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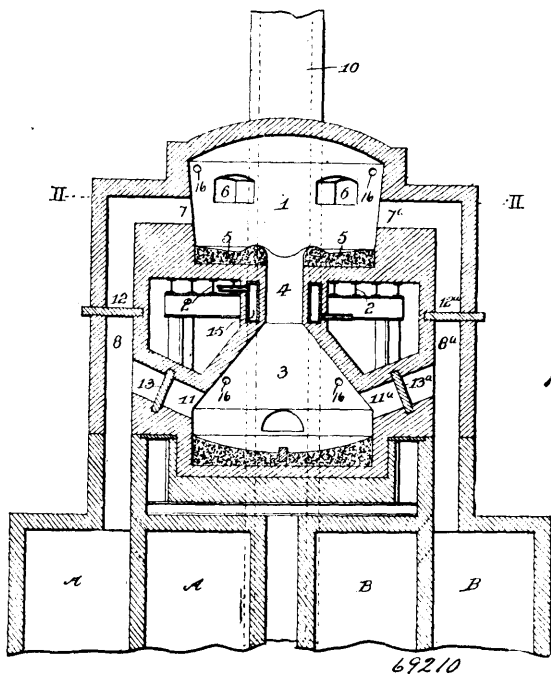
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INVENTIONS PATENTED.

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

No. 69,210. Metallurgical Furnace.
(Fournaise Métallurgique.)

FIG. 1.



69210

Edward Kerr, Pittsburg, Pennsylvania, U.S.A., 2nd November, 1900; 18 years. (Filed 21st May, 1900.)

Claim.—1st. A metallurgical furnace having in combination a melting chamber, a crucible arranged below the melting chamber, an opening or passage between the melting chamber and crucible,

for the passage of products of combustion and the molten metal into the crucible, the melting chamber having a port or opening for the admission of heating gases, flues or passages leading to the stack and connected by ports or openings to opposite sides of the crucibles and valves located in said passages for controlling the flow of products of combustion from the crucible, substantially as set forth. 2nd. A metallurgical furnace having in combination a melting chamber, a crucible arranged below the melting chamber, an opening or passage connecting the melting chamber, and crucible for the passage of products of combustion and the molten metal into the crucible re-generating chambers, flues connecting said chambers with the melting chamber and crucible, and valves arranged in said flues controlling the flow of gases through said flues, substantially as set forth. 3rd. A metallurgical furnace having in combination a melting chamber, a crucible arranged below the melting chamber, an opening or passage connecting the crucible and melting chamber, for the passage of products of combustion, and the molten metal into the crucible, ports or openings on opposite sides of the melting chamber for the admission of heating gases, valves controlling said ports or openings, ports or openings on opposite sides of the crucible and valves controlling the flow of gases from the crucible, substantially as set forth. 4th. In a metallurgical furnace, the combination of a melting chamber, a crucible arranged below the melting chamber, an opening or passage connecting the crucible and melting chamber, for the passage of products of combustion and the molten metal into the crucible, the passage or opening being arranged to one side of the center of the melting chamber, a port or opening for the admission of heating gases to the melting chamber, and a connection from the crucible to the stack, substantially as set forth.

No. 69 211. Process of Reducing Aluminum.
(Procédé pour réduire l'aluminium.)

Frank Austin Gooch, New Haven, Connecticut, U.S.A., 2nd November, 1900; 6 years. (Filed 2nd August, 1900.)

Claim.—1st. As an improvement in the art of manufacturing aluminium, the herein-described process which consists in forming a bath by fusing together a suitable compound of aluminium and a suitable halogen compound of a metal more electro-positive with reference to sulphur than is aluminium, adding to the bath a suitable compound of sulphur together with alumina, and then passing an electric current of suitably low voltage through the fused mass, thereby electrolyzing the same, substantially as and for the purposes set forth. 2nd. As an improvement in the art of manufacturing aluminium, the herein-described process which consists in forming a bath by fusing together a halogen compound of aluminium and a suitable halogen compound of a metal more electro-positive than aluminium with reference to sulphur, adding to the bath a suitable compound of sulphur, together with alumina, and then passing an electric current of suitably low voltage through the fused mass, thereby electrolyzing the same, substantially as and for the purposes set forth. 3rd. As an improvement in the art of manufacturing aluminium, the herein-described process which consists in forming a bath by fusing together a halogen compound of aluminium and suitable halogen compounds of metals which are more electro-positive than aluminium with reference to sulphur, adding to the bath in suitable quantity carbon disulphid, together with alumina, and then passing an electric current of suitably low voltage through the fused mass, thereby electrolyzing the same, substantially as and for the purposes set forth. 4th. As an improvement in the art of manufacturing aluminium, the herein-described process, which consists in forming a bath by fusing together the fluorids of aluminium, and of metals more electro-positive than aluminium with reference to sulphur, adding to the bath in suitable quantity carbon disulphid, together with alumina, and then passing an

electric current of suitably low voltage through the fused mass, thereby electrolyzing the same, substantially as and for the pur-

posed said tracer, paper shifting mechanisms at the receiving and transmitting stations, and means whereby said mechanisms are inactive

Fig. 1.

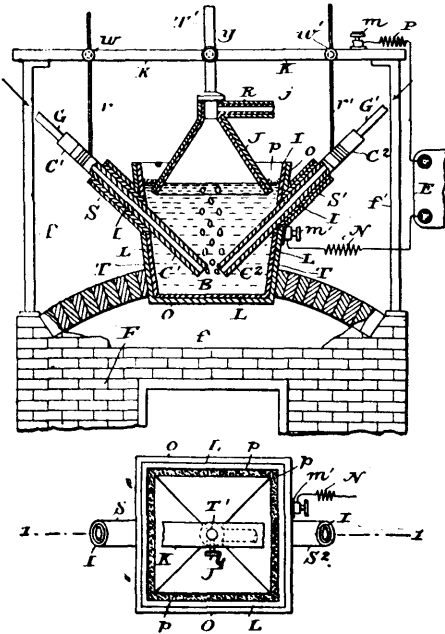


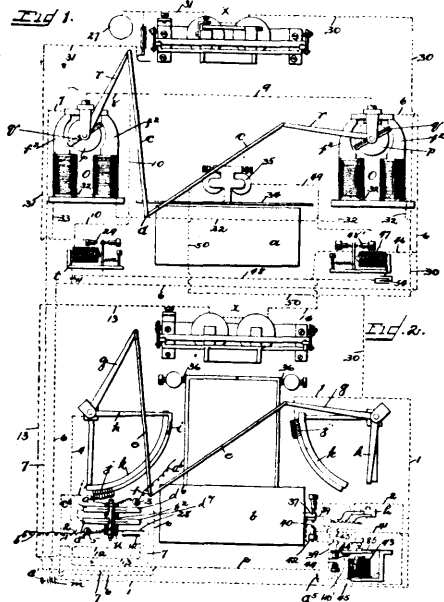
Fig. 2. 69211

poses set forth. 5th. As an improvement in the art of manufacturing aluminium, the herein described process, which consists in forming a bath by fusing together fluorids of aluminium, and of alkaline metal, adding to the bath in suitable quantity carbon disulfid, together with alumina, and then passing an electric current of suitably low voltage through the fused mass, thereby electrolyzing the same, substantially as and for the purposes set forth. 6th. As an improvement in the art of manufacturing aluminium, the herein-described process which consists in forming a bath by fusing together the fluoid of aluminium and the fluoid of sodium, adding to the bath in suitable quantity carbon disulfid and alumina, and then passing an electric current through the fused mass, thereby electrolyzing the same, substantially as and for the purposes set forth.

No. 69,212. Telautographic Apparatus.
(Appareil télautographique.)

Foster Ritchie, 97 Gresham Street, London, England, 2nd November, 1900; 6 years. (Filed 4th September, 1900.)

Claim.—1st. In a telautographic apparatus, transmitting appliances, including a tracer, receiving appliances arranged at a distant station, a line wire connecting these appliances, a rheostat comprising resistance coils, said coils being arranged in series in said line circuit, an arm connected to move with said tracer and carrying a brush arranged to move over said rheostat, whereby the line current is varied in strength, paper shifting mechanisms at the receiving and transmitting stations, and means whereby said mechanisms are inactive during the writing operation, and means arranged at the receiving station, and actuated by the variations in strength of the line current, for actuating the receiving appliances, as and for the purpose set forth. 2nd. In a telautographic apparatus, a transmitting tracer, a receiving pen, line wires connecting the same, a rheostat comprising resistance coils arranged in series in the line circuits, brushes connected to move coincidentally with the tracer over said rheostat, whereby the strength of the line currents is varied when said tracer is moved, an electrical apparatus arranged to actuate the receiving pen, said electrical apparatus arranged in the line circuit, and effected by the variations in current strength, paper shifting mechanism at the receiving and transmitting stations, and means whereby said mechanisms are inactive during the writing operation, as and for the purpose set forth. 3rd. In a telautographic apparatus, a transmitting tracer, a receiving pen, line wires connecting the same, jointed rods to which said tracer is connected, arms connected to said rods and carrying brushes, resistance arranged in series in the line circuits, and over which said brushes operate, in combination with means operated by the variations in current strength thus sent in line for duplicating in the receiving pen the movements of



69212

during the writing operation, as and for the purpose set forth. 4th. In a telautographic apparatus, a transmitting tracer and receiving pen, line wires connecting the same, means actuated by the movements of said tracer for varying the strength of the current sent to the line, rocking coils connected to the receiving pen for actuating the same, magnetic fields in which said coils operate, said coils being included in the line circuits, paper shifting mechanisms at the receiving and transmitting stations, and means whereby said mechanisms are inactive during the writing operation, as and for purpose set forth. 5th. In a telautographic apparatus, a sending tracer, a receiving pen, line wires connecting the same, jointed rods connected to said pen, pivotally mounted coils having arms respectively connected to said rods, said coils being respectively arranged in the line circuits, fields for each of said coils, and means actuated by the movements of said tracer for varying the strength of the line currents, as and for the purpose set forth. 6th. In a telautographic apparatus, a sending tracer, a receiving pen, line wires connecting the same, pivotally mounted coils respectively arranged in the line circuits and respectively connected to the receiving pen, and co-operating to effect the movements of said pen, means for yieldingly maintaining said coils in one limit of their rocking movements, magnetic fields for said coils, and means actuated by the movements of said sending tracer for varying the strength of the currents sent to the line wires, as and for the purpose set forth. 7th. In a telautographic apparatus, a sending tracer, a receiving pen, line wires connecting the same, pivotally mounted coils respectively arranged in the line circuits and respectively connected to the receiving pen, and co-operating to effect the movement of said pen, springs arranged to normally hold said coils in one limit of their movement, magnetic fields for said coils, and means actuated by the movements of said sending tracer for varying the strength of the currents sent to the line wires, as and for the purpose set forth. 8th. In a telautographic apparatus, a sending tracer, a receiving pen, line wires connecting the same, pivotally mounted coils respectively arranged in the line circuits and respectively connected to the receiving pen, and co-operating to effect the movement of said pen, magnetic fields for said coils, means actuated by the movements of said tracer for varying the strength of currents sent to the line wires, and means for retarding the rocking movements of said coils, as and for the purpose set forth. 9th. In a telautographic apparatus, a sending tracer, a receiving pen, line wires connecting the same, pivotally mounted coils arranged in the line circuits and connected to the receiving pen, magnetic fields for said coils, means actuated by the movements of said tracer for varying the strength of the currents sent to the line wires, and a dash pot arranged to retard the rocking movement of said coils, as and for the purpose set forth. 10th. In a telautographic apparatus, a sending tracer, a receiving pen, line wires connecting the same, stationarily mounted iron cores, magnets having pole pieces surrounding said cores, coils pivotally mounted and interposed between said cores and pole pieces, said coils being arranged in the line circuits and connected to the receiving pen, and means actuated by the movements of the sending tracer for varying the strength of currents sent to the line wires, as and for the purpose set forth. 11th. In a telautographic ap-

paratus, a sending tracer, a receiving pen, line wires connecting the same, rheostats comprising insulated plates connected up in series and arranged in line circuits, brushes connected to move with said tracer and operating over said plates, to complete circuits there-through, whereby the line current is varied, paper shifting mechanisms at the receiving and transmitting stations, means whereby said mechanisms are inoperative during the writing operation, and means actuated by such variations in the line current for actuating said receiving pen in synchronism with the movements of the tracer, as and for the purpose set forth. 12th. In a telautographic apparatus, a sending tracer, a receiving pen, a line wire connecting the same, a rheostat arranged in the line circuit, and comprising a support, a series of insulated plates connected in series by high resistances, said plates having projections arranged to be received in seats in said support, and a bar for clamping said projections in said seat, in combination with a brush connected to move with said tracer and operated over said plates, and means arranged in the line circuit and actuated by the variations in line current for operating the receiving pen in synchronism with the movements of the tracer, as and for the purpose set forth. 13th. In a telautographic apparatus, a tracer, a receiving pen, a line wire connecting the same, rheostat arranged in the line circuit, and comprising a support having a dove-tailed seat, insulated plates having dove-tailed projections, adapted to be received in said seats, said plates being connected in series by high resistances, in combination with a brush connected to move with said tracer and operating over said plates, and means arranged in the line circuit for operating the receiving pen in synchronism with the movements of the tracer. 14th. In a telautographic apparatus, a tracer, a receiving pen, a line wire connecting the same, a rheostat comprising insulated plates, each having a projection, said projections arranged in staggered relation with respect to each other, the projections of adjacent plates being connected in series by a high resistance, in combination with a brush connected to move with said tracer, and means arranged in the line circuit and actuated by variations in the line current for operating the receiving pen in synchronism with the tracer, as and for the purpose set forth. 15th. In a telautographic apparatus, a paper-shifting mechanism, including a swinging frame, clamping jaws carried thereby and arranged to grasp the edge of the paper, and electro-magnetic means for swinging said frame and opening and closing the jaws, as and for the purpose set forth. 16th. In a telautographic apparatus, a paper-shifting mechanism, including a swinging frame having lugs, clamp arms co-operating with said lugs to grasp the edges of the paper therebetween, and electro-magnetic means for swinging said frame and rocking said arms, as and for the purpose set forth. 17th. In a telautographic apparatus a paper-shifting mechanism comprising an electro-magnet, a swinging frame carrying the armature of said magnet, said armature being pivotally mounted in said frame and carrying clamp arms for engaging and gripping the edges of the paper, and means for energizing said magnet, whereby said armature is rocked to clamp the edges of the paper, and said frame is swung to advance the paper, as and for the purpose set forth. 18th. In a telautographic apparatus, a paper-shifting mechanism comprising an electro-magnet, a pivotally mounted armature for said magnet, a swinging support in which said armature is pivotally mounted, clamp arms carried by said armature and arranged to engage and release the edges of the paper, means for normally holding said clamp arms released and said support retracted, and means for energizing said magnet, as and for the purpose set forth. 19th. In a telautographic apparatus, a paper-shifting mechanism comprising an electro-magnet, a swinging frame, an armature for said magnet, pivotally mounted in said frame, stops between which said frame swings, means for normally maintaining said frame in one limit of its movement, clamping jaws actuated by the rocking movement of said armature, and means for energizing said magnet, as and for the purpose set forth. 20th. In a telautographic apparatus, a paper-shifting mechanism comprising an electro-magnet, a swinging frame, an armature for said magnet, pivotally mounted in said frame, said armature having clamping arms arranged to clamp the edges of the paper, a spring connected to said armature to hold the same in position to release the paper and said frame in retracted position, and means for energizing said magnet, as and for the purpose set forth. 21st. In a telautographic apparatus, a paper shifting mechanism comprising an electro-magnet, a curved pole piece therefor, a movable armature arranged to be attracted towards and to move over said pole piece, clamping device actuated by said armature and adapted to engage the paper to be shifted, and means for energizing the electro-magnet, as and for the purpose set forth. 22nd. In a telautographic apparatus, a paper shifting mechanism comprising an electro-magnet having a curved pole piece, a swinging frame, an armature pivotally mounted in said frame and having clamping jaws arranged to engage and grip the edges of the paper, means for normally holding said frame retracted with said armature over the smaller part of said pole piece, whereby said clamping jaws are released, and means for energizing said magnet, as and for the purpose set forth. 23rd. In a telautographic apparatus, a sending tracer, a receiving pen, and a line circuit connecting the same, in combination with a main switch for controlling said circuit, comprising a rocking piece having insulated metal plates connected to the line wires, contact springs or fingers arranged to engage said plates, and means actuated by the tracer for controlling the movements of

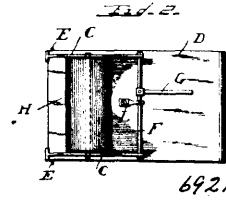
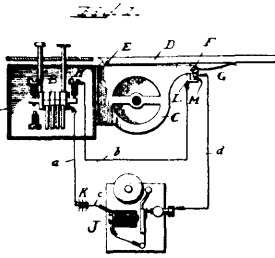
said rocking piece, as and for the purpose set forth. 24th. In a telautographic apparatus, a sending tracer, a receiving pen, a line circuit connecting the same, in combination with a main switch comprising a movable piece having contact places, fixed fingers or springs, into engagement with which said contact plates may be moved, a projection carried by said movable piece, an auxiliary contact arranged to be engaged thereby, a paper shifting mechanism, a circuit therefor, said circuit arranged to be controlled by said projection and auxiliary contact, and means actuated by the tracer for operating said switch, as and for the purpose set forth. 25th. In a telautographic apparatus, a movable receiving pen, in combination with an independent inking device therefor, comprising a reservoir, a basin communicating therewith, whereby the ink is maintained at an uniform level therein, said pen arranged to be moved into and out of said basin, as and for the purpose set forth. 26th. In a telautographic apparatus, a receiving pen comprising a bowl and a stem having a fine orifice communicating therewith, and means for movably supporting said pen, in combination with an ink reservoir, a basin communicating therewith, said pen arranged to be moved into and out of said basin, as and for the purpose set forth. 27th. In a telautographic apparatus, a receiving pen, a platen upon which said pen operates, electro-magnet means whereby said pen may be brought into contact with the surface of the paper resting on said platen or raised therefrom, a circuit for said means, a relay for controlling the circuit of said means, and a condenser arranged in the circuit of said relay, as and for the purpose set forth. 28th. In a telautographic apparatus, a receiving pen, a platen therefor, a sending pen and a platen therefor, electrical devices for controlling the movements of said receiving pen towards its platen, a relay for controlling the circuit of said electrical devices, a condenser arranged in the circuit of said relay, and means actuated by the pressure of the sending pen on its platen for controlling the circuit of said relay, as and for the purpose set forth. 29th. In a telautographic apparatus, a receiving pen, or pen arms containing or carrying magnetic material, normally out of contact with its record paper, a magnet arranged adjacent to the record paper, and a circuit therefor, whereby when said magnet is energized said pen is attracted to contact with its record sheet, as and for the purpose set forth. 30th. In a telautographic apparatus, a transmitting pen, a receiving pen, line wires connecting the same, platens upon which said pens operate, said receiving pen containing or carrying magnetic material and normally out of contact with its platen, an iron core arranged behind said platen, a coil therefor, a circuit for said coil, and means actuated by the pressure of the transmitting pen on its platen for completing the circuit of said coil, as and for the purpose set forth. 31st. In a telautographic apparatus, a transmitting pen, a receiving pen, and line wires connecting the same, electrical devices for causing said receiving pen to contact with its record paper, a relay controlling the circuit of said electrical devices, an induction coil having its secondary winding arranged to bridge said line circuit, and means actuated by the pressure of the transmitting pen on its record paper for completing the circuit of the primary of said induction coil, as and for the purpose set forth. 32nd. In a telautographic apparatus, a transmitting pen, a receiving pen, line wires connecting the same, electrical devices for controlling the approach of the receiving pen to its record paper, a relay arranged to control the circuit of said electrical devices, an induction coil having its secondary winding arranged to bridge said line circuit, a condenser arranged in said secondary circuit, and means actuated by the pressure of the transmitting pen on its record paper for completing the circuit of the primary of said induction coil, as and for the purpose set forth. 33rd. In a telautographic apparatus, a paper shifting mechanism at the sending station and a paper shifting mechanism at the receiving station, a line circuit connecting the stations, a local circuit for each paper shifting mechanism, a relay arranged in the line circuit for controlling the circuit of the paper shifting mechanism at the receiving station, and a switch arranged at the sending station for simultaneously breaking the line circuit and making the local circuit of the paper shifting mechanism at the sending station, as and for the purpose set forth.

No. 69,213. Telautograph. (*Télautographe.*)

Frederick W. Cushing, Highland Park, Illinois, U.S.A., 2nd November, 1900; 6 years. (Filed 3rd August, 1900.)

Claim.—1st. In a telautograph, a master switch adapted to be moved to one position for the transmission of a message, and to another position for receiving a message, a signal device, a circuit therefor, said circuit arranged to be closed or opened coincidentally with the movements of the master switch, and means actuated coincidentally with the raising of the arm of the operator, after transmitting a message, for completing the signal circuit, whereby failure to restore the master switch to receiving position will be indicated, as and for the purpose set forth. 2nd. In a telautograph, a signal device, a circuit therefor, two pairs of separable contacts in said circuit, a master switch and an arm-rest, one of said pairs of contacts controlled by said master switch and the other pair controlled by said arm rest, as and for the purpose set forth. 3rd. In a telautograph, a signal device, a circuit therefor, two pairs of separable contacts arranged in said circuit, a moveable master switch arranged to control one of said pairs of contacts, and a moveable arm-rest arranged to control the other of said pairs of contacts, as and for the purpose set forth. 4th. In a telautograph, a signal

device, a circuit therefor, a pair of contacts arranged in said circuit, an arm-rest connected to one of said contacts, and means for yield-



ingly maintaining said arm-rest in position for said contact to make connection with the other of said contacts, as and for the purpose set forth. 5th. In a telautograph, supporting brackets, an arm-rest pivoted at one end upon said brackets, a spring for yieldingly supporting the other end of said arm-rest, a signal device, a circuit therefor, and means whereby when such arm-rest is depressed said circuit is broken, and when said arm-rest is raised said circuit is closed, as and for the purpose set forth. 6th. In a telautograph, a master switch, a signal device and an arm-rest, said switch and arm-rest both arranged to control said signal device, as and for the purpose set forth.

No. 69,214. Cipher Code System. (Système de caractères de convention pour correspondance écrite.)

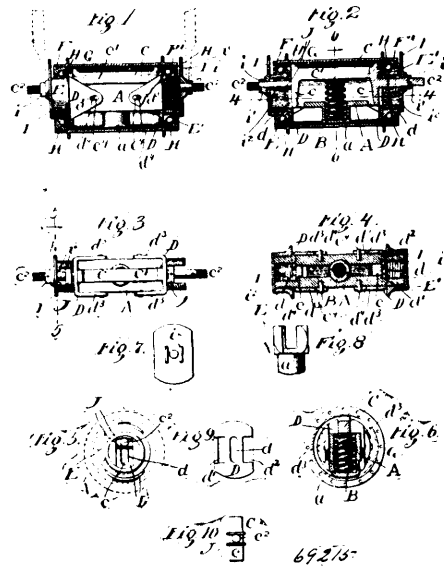
DRUB	DRUG	DRUM	DRUP	DRUC
fall	1 x 12	12 11	14 11	16 11
fast	2 x 12	12 11	14 11	16 11
flag	3 x 12	12 11	14 11	16 11
flam	4 x 12	12 11	14 11	16 11
flap	5 x 12	12 11	14 11	16 11
flow	10 x 12	12 11	14 11	16 11
flit	10 x 18	12 11	14 11	16 11

DRUB	DRUG	DRUM	DRUP	DRUC
fall	1 x 12	12 11	14 11	16 11
fast	2 x 12	12 11	14 11	16 11
flag	3 x 12	12 11	14 11	16 11
flam	4 x 12	12 11	14 11	16 11
flap	5 x 12	12 11	14 11	16 11
flow	10 x 12	12 11	14 11	16 11
flit	10 x 18	12 11	14 11	16 11

Elmer F. Cassel, Seattle, Washington, U.S.A., 2nd November, 1900; 6 years. (Filed 8th August, 1900.)

Claim.—1st. A cipher code in which words or syllables capable of literal translation are so compounded as to form complete cipher words without literal meaning, as set forth. 2nd. A cipher code in which single code words or characters are formed of two united parts or syllables indicating respectively a definition and a group of definitions, as set forth. 3rd. A cipher code consisting of a series of groups each indicated by a word or syllable and containing a series of definitions, each of which latter is also designated by a word or syllable, said words or syllables when united forming a cipher word without literal meaning, as set forth. 4th. A cipher code consisting of a series of groups each indicated by a word or syllable and containing a series of definitions, each of which latter is also designated by a line word or syllable, said line words or syllables being the same for each group, arbitrary cipher words being formed by compounding said page and line words or syllables as set forth.

No. 69,215. Electric Hub and Axle. (Moyeu et essieux.)



Frank Schmitz, Chicago, Illinois, U.S.A., 2nd November, 1900; 6 years. (Filed 28th July, 1900.)

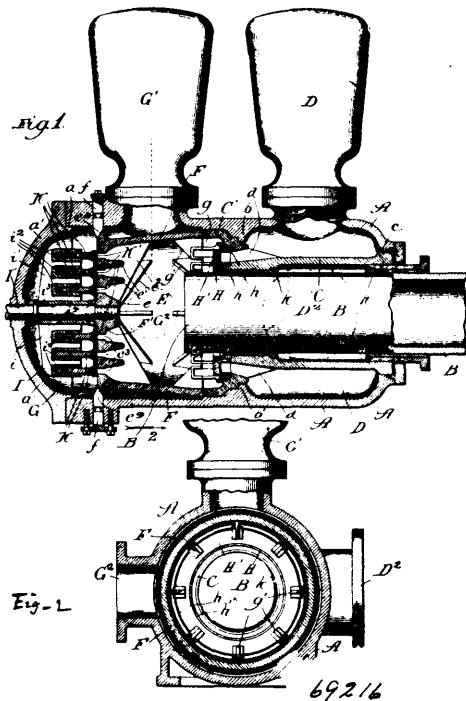
Claim.—1st. The combination with an axle box, an axle vertically guided therein having guiding legs at its opposite ends, of longitudinally adjustable caps upon the ends of the axle box and adapted to bear upon said guiding legs, and a bearing cone adjustment secured upon the axle box and capable of longitudinal adjustment thereon to tighten the caps upon the axle, substantially as described. 2nd. The combination with an axle box and an axle vertically guided therein, having guiding legs near its ends, of bearing cones secured upon the ends of the axle box and longitudinally adjustable thereon and means adjustable by and with said cones for engaging the guiding legs of the axle to prevent oscillation of the axle with respect to the axle box, substantially as described. 3rd. The combination with a channelled axle box, of an axle guided therein having guide legs near the opposite ends of the axle box and caps arranged upon the ends of the axle box and extending around the sides thereof, said caps being guided both upon the ends and sides of the axle box and bearing upon the guide legs of the axle, substantially as described. 4th. The combination with a channelled axle box, of an axle yieldingly supported in said axle box, plates secured upon said axle and formed with vertical guides adapted to engage the axle box and prevent rotation of the box with respect to the plates, and means for securing the plates themselves against rotation, substantially as described.

No. 69,216. Pump. (Pompe.)

Fraser and Chalmers, Chicago, Illinois, U.S.A., assignee of John Stumpf, Rankenstrasse 27, Berlin, Prussia, 2nd November, 1900; 6 years. (Filed 12th October, 1900.)

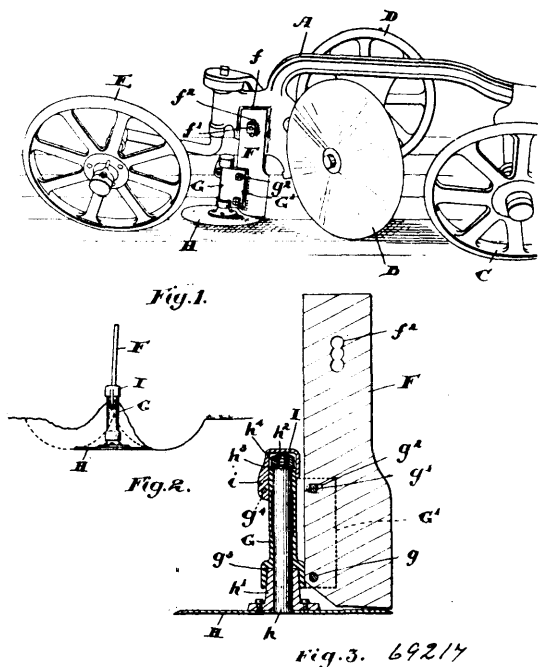
Claim.—1st. In a pump, the combination with the pressure chamber, of a piston, suction valve and pressure valve in coaxial alignment, the suction valve being about the piston, substantially as described. 2nd. In a pump, the combination with the pump casing of a discharge chamber therein, provided with a discharge opening, and a pressure chamber casing in the discharge chamber and exposed circumferentially to the pressure therein, substantially as and for the purpose set forth. 3rd. In a pump, the combination with the pump casing of a discharge chamber therein, provided with a discharge opening, and a frusto-conical pressure chamber casing in the discharge chamber and exposed circumferentially to the pressure therein, substantially as and for the purpose set forth. 4th. In a pump, the combination with the pump casing of a discharge chamber therein, provided with a discharge opening, a pressure chamber casing within and surrounded by the discharge chamber, a piston working in the pressure chamber, a valved suction port about the piston and a valved pressure port leading to the discharge chamber, substantially as described. 5th. In a pump, the combination with the pump casing of a discharge chamber therein, provided with a discharge opening, a pressure chamber casing within and surrounded by the discharge chamber, a piston working in the pressure chamber, a valved suction port about the piston, and a valved pressure port below the top of the pressure chamber leading to the discharge chamber, substantially as described. 6th. In a pump, the combination with the pump casing of a discharge chamber therein, provided with a discharge opening, a

pressure chamber casing within and surrounded by the discharge chamber, a piston working in the pressure chamber, a valved suc-



tion port about the piston and a valved pressure port coaxial with the piston leading to the discharge chamber, substantially as described.

No. 69,217. Disc Plough. (Charrue à disque.)

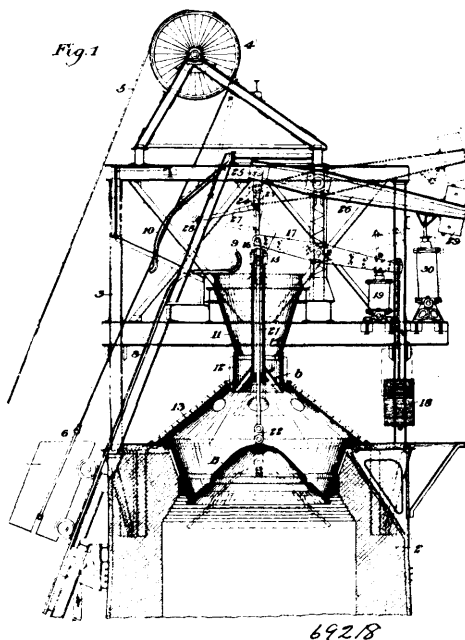


The Verity Plough Company, assignee of Melroy J. Miller, all of Brantford, Ontario, Canada, 2nd November, 1900; 6 years. (Filed 10th October, 1900.)

Claim.—1st. In a disc plough, the combination with the frame, wheels, and disc suitably disposed and journaled in the frame, of a horizontally disposed disc located within and to the rear of the main ploughing disc and means for suitably securing it to the frame, as

and for the purpose specified. 2nd. In a disc plough, the combination with the frame, wheels, and disc suitably disposed and journaled in the frame, of a horizontally disposed disc located within and to the rear of the main ploughing disc, a coulter suitably held on the frame and extending over the front of the latter disc and suitable bearings for such disc secured to the rear of the coulter, as and for the purpose specified. 3rd. In a disc plough, the combination with the frame, wheels, and disc suitably disposed and journaled in the frame, of a coulter suitably secured to the frame in a substantially vertical position, a disc provided with an upwardly extending vertical shaft and suitable supporting bearings secured to the rear of the coulter supporting the shaft in position and allowing of the rotation of the disc, as and for the purpose specified. 4th. In a device of the class described, the combination with the coulter, of a sleeve provided with a flange bolts for securing the flange to the coulter, a disc provided with a suitable hub at the upper side extending into a cup at the bottom of the sleeve, the shaft and nut on the top of the shaft for securing it from vertical displacement within the sleeve, as and for the purpose specified. 5th. In a device of the class described, the combination with the coulter, of a sleeve provided with a flange, bolts for securing the flange to the coulter, a disc provided with a suitable hub at the upper side extending into a cup at the bottom of the sleeve, the shaft and nut on the top of the shaft for securing it from vertical displacement within the sleeve and a cap surmounting the top of the sleeve and suitably connected thereto, as and for the purpose specified.

No. 69,218. Blast Furnace. (Haut fourneau.)

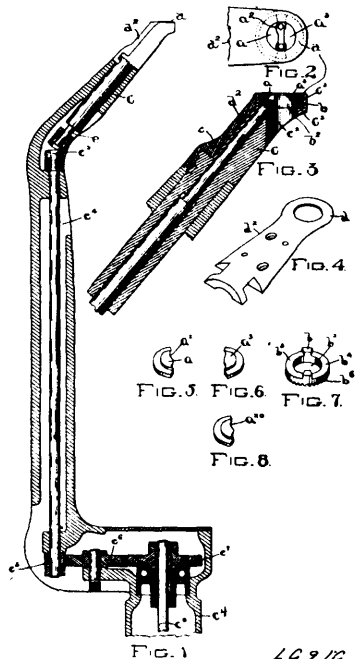


The Carnegie Steel Company, Pittsburg, Pennsylvania, assignee of Edwin Elmer Slick, Braddock, Pennsylvania, U.S.A., 2nd November, 1900; 6 years. (Filed 20th February, 1900.)

Claim.—1st. The combination with a blast furnace having at its upper end a main charging hopper and bell, of a supplemental hopper supported above the main hopper and having an inwardly converging side, a throat at the lower end of the supplemental hopper into which the material drops from the converging side of the supplemental hopper, said throat being at least substantially as wide at its mouth at its upper end, and of smaller cross sectional area than the main hopper, a bell seated against the lower end of the throat, a track leading to the supplemental hopper, and a skip movable upon the track and arranged to discharge the material upon the inclined converging side of the upper hopper, substantially as described. 2nd. The combination with a blast furnace having at its upper end a main charging hopper and bell, of a supplemental hopper supported above the main hopper and having an inwardly converging side, a throat at the lower end of the supplemental hopper into which the material drops from the converging side of the supplemental hopper, said throat having at least substantially great an area at its mouth as at its upper end, and of smaller cross sectional area than the main hopper, a bell seated against the lower end of the throat, mechanism for operating both bells, a track leading to the supplemental hopper, and a skip movable upon the track and arranged to discharge the material upon the inclined converging side of the upper hopper, substantially as described. 3rd. The com-

combination with a blast furnace, having at its upper end a main charging hopper and bell, of a supplemental hopper supported above the main hopper and having inwardly converging sides, a throat at the lower end of the supplemental hopper into which the material drops therefrom, said throat being at least substantially as wide at its mouth as at its upper end, and of a smaller area than the main hopper, a downwardly movable bell bottom arranged to close the lower end of the throat, a pair of tracks leading to the supplemental hopper, a pair of tipping skips movable upon the tracks and arranged to alternately deposit the material upon its converging side, and means for operating both bells, substantially as described. 4th. The combination with a blast furnace, having at its upper end a main charging hopper and bell, of a supplemental hopper supported above the main hopper and having an inwardly converging side, the axis of the supplemental hopper being inclined toward the place of discharge of the skip, a throat at the lower end of the supplemental hopper into which the material drops from the converging side of the supplemental hopper, said throat being at least substantially as wide at its mouth as at its upper end, and of smaller cross sectional area than the main hopper, a bell seated against the lower end of the throat, a track leading to the supplemental hopper, and a skip movable upon the track and arranged to discharge the material upon the inclined converging side of the upper hopper, substantially as described.

No. 69,219. Pegging Machine. (*Machine à cheviller.*)



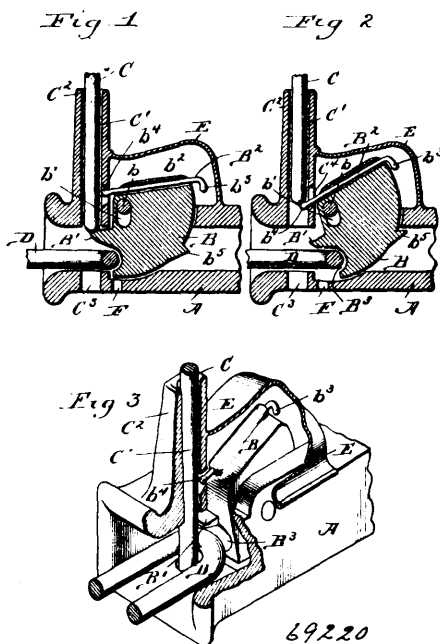
69219

The United Shoe Machinery Company, Paterson, New Jersey assignee of John Francis Davey, Beverly, Massachusetts U.S.A., 2nd November, 1900; 18 years. (Filed 15th October 1900.)

Claim.—1st. In a pegging machine, a combined work support and cutting device rotatably mounted and having a slot extending diametrically across the same, and a cutting edge at one side of said slot and adjacent to the supporting surface. 2nd. In a pegging machine, a combined work support and cutting device having a slot extending diametrically across the same, a cutting edge at one side of said slot and adjacent to the supporting surface, and means for producing a complete rotation of said cutting device between successive pegging operations. 3rd. In a pegging machine, the combination with the awl and peg driving mechanism, of a work support provided with a slot, the middle portion of which is substantially equal in width to the diameter of the awl, and a cutting edge near one end of said slot, the slot at said end being wider than at the middle, as set forth. 4th. In a pegging machine, a combined work support and cutting device having a slot extending diametrically across the same, a cutting edge at one side of said slot and adjacent to the supporting surface, actuating mechanism for said cutting device adapted to cause a complete rotation of said cutting device, and means for locking such actuating mechanism at the end of each operation. 5th. In a machine for pegging boots and shoes, the combination with the horn or work support, of a peg trimming or cutting device working in the top of said horn and having a slot extending diametrically across it to permit the feed movement of the awl and a cutting edge at the side of said slot, and means for operating said device to trim the pegs, as set forth. 6th. A peg trimming device rotatably mounted in the horn and having a supporting

surface for the material, and a slot extending diametrically across or through said surface, a cutting portion at the edge of said slot, and means for moving the trimming device to cause said edge to travel past and sever the projecting end of the peg. 7th. A horn or work support, and a cutting device rotatably mounted thereon, said cutting device constituting a part of the support and having a radial cutting portion. 8th. In a pegging machine, in which the material is fed by a lateral movement of the awl, a work support provided with a radial slot through which the awl travels in such lateral movement, a cutting edge substantially in line with said slot, and an oscillating or rotating carrier for said cutting edge to move the same across the line of feed movement when the awl is lifted. 9th. In a pegging machine, a rotatable horn, a slot extending diametrically across the surface thereof, means for preventing the rotation of the horn from changing the position of said slot relative to the other parts of the machine, a cutting edge formed on one side of said slot, and means for moving the said cutting edge to sever the peg, as set forth. 10. In a pegging machine, a work support having a central opening, a cutting device working therein and having a cutting member and a supplemental supporting member separated from each other to afford a slot or opening extending radially from said central opening, and a carrier for said members rotatably mounted in the horn. 11th. In a pegging machine, a work support, a cutting device working therein and having a cutting member and a supplemental supporting member separated from each other to afford a slot or opening between them, a carrier having recesses to receive said members, a top or cover for the horn arranged to constitute a retaining device for said carrier and members. 12th. In a pegging machine, a work support, a cutting device working therein and having a cutting member and a supplemental supporting member separated from each other to afford a slot or opening between them, a carrier having recesses to receive said members, a top or cover for the horn arranged to constitute a retaining device for said carrier and members, and means for imparting a rotary movement to said carrier. 13. In a pegging machine, a rotary cutter having a radial channel normally in line with the feed movement of the awl, and a cutting edge along said channel, and means for rotating said cutter comprising an actuator adapted to move said cutter a predetermined distance at each operation, and means for locking said cutter at the end of such movement. 14th. In a pegging machine, a rotary cutter having a radial channel normally in line with the feed movement of the awl, and a cutting edge along said channel, means for rotating said cutter comprising an actuator adapted to move said cutter a predetermined distance at each operation, means for locking said cutter at the end of such movement, and means for unlocking said cutter prior to the next movement. 15th. In a pegging machine, the combination with a rotary cutter, of a pawl for actuating the same, a locking device for arresting said cutter, and means for unlocking said device in response to the next actuating movement of said pawl.

No. 69,220. Car Coupler. (*Attelage de chars.*)

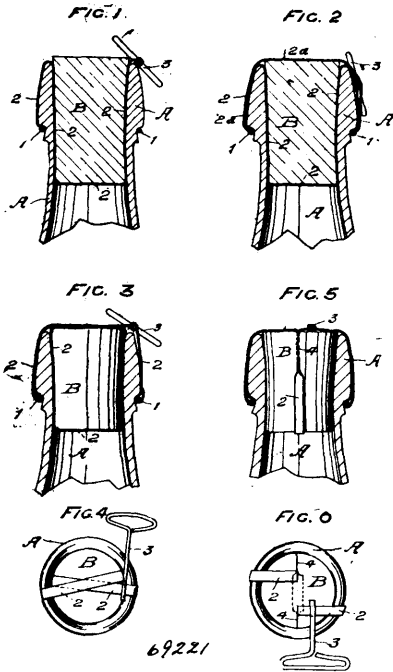


69220

Samuel M. Brooks, Lawnville, Tennessee, J. B. Harvey, R. Ladd, J. Leinburg, J. W. Crowder, J. Mc. K. Smith, H. C. Burns, W. Tuttertow, W. D. Hobey, all of Lawnville aforesaid, and W. T. Galloher, Wheat, and J. A. Muech, Kingston, Tennessee, U.S.A., 2nd November, 1900; 6 years. (Filed 10th October, 1900.)

Claim.—1st. The combination of the draw head, an eccentrically mounted tumbler having a part projecting into the path of the coupling pin, and another part projecting into the path of the coupling link, with a slide mounted on said tumbler and having a nose projecting into the path of the pin, when the latter is raised and the tumbler is in its rear position. 2nd. The combination with the coupling link, of a longitudinally channelled draw head, a coupling pin moving vertically across the channel in the draw head and engaging in suitable bearings in the walls thereof, a tumbler mounted to swing in a vertical plane within the channel of the draw head and having a lug normally projecting into the path of the pin and above the path of the link, and a downwardly projecting portion normally lying in the path of the link and in a plane below that of the lug, and a slide in said tumbler in a plane above the lug thereon, said slide having a part projecting into the path of the pin when the tumbler is in position to withdraw said lug from out of the path of the pin.

No. 69,221. Cork Extractor. (Tire bouchon.)



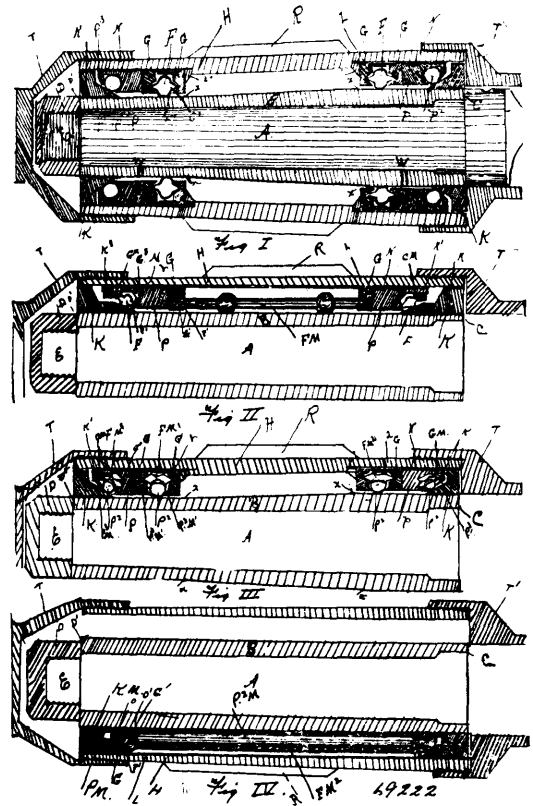
69221

George A. Smith, Alberni, British Columbia, Canada, 5th November, 1900; 6 years. (Filed 16th October, 1900.)

Claim.—1st. In combination with the neck of an ordinary bottle and its cork, a wire securely fixed round the first reduction of the neck, a band of flat wire of flexible material attached thereto so that it can pass up over the lip of the bottle, down under the cork and up the other side of the same, so that the cork rests in the loop thus formed, a key of suitable form attached to the free end of this band so that when the key is turned the band shall coil upon itself, substantially as and for the purposes specified. 2nd. In combination with the neck of an ordinary bottle and its cork, a wire drawn tight in a groove or reduction round the outside of the neck of the bottle, a strip of flexible material attached to such wire, passing up, over the lip of the bottle neck, down between cork and bottle to underside of cork, across and up the opposite side of cork, the continuation over the lip and down under and round neck wire, up and over cork and down to be secured near the point of commencement, and means whereby the loop under the cork may be wound up on itself after the severance of the strip across the cork, substantially as and for the purposes specified. 3rd. In combination with the neck of a bottle, a wire externally surrounding the same, a cork having slits cut in it from the top to half way down and of a depth about one third of the diameter of the cork, a loop of flat wire passing under the cork, a half twist on each side of such loop, and the upper edge portions of the loop being pressed in the slits, the bending over of the same and their attachment to the fastening wire, a key inserted in either strip external to the cork, substantially as and for the purposes specified. 4th. In combination with a bottle neck and a cork within the same, a wire in a groove round the neck of a bottle, a flexible strip attached to such wire and passing up over the top of the cork, down alongside the cork between cork and bottle across the underside of the cork and up the opposite side of the same, and being angled slightly, the continuation of the same strip over the cork and down to the neck wire on the opposite side, and a suitable key attached to the strip that after the severance of one of the

attachments shall enable the strip to be wound upon itself and shall shorten the loop which passes under the cork, substantially as and for the purposes described.

No. 69,222. Axle Box. (Boite à graisse.)



69222

Albert Ennis Henderson, Woodbridge, Ontario, Canada, 5th November, 1900; 6 years. (Filed 16th October, 1900.)

Claim.—1st. The combination in a roller and ball bearing axle boxing, of an inner tapering sleeve fitting snugly upon the tapering arm of an ordinary axle, and firmly held against the shoulder on the inner end by a nut engaging the outer reduced threaded end of the hub, and an outer sleeve fitting into the wooden part of the hub, and having on its interior surface adjusting annular bearings for rollers, annular adjusting nuts to regulate these bearings, also cups, and retaining rings for balls, or adjustable roller bearings or roller bearings and retainers for balls where both are combined formed upon the outer surface of said annular adjusting nuts, said balls or rollers acting upon annular adjusting cone-shaped nuts screw threaded upon each end of the inner sleeve, which serve to keep the outer sleeve in its proper relation to the inner so that the rollers may engage the straight portion on the inner sleeve, as substantially set forth in drawings and specifications. 2nd. The combination in a roller and ball bearing axle boxing of a specially constructed bearing for the rollers, consisting of opposing annular rings provided with feathers fitting into oppositely disposed grooves in the outer sleeve, having on their opposing surfaces cone-shaped recesses to receive pointed ends of the rollers, said bearing rings being adjustable relative to each other by means of annular jam nuts, said bearing being adapted for working either horizontally or at an angle upon a direct parallel surface, and in the latter form may be substituted for the balls in the adjusting bearing thus practically eliminating friction by confining it to the bearing points of the rollers in their cone-shaped seats, as substantially set forth in drawings and specifications. 3rd. The combination in a roller and ball bearing axle boxing of balls or rollers in conjunction with, and acting upon the bearing rollers in modified form (which are held in their bearings on the outer sleeve), and engaging the outer surface of the inner sleeve, thus reducing the necessary rotary action of the balls or rollers as they do not engage the outer sleeve as in all other ball or roller bearings but act only upon the inner sleeve and the bearing rollers, which also prevents the friction of the balls or rollers upon each other, said balls or rollers being held in position in contact with bearing rollers by means of retainers attached to the annular bearing rings, of the adjusting nuts, attached to the outer sleeve, as substantially set forth in drawings and specifications. 4th. By using long bearing rollers, and long rollers in conjunction with them, the secondary or adjusting bearings may be dispensed with and the sleeves regulated upon each other by means

of adjustable annular nuts, screw threaded upon either end of the inner sleeve, and also upon the ends of the bearing rollers, thus simplifying the construction and providing a suitable bearing for a heavy boxing. 5th. In a roller or ball bearing boxing, the combination of bearing rollers or bearing rollers with balls or rollers, applied between an inner and an outer sleeve in such form as to practically eliminate friction and adapted for use in any vehicle from a bicycle to the heaviest dray, and may also be applied to reapers, binders, etc. 6th. I claim for my bearing rollers and bearing rollers with rollers in conjunction, adaption for stationary boxings as well.

No. 69,223. Elastic Heel. (*Talon élastique.*)



69223

Henry B. Haigh, New York City, New York, U.S.A., 5th November, 1900; 6 years. (Filed 13th October, 1900.)

Claim.—1st. A heel for shoes made of leather, provided with a recess in the lower surface of the heel, and a rubber piece fitting in said recess, but not completely filling the same, with the upper surface extending only slightly above the outer surface of the heel, with means for holding said rubber piece in place, substantially as described. 2nd. A heel for shoes, provided with a recess in the lower surface of the heel, and a rubber piece fitting in said recess, but not completely filling the same, with the upper surface of the rubber extending only slightly above the outer surface of the heel, and a tongue on the rubber piece extending between the top lift and heel, for holding the said rubber piece in place, substantially as described. 3rd. In a heel for shoes, a top lift therefor made of leather, provided with a slot wider within than at the surface, and a rubber strip fitting in said slot, but not completely filling the same, and means for retaining said strip within the slot, substantially as described. 4th. In a heel for shoes made of leather, the combination with the heel, of the top lift therefor provided with a slot having walls flaring inwardly, and a rubber strip fitting in said slot, but not completely filling the same, with the upper surface of the rubber extending only slightly above the outer surface of the top lift, and a tongue on the strip extending between the top lift and the heel, for retaining the strip in place, substantially as described.

No. 69,224. Can washing Machine.

(*Machine à laver les bidons.*)

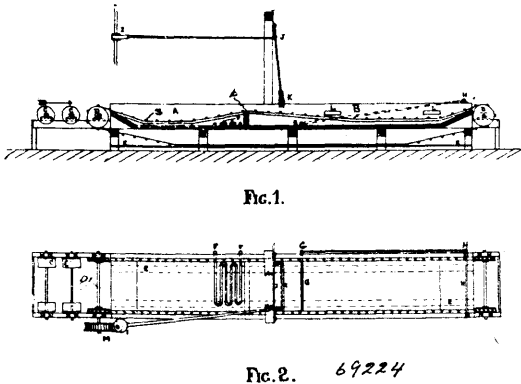


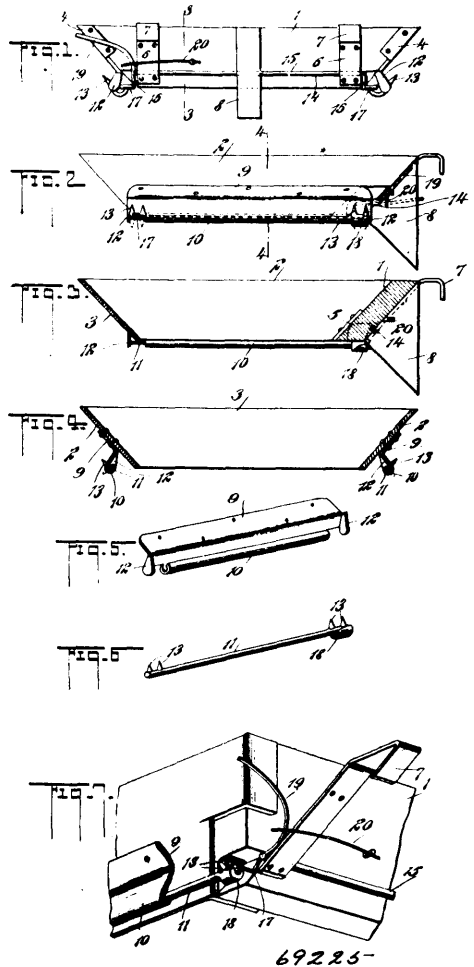
Fig. 2. 69224

Thomas James Cosens, New Westminster, British Columbia, Canada, 5th November, 1900; 6 years. (Filed 10th October, 1900.)

Claim. 1st. In a machine of the class described, a shallow trough or bath, a heating coil in the bottom of such, slack sprocket chains on each side of the inside of the bath joined with slats so as to form a conveyer, sprocket wheels at each end of the bath and means

whereby a continuous motion may be imparted to such sprocket wheels and chains, receiving rollers at the entering end of such bath, a swinging tubular frame at the leaving end of the same, having a perforated lower cross member carrying a swab or brush that shall sweep the tops of the cans across the whole width of the bath and means whereby water may be admitted to such tubular frame and through it to the perforated lower member, and an eccentric and rod connected to the swinging frame whereby an oscillating motion may be imparted to such frame, all substantially as described. 2nd. In a machine of the class described, a long shallow trough or bath, a slack conveyer formed of sprocket chains on each side of the bath with slats between them, a cross pipe in the entering end of such bath below the chains, perforated on its upper side, a similar cross pipe above the level of the chains at the opposite end of the bath, perforated on its under side and means whereby water may be conveyed to such pipes, long shallow overflows in the sides of such bath, substantially as described. 3rd. In a machine of the class described, a long trough or bath divided by a cross partition into two parts, one smaller than the other, slack sprocket chains on each side of the inside of the bath passing over sprocket wheels at each extreme end thereof, the upper sides of which are above the level of the ends of and partition, slats connecting such chains so as to form a carrier or conveyer and means whereby continuous motion, through the smaller bath to the larger, may be imparted to such chains, heating coil in the bottom of the smaller division, a cross pipe perforated on its upper side in the end of the larger bath near the partition below the level of the chains, a similar pipe perforated on its underside at the other end of the same bath above the level of the chains, long shallow overflows in the sides of the same bath just below the level of the partition, a swinging tubular frame, having a perforated lower cross member and means whereby water may be admitted to such, suitably suspended over the entering end of the second bath, at its lower end a swab or brush which will sweep the tops of the cans when on the conveyer chains, means whereby an oscillating motion may be imparted to such frame, and receiving rollers at the entering end, all substantially as described.

No. 69,225. Sack-holder. (*Porte-sac.*)

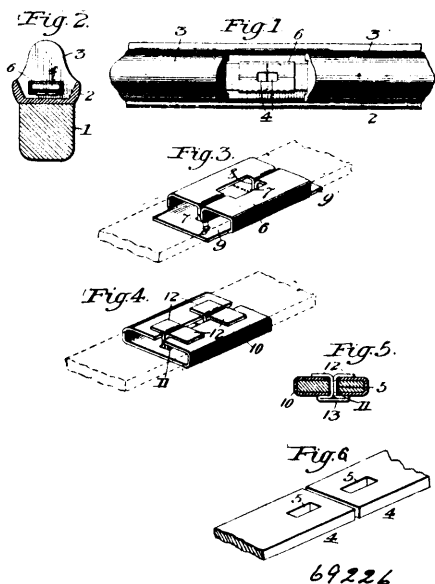


69225-

Frank Herman Gilbert, Ridgefield, Washington, U.S.A., 5th November, 1900; 6 years. (Filed 2nd October, 1900.)

Claim.—1st. A sack-holder, comprising a hopper, means for attaching the same to a support, bearing-plates secured to opposite side walls of the hopper and having tubular lower portions, holding-bars mounted to rock in said tubular portions, teeth on said bars, lugs on said bars and having curved upper edges, a locking and releasing bar mounted to rock in a groove formed in the rear wall of the hopper, the said locking and releasing bar having its ends turned downward and then outward to engage with the lugs of the holding-bars, a handle extended from said locking and releasing bar, and a spring attached at one end to the hopper and engaging the said handle, substantially as specified. 2nd. A sack-holder, comprising a hopper, straps secured to the outer sides of the rear wall of said hopper, and terminating in hooks at the upper end, a bracket attached to said rear wall, a locking and releasing bar mounted to rock in a channel formed in the rear wall, the said bar being held in place by the said straps, holding bars mounted to rock on the opposite side walls of the hopper, teeth on the said holding bars, lugs extended inward from said holding-bars, and adapted to be engaged by the locking and releasing bar, and a spring for moving the locking and releasing bar to its normal position, substantially as specified.

No. 69,226. Means for Securing Rubber Tires to Vehicle Wheels. (Moyen d'assujettir les bandages en caoutchouc aux roues.)



Richard A. Brine, Revere, Massachusetts, U.S.A., 5th November, 1900; 6 years. (Filed 30th July, 1900.)

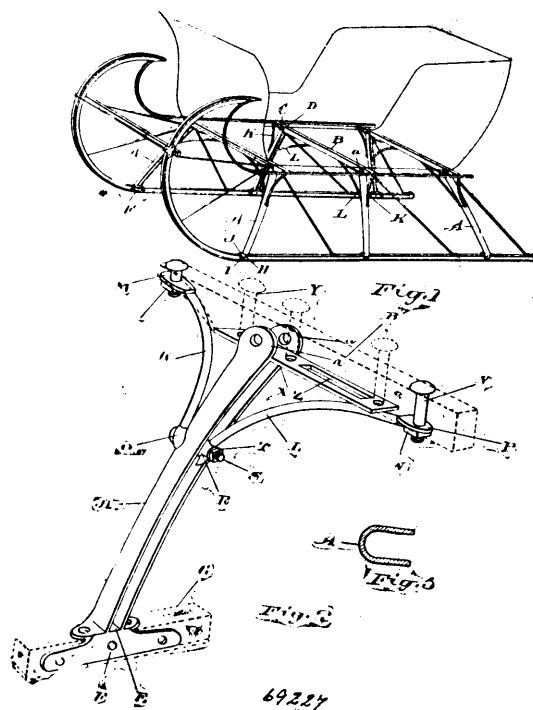
Claim.—1st. The combination with a wheel, of a rubber tire, a slotted metallic tape, top and bottom plates in one piece, and arms or prongs passed through the slots and bent down. 2nd. The combination with a wheel, of a rubber tire, a slotted metallic tape, and an integral metallic plate having slots, and arms or prongs for uniting the several parts. 3rd. The combination with a wheel, of a rubber tire, a slotted metallic tape, and an integral metallic plate having slots, projecting ends 9, 9, and arms or prongs for uniting the several parts. 4th. The combination of a wheel, of a rubber tire, a slotted metallic tape, an integral metallic plate having two slots and its edges bent and lapped over the sides of the free ends of the tape, and arms or prongs passed through the two slots in the plate and tape and the ends bent down.

No. 69,227. Sleigh. (Trainau.)

Thomas Stephenson, Cannington, Ontario, Canada, 5th November, 1900; 6 years. (Filed 27th July, 1900.)

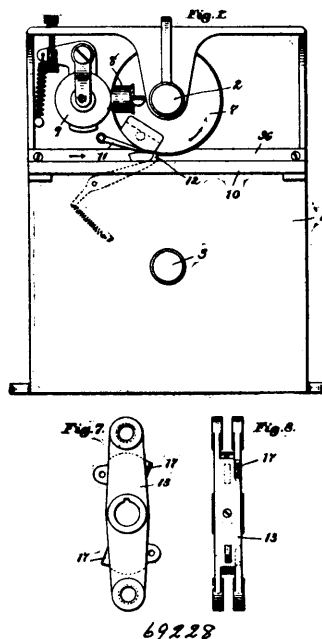
Claim.—1st. A sleigh gear embracing in its construction a knee provided at the upper end with two oppositely opposed lugs to receive the beam of the body, and at its lower end two oppositely opposed lugs to receive the runner of the sleigh, two braces located one on each side of the knee and bolted to the middle thereof, substantially as specified. 2nd. A sleigh gear embracing in its construction a knee provided at its upper end with two oppositely opposed lugs to receive the beam of the body, and at its lower end two oppositely opposed lugs to receive the runner of the sleigh, two

braces located one on each side of the knee and bolted to the middle thereof, a plate extending horizontally across the top of the knee



parallel with the under side of the beam, provided with an elongated slot, and a plate extending horizontally across the under side of the of the bottom of the knee parallel with the top of the runner, substantially as specified.

No. 69,228. Rotary Marking Stamp. (Etampe rotatoire à marquer.)



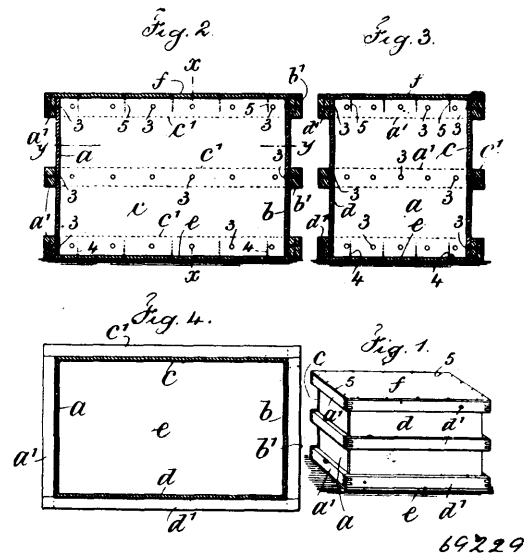
Henry Edward Waite, Newton, Massachusetts, U.S.A., 5th November, 1900; 6 years. (Filed 12th March, 1900.)

Claim.—1st. In a rotary marking stamp, a printing couple comprising a revolving marker and a revolving impression pad, one of which is movable toward and from its center of revolution and yieldingly projected away therefrom so as to assume printing relation with the other member, a fixed support, a rejecter yieldingly mounted on said support and engaging the said yielding

printing member in each revolution of the latter, and displacing the same from printing relation with the other member when the yielding member is unlocked, and letter controlled means revolving with the yielding member for locking the latter in printing position when a letter is present. 2nd. In a rotary marking stamp, a printing couple comprising a revolving marker and a revolving impression pad one of which is movable toward and from its center of revolution and yieldingly projected away therefrom so as to assume printing relation with the other member, a fixed support, a spring-held lever pivoted thereon and carrying a roller adapted to engage the said yielding printing member in each revolution of the latter and displace the same from printing relation with the other member when the yielding member is unlocked, and letter controlled means revolving with the yielding member for locking the latter in printing position when a letter is present. 3rd. In a rotary marking stamp, a printing couple comprising a revolving marker and a revolving impression pad one of which is movable toward and from its center of revolution and yieldingly projected away therefrom so as to assume printing relation with the other member, a rejecter engaging said yielding printing member in each revolution of the latter and displacing the same from printing position when the yielding member is not locked, a letter controlled lock revolving with said yielding member and adapted to lock the latter in printing position when a letter is present, and yielding means normally retracting said lock or holding it out of locking position. 4th. In a rotary marking stamp, a printing couple comprising a revolving marker and a revolving impression pad, one of which is movable toward and from its center of revolution and yieldingly projected away therefrom so as to assume printing relation with the other member, a rejecter engaging said yielding printing member in each revolution of the latter and displacing the same from printing position when the yielding member is not locked, a letter controlled lock revolving with said yielding member and adapted to lock the latter in printing position when a letter is present, and a letter engaging trip positively connected with said lock and adapted to carry the latter into locking position. 5th. In a rotary marking stamp, a printing couple comprising a revolving marker and a revolving impression pad, one of which is movable toward and from its center of revolution and yieldingly projected away therefrom so as to assume printing relation with the other member, a rejecter engaging said yielding printing member in each revolution of the latter and displacing the same from printing position when the yielding member is not locked, a pivoted lock revolving with said yielding member, a letter engaged trip secured to said lock and oscillating on the same pivot therewith and adapted to carry said lock into position to lock the yielding member in printing position when a letter is present, and yielding means normally retracting said lock or holding it out of locking position. 6th. In a rotary marking stamp, a revolving support, a member of a printing couple pivotally mounted on said support eccentrically to the axis of revolution thereof, means for oscillating said member inwardly toward said axis out of printing position when no letter is present, and a letter controlled lock adapted to support the free end of the member and hold said member in printing position when a letter is present. 7th. In a rotary marking stamp, two revolving supports held in fixed bearings on opposite sides of the letter path, a lever pivotally mounted on one of said supports eccentrically to the axis of revolution thereof, a member of a printing couple mounted on one end of said lever, a co-operating member mounted on the other support, and a spring connected with said lever and normally projecting outwardly the end which carries the first said member. 8th. In a rotary marking stamp, a revolving support held in fixed bearings, a lever pivotally mounted on said support eccentrically to the axis of revolution thereof, a spring yieldingly projecting one end of said lever outwardly, a member of a printing couple pivoted to said end, a second spring of less force than the first spring normally holding the said member in printing position, means for displacing said member from printing position when no letter is present, and letter controlled means for locking said member with respect to the lever when a letter is present. 9th. In a rotary marking stamp, a revolving support held in fixed bearings, a segmental member of a printing couple yieldingly mounted thereon, and a segmental carrying member yieldingly mounted on said support and forming a continuation of the carrying surface of the first said member and adapted to advance the letter after the first said member has passed from engagement therewith. 10th. In a rotary marking stamp, two revolving supports held in fixed bearings on opposite sides of the letter path, a lever pivotally mounted on one of said supports eccentrically to the axis of revolution thereof, a member of a printing couple mounted on one end of said lever, a co-operating member mounted on the other support, a spring connected to said lever and normally projecting outwardly the end which carries the first said member, and a segmental carrying member, yieldingly mounted on the first said support and forming a continuation of the carrying surface of the first said member. 11th. In a rotary marking stamp, a revolving support, a member of a printing couple yieldingly mounted on said support, an opposed revolving support carrying a co-operating member, a lock adapted to lock the first said member in printing position and carried by its support, a letter engaging trip carried by said support and controlling said lock, and an abutment mounted on the opposed support and adapted to engage the opposite side of the letter from said trip, whereby the trip is operated. 12th. In a rotary marking stamp, a

revolving support, a member of a printing couple yieldingly mounted on said support, an opposed revolving support carrying a co-operating member, a lock adapted to lock the first said member in printing position and carried by its support, a yielding stop adapted to arrest the letters, co-operating gripping members carried by the respective supports and located in advance of the printing members, said gripping members engaging the letter and advancing it past said stop, the gripping member on the support which carries the lock acting as a letter engaged trip which controls said lock. 13th. In a device of the character specified, the combination of means for guiding the letters in a pre-determined path, a hub or shaft, means for rotating the same, a stacker projecting from one side only of said shaft and adapted to sweep intermittently across the letter path, means for arresting the letters in proximity to said stacker, a horizontal carrying belt located beneath the area swept over by said stacker and means for propelling said belt. 14th. In a device of the character specified, means for marking the letter, means for guiding the letter after being marked, a stacking table on which the marked letters are collected, a stacker, and an arresting abutment having a portion extending diagonally across the letter path, a portion parallel to said path, and a portion at right angles to said parallel portion, said abutment being adjustable mounted on the stacking table, so as to be movable therealong to different positions. 15th. In a rotary marking stamp, two shafts located on opposite sides of the letter path, co-acting marking devices secured to said shafts, two gears secured to the respective shafts and meshing with each other, a letter carrying belt suitably guided in a position to advance the letters to the marking devices, and means for propelling said belt, comprising a fixed driving roll engaging one side of the belt and having a gear meshing with one of the first said gears, an idler roll engaging the other side of the belt opposite the driving roll, and means for yieldingly pressing said idler roll against the belt.

No. 69,229. **Wooden Box.** (*Boite en bois.*)



Erastus Henry Barnes, Brooklyn, New York, U.S.A., 5th November, 1900; 6 years. (Filed 16th October, 1900.)

Claim.—1st. A wooden shipping box or package, comprising similar side and end sections each composed of a slab of wood veneer and parallel battens upon one surface thereof, with the grain of the veneer running at right angles to the battens, and the battens secured to the slab by nails passing first through the slab and then through the battens and clinched on the surface of the battens with the ends of the battens projecting interlocked and secured at the respective corners, and the vertical ends of opposite slabs overlapping the edges of adjacent slabs, and a bottom and top each composed of thin slabs of wood veneer extending over and connected to the battens by nails passing through the veneer into the battens, substantially as set forth. 2nd. A wooden shipping box or package, comprising similar side and end sections each composed of thin slabs of wood veneer with parallel battens along the respective opposite edges and with a center batten, the battens being secured to the slabs by nails passing first through the slabs and then through the battens and clinched on the surface of the battens, the grain of the wood veneer running at right angles to the length of the battens, and the ends of the various battens projecting and notched and firmly interlocked, the one with the other at the respective corners and held together securely by glue, and the top and bottom each composed of thin slabs of wood veneer extending over and secured to the various edge battens of the end and side sections by nails passing through the veneer into the battens, substantially as set forth.

No. 69,230. Closet Seat. (*Siège de latrines.*)

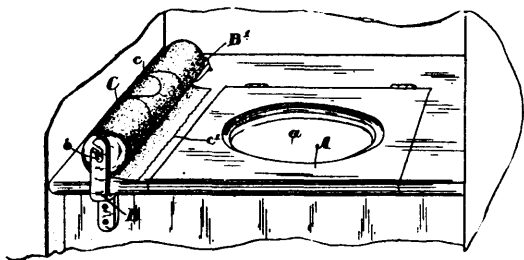


Fig. 1.

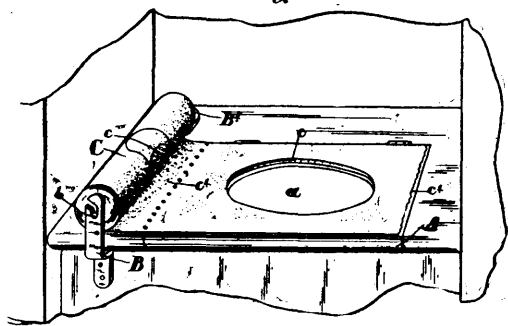
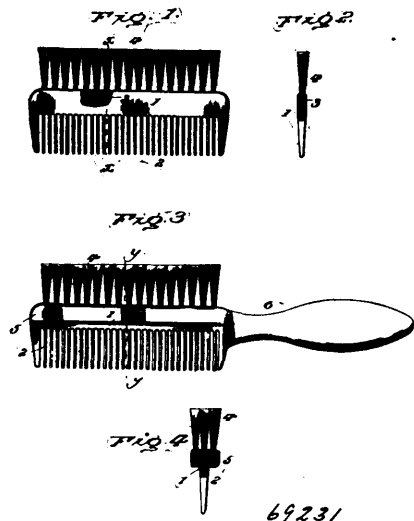


Fig. 2. 69230

Edward Robert Peacock, Deer Park, Ontario, Canada, 5th November, 1900; 6 years. (Filed 16th October, 1900.)

Claim.—1st. The combination with a closet seat provided with the usual opening, of a roll of paper suitably journaled in proximity to the seat and provided with holes at equal distances apart, such holes corresponding to the size of the opening in the seat, as and for the purpose specified. 2nd. The combination with a closet seat provided with the usual opening, of a roll of paper suitably journaled in proximity to the seat and transversely perforated at equal distances apart and provided with holes at equal distances apart and midway between each two lines of perforations, such holes corresponding to the size of the opening in the seat, as and for the purpose specified. 3rd. A closet seat protector consisting of a paper blank corresponding substantially in size to the size of the seat and provided with an opening of corresponding size to the opening in the seat, as and for the purpose specified.

No. 69,231. Comb and Brush. (*Peigne et brosse.*)



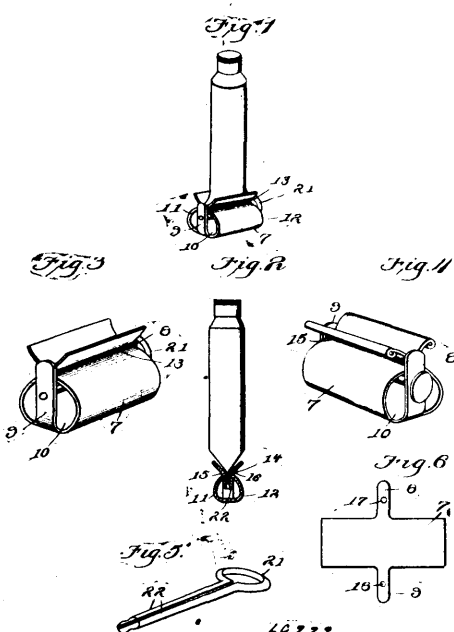
69231

Alfred Benjamin Durgin, Medford, Massachusetts, U.S.A., 6th November, 1900; 6 years. (Filed 17th October 1900.)

Claim.—1st. A comb brush consisting of a body having an edge portion cut to provide integral comb teeth and having sockets in its op-

posite edge portion, and brush material secured in the said sockets and projecting in an opposite direction to the comb teeth, substantially as specified. 2nd. A comb brush consisting of a body having an edge portion cut to provide integral comb teeth and having sockets in its opposite edge portion and having an end portion extended to form a handle in line with the stock, and brush material secured in the said sockets and projecting in an opposite direction to the comb-teeth, substantially as specified. 3rd. A comb brush consisting of a body having an edge portion cut to provide integral comb teeth and having longitudinal extensions at the sides of its opposite edge portion to stiffen and strengthen the body and form a brush back provided with sockets and projecting in an opposite direction to the comb teeth, substantially as set forth. 4th. A comb brush consisting of a body having an edge portion cut to provide integral comb teeth and having longitudinal extensions at the sides of its opposite edge portion to stiffen and strengthen the body and form a brush back provided with sockets and having an end portion extended to form a handle in line with the stock, and brush material secured in the said sockets and projecting in an opposite direction to the comb teeth, substantially as specified.

No. 69,232. Tube. (*Tube.*)

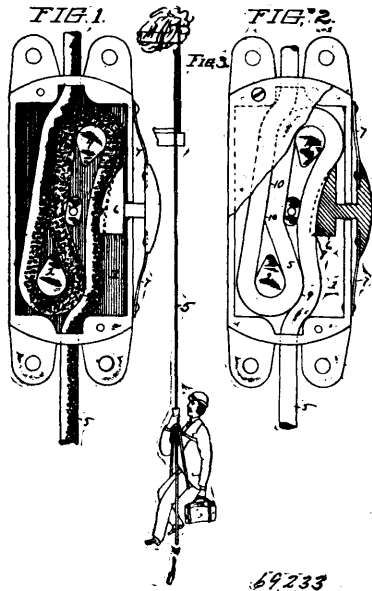


69232

Francis A. Nelson, Chicago, Illinois, U.S.A., 6th November, 1900; 6 years. (Filed 17th October, 1900.)

Claim.—1st. A collapsible tube holder, comprising a base adapted to receive the closed end of the tube and a turning pin carried thereby for folding the closed end of the tube upon itself progressively, for expelling the contents thereof, substantially as described. 2nd. In a collapsible tube holder, the combination with a base having an engaging opening in its upper end, of a turning pin carried by the base below the opening, whereby the closed end of the tube may be engaged and progressively fold the same upon itself, substantially as described. 3rd. In a collapsible tube holder, the combination with a sheet metal base having a hopper like opening in the upper end to receive the tube of a split turning pin carried in suitable bearings in the holder and designed to grasp the closed end of the tube for the purpose set forth. 4th. A blank for a tube holder, comprising a rectangular body of sheet metal having two outwardly projecting extensions on each longitudinal edge, intermediate the ends of the blank, substantially as described.

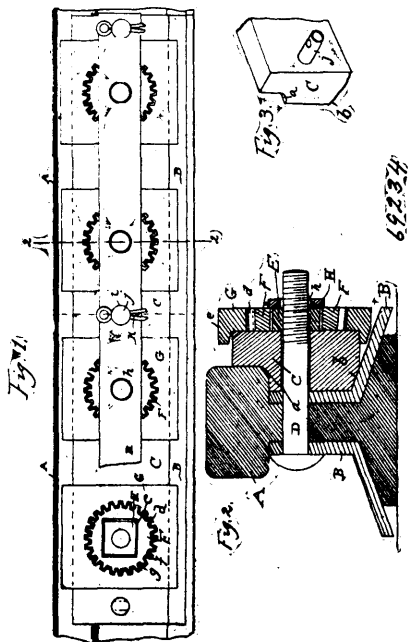
No. 69,233. Fire Escape. (*Sauveteur d'incendie.*)



Oscar A. Davis, Quincy, Illinois, U.S.A., 6th November, 1900; 6 years. (Filed 17th October, 1900.)

Claim.—In a fire escape, the combination of the friction box 1, having friction studs 2, 3 and 4, and a brake 6, operating through an aperture in the edge of said friction box, and in alignment with the friction stud 3, substantially as specified.

No. 69,234. Nut Lock. (*Arrête-écrou.*)

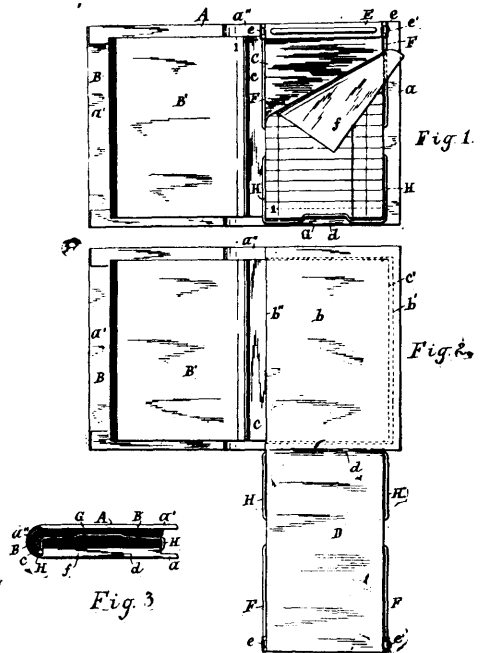


John P. Strand, Alta, Iowa, U.S.A., 6th November, 1900; 6 years. (Filed 17th October, 1900.)

Claim.—1st. In a nut lock, the combination of two parts to be connected, a threaded bolt extending through said parts, a lock piece arranged on the bolts, and engaging one of the parts to be connected so as to be held against rotation, an angular nut mounted on the bolt, a circular disc having an angular aperture snugly receiving the nut and also having peripheral teeth a plate having a circular aperture snugly receiving the disc and teeth on the wall of said aperture intermeshed with those of the disc and also having flanges engaging the lock pieces and means for retaining the disc in engagement with the lock pieces, substantially as specified. 2nd. In a nut lock, the combination of two parts to be connected, a threaded bolt extending

through said parts, a lock piece arranged on the bolt and engaging one of the parts to be connected so as to be held against rotation, and having outwardly extending apertured.

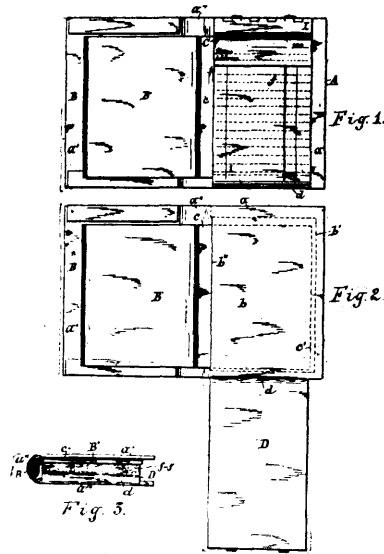
No. 69,235. Manifold Order Book. (*Livre à copier.*)



The Carter Crume Company, assignee of Thomas McDowell, both of Niagara Falls, New York, U.S.A., 6th November, 1900; 6 years. (Filed 7th March, 1899.)

Claim.—1st. In a manifold order book, the combination with the pile of original and duplicate leaves folded upon each other, and the carbon sheet, of a cover, a base to support said pile hinged to the lower edge of the cover, a clamp to secure the upper end of the pile to the free end of the base, a holder to secure the lower end of the pile to the base, and set of triplicate leaves bound together and held in the book, and adapted to lie upon either or both sides of the said base and pile of leaves, as set forth. 2nd. In a manifold order book, the combination with the pile of original and duplicate leaves folded upon each other, and the carbon sheet, of a cover, a base to support said pile hinged to the lower right hand edge of the cover, a spring clamp to hold the carbon sheet and one end of the pile to the base, a set of triplicate leaves and a flexible cover therefor bound together at their centers, and a pocket in the inside of the first-mentioned cover to contain one of the leaves of the second-mentioned cover, as set forth. 3rd. In a manifold order book, the combination with the pile of original and duplicate leaves folded upon each other, and the carbon sheet, of a cover, a base to support said pile hinged to the lower right hand edge of the cover, a spring clamp to hold the carbon sheet and one end of the pile to the base, a set of triplicate leaves and a flexible cover therefor bound together at their centers, and a pocket in the inside of the first-mentioned cover to contain one of the leaves of the second-mentioned cover, as set forth. 4th. In a manifold order book, the combination with the pile of original and duplicate leaves folded upon each other, and the carbon sheet, of a cover, a base to support said pile hinged to the lower edge of the cover, means to hold the carbon sheet and the pile to the said base, a book containing the triplicate leaves having its hinge opposite the hinge of the first-mentioned cover, the latter cover extending on all sides beyond the other cover, and means to secure the said covers together, as set forth. 5th. In a manifold order book, the combination with a pile of original and duplicate leaves folded upon each other in a zigzag manner with lines of perforations at the folds, and the carbon sheet, of a cover, a base to support said pile hinged to the lower right hand edge of the cover, a spring clamp to hold the carbon sheet and one end of the pile to the base, a spring holder to hold the other end of the pile to the base, a set of triplicate leaves and a flexible cover therefor bound together at their centers and fold, the fold lying upon the hinge of the first-mentioned cover, and a pocket in the inside of the right hand leaf of the first-mentioned cover and opening near its hinge to receive and retain the right hand leaf of the flexible cover, substantially as and for the purpose described.

No. 69,236. Manifold Order Book. (Livre à copier.)



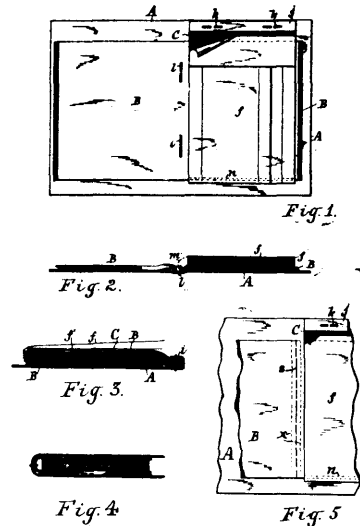
69236

The Carter-Crume Company, assignee of Thomas McDowell, all of Niagara Falls, New York, U.S.A., 6th November, 1900; 6 years. (Filed 7th March, 1899.)

Claim.—1st. In a manifold order book, the combination with the pile of double leaves, one-half of which are bound together while the other half fold in as fly leaves, and the transfer sheet coated with transferring composition on both sides bound therein, of a cover, a base to support said pile hinged to the lower edge of the cover, a clamp to secure the bound end of the pile to the base, and a set of triplicate leaves bound together and held in the book, and adapted to lie upon either or both sides of the said base and pile of leaves, as set forth. 2nd. In a manifold order book, the combination with the pile of double leaves, one-half of which are bound together while the other half fold in as fly leaves, and the transfer sheet coated with transferring composition on both sides bound therein, of a cover, a base to support said pile hinged to the lower edge of the cover, an hinged spring clamp to secure the bound end of the pile to the base, and a set of triplicate leaves bound together and held in the book, and adapted to lie upon either or both sides of the said base and pile of leaves, as set forth. 3rd. In a manifold order book, the combination with the pile of double leaves, one half of which are bound together while the other half fold in as fly leaves, and the transfer sheet coated with transferring composition on both sides bound therein, of a cover, a base to support said pile hinged to the lower edge of the cover, a clamp to secure the bound end of the pile to the base, and a set of triplicate leaves bound together and held in the book, and adapted to lie upon either or both sides of the said base and pile of leaves, as set forth. 4th. In a manifold order book, the combination with the pile of double leaves, one-half of which are bound together while the other half fold in as fly leaves, and the transfer sheet coated with transferring composition on both sides bound on the top of the pile and of a length to be inclosed by the double leaves, said leaves being divided by perforated lines, of a cover, a base to support said pile hinged to the lower edge of the cover, a clamp to secure the bound end of the pile to the base, and a set of triplicate leaves bound together and held in the book, and adapted to lie upon either or both sides of the said base and pile of leaves, as set forth. 5th. In a manifold order book, the combination with the pile of double leaves, one-half of which are provided with stubs bound together, while the other half fold in as fly leaves, perforated lines between the leaves and between the leaves and stubs, and the transfer sheet coated with transferring composition on both sides and of a length to be inclosed by the double leaves, of a cover, a base to support said pile hinged to the lower right hand edge of the cover, a spring clamp mounted on the free end of the hinged base and engaging the stubs and transfer sheet, and a set of triplicate leaves bound together and held in the book, and adapted to lie upon either or both sides of the said base and pile of leaves, as set forth. 6th. In a manifold order book, the combination with the pile of double leaves, one-half of which are bound together while the other half fold in as fly leaves, and the transfer sheet coated with transferring composition on both sides bound therein, of a cover, a base to support said pile hinged to the lower edge of the cover, a spring clamp to hold the carbon sheet and one end of the pile to the base, a set of triplicate leaves and a flexible cover therefor bound together at their centers, and a pocket

in the inside of the first mentioned cover to contain one of the leaves of the second mentioned cover, as set forth. 7th. In a manifold order book, the combination with the pile of double leaves, one-half of which are bound together while the other half fold in as fly leaves, and the transfer sheet coated with transferring composition on both sides bound therein, of a cover, a base to support said pile hinged to the lower edge of the cover, a spring clamp to hold the carbon sheet and one end of the pile to the base, a set of triplicate leaves and a flexible cover therefor bound together at their centers, and a pocket in the right hand side of the first mentioned cover and opening near and on a line parallel with the central hinge to receive and contain the right hand leaf of the said flexible cover, as set forth.

No. 69,237. Manifold Order Book. (Livre à copier.)



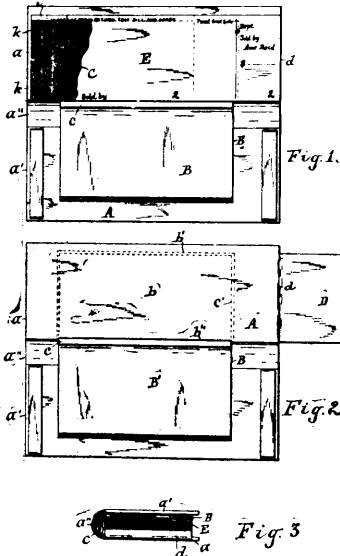
69237

The Carter Crume Company assignee of Thomas McDowell, all of Niagara Falls, New York, U.S.A., 6th November, 1900; 6 years (Filed 7th March, 1899.)

Claim.—1st. In a manifold order-book, the combination with the cover, a tablet composed of folded leaves, one half of which are bound together while the other half fold in as fly leaves, means to secure the upper end of the tablet to the upper edge of the right-hand side of the cover, a sheet coated with transferring composition on both sides bound at its upper end to the tablet and cover and of a length to be enclosed in the folded leaves, and a pile of leaves secured to the cover along a central line between the right and left-hand leaves and adapted to lie upon either or both sides of the said tablet, as set forth. 2nd. In a manifold order book, the combination with the cover having a projection at the upper edge of the right hand side thereof, a tablet composed of folded leaves, one-half of which are bound together at one end while the other half fold in as fly leaves, said projection folded over the bound end of the leaves and secured to the latter, a sheet coated with transferring composition on both sides bound at its upper end to the tablet and cover and of a length to be enclosed in the folded leaves, and a pile of leaves secured to the cover along a central line between the right and left-hand leaves and adapted to lie upon either or both sides of the said tablet, as set forth. 3rd. In a manifold order book, the combination with the flexible cover having a projection at the upper edge of the right hand side thereof, a tablet composed of folded leaves, one half of which are bound together at one end while the other half fold in as fly leaves, the said projection being folded over the bound end of the leaves, staples passing through the projection and bound end of the leaves, a sheet coated with transferring composition on both sides bound at its upper end to the tablet and cover and of a length to be enclosed in the folded leaves, and a pile of leaves secured to the cover along a central line between the right and left hand leaves and adapted to lie upon either or both sides of the said tablet, as set forth. 4th. In a manifold order book, the combination with the flexible cover having a projection at the upper edge of the right hand side thereof, a tablet composed of folded leaves, one half of which are bound together at one end while the other half fold in as fly leaves, both being provided with perforated lines so that they can be readily torn out, the said projection being folded over the bound end of the leaves, staples passing through the projection and bound end of the leaves, a sheet coated with transferring composition on both sides bound at its upper end to the tablet and cover and of a length to be enclosed in the folded leaves, and a pile of leaves secured to the cover along a central line between the right and left hand leaves and adapted to lie upon either or both sides of the said tablet, as set forth. 5th. In a manifold order book, the combination with the cover having a projection at the upper edge of the right hand side thereof, a tablet

composed of folded leaves, one half of which are bound together at one end while the other half fold in as fly leaves, said projection folded over the bound end of the leaves and secured to the latter, a sheet coated with transferring composition on both sides bound at its upper end to the tablet and projection and of a length to be enclosed by a folded leaf, and a pile of thin sheets to the cover on a line midway between the side edges thereof and parallel with and to the left of the side edges of the folded leaves, as set forth.

No. 69,238. Manifold Order Book. (*Livre à copier.*)



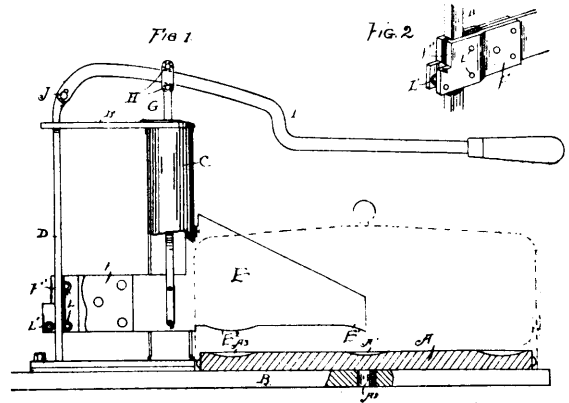
69238

The Carter-Crume Company, assignee of Thomas McDowell, all of Niagara Falls, New York, U.S.A., 6th November, 1900; 6 years. (Filed 7th March, 1899.)

Claim.—1st. In a manifold order book, the combination with the cover and a pile of duplicates, said duplicates being bound together at one edge with a leaf coated with transferring composition, bound upon the top of the pile, of a board hinged to the cover and supporting the said pile, a pocket in the cover below the said hinged board and opening at or near the centre of the cover, and a small book containing the original sheets, one of the covers of the latter book being entered and retained in the said pocket, as set forth. 2nd. In a manifold order book, the combination with the cover, and a pile of leaves forming duplicates, said duplicates being bound together at one edge with a leaf coated with transferring composition bound upon the top of the pile, of a board supporting the said pile, hinged to the right-hand edge of the leaf, *a*, of the cover, and having its free end attached to the bound end of the pile of duplicates, a pocket in the cover below the said hinged board and opening at or near the centre of the cover, and a small book containing the original sheets, one of the covers of the latter book being entered and retained in the said pocket, as set forth. 3rd. In a manifold order book, the combination with the cover, and a pile of leaves forming duplicates, said duplicates being bound together at one edge with a leaf coated with transferring composition, bound to the top of the pile, of a board supporting the said pile, hinged to the right-hand edge of the leaf, *a*, of the cover and having a pocket therein, a piece secured to the lower side of the pile of duplicates to enter the pocket and retain the said pile in position thereon within its bound end upon the free end of the hinged section, a pocket in the cover below the said hinged board and opening at or near the centre of the cover, and a small book containing the original sheets, one of the covers of the latter book being entered and retained in the said pocket, as set forth. 4th. In a manifold order book, the combination with the cover, and a pile of leaves forming duplicates, said duplicates being bound together at one edge with a leaf coated with transferring composition bound upon the top of the pile, of a board supporting the said pile hinged to the right-hand edge of the leaf, *a*, of the cover, and having a pocket therein opening near and on a line parallel with the free end of the hinged board and on its upper side, a piece secured upon the lower side of the said pile and adapted to enter the pocket, said piece being secured to the bound end of the pile, a pocket in the cover below the said hinged board and opening at or near the centre of the cover, and a small book containing the original sheets, one of the covers of the latter book being entered and retained in the said pocket, as set forth. 5th. In a manifold order book, the combination with the stiff cover and its central horizontal hinge, a pocket in the inside of the leaf, *a*, of the cover and

having its mouth near and parallel with the hinge, of a book shorter than the said cover and having a flexible cover and containing leaves for original slips, and having one of the leaves of its cover lying in the said pocket, a board hinged to one side of the upper leaf of the latter cover, a tablet bound at one end, supported upon the hinged board and having its bound end removably secured to the free end of said section, perforated lines across the sheets of said tablet extending beyond the ends of the small book of originals, as and for the purpose set forth. 6th. In a manifold order book, the combination with cover and a pile of duplicates, said duplicates being bound together at one edge, and a leaf coated with transferring composition bound upon the top the pile, of a board hinged to the cover and supporting the said pile, a small book, much shorter than said cover, containing the original sheets, and means substantially as described detachably securing the small book to the cover, as set forth.

No. 69,239. Cheese Cutter. (*Couteau à fromage.*)

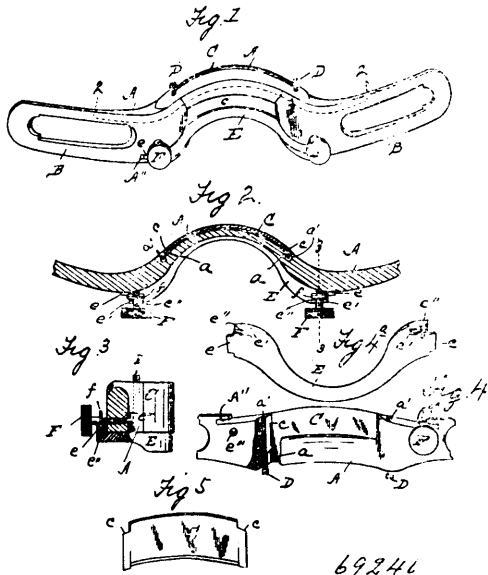


69239

Elkanah Said Burt, Glencoe, California, U.S.A., 6th November, 1900; 6 years. (Filed 17th October, 1900.)

Claim.—1st. A cheese cutting device consisting of a support for the cheese, a vertically slotted guide exterior to the periphery of the support, a knife or cutter of substantially triangular shape, having the deepest portion proximate to said guide, said knife having a longitudinal stem or shank extension from its rear passing through the slots in the guide, a guide for the rear end of the shank, a lever fulcrumed to the rear guide and a rod connected with the knife and passing through the slotted guide, and loosely connected with the lever at a point between its ends. 2nd. A device for cutting cheese consisting of a base, a rotary cheese support turnable thereon, a hollow vertical column fixed to the base exterior to the support and having slots or channels through the opposite sides and radially in line with the centre of the cheese, a vertically movable knife extending through said slots having the point in line above the centre of the cheese, clamps between which the rear end of the knife is fixed, a vertically fixed guide bar around which the upper rear ends of the clamps are bent and antifrictional rollers journaled between the clamps and adapted to travel against the guide bar. 3rd. A device for cutting cheese consisting of a base, a rotary cheese support pivoted and turnable upon the base having exterior knobs by which it may be moved, a hollow column slotted upon opposite sides in line with the centre of the cheese, a knife extending through said slots and projecting over the cheese, clamps behind the column between which the rear end of the knife is secured, a vertically fixed guide bar around which the upper portion of the rear ends of the clamps are bent, a roller journaled between the lower ends of the clamps upon each side of the bar, a rod, the lower end of which is fixed to the knife within the column, a guiding cap through which the upper end of the rod passes, a fulcrumed lever engaging the upper end of the rod whereby it and the knife and the guides are vertically movable. 4th. A cheese cutting device consisting of a horizontally rotatable cheese support, and means for turning it, a hollow column slotted upon opposite sides having a central perforated cap, a vertical guide bar parallel with and at the rear of the column, a supporting plate extending from the top of the column to the guide bar, a knife extending through the slotted column, clamping plates at the rear of the column in which the rear end of the knife is bolted, guide flanges and rollers within the clamping plates adapted to travel upon the vertically fixed guide bar, a rod fixed to the knife within the column and extending through the guide hole in the top thereof, a lever having one end fulcrumed to the top of the fixed exterior guide rod, rollers journaled in the top of the knife actuating rod between which the lever passes and by the movement of which it is reciprocated.

No. 69,240. Heel Shave. (*Appareil à finir les talons.*)



69240

Erik Hoglund, Los Angeles, California, U.S.A., 6th November 1900; 6 years. (Filed 17th October, 1900.)

Claim—1st. In a heel shave, the combination set forth of the frame provided with the handles the knife seat and the slots, each slot communicating with a screw hole, a gauge arranged at the front of the shave, a knife provided at its ends with tongues to slide in the slots and to project into the screw holes, and screws screwing into the holes and engaging with the tongues to force the knife toward the gauge. 2nd. In a heel shave, the combination set forth of a curved frame provided with handles and with guide slots which open into screw threaded holes respectively, the knife provided at its end with tongues to slide in the slots and to project into the screw holes, guideways arranged at the front of the frame and transverse the slots, a gauge provided with tongues to slide in the guideways, and provided with projecting lips to engage with flanged adjusting screws, and adjusting screws arranged at the ends of the gauge, respectively, and screwed into the frame and each provided with a flange to enter the slotted lip upon the gauge. 3rd. In a heel shave, the combination set forth of the frame, the knife secured to the frame, guideways arranged in the frame, a gauge provided with tongues to slide in the guideways and provided at each end with a projecting slotted lip, and adjusting screws, arranged at the respective ends of the gauge, and each provided with a flange to enter the slotted lips, and screwed into the frame. 4th. In a heel shave, the combination set forth of the curved frame recessed to receive the knife and provided in each end of the recess with a slot, a screw threaded hole arranged at the end of each slot, the knife shouldered to fit within the recess and provided upon the front portion of each end with a tongue to slide within the guide slots, the screws adapted to screw into the screw threaded holes and to engage with the tongues upon the knife, and a gage removably secured in the front of the knife.

No. 69,241. Buggy Top Joint. (*Joint de soufflet de voiture.*)

William Winkler, assignee of Richard D. Burchard, both of Macon, Missouri, U.S.A., 6th November, 1900; 6 years. (Filed 25th July, 1900.)

Claim.—A buggy top joint, consisting of arms or levers pivotally connected together in pairs and pivoted at their ends to the knuckles of the top prop, in combination with chains, pulleys, and a handle for operating the arm or levers to open the top prop joints to let down the buggy top, substantially as described. 2nd. A buggy top joint comprising the top prop levers, arms or levers pivoted together and pivotally connected to the knuckles of said top prop levers, chains connected to the pivots of said arms or levers, pulleys over

which the chains pass, said pulleys being journaled to brackets on one of the bows of the buggy top, and a handle for operating both

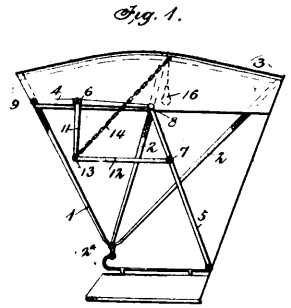
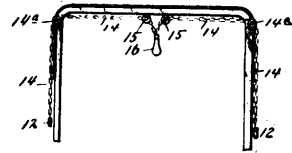


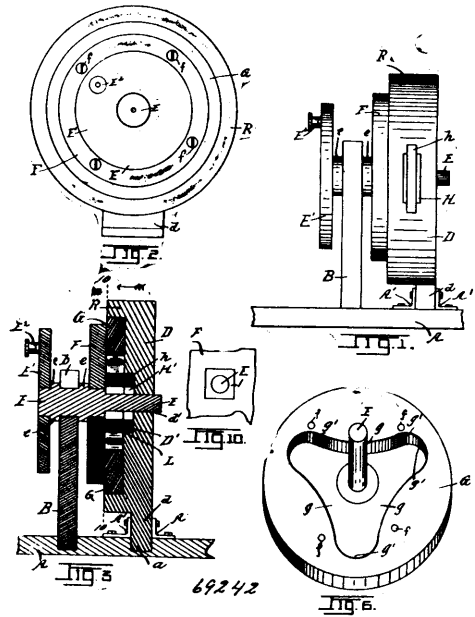
Fig. 2.



69241

chains simultaneously to open or break the joints of the top prop, substantially as described.

No. 69,242. Power Mechanism. (*Mécanisme moteur.*)



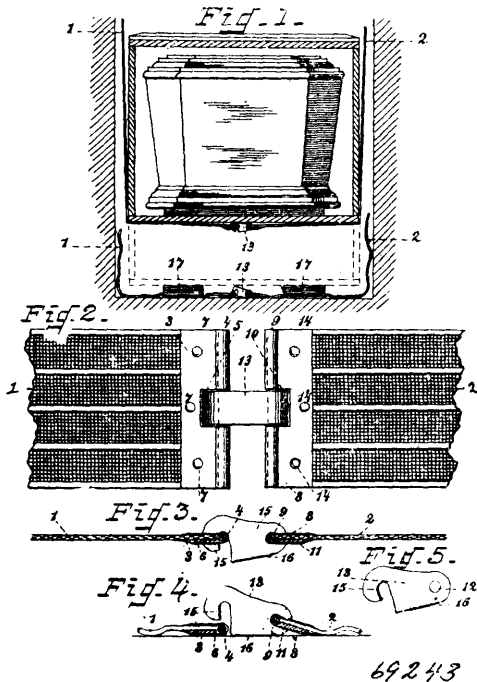
69242

Harry Door Leeking and Peter Mager Groff, both of Witmer, Pennsylvania, U.S.A., 6th November, 1900; 6 years. (Filed 5th October, 1900.)

Claim.—1st. The combination, in a power mechanism, of a shaft, a cam plate rigidly secured on the shaft and provided with a series of cams arranged about the centre and having a socket located opposite each cam, an immovable guide plate provided with a channel having its open side toward the cam plate, a connecting rod in the channel of the guide plate, and a shoulder plate on the connecting rod and engaging the cams of the cam plate, the shaft passing through a slot in the connecting rod and the shoulder plate, for the purpose specified. 2nd. The combination, in a power mechanism, of a shaft, a cam plate rigidly secured on the shaft and provided with a series of sockets, convex walls connecting the sockets and and forming the cams of the cam plate, an immovable guide plate

provided with a channel having its open side toward the cam plate, a connecting rod in the channel of the guide plate, and a shoulder plate on the connecting rod and engaging the cams of the cam plate, the shaft passing through a slot in the connecting rod and the shoulder plate, for the purpose specified. 3rd. The combination, in a power mechanism, of a shaft, a connecting rod, a cam plate rigidly secured on the shaft and provided with a series of cams arranged about its centre and having a socket located opposite each cam, curved walls connecting the cams and sockets, an immovable guide plate provided with a channel having concave longitudinal sides, a connecting rod in said channel, and a shoulder plate on the connecting rod and engaging the cams of the cam plate, there being an elongated slot through the connecting rod and the shoulder plate and of greater width than the diameter of the shaft, the shaft passing through said slot, for the purpose specified. 4th. The combination, in a power mechanism, of a shaft, a connecting rod, a cam plate rigidly secured on the shaft and provided with a series of sockets, convex walls connecting the sockets and forming the cams of the cam plate, an immovable guide plate provided with a channel having concave longitudinal sides, a connecting rod in said channel, the mouth of said channel being of greater width than the connecting rod, and an elongated oval shoulder plate on the connecting rod and engaging the cams of the cam plate, there being an elongated oval slot through the connecting rod and the shoulder plate and of greater width than the diameter of the shaft, for the purpose specified. 5th. The combination, in a power mechanism, of a post, a stationary upright guide plate having a channel therein, a shaft journaled in the post and the guide plate, a wheel rigidly secured to the shaft and having a cam opening therein, the inner face of said wheel being flush against the guide plate, three cams formed by the wall of said opening and arranged symmetrically about the centre, a socket being formed by said wall opposite each cam, the wall forming a curved connection between the cams and the sockets, a connecting rod having an end in the channel of the guide plate, the mouth of the channel being wider than said end of the connecting rod, and an elongated oval shoulder plate on the connecting rod and adapted to have both ends thereof in continuous engagement with the wall forming the cams and the sockets and the curves connecting the cams and the sockets, the shaft passing through an elongated oval slot in the shoulder plate and the connecting rod and of greater width than the diameter of said shaft substantially as and for the purpose specified.

No. 69,243. Burial Casket Lowering Device.
(Appareil a descendre les cercueils dans les fosses.)

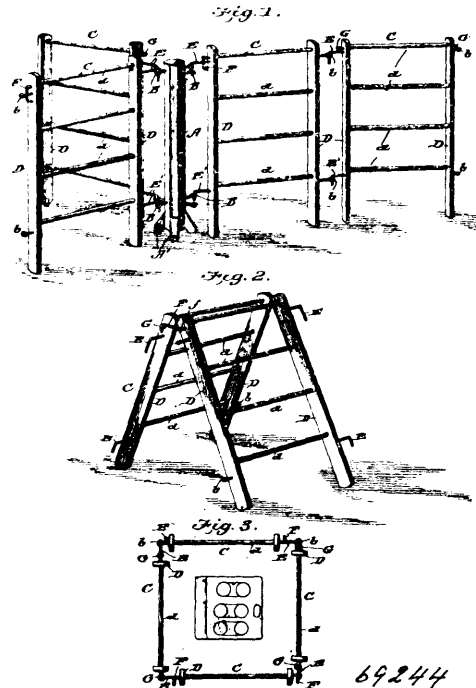


Mitchell J. Cameron, Auburn, New York, U.S.A., 6th November, 1900; 6 years. (Filed 17th October, 1900.)

Claim.—1st. In a burial casket lowering device, the lowering ends of the lowering straps or cords provided with weights and recessed keeper plates carrying shafts, and an interlocking hook having a downward extension midway thereof hinged on one of said shafts substantially constructed in the manner and for the purpose herein shown and described. 2nd. In a burial casket lowering device the lowering strap or cord 1, having fastened to its lowering end the plate 3, having the recess 5, combined with and carrying the weight 6, and the shaft 4 adapted to be engaged by an interlocking hook,

substantially in the manner and for the purpose herein described and shown. 3rd. In a burial casket device the lowering strap or cord 2, having fastened to its lowering end the plate 8, having the recess 10, and carrying the weight 11, and the shaft 6, combined with the hinged hook 13, adapted to engage a keeper plate having the downward extension 16, and hinged on said shaft 6, in said recess 10, substantially in the manner herein shown and described. 4th. In a burial casket lowering strap or cord 2, having fastened to its lowering end the plate 8, provided with the recess 10, and carrying the weight 11, and the shaft 9, on which said shaft is carried the hinged hook 13, having the downward extension 16, in said recess 10; combined with the lowering strap or cord 1, also having fastened to its lowering end the plate 3, provided with a recess 5, and carrying the weight 6, and the shaft 4, on which the hinged hook 13, hooks with its hooked end 15, in the said recess 5, and is unhooked therefrom through the ground impact of its downward extension 16, substantially constructed in the manner and for the purpose herein described and shown.

No. 69,244. Clothes Drier. (*Schoir a linge.*)



Bruno Kippels, Moorhead, Minnesota, U.S.A., 6th November, 1900; 6 years. (Filed 19th October, 1900.)

Claim.—In a clothes rack, the combination with the post having eyes arranged in vertical alinement, of a series of detachable, rectangular frame section, one of whose vertical bars is provided with two hooks and the other with two eyes correspondingly arranged, whereby the said sections are adapted for pivotal attachment to the post and to each other, as shown and described.

No. 69,245. Folding Box. (*Boite pliante.*)

Lena F. Ferrell, La Monte, Missouri, U.S.A., 6th November, 1900; 6 years. (Filed 17th October, 1900.)

Claim.—1st. A folding box comprising a bottom having side and end folds connected therewith, locking folds connected with the end folds, slots in the locking folds adapted to interlock with the slots of their corresponding folds, an opening in each locking fold, a tongue carried by each locking fold and adapted to engage the opening of its interlocking extensions carried by the end folds and a side fold, and a cover carried by the remaining side fold. 2nd. A folding box comprising a bottom having side and end folds connected therewith, locking folds connected with the end folds and adapted for engagement, locking extensions carried by the end folds and a side fold at their upper edges and adapted for engagement to project inwardly and over the inclosure of the box, and a cover fold carried by the remaining side fold. 3rd. A folding box comprising a bottom having side and end folds connected therewith, locking folds connected with the end folds and adapted for engagement, locking extensions carried by the end folds and a side fold at their upper edges and adapted for engagement to project inwardly and over the inclosure of the box, and a cover. 4th. A folding box, comprising a bottom having side and end folds connected therewith, locking folds connected with the end folds, slots formed in the

locking folds and adapted to interlock with their opposite locking folds, said locking folds being adapted to lie against the side folds,

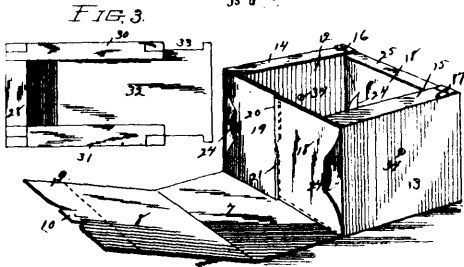
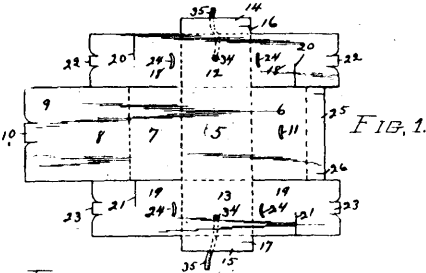
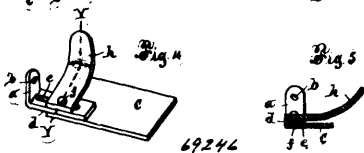
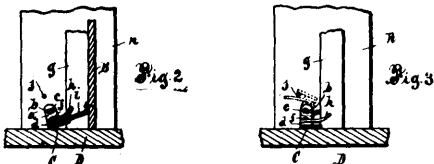
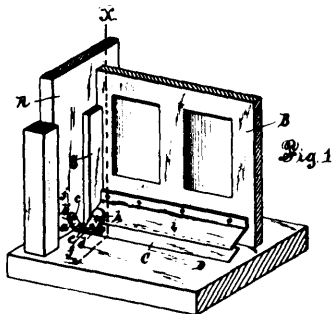


FIG. 2.

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openings in the locking fold and tongues carried by the locking folds and adapted to enter the openings of their interlocking folds, and a cover fold connected with a side fold.

No. 69,246. Weather Strip. (Bourrelet de porte.)



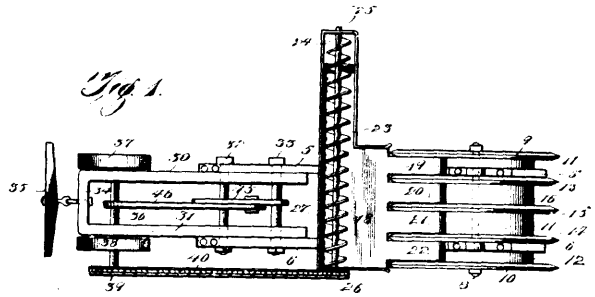
69246

Allen Herbert Cole, Syracuse, New York, U.S.A., 6th November, 1900; 6 years. (Filed 19th October, 1900.)

Claim.—1st. The combination with the door frame, of a weather strip consisting of a metallic plate and provided at its opposite ends with longitudinally adjustable ears by which it is pivoted to said door frame, whereby the strip may be swung upward into inverted position, and means retaining said strip in said position, substantially as described. 2nd. The combination with the door frame, of a weather strip consisting of a metallic plate, longitudinally adjustable bars on said bars by which said plate is pivoted to the door frame, substantially as described. 3rd. The combination with the door frame and door, of a weather strip consisting of a metallic plate, upwardly inclined ears secured longitudinally adjustable on the ends

of said plate by which the plate is pivoted to the door frame, and means secured to the door for tilting said strip, substantially as described. 4th. The combination with the door frame and door, of a weather strip consisting of a metallic plate, longitudinally slotted bars on the ends of said plate, rivets passing through said plate bars, whereby the latter can be adjusted lengthwise on the plate, upwardly inclined ears formed on said bars by which the plate is pivoted to the door frame, an upwardly curved arm secured to one end of the plate by one of the aforesaid rivets, and a plate secured to the door and adapted to engage said arm to tilt the strip, and means to retain the strip in inverted position, substantially as described.

No. 69,247. Ditching Machine. (Machine à fossoyer.)



69247

Graves Y. McMurry, Silver City, Georgia, U.S.A., 6th November, 1900; 6 years. (Filed 19th October, 1900.)

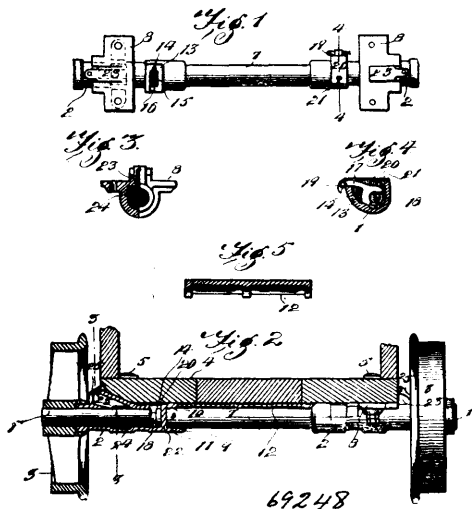
Claim.—1st. A ditching machine comprising a main frame, a supplemental frame pivoted to the main frame, an axle mounted upon the main frame, cutting discs mounted upon the axle and separated by interspaces, said discs having peripheral cutting cogs, fingers disposed between the discs and adapted to receive and convey dirt therefrom, supporting wheels upon the supplemental frame, means for moving the supplemental frame upon its pivot to raise and lower the wheels carried thereby, and casters upon the main frame for supporting it when the supplemental frame is raised upon its pivot. 2nd. A ditching machine comprising a main frame, cutting discs carried by the main frame and adapted to cut and raise the dirt from the discs, means for removing the dirt from the discs, a conveyer adapted to discharge the dirt, a supplemental frame pivoted to the main frame supporting wheels upon the supplemental frame, means for holding the supplemental frame normally with its supporting wheels in operative position, connections between the supporting wheels and the conveyer for operating the latter, means for moving the supplemental frame upon its pivot, and casters upon the main frame for supporting the main frame when the supplemental frame is raised upon its pivot. 3rd. A ditching machine comprising a frame, an axle carried by the frame, cutting discs mounted upon the axle and separated by interspaces, said discs having peripheral lugs separated by recesses, additional discs disposed in said interspaces and lying with their peripheries within the inclosure of the lines of the bases of the recesses, and fingers disposed between the cutting discs with their ends upon the second discs and below the bases of the recesses, said fingers extending beyond the peripheries of the cutting discs. 4th. A ditching machine comprising a main frame, cutting discs carried by the main frame and adapted to cut and raise the dirt from the ditch, means for removing the dirt from the discs, a conveyer adapted to discharge the dirt, a supplemental frame pivoted to the main frame, supporting wheels upon the supplemental frame, means for holding the supplemental frame normally with the supporting wheels in operative position, connections between the supporting wheels and the conveyer for operating the latter, and means for moving the supplemental frame upon its pivot.

No. 69,248. Car Axle. (Essieu de chars.)

James Slavin Hickey and James Henry Egbert, both of Anaconda, Montana, U.S.A., 6th November, 1900; 6 years. (Filed 19th October, 1900.)

Claim.—1st. A device of the class described comprising a pair of separate and independent bearing sleeves designed to be located at opposite sides of a car, a separate and independent piece connecting the sleeves, and a pair of short axle sections spaced apart and secured within the sleeves and designed to have car wheels fixed to them, substantially as described. 2nd. A device of the class described comprising a pair of separate and independent bearing sleeves designed to be located at opposite sides of a car, a separate independent spacing piece connecting the sleeves, the short-axle-sections spaced apart and arranged within the bearing sleeves and located beyond

the central connection and designed to have car wheels fixed to them, and locking devices for retaining the axle sections in the



bearing sleeves, substantially as described. 3rd. In a device of the class described, the combination with a car, of bearing sleeves arranged at opposite sides thereof, the short axle sections arranged in the bearing sleeves and designed to have car wheels fixed to them, and the locking devices securing the axle sections in the sleeves, and arranged at the sides of the latter, whereby the axle sections may be released and removed without unloading the car or separating the latter from the train, or removing the sleeve from the car, substantially as described. 4th. In a device of the class described, the combination of a car, of bearing sleeves arranged at opposite sides of the car and provided with laterally disposed enlargements forming interior chambers, the latter being open at the top and provided with side slots, axle sections arranged within the sleeves, spaced apart and designed to have car wheels secured to them, and the locking devices or keys arranged within the bearing sleeves at the enlargements thereof, engaging the axle sections and provided with shanks extending through the said slots, said locking devices being adapted to be operated from the sides of the sleeves without removing them therefrom, substantially as described. 5th. In a device of the class described, the combination of bearing sleeves designed to be located at opposite sides of a car, the short axle sections spaced apart and arranged in the bearing sleeves, locking devices arranged at the sides of the sleeves and having shanks extending through the same, said locking devices engaging the axle sections, and keys retaining the locking devices in engagement with the axle sections, substantially as described. 6th. In a device of the class described, the combination of bearing sleeves designed to be arranged at opposite sides of a car and provided with laterally disposed enlargements having openings at the top and slots at the sides, the short axle sections arranged in the bearing sleeves, covers secured to the bearing sleeves and arranged over the openings of the enlargements, and locking devices engaging the axle sections and provided with shanks extending through the said slots and secured to the covers, substantially as described. 7th. In a device of the class described, the combination of bearing sleeves designed to be located at opposite sides of a car, the short axle sections arranged within the bearing sleeves and designed to have car wheels fixed to them, abutting devices located within the sleeves and arranged to receive the inner ends of the axle sections, whereby the outer ends of the sleeves and the inner ends of the hubs of the wheels are relieved of the friction resulting from the side thrusts of the bar, the independent spacing piece connecting the bearing sleeves and located between the abutting devices and means for securing the axle sections in the sleeves, substantially as described.

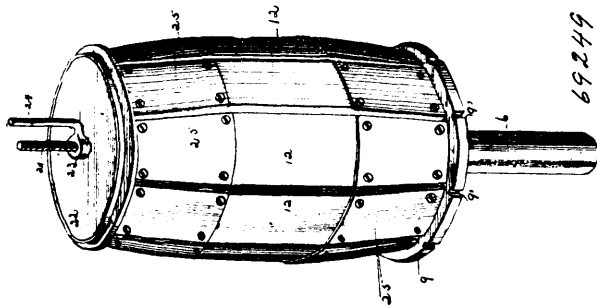
No. 60,249. Barrel Forming Machine.

(Machine à façonner les barils.)

William M. Schoolfield, Pocomoke, Maryland, U. S. A., 6th November, 1900; 6 years. (Filed 19th October, 1900.)

Claim.—1st. A barrel form comprising a spindle, staves connected with the spindle for bodily pivotal movement toward and away from the spindle, means for moving the staves upon their pivots, a block upon the spindle having guide grooves, and projections upon the staves engaging the grooves for movement therethrough to prevent lateral displacement of the staves. 2nd. A barrel form comprising a spindle having a wedge block thereon, staves hinged to the spindle for bodily movement toward and away from the spindle, said staves lying against the block, and means for moving the staves longitudinally against the wedge block to press them out

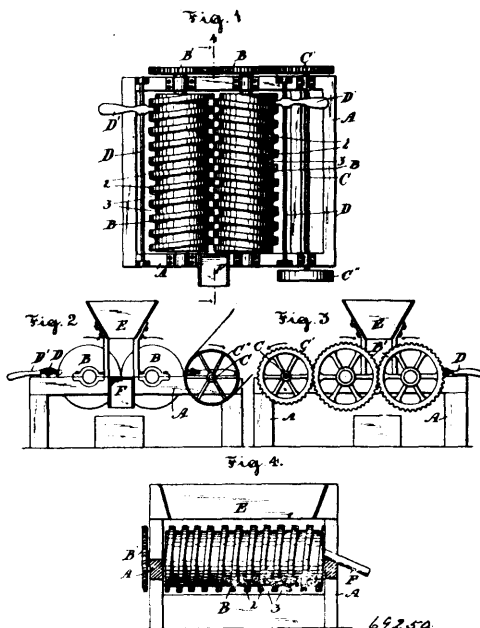
wardly. 3rd. A barrel form comprising a spindle having a wedge block thereon and provided with guide grooves, staves hinged to



the spindle for movement toward and away from the spindle and resting with their ends against the block, projections on the staves engaging the guide grooves, and means for moving the staves longitudinally against the wedge block to force the staves outwardly. 4th. A barrel form comprising a spindle having a wedge block thereon provided with longitudinal guide grooves, staves, plates hinged at their ends to the staves and to the spindle, whereby the staves may be moved bodily and pivotally towards and away from the spindle, a screw extension of the spindle, a clamping plate upon the screw for engagement with the staves to move them longitudinally against the wedge block to expand the form, a nut engaged with the screw to operate the plate, and projections upon the staves engaging the guide grooves to hold the staves from lateral displacement. 5th. A barrel form comprising a spindle, a plurality of staves hinged to the spindle for bodily and pivotal movement towards and away from the spindle, and staves having their outer faces flattened between their ends, and means for moving the staves pivotally and longitudinally to expand the form. 6th. A barrel form comprising a spindle, a plurality of staves pivotally connected with the spindle for movement toward and away from the spindle and provided with clenching plates, a clamping plate having means for moving it against the staves to move them pivotally and a second plate provided with indicating means to indicate the interspaces between the staves.

No. 69,250. Clay Pulverizer and Stone Separator.

(Pulvérisateur de glaise et séparateur de pierre.)

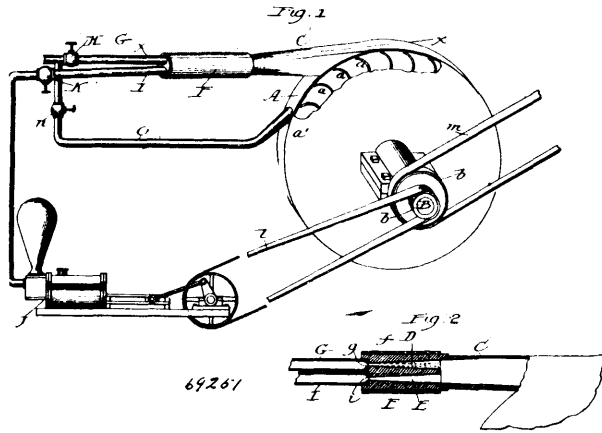


James Elliott, Wingham, Ontario, Canada, 6th November, 1900; 6 years. (Filed 15th May, 1899.)

Claim.—1st. In a clay pulverizer and cleaner, rollers rotating in contact with each other and having their surfaces broken up by

square screw threads and set so that a thread of one is opposite a space of the other, substantially as set forth. 2nd. In a clay pulverizer and cleaner, the combination of a pair of horizontal rollers set side by side in contact with each and having their surfaces broken up by square screw threads in opposite directions, a frame in which said rollers are journaled, cleaning levers on guide rods, a feed hopper and discharge chute, substantially as set forth.

No. 69,251. Steam and Air Turbine. (*Turbine a vapeur et air.*)



James William Paige and Bertha Wright Dixon, administratrix of the estate of Theron S. E. Dixon, both of Chicago, Illinois, U.S.A., 6th November, 1900; 6 years. (Filed 22nd April, 1898.)

Claim.—1st. The improvement in the art of developing motive power consisting in the method of applying to a turbine wheel, impelled by the velocity and weight of the impinging fluid, two elastic fluids of different temperatures, both moving with a velocity due to their prior compression, and of mingling the same in a conduit, prior to delivery into the wheel, whereby heat from the fluid of higher temperature is imparted to the fluid of lower temperature, causing an increase of its velocity and of the momentum of the mixture, substantially as and for the purpose set forth. 2nd. The improvement in the art of developing motive power consisting in the method of applying to a turbine wheel, impelled by the velocity and weight of the impinging fluid, a stream of air, having a velocity due to its prior compression and of mingling with the same in a conduit, prior to its delivery into the wheel, of a jet of steam, whereby the heat from the steam is imparted to the flowing air, thereby increasing its velocity and the momentum of the mixture, substantially as and for the purpose set forth. 3rd. The improvement in the art of developing motive power consisting in the method of applying to a turbine wheel, impelled by the velocity and weight of the impinging fluid, a flowing stream of gas having an initial velocity independently developed, and of mingling with the same, prior to its entry into the wheel, of a jet of steam, whereby the heat of the steam is imparted to the flowing gas, thereby increasing its velocity and the momentum of the mixture, substantially as and for the purpose set forth. 4th. The improvement in the art of developing motive power consisting in the method of applying to a turbine wheel, impelled by the velocity and weight of the impinging fluid, a stream of air having a velocity due to its prior compression, and of applying heat to this stream of air prior to its delivery into the wheel for the purpose of increasing its velocity, substantially as and for the purpose set forth. 5th. The improvement in the art of developing motive power consisting in the method of applying to a turbine wheel, impelled by the velocity and weight of the impinging fluid, a stream of compressed air, whose initial velocity has been increased by expansion in a confined passage, and of mingling with the same in a conduit, prior to its delivery into the wheel, of a jet of steam, whereby heat from the steam is imparted to the flowing air, thereby increasing its velocity, and of supplying additional air by its suction into the jet of steam, substantially as and for the purpose set forth. 6th. The improvement in the art of developing motive power consisting in the method of applying to a turbine wheel, impelled by the velocity and weight of the impinging fluid, a stream of air, having a velocity due to its prior compression, and of mingling with the same in a conduit, prior to its delivery into the wheel, of a jet of steam whereby heat from the steam is imparted to the flowing air, thereby increasing its velocity, and of supplying additional air by its suction into the jet of steam, substantially as and for the purpose set forth. 7th. The improvement in the art of developing motive power consisting in the method of applying to a turbine wheel, impelled by the velocity and weight of the impinging fluid, a stream of air, having a velocity due to its prior compression, and of mingling with the same in a conduit, prior to delivery into

the wheel, of a jet of steam, whereby heat from the steam is imparted to the flowing air, thereby increasing its velocity, and of supplying additional air by its suction into the conduit, substantially as and for the purpose set forth.

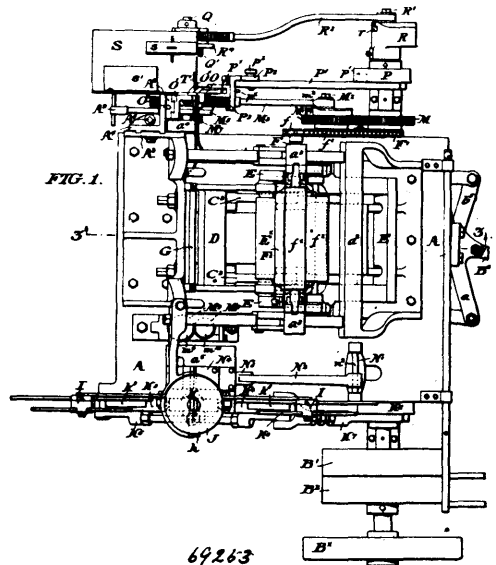
No. 69,252. Food Powder and Extract. (*Poudre alimentaire.*)

Henry John Dunn, 15 Walpole Road, Twickenham, Middlesex, England, 8th November, 1900; 6 years. (Filed 28th March, 1899.)

Claim.—1st. The process for the production of meat powder retaining its natural flavor, which consists in comminuting the animal food substance, and then subjecting the same to the drying action of a current of air at a temperature not exceeding 60° F., followed by a current of air at a higher temperature not exceeding 100° F. 2nd. The process for the production of meat powder retaining its natural raw flavor, which consists in removing the fat, comminuting the remaining animal food substance subjecting the same to the desiccating action of current of dry air at a temperature not exceeding 60° F., followed by a current of air at a higher temperature not exceeding 100° F., and fully compressing the dry comminuted substance into cakes or tablets. 3rd. The process herein described of manufacturing animal food extract, which consists in first comminuting the animal substance, then subjecting it to the drying action of a current of dry cool air, then reducing the dry comminuted material to powder, then agitating the powdered substance in water, then draining off most of the liquid, then extracting from the residue the liquid remaining therein, then mixing the said extracted liquid with the liquid drained off and finally concentrating the said mixed liquids, substantially as set forth. 4th. The improved food powder manufactured substantially as described, and consisting of an animal food substance which has been first comminuted, then subjected to the action of a current of dry cool air at a temperature not exceeding 60° F., and then to a current at a temperature not exceeding 100° F., and compressed into blocks or cakes, substantially as set forth. 5th. The improved food extract manufactured substantially as described and consisting of an animal food substance which after having been first comminuted, and subjected to the action of a current of dry cool air and then reduced to powder, such powder is agitated in water, most of such liquid drawn off, and the liquid remaining in the residue extracted therefrom, the extracted liquid having been afterward mixed with the liquid previously drained off, substantially as set forth.

No. 69,253. Tag-Making Mechanism.

(*Mécanisme à faire les forreets.*)



George William Swift, jr., Bordentown, New Jersey, U.S.A., 8th November, 1900; 6 years. (Filed 11th February, 1899.)

Claim.—1st. The combination, with means to progress a tag body web, of mechanism to notch the edge of said web at regular intervals and means to adjust said mechanism with respect to said web, to vary the dimensions of the notches therein, substantially as set forth. 2. The combination with means to progress a tag body web, of mechanism to notch the edge of said web at regular intervals, and a wedge block to adjust said mechanism with respect to said web, to vary the dimensions of the notches therein, substantially as

set forth. 3rd. The combination with means to progress a tag body web, of an oscillatory blade to slit said web, and means to adjust the relative position of the centre of oscillation of said blade and the edge of said web, to vary the dimensions of the slits in said web, substantially as set forth. 4th. The combination with a reservoir for an adhesive compound, of a port leading from said reservoir, means to progress a strip of fabric, and a roller opposed to said port to present said strip against the mouth thereof, to receive the adhesive directly therefrom, substantially as set forth. 5th. The combination with means to progress a tag body web, of mechanism to notch the edge of said web at regular intervals, means to adjust said mechanism with respect to said web, to vary the dimensions of the notches therein, and adjustable means to vary the distance between the successive notches in said web, substantially as set forth. 6th. The combination with means to progress a tag body web, of an oscillatory blade to slit said web, means to adjust the relative position of the centre of oscillation of said blade and the edge of said web, to vary the dimensions of the slits in said web, and adjustable means to vary the distance between the successive slits in said web, substantially as set forth. 7th. The combination with means to progress a tag body web, of an oscillatory blade to slit said web, means to automatically vary the relative position of the centre of oscillation of said blade, and the edge of said web, to vary the dimensions of the slits in said web, at predetermined periods in the operation, substantially as set forth. 8th. The combination with means to intermittently progress a tag body web, of means to perforate said web during the intermission in its traverse, mechanism to notch the edge of said web, at regular intervals, and means to simultaneously adjust said notching mechanism vertically and in the direction of traverse of the web, to vary the dimensions of the notches and the distance of the same from the perforations, substantially as set forth. 9th. The combination with a reservoir for an adhesive compound, of two parts leading from said reservoir, two strips of fabric, respective rollers arranged to present the respective strips in opposition to the respective ports to receive the adhesive, directly therefrom, and means to simultaneously progress both of said strips, substantially as set forth. 10th. The combination with the feed rollers M^9 , M^{10} , of the gears m^9 , m^{10} , fixed upon the respective rollers, the shaft M^8 , extending from the roller M^9 , the bevel gear m^6 , connecting said shaft M^8 , with the shaft M^9 , a ratchet wheel M^7 , fixed upon said shaft M^6 , the pawl m^5 , mounted to oscillate with respect to said shaft M^6 , a pitman m^5 , arranged to intermittently actuate said pawl m^5 , an eccentric operatively connected with said pitman, and means to adjustably vary the throw of said eccentric, substantially as set forth. 11th. The combination with means to progress a tag body web, of mechanism to perforate said web at regular intervals, mechanism to notch the edge of said web at regular intervals, means to adjust said notching mechanism with respect to said web, to vary the dimensions of the notches therein, and mechanism arranged to operate in synchronism with said perforating and notching mechanism to provide said web, with imprints in predetermined relation with said perforations and notches, substantially as set forth. 12th. The combination with means to progress a tag body web, of mechanism to notch the edge of said web at regular intervals, means to adjust said notching mechanism with respect to said web, to vary the dimensions of the notches therein, a blade arranged to slit said web, and mechanism arranged to operate in synchronism with said notching and slitting mechanism, to provide said web with imprints in predetermined relation with said perforations and slits, substantially as set forth. 13th. The combination with means to progress a tag body web, of means to progress reinforcing strips upon opposite sides of said web, of perforating mechanism, comprising opposed die plungers K^1 , K^2 , the reciprocating head K^3 , in which said plunger K^1 , is fixedly mounted, the reciprocating head K^4 , in which said plunger K^2 , is mounted to reciprocate in the direction of its length, resilient means independent of the reciprocating mechanism to normally thrust said plunger K^2 , forward with respect to said head K^3 , a die stem k^2 , fixed in said head K^4 , and extending through said plunger K^2 , a passage way k^1 , in the plunger K^1 , in registry with said die stem k^2 , and means to reciprocate said heads K^3 , K^4 , in opposition substantially as set forth.

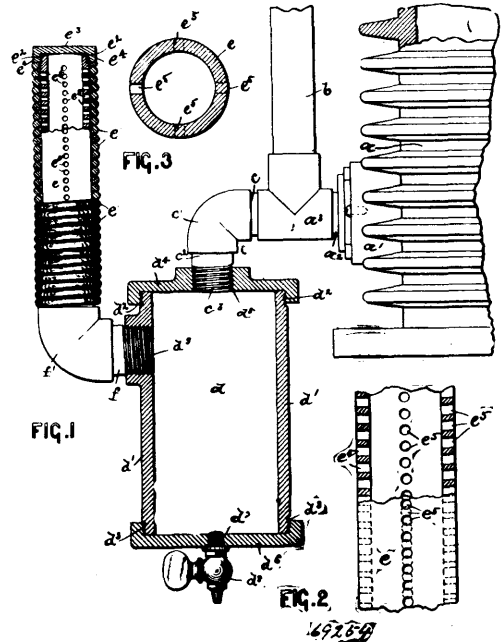
No. 69,254. Engine Muffler.

(*Tambour de machine à vapeur.*)

The Oxford Manufacturing Company, Oxford, Pennsylvania, assignee of James Smith, Newark, New Jersey, U.S.A., 8th November, 1900; 6 years. (Filed 17th October, 1900.)

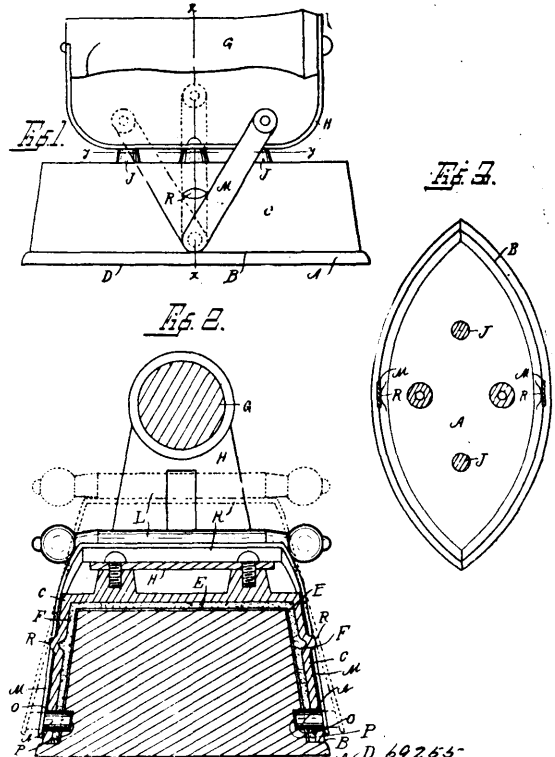
Claim.—1st. In a muffler for engines, an exhaust or eduction pipe or duct, having a closed top and an inlet for receiving the exhausted medium, and provided with radially extending and helically disposed holes or perforations, and a spring encircling the outer surface of said pipe or duct, the central helical pitch line of the coils of said spring corresponding to an imaginary helical line around the said pipes or duct on which said holes or perforations have their centres, substantially as and for the purposes set forth. 2nd. In a muffler for engines, the combination of a casing forming a relief chamber, having a means of ingress and egress for the medium to be exhausted, of an exhaust pipe connected therewith, having a closed top and provided with radially extending and helically disposed holes or perforations, and a spring encircling the outer surface of said pipe, the central helical pitch line of the coils

of said spring corresponding to an imaginary helical line around said pipe on which said holes or perforations have their centres.



substantially as and for the purpose set forth. 3rd. The herein described engines, consisting essentially of a casing, d^1 , a top and bottom cover therefor, said top cover having an opening, and a means of ingress therein for the admission of the medium to be exhausted, said casing having an opening in one side thereof, and an eduction pipe, c , connected with the said opening in the side of said casing, said pipe c being provided with helically disposed openings or perforations e^5 , and a spring e^1 encircling said pipe and arranged over said holes or perforations, substantially as and for the purposes set forth.

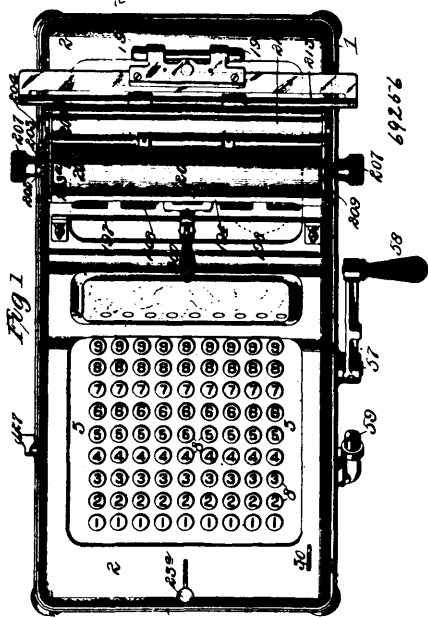
No. 69,255. Sad Iron. (*Fer à repasser.*)



Charles T. Johnson, assignee of Lorenzo D. Clark, both of Stoughton, Wisconsin, U.S.A., 8th November, 1900; 6 years. (Filed 15th October, 1900.)

Claim.—In a sad iron, the combination of a core, provided with a smoothing surface, a shell adapted to enclose the core, with the exception of the smoothing surface and a narrow bead or bearing around the edge thereof, a non-heat conductor located between the shell and core, and a fastening adapted to temporarily bind the shell and core together, substantially as and for the purpose set forth. 2nd. In a sad iron, the combination of a core, provided with a smoothing surface, a removable shell adapted to enclose the core, with the exception of the smoothing surface and a narrow bead or bearing around the edge thereof, a fastening for temporarily holding the shell and core together, a dead air space, and a non-heat conducting lining surrounding the inclosed portion of the core, and partially filling said dead air space, said shell being adapted to impinge upon said bead or bearing at its lower edge, and together with said lining and said dead air space, to form a heat retaining barrier, substantially as described. 3rd. In a sad iron, the combination of a core provided with a smoothing surface, a removable shell adapted to enclose the core, with the exception of the smoothing surface and a narrow bead or bearing around the edge thereof, a fastening for temporarily holding the shell and core together, and a non-heat conducting lining surrounding the inclosed portion of the core, said shell being adapted to impinge upon said bead or bearing at its lower edge, together with said lining, to form a heat-retaining barrier, substantially as described.

No. 69,256. Calculating Machine. (Machine a calculator.)



Frank Charles Rinsche, St. Louis, Missouri, U.S.A., 8th November, 1900; 6 years. (Filed 1st August, 1900.)

Claim.—1st. The combination with a series of depressible keys, of means for holding said keys in a depressed position, whereby they act as stops, a slide bar common to said series of keys and provided with lateral projections designed to co-operate with the stops set up by the different keys in their depressed position, a rack pivoted to said slide bar, an adding wheel designed to mesh with said rack, an operating handle, friction devices interposed between said operating handle and said slide bar, whereby said slide bar is moved forwardly by friction until arrested by one of the depressed keys, and means for throwing the rack into engagement with the adding wheel after the slide bar has completed its forward movement, substantially as described. 2nd. The combination with a series of adding wheels, of a series of independently movable keys for each wheel, a separate stop designed to be set up by each key, a slide bar common to said series of keys and provided with lateral projections co-operating with the stops set up by the keys, a rack pivoted to said slide bar, an operating handle, friction devices interposed between said operating handle and said slide bar, whereby said slide bar is moved forwardly by friction until arrested by one of the key stops, means connected with the operating handle for throwing the rack into engagement with the adding wheel after the slide bar has completed its forward movement, the friction devices operated by the handle restoring the slide bar and rotating its meshed adding wheel, and means for throwing the rack on the slide bar out of engagement with the adding wheel when the operating handle reaches the limit of its return movement, substantially as described. 3rd. The combination with a series of independently movable keys whose shanks are staggered, the hands of said keys being in alignment, lateral projections extending from the key shanks, a pivoted wing in the path of said projections, a locking plate which is held in a retracted

position by said wing, and means on said plate for locking a depressed key in its lowered position, and the rest of the keys of that series in their elevated position, substantially as described. 4th. The combination with a series of independently movable keys whose shanks are notched, of lateral projections extending from said shanks, a latch plate in the path of said projections, a sliding locking plate held in a retracted position by the latch plate, and a spring whose ends are connected to said latch plate and sliding locking plate, respectively, substantially as described. 5th. The combination with a series of independently movable keys whose shanks are staggered and provided with notches of lateral projections on said key shanks, a pivoted wing in the path of said projections, a locking plate which is controlled by said pivoted wing, said locking plate being provided with shoulders on each side for co-operating with staggered key shanks, and means for forcing the locking plate forward whenever the pivoted wing is depressed, substantially as described. 6th. The combination with a series of keys, of projections arranged on the shanks thereof, a pivoted wing in the path of said projections, a sliding locking plate, a stop on said locking plate co-operating with the projections on the pivoted wing, and a spring whose ends are connected to said pivoted wing and to the locking plate, respectively, substantially as described. 7th. The combination with a series of independently movable keys designed to set up stops, of means co-operating with said keys for locking the depressed key in its lowermost position, and the remaining keys of that series in their elevated position, and a spring common to a plurality of keys of that series for restoring the depressed key to its elevated position after said key has been released by the locking plate, substantially as described. 8th. The combination with a series of independently movable keys, of means for locking the depressed key of the series in its lowered position, and the remaining keys of that series in their elevated position, a slide bar provided with projections, one of which co-operates with the depressed key, and a lock for said slide bar, said lock co-operating with the key lock in such manner as to release the slide bar upon the depression of any key in the series, substantially as described. 9th. The combination with a series of independently movable keys whose shanks are staggered, said keys, when depressed, forming stops, of a slide bar provided with projections for co-operating with the key stops, alternate projections on the slide bar extending in opposite direction, substantially as described. 10th. The combination with a series of staggered key stops, of a slide bar occupying a medial line with respect to said series of staggered key stops, projections on said slide bar, alternate projections extending in opposite directions, and means for moving said slide bar longitudinally, whereby one of its carried projections will co-operate with one of the key stops, substantially as described. 11th. The combination with a staggered series of key stops, of a slide bar travelling in a medial line between said stops, projections on said slide bar for co-operating with the key stops, each projection on the slide bar individually co-operating with its respective key stop, and means for moving said slide longitudinally, whereby one of its carried projections will co-operate with one of the key stops, substantially as described. 12th. The combination with several series of keys, of a slide bar common to each series of keys, stops on said slide bars for co-operating with the shanks of the depressed keys, latches or locks for said slide bars, mechanism which is operated by any key of a series for locking said key in its depressed position, and the remaining keys of that series in an elevated position, said mechanism also releasing the slide bar common to the series wherein the key is operated, and means for imparting longitudinal motion to the slide bar after its release, substantially as described. 13th. The combination with several series of keys, of a slide bar common to each series of keys, stops on the slide bar for co-operating with the shank of a depressed key in the series to which said slide bar is common, mechanism which is thrown into action by the depression of a key in a series to lock said key in its depressed position, and the remaining keys of that series in an elevated position, said mechanism releasing the slide bar common to that series of keys, friction devices in engagement with the slide bars for moving the same forward until one of the stops thereof contacts with its respective key shank, and means for moving said friction devices a predetermined distance irrespective of the arrest of the driven slide bar short of the limit of movement of the friction devices, substantially as described. 14th. The combination with a key board comprising series of independently movable keys, of a sliding plate common to each series of keys, levers in the paths of said sliding plates, latch pins operated by the several levers, and slide bars co-operating with said latch pins, substantially as described. 15th. The combination with a key board comprising series of independently movable keys, of sliding plates common to the several series of keys, bell crank levers having one member in the path of a sliding plate, latch pins co-operating with the other member of said bell crank levers, and slide bars which are released whenever the latch pins are raised, substantially as described. 16th. The combination with a key board comprising series of independently movable keys, of locking plates common to the several series of keys, and which are designed to move forward whenever a key in a series to which the plate is common is depressed, bell crank levers 44 having one member in the path of movement of a plate, a latch pin 42 formed with an opening for receiving the other member of said bell crank lever, a bar 43 in which said latch pins operate, and slide bars 32 having shoulders 41 for co-operating with the latch pins, said slide bars being guided in the movements by the bar 43, substantially

as described. 17th. In a calculating machine, the combination with a key board comprising series of independently movable keys, of locking plates common to the several series of keys for locking a depressed key in its lowered position, and the remaining keys in an elevated position, slide bars which are movable independently of said locking plates, a handle connected to said bars for operating the same, and devices operated by the handle for restoring all of the locking plates to effect the release of the depressed keys, substantially as described. 18th. In a calculating machine, the combination with a series of independently movable keys, of locking plates common to the several series of keys for locking any depressed key of a series in its lowered position, and the remaining keys of that series in an elevated position, a pivoted frame against which the locking plates abut in their forward movement, and a lever for operating said frame and effecting a manual restoration of the locking plates to release all the depressed keys, substantially as described. 19th. In a calculating machine, the combination with a key board comprising series of independently movable keys, of locking plates common to the several series of keys for locking the depressed key in its lowered position, and the remaining keys in an elevated position, a series of latch pins co-operating with the locking plates, slide bars provided with projections for co-operating with stops set up by the different keys, a handle for moving said slide bars forwardly until they are arrested by the key stops, adding wheels, means for connecting wheels with the slide bars after said bars have been arrested, a rearward movement of the handle restoring the slide bars and rotating their connected adding wheels, and mechanism connected with the handle for restoring the locking plates and releasing the keys only when the handle has started on its rearward movement, substantially as described. 20th. The combination with a key board, for setting up stops, in which keyboard are included sliding plates for holding the operated keys in a depressed position, of slide bars co-operating with the key stops, adding wheels, which are connected with the slide bars when said bars are arrested in their forward movement by the key stops, latch pins co-operating with the slide bars and with the locking plates, springs for holding said latch pins in position against the slide bars, a bar common to all of the locking plates, and mechanism operated by the handle for actuating said bar to restore the locking plates and release the keys, said mechanism also relieving the latch pins of restraint so that they are in position to co-operate with their respective slide bars, substantially as described. 21st. The combination with a key board for setting up stops, in which key board are included sliding plates for locking operated keys in a depressed position, of levers in the path of movement of said locking plates, latch pins operated by said levers, a rocking frame for co-operating with the sliding plates, a cam shaft co-operating with the rocking frame, a tappet on the end of said cam shaft, an operating handle, and means connected to said handle and co-operating with said tappet for rocking the frame when said handle is moving in one direction, substantially as described. 22nd. The combination with the key board, in which are included sliding locking plates, of a rocking frame for co-operating with said plates, a cam shaft for rocking said frame, a tappet mounted on said cam shaft, a sliding rod provided with a lateral projection for co-operating with said tappet, and an operating handle for moving said sliding rod, substantially as described. 23rd. The combination with a key board, in which are included locking plates, of an operating handle, mechanism operated by said handle for restoring said locking plates, and means for rendering the restoring mechanism operated by the handle, inoperative, substantially as described. 24th. The combination with a key board, in which are included locking plates, of a rocking frame for restoring said plates, an operating handle, mechanism actuated by said handle for rocking said frame to restore the plate, and devices under control of the operator for rendering the handle operated mechanism, inoperative, substantially as described. 25th. The combination with a key board, in which are included sliding locking plates, of a rocking frame for restoring said plates, a cam shaft for rocking said frame, a tappet on said cam shaft, an operating handle, devices operated by said handle for engaging said tappet and rocking the cam shaft in one direction, and a manually operable device for engaging the tappet and throwing it out of the path of the handle operated mechanism, substantially as described. 26th. The combination with the key board, in which are included sliding plates, of a rocking frame for restoring said plates, a cam shaft for rocking said frame, a tappet loosely mounted on said shaft and locked against independent rotation in one direction, an operating handle, a slide bar provided with a lateral projection for co-operating with the tappet and rocking the cam shaft in one direction, and a repeating key for co-operating with said tappet and idly rotating the same on the cam shaft to throw said tappet out of the path of movement of the handle of the operated mechanism, substantially as described. 27th. The combination with a series of independently movable slide bars, of latches or detaining devices co-operating therewith, a bar common to all of said detaining devices, a lever for operating said bar, and an operating lever 127 for actuating said last-mentioned lever, substantially as described. 28th. The combination with a series of sliding bars, of detents therefor, a bar common to all of said detents, a lever 127, a rocking arm connected with said lever, and connections between said rocking arm and said bar for simultaneously operating said detents, substantially as described. 29th. The combination with sliding bars, of detents therefor, a frame carrying a bar designed to simultaneously engage said detents, a lever for operating said frame,

a rocking arm with which said lever co-operates, means for rocking said arm, and a spring for holding the frame and lever in position, substantially as described. 30th. The combination with sliding bars, of rock arms connected therewith, and friction devices for moving said rock arms and their connected sliding bars, substantially as described. 31st. The combination with sliding bars, of rock arms connected therewith, and friction devices for moving said rock arms and their connected sliding bars, said friction devices comprising spring pressed balls engaging said rock arms, substantially as described. 32nd. The combination with sliding bars, of a driving shaft, arms loosely mounted on said shaft, and having a slot and pin connection with said bars, and fixed arms on said driving shaft carrying spring pressed balls for co-operating with the loosely mounted bar arms, substantially as described. 33rd. The combination with sliding bars, of a shaft, arms 49 loosely mounted on said shaft and connected to said bars, rock arms fixedly mounted upon said shaft, and carrying spring pressed balls in their outer ends for co-operating with the arms 49, said arms 49 being provided with recesses or openings in the paths of the spring pressed balls, substantially as described. 34th. The combination with sliding bars, of a shaft 50, means for rocking said shaft, arms 49 loosely mounted upon said shaft and having slot and pin connections with said sliding bars, said arms being also provided with track extensions, rocking arms 52 fixedly mounted on said shaft, and spring pressed balls mounted in the ends of said arms 52, and co-operating with the arms 49, said arms 49 recessed in the paths of the balls to afford seats or sockets therefor, substantially as described. 35th. The combination with the main driving shaft 57, of a handle for operating said shaft, a rock arm on said shaft, a slide bar having a link connection with said rock arm, a rack on said sliding bar, a segment in mesh with said rack, a shaft which is rocked by said segment, and a dash pot whose plunger is vibrated by said last-mentioned rock shaft, substantially as described. 36th. The combination with a rock shaft, of a notched disc 75 mounted thereon, oppositely extending lateral projections on said disc, a double ended pawl co-operating with the notches in said disc, and tappets conjoined to said pawl and co-operating with the projections on the disc to throw one or the other end of said pawl into engagement with the disc, substantially as described. 37th. The combination with sliding bars, of pivoted racks carried thereby, adding wheels, a rocking frame for throwing said racks into and out of engagement with said adding wheels, an operating handle and friction devices between said handle and racks for frictionally driving said racks in a forward direction, said handle rocking the frame to throw said racks into engagement with the adding wheels, and returning said racks to rotate said adding wheels, substantially as described. 38th. The combination with sliding bars, of racks pivotally connected therewith, a rocking frame for carrying the free ends of said racks, an arm 109 for rocking said frame, adding wheels, and an operating handle for rocking the arm 109, and said frame and throwing the free ends of the pivoted racks into and out of engagement with the adding wheels, substantially as described. 39th. The combination with sliding bars, of pivoted racks connected therewith, said racks being slotted at their free ends, a rocking frame provided with a cross bar passing through the slots in the free ends of the pivoted racks, an arm 109 for rocking said frame, and an operating handle for rocking said arm 109, to raise and lower the free ends of the racks, substantially as described. 40th. The combination with sliding bars, of racks pivotally connected therewith and having their free ends slotted, adding wheels with which said racks are designed to mesh, a rocking frame carrying a member which passes through the slots in the pivoted racks, an arm 109, for rocking said frame, locking dogs for the adding wheels, and means on said rocking frame for co-operating with said dogs to unlock or release the adding wheels whenever the racks are thrown into engagement therewith, substantially as described. 41th. The combination with sliding bars, of slotted racks pivotally connected therewith, a rocking frame having a member which passes through the slots in said racks, an arm 109, for rocking said frame, adding wheels with which the racks are thrown into and out of engagement when the rocking frame is actuated, transferring devices for actuating the next adjacent adding wheels of higher order, and a centering device actuated by said rocking frame, and co-operating with the transferring devices, substantially as described. 42nd. The combination with slide bars, or racks pivotally connected therewith, a rocking frame for raising and lowering the free ends of said racks, an arm 109, for rocking said frame, adding wheels, transferring devices co-operating with said adding wheels to impart motion to the next adjacent adding wheel of higher order, an operating handle for restoring the slide bars and their carried racks to rotate the adding wheels, and mechanism positively operated by the operating handle previous to its restoring movement for actuating the transferring devices, substantially as described. 43rd. The combination with sliding bars, of pivoted racks carried thereby, adding wheels, a rocking frame for throwing said racks into and out of engagement with said adding wheels, transferring devices which are tripped by the adding wheels, key stops for arresting forward movement of the sliding bars, frictional devices moving said sliding bars forwardly, an operating handle for actuating said frictional devices, and mechanism for restoring the tripped transferring devices, said mechanism comprising a shaft, on which is arranged a series of projections in spiral order, substantially as described. 44th. The combination with adding wheels and means for operating the same, of transfer

ring devices which are tripped by said adding wheels, a shaft provided with projections arranged in spiral order for restoring the tripped devices, and so actuating the next adjacent adding wheel of higher order, a pinion loosely mounted on said shaft, a pawl carried by said pinion, a ratchet wheel fixedly mounted on the shaft with which said pawl co-operates, a segment in mesh with the pinion, an operating handle, and a cam driven by said operating handle for rocking the segment, whereby said shaft is positively driven only when the handle is moving in a forward direction, substantially as described. 45th. The combination with transferring devices of a shaft provided with projections for actuating the same, a pinion loosely mounted on said shaft, a ratchet wheel fixedly mounted on the shaft, a pawl carried by the pinion and co-operating with said ratchet wheel, and a friction brake conjoined to the pinion, and bearing upon said shaft, substantially as described. 46th. The combination with transferring devices, of a shaft provided with projections for actuating the same, ratchet wheels fixed on said shaft, a stationarily mounted pawl for co-operating with one of said ratchet wheels to prevent the return movement of the shaft, a pinion loosely mounted on said shaft, a driving pawl conjoined to said pinion for co-operating with the other of said ratchet wheels, means for rotating said pinion in opposite directions, and a friction brake carried by the pinion, and embracing said shaft, substantially as described. 47th. The combination with vertically immovable slide bars, of racks pivoted to said slide bars, adding wheels, a rocking frame for throwing said racks into and out of engagement with said adding wheels, and means for operating said rocking frame, said means comprising a rock arm provided with a cam groove, with which groove co-operates a roller on said rocking frame, substantially as described. 48th. The combination with adding wheels, of pivoted racks co-operating therewith, a rocking frame for moving said racks into and out of engagement with the adding wheels, a cam for moving said frame, a slotted quadrant, and connections between said quadrant and cam, substantially as described. 49th. The combination with adding wheels, of pivoted racks, a frame for throwing said racks into and out of engagement with said adding wheels, a cam for moving said frame, a friction device co-operating with said cam, an arm 110 connected to said cam and provided with a finger 111, and a quadrant provided with stops for co-operating with said finger to move the cam in opposite directions, substantially as described. 50th. The combination with adding wheels, of vertically immovable slide bars, pivoted racks carried thereby a rocking frame for throwing said racks into and out of engagement with said adding wheels, a cam for moving said rocking frame, a lever 129 for operating said cam, and a handle 127 co-operating with said lever, substantially as described. 51st. The combination with adding wheels, of pivoted racks, a rocking frame for throwing said racks into and out of engagement with said adding wheels, an operating handle, connections between said operating handle and said rocking frame for actuating the latter, and manually operable devices for throwing the racks into and out of engagement with the adding wheels, said manually operable devices, when moved to a position to throw the racks into engagement with the adding wheels, rendering inoperative the connections between the rocking frame and the operating handle, substantially as described. 52nd. The combination with adding wheels, of racks for driving the same, an operating handle, connections between said operating handle and racks whereby the racks are thrown into and out of engagement with the adding wheels, and motion imparted thereto for rotating said wheels, and manually operable devices for rendering inoperative the connections between the racks and the adding wheels with respect to said connections throwing the racks into and out of engagement with the adding wheels, said manually operable devices, however, not interfering with the motion communicated by the operating handle to move the racks to rotate the wheels, substantially as described. 53rd. The combination with adding wheels provided with pins of stops, which yield when the wheels are rotated in one direction, but which arrest the wheels when rotated in an opposite direction, slide bars, pivoted to said slide bars, key stops for said slide bars, an operating handle, connections between the handle and said bars for moving the same forward until arrested by said key stops, connections operated by the handle for throwing the racks into engagement with the adding wheels, restoring the bars, rotating the adding wheels, and disengaging the racks from the adding wheels when the handle reaches its rearmost position and manually operable devices for throwing the racks into engagement with the adding wheels when the handle is in its rearmost position, whereby, when said handle is moved forward, the adding wheels are rotated reversely until arrested by their stops, and when said manually operable devices are returned to their normal position, the adding wheels are at zero, and the machine cleared, substantially as described. 54th. The combination with adding wheels provided with pins, which yield when the wheels are rotated in one direction, but which arrest the wheels when rotated in an opposite direction, slide bars, racks pivoted to said slide bars, key stops for said slide bars, an operating handle, connections between said handle and said bars for moving the same forward until arrested by said key stops, connections operated by the handle for throwing the racks into engagement with the adding wheels, restoring the bars, rotating the adding wheels, and disengaging the racks from the adding wheels when the handle reaches its rearmost position, manually operable devices for throwing the racks into engagement with the adding wheels when the handle is

in its rearmost position, whereby, when said handle is moved forward, the adding wheels are rotated reversely until arrested by their stops, and when said handle is returned, the adding wheels and racks are returned to their normal position, and stops on the sliding bars for determining the movement thereof, and of the adding wheels when said bars are returned to their normal position, substantially as described. 55th. The combination with adding wheels, of sliding bars, slotted racks pivoted to said bars, a rocking frame carrying a cross member which passes through the slots in said racks, a projection 116 on said frame for releasing or unlocking the adding wheels when the racks are thrown into engagement therewith, a rock arm 109 provided with a cam for rocking said frame, quadrant, an arm 110 provided with a projection for co-operating with said quadrant to move the arm 109, a lever 129 provided with a slot, through which passes a pin on the arm 109 for rocking said arm, and a handle or lever 127 for rocking the lever 129, substantially as described. 56th. The combination with adding wheels, of pivoted racks, a rocking frame for throwing said racks into and out of engagement with the adding wheels, an arm 109 provided with a cam groove for rocking said frame, a slotted quadrant 106 provided with stops 107 and 108, an arm 110 pivoted on the arm 109, and provided with a finger for co-operating with the quadrant-stops, a lever 129 for rocking the arm 109, a handle for moving the lever 129, a means for elevating the arm 110 out of engagement with the quadrant whenever the arm 129 is operated, substantially as described. 57th. The combination with a key board for setting up stops in different positions, of slide bars for co-operating with said stops, means for rectilinearly moving said bars to a position of rest against stops, type carrying frames rigidly secured to said bars, and independently moveable type carried by said frames; substantially as described. 58th. The combination with a key board for setting up stops in different positions, of slide bars for co-operating with said stops, means for rectilinearly moving said bars to a position of rest against the stops, type carrying frames rigidly secured to said bars, independently moveable type carried by said frames, and independently moveable type hammers for co-operating with said type substantially as described. 59th. The combination with a key-board for setting up stops in different positions, of slide bars co-operating with said stops, means of moving said bars to a position of rest against said stops, type carrying frames secured to said bars, independently moveable type arranged in said frames, independently moveable hammers co-operating with the type, pawls which are operated upon the movement of any of the type frames to initially release the type hammer common to that frame, and means for automatically releasing the type hammers co-operating with type in frames of lower order, irrespective of whether said frames are actuated, substantially as described. 60th. The combination with a key board for setting up stops in different positions, of slide bars co-operating with said stops, type frames moveable with the slide bars, independently moveable type carried by said frames, and spring fingers, one of said fingers co-operating with a plurality of type in a frame, substantially as described. 61st. The combination with a key board for setting up stops in different positions, of slide bars which are arrested by said stops, type frames moveable with said key bars, a series of independently moveable type arranged in each frame, and a single finger co-operating with all of a series of type in a frame, substantially as described. 62nd. The combination with a key board for setting up different stops, of slide bars carrying type frames, a series of independently moveable type arranged in said frames, said type being formed with shoulders or lateral projections on their lower ends, and stationary spring fingers which co-operate with said shoulders to return the actuated type to their normal position, substantially as described. 63rd. The combination with a key board for setting up stops, of slide bars co-operating with said stops, type frames carried by said slide bars, a series of independently moveable type in each frame, lateral extensions at the lower ends of the type, a spring finger for each series of type which is designed to ride over said extensions when the frame is moved, and type hammers for driving the type in the printing line against the resistance of said spring fingers, substantially as described. 64th. The combination with a key board for setting up stop, of sliding bars co-operating with said stops, type frames carried by said sliding bars independently moveable type hammers for co-operating with said type, a pawl co-operating with each type hammer, a track extension on each pawl which co-operates with a projection on each type frame, an operating handle, and means connected with said operating handle to trip all of the released type hammers, substantially as described. 65th. The combination with a key board for setting up stops of sliding bars co-operating with said stops, a series of type carried by said sliding bars, independently moveable type hammers co-operating with said type, independently moveable pawls 150 co-operating with the type hammers and with the sliding bars, whereby, whenever a sliding bar is actuated, its respective pawl is operated to release the type hammer, pawls 157 co-operating with said type hammers, an operating handle, and connections between said operating handle and said pawls 157, whereby the type hammers are fully released or tripped after the sliding bars and their carried type have completed their movement, substantially as described. 66th. The combination with a key board for setting up stops, of sliding bars co-operating with said stops, independently moveable type carried by said bars, type hammers for driving said

type to make printing impression, pawls 150 for unlocking the type hammers in a retracted position, track extensions on said pawls, means on said sliding bars for co-operating with said track extensions to move the pawls whenever the sliding bars are moved, means on said pawls for actuating the next adjacent pawl of lower order, irrespective of whether its co-operating slide bar is moved or not, pawls 157 for sustaining the type hammers in a retracted position after said type hammers have been released by the pawls 150, an operating handle, and connections between said operating handle and said pawls 150 to operate the latter when the handle reaches a certain position, substantially as described. 67th. The combination with a keyboard for setting up stops, of slide bars co-operating with said stops, type carried by said slide bars, type hammers co-operating with said type, pawls for sustaining and releasing said type hammers, means on the slide bars for operating said pawls, an operating handle, handle operated pawls for tripping the type hammers when the handle is in certain position, centreing racks carried by the sliding bars, a centreing bar co-operating with said racks, and connections between said centreing bar and the mechanism for operating the pawls 157, whereby said bar is thrown into an operative position before the pawls 157 are operated, substantially as described. 68th. The combination with a key board for setting up stops, of sliding bars co-operating with said stops, type carried by said sliding bars, type hammers co-operating with said type, centering racks 166 carried by said sliding bars, a rocking frame, a centering bar carried by said rocking frame for co-operating with said centreing racks, an operating handle, and connections operated by said handle for releasing the type hammers, said connections also rocking the frame carrying the centreing bar, substantially as described. 69th. The combination with a series of independently movable type frames, of independently movable type carried by said frames, independently operable type hammers co-operating with the type, two pawls for each of said type hammers, one of said pawls being operated by the type frame to initially release the type hammer, and the other of said pawls being operated by connections from the operating handle to finally release or trip the type hammer, in order that said hammer may deliver an impacting blow against the type, a rocking frame carrying a cross bar for co-operating with said last-mentioned pawls, said cross bar also restoring the type hammers to their normal position and setting the same for another operation, and an operating handle for rocking said frame, substantially as described. 70th. The combination with a movable type frame carrying independently movable type, of a type hammer co-operating with said type, a pawl for holding the type hammer in its retracted position, said pawl being operated whenever the type frame is moved to release the hammer, a pawl for holding the type hammer in its retracted position when released, and a bar for operating said last-mentioned pawls to release the type hammer, said bar also co-operating with the type hammer to re-set the same against the resistance of its driving spring, substantially as described. 71st. In a ribbon feed, the combination with two spools on which the ribbon is wound, of ratchet wheels on the shafts of said spools, pawls for said ratchet wheels, and means which is operative when the full spool is held against further movement by the tension of the ribbon for disengaging the pawl co-operating with the ratchet of the full spool and to engage a pawl with the ratchet for the empty spool, substantially as described. 72nd. In a ribbon feed, the combination with two spools to which the ends of an inking ribbon are secured, of ratchets on the ends of the shafts of said spools, a sliding plate carrying two pawls designed to laterally engage said ratchets, means for vibrating said plate to cause the engaged pawl to rotate its ratchet and consequently wind the ribbon on its conjoined spool, and mechanism which is thrown into action when the wound spool is held against further movement by the tension or pull of the ribbon from the unwound spool to disengage the pawl from the ratchet of the full spool, and engage the other pawl with the ratchet of the empty spool, substantially as described. 73rd. In a ribbon feed, the combination with two spools on which an inking ribbon is designed to be wound, of ratchets secured to the shafts of said spools, a vibrating frame plate, a rotary element mounted on said frame plate, two pawls mounted on said rotary element and designed to laterally engage the spool ratchets, means for holding one or the other of said pawls in a position where it will properly co-operate with and drive its respective ratchet, and means for reversing the action of said pawls when the wound spool is held against further movement by unusual tension being placed upon the ribbon, substantially as described. 74th. The combination with a ribbon, of feeding devices therefor, means for reversing the action of the feeding devices, and mechanism in the form of a vibrating plate carrying a plurality of pawls for automatically shifting the reversing means when the wound spool is held against further movement by unusual tension upon the ribbon, substantially as described. 75th. The combination with a platen and type, of means for feeding a sheet between the same, a printing ribbon interposed between the type and sheet, and automatically actuated devices for causing the ribbon to be fed first in one direction and then in the opposite direction, the reversal in the feed of the ribbon being accomplished when the wound spool is held against further movement by an unusual tension or pull being exerted upon the ribbon, substantially as described. 76th. The combination with a series of type and a platen, of means for feeding a sheet of paper between the same, a printing ribbon interposed between the type and sheet, automatically actuated devices for causing the ribbon to be fed first

in one direction and then in the opposite direction, said mechanism comprising a vibrating frame, a plurality of pawls carried by said frame, and devices which are operative when the wound spool is held against further movement by an unusual tension placed upon the ribbon for causing the pawls to alternately engage and drive their respective ribbon winding mechanism, substantially as described. 77th. The combination with a ribbon, of spools to which the ends of said ribbon and secured, ratchets on the shafts of said spools, a rotary element mounted on said plate, two pawls carried by said rotary element, and designed to alternately engage their respective ratchets, said rotary element being actuated when the wound spool is held against further movement by an unusual tension being placed upon the ribbon, and a centering device co-operating with said vibrating plate, a rotary element to hold it in the position in which it is placed after co-operation with the ratchet of the wound spool, substantially as described. 78th. The combination with two spools, of a ribbon having its ends connected thereto, ratchets conjoined to said spools, a vibrating plate 175, a rotary element 176 mounted upon said plate, a spring pressed centering pawl 177 co-operating with said rotary element, pawls 179 and 180 mounted upon said rotary element and designed to alternately drive their respective ratchets, springs for holding said pawls in an operative position, and projections on said rotary element for co-operating with the pawls carried thereby, whereby, when either end of the ribbon is placed under unusual tension, said rotary element is actuated to release the discharged pawl and throw it into an operative position to reverse the direction in which the ribbon is wound, substantially as described. 79th. The combination with a ribbon, of feeding devices therefor, means for reversing the action of the feeding devices, mechanism for automatically shifting the reversing means under unusual tension upon the ribbon, and a yielding driver for said feeding devices substantially as described. 80th. The combination with a ribbon, of pawl and ratchet mechanisms affording feeding devices therefor, yielding means for operating said feeding devices, and mechanism for automatically shifting the reversing means under unusual tension upon either end of the ribbon, substantially as described. 81st. The combination with a ribbon, of feeding devices therefor in the form of pawl and ratchet mechanisms, which are alternately thrown into operative position to feed the ribbon in opposite directions, a vibrating plate upon which the pawls of said feeding mechanisms are mounted, a rock shaft for vibrating said plate, a rock arm loosely mounted upon said shaft, said rock arm being locked against movement in one direction, and moving in the opposite direction against the tension of a spring, and means connected to said arm for vibrating the same, substantially as described. 82nd. In a calculating machine, the combination with two or more series of vertically movable type, of means for bringing any one type of a series into position to print side by side with those of other series, a platen adapted to support a sheet of paper above said type and to be moved laterally across the top of the machine and set in different positions opposite the type, a hinged carriage in which said platen is mounted devices for locking the platen and its carriage in any position in which it is set, and means for intermittently moving the platen to feed the paper, whereby parallel columns may be printed upon the paper, substantially as described. 83rd. In a machine of the character described, the combination with the printing types and operating mechanism therefor, of an arm which is vibrated by said mechanism after each printing action, a laterally adjustable carriage, a platen arranged in said carriage, a rocking frame carrying a rod co-operating with the vibrating arm in the different adjusted positions of the carriage, a ratchet wheel conjoined to said platen, a pawl co-operating with said ratchet wheel, and means for driving said pawl from said rocking frame, substantially as described. 84th. The combination with a hinged carriage, of a platen roller mounted therein, means for driving said platen roller step by step, a track for supporting the free end of said carriage, means on the carriage for co-operating with the track for locking said carriage in different laterally adjusted positions, a pivoted frame carrying a track 213, on which the rear end of the carriage is slidingly and pivotally mounted, and means for vertically adjusting said frame, substantially as described. 85th. The combination with a hinged carriage, of a platen mounted therein, a track roller arranged in the front end of the carriage, a notched track with which said roller co-operates, a latch pin co-operating with the notches in the track, and a handle on said latch pin by which said carriage may be lifted, substantially as described. 86th. The combination with a pivoted track 213, of a carriage slidingly and pivotally mounted on said track, platen arranged in said carriage, means for locking said carriage and its platen in laterally adjusted positions, a support for the free end of the carriage, and means for adjusting the height of the track 213, substantially as described. 87th. The combination with a pivoted track 213, of means for adjusting the height of same, a carriage slidingly and pivotally mounted on said track a notched rail for supporting the free end of the carriage, a platen mounted in the carriage, and means on said carriage for co-operating with the notches in the rail to lock said carriage in different laterally adjusted positions, substantially as described. 88th. The combination with a pivoted carriage section, of a bracket secured to said section for supporting a roll of paper, a carriage pivoted to said section, and a platen roller mounted in said carriage, substantially as described. 89th. The combination with printing type, of a platen roller, oppositely arranged ratchet wheels conjoined thereto, pawls for said ratchet wheels, one of which is a driving pawl, and means for

operating the other of said pawls from the driving pawl to render said other pawl inoperative whenever the driving pawl moves to a position to drive its ratchet, said other pawl moving in a position to limit the movement imparted by the driving pawl to the ratchet, substantially as described. 90th. The combination with a platen, of oppositely disposed ratchet wheels conjoined thereto, a driving pawl co-operating with one of said ratchet wheels, and a stop pawl co-operating with the other of said ratchet wheels for determining the extent of motion imparted by the driving pawl, substantially as described. 91st. The combination with a platen, of oppositely arranged ratchet wheels conjoined thereto, a driving pawl co-operating with one of the ratchet wheels, a stop pawl which is lifted by said driving pawl in its initial movement to release its ratchet wheel so as to permit the driving pawl to operate its respective ratchet wheel, said auxiliary pawl being released after the driving pawl is in a driving position to arrest or limit the movement imparted by the driving pawl, substantially as described. 92nd. The combination with a platen, of oppositely arranged ratchet wheels 202 and 202a, a driving pawl 204 co-operating with the ratchet wheel 202, an auxiliary or stop pawl 203a co-operating with the pawl 203 and the ratchet wheel 202a, and means for throwing the stop pawl out of engagement with its respective ratchet wheel whenever the driving pawl is turned out of engagement with its ratchet wheel, substantially as described. 93rd. The combination with printing type, of an inking ribbon normally in printing line of said type, an inking ribbon of different color in juxtaposition to the printing line, means for shifting the position of said ribbons, and a spring for returning said ribbons to their normal position, substantially as described. 94th. The combination with printing type, of a ribbon which normally occupies a position across the printing line of said type, a ribbon of different colour arranged parallel with said first-mentioned ribbon, feeding devices common to both ribbons, a shifting mechanism for positively transposing said ribbons, and a spring for returning said ribbons to their normal positions, substantially as described. 95th. The combination with twin spools, one of which carries a ribbon of one colour normally in printing line, and the other of which carries a ribbon of different colour normally out of printing line, of feeding mechanism for said spools, means for positively effecting the transposition of said ribbons, and a spring co-operating with said transposing mechanism for returning the ribbons to their normal positions whenever said spring is free to act, substantially as described. 96th. In a calculating machine, the combination with a recording mechanism, in which are included inking ribbons of different colors, one of said ribbons normally occupying a position opposite the printing line, of a total key or lever, mechanism connected to said total key or lever for positively moving said ribbons in one direction for effecting the transposition thereof, and a spring connected to said mechanism for restoring the ribbons to their normal position when the transposing mechanism is released by the total key, substantially as described. 97th. In a calculating machine, the combination with adding and recording mechanism, of a total key or lever co-operating therewith, an operating handle for driving said recording and adding mechanisms, inking ribbons of different colours which are included in the recording mechanism, and mechanism connected to and operated by the total key or lever, whereby, when said lever is moved to one position and the handle operated to cause the recording mechanism to print a total, the ribbons are transposed, and the total is printed in a color different from the items of which it is composed, substantially as described. 98th. In a calculating machine, the combination with adding and recording mechanisms, of an operating handle for driving said mechanisms, a total key, connections for printing the total of the sum in the adding mechanism through the instrumentality of the recording mechanism, and means for printing such a total in a colour different from that of the items of which it is composed, substantially as described. 99th. The combination with printing type, of an inking ribbon normally in the printing line thereof, an inking ribbon of different colour in juxtaposition to said first mentioned ribbon, mechanism for transposing said ribbons, said mechanism comprising levers 127, 129, and 222, a rock shaft provided with rock arms having link connections with the spools upon which the ribbons are wound, and a link 221 connected with the lever 222, for rocking said shaft, substantially as described. 100th. In a calculating machine, the combination with a series of independently movable printing type, of an inking ribbon normally in position across the printing line of said type, an inking ribbon of different colour in juxtaposition to said first mentioned ribbon, means for feeding said ribbons, a lever 127 arranged externally the machine, connections between said lever and said ribbons, said connections comprising a lever 129, a lever 222 having one end resting upon the lever 129, a spring 223 for holding the end of lever 222 against lever 129, a rock shaft, and a link connection between lever 222 and said rock shaft, substantially as described. 101st. The combination with twin ribbon spools, of different coloured ribbons wound thereon, shafts upon which said spools are slidably mounted, feeding mechanism for said ribbons, shifting mechanism for sliding the spools along their respective shafts and transposing said ribbons, and means within reach of the operator for positively actuating said shifting mechanism in one direction only, substantially as described. 102nd. The combination with a plurality of ribbon spools containing different coloured ribbons, of frames containing said spools shafts upon which said spools and frames are slidably mounted, a rock shaft carrying arms connected by links to said frames, means under

control of the operator for positively rocking said shaft in one direction, for transposing said ribbons, and a spring for returning said rock shaft and its parts to their normal positions, substantially as described. 103rd. The combination with sliding frames, of ribbon spools carried thereby, guide rollers for the ribbons mounted in said frames, different coloured ribbons wound on said spools, guide rods 215, for said framed said guide rods, also forming spindles for the guide rollers, and means under control of the operator for sliding said frames to transpose said ribbons, substantially as described. 104th. The combination with sliding frames, of suitable guide rods therefor, ribbon spools carried by said frames, guide rollers for the ribbons mounted in said frames, rock arms mounted on a suitable shaft connected by links to said frames, a total key, and connections between said total key and said rock shaft, whereby, when said total key is in different positions, said ribbons are transposed, substantially as described. 105th. The combination with a series of independently movable type, of a plurality of inking ribbons, means for shifting said ribbons so that one or another will occupy a position across the printing line, feeding devices common to all of said ribbons, means for reversing the action of the feeding devices, and mechanism for automatically shifting the reversing means when either of the wound spools is held against further movement by unusual tension being placed upon its respective ribbon, substantially as described.

No. 69,257. Shelf Bracket. (Console d'étagère.)

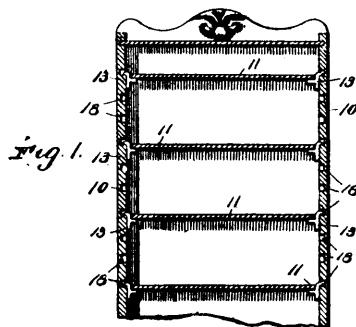


Fig. 2.



Fig. 3.



69257

John D. Johnston, Newport, Rhode Island, U.S.A., 8th November, 1900; 6 years. (Filed 9th October, 1900.)

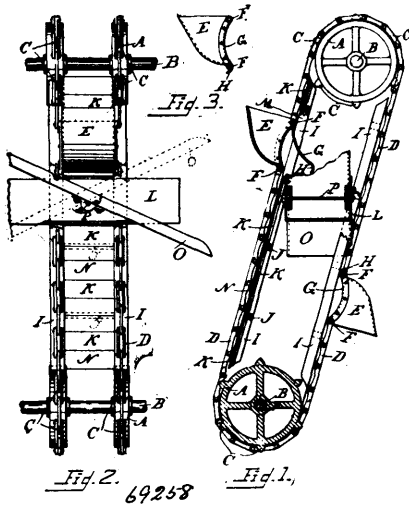
Claim.—1st. A shelf supporting bracket, comprising a shank, a hook at the upper end of said shank projecting at one side thereof, and a rest arm intermediate the ends of said shank and projecting from the side opposite the hook. 2nd. A shelf supporting bracket comprising a shank, a down turned hook at the upper end of said shank and projecting at one side thereof, and a rest arm intermediate the ends of said shank and having a flat upper face, said rest arm projecting from the side of the shank opposite to the hook. 3rd. A shelf supporting bracket, comprising a straight shank, a down turned hook at the upper end of said shank, said hook having a pointed end and projecting at one side of the shank, and a laterally off-set rest arm projecting at substantially right angles to the shank intermediate the ends thereof, said arm projecting from the side opposite to the hook.

No. 69,258. Elevator. (Élévateur.)

Reuben J. Melins, Bath-on-the-Hudson, New York, U.S.A., 8th November, 1900; 6 years. (Filed 15th October, 1900.)

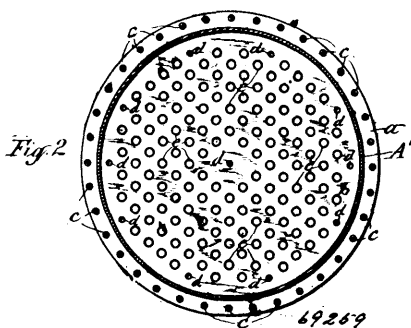
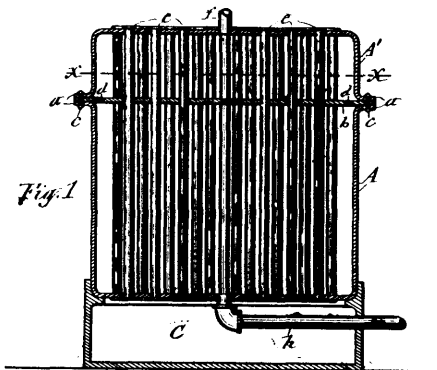
Claim.—1st. In an elevator, the combination with an inclined guide floor N, composed of removable shutters, K, which forms closures for openings M, in said guide floor, said shutters being supported in place by string pieces L, and cross ties J, as herein set forth, of an elevator bucket E, having at its back, a swinging door, G, and adapted to be moved on said floor, said door being arranged to be opened by gravity while the bucket is passing over an uncovered opening M, in the guide floor, and to close automatically by contact with the closed part of said floor, as specified. 2nd. In an elevator, the

combination of an inclined guide floor N, provided with an opening or openings, M, formed therethrough, an elevator bucket E having a



swinging door G hinged to cover its rearmost side, said bucket being arranged to be moved on said guide floor, an open ended trough L, and a tiltable chute O, journaled transversely between the sides of said open ended trough L, whose bottom forms stops for limiting the movement of said chute in either direction, said chute being arranged directly under an opening M, in the guide floor, so that the contents of said bucket will fall directly into the chute and be discharged from the depressed end of the latter, as specified. 3rd. The combination of a trough L, having its opposite ends open and having a bottom that is shorter than the sides of the trough, so as to form a stop at each end thereof, and a tiltable chute O, transversely pivoted at, or near its midlength to said trough and arranged to be tilted so that either end of said chute can be depressed until it takes against the corresponding end of the bottom of the trough, as specified.

No. 69,259. Steam Boiler. (*Chaudière à vapeur.*)

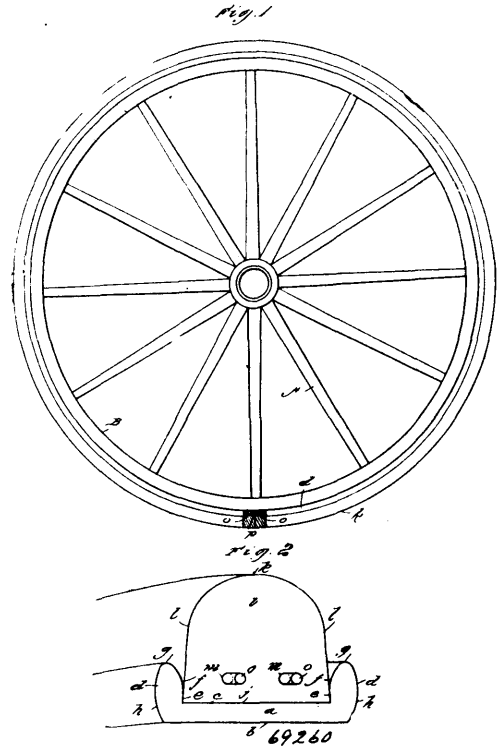


John Jay Tonkin, Oswego, New York, U.S.A., 8th November, 1900; 6 years. (Filed 20th October, 1900.)

Claim.—A steam boiler composed of a bottom case extending to the water line of the boiler, an inverted top case both flanged outward at their junction, a horizontal diaphragm seated with its margin

between the flanges of said cases and perforated for communication between the upper and lower compartments of the boiler, rivets uniting the said parts at the said flanges, and tubes extending loosely through the diaphragm and through the bottom and top plates of the boiler and fastened to said plates, as set forth and shown.

No. 69,260. Rubber Tire. (*Bandage de caoutchouc.*)



John Grover Webb, Springfield, Ohio, U.S.A., 8th November, 1900; 6 years. (Filed 17th July, 1900.)

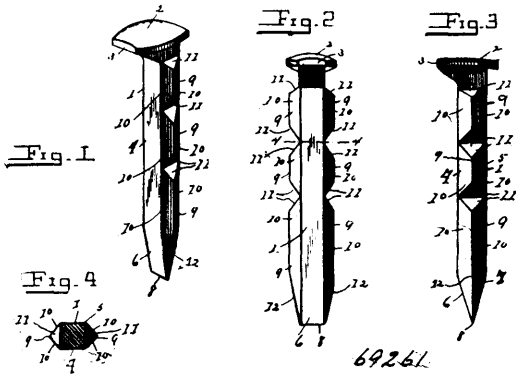
Claim—1st. In a rubber tire equipment, the combination with a channel iron having the inner sides of its flanges inclined inward a portion of the distance and turned outward the remainder of the distance, their edges curved, and their outer sides convex, of a rubber tire proper having a curved tread, inclined sides extending from the tread curves down into the channel and adapted, when under lateral expansion, to interlock with the inner inclined portions of the flanges and to spread toward the outer turned out portions of the flanges, and one or more retaining wires or bands extending through the rubber and united at their ends. 2nd. In a rubber tire equipment, the combination with a channel iron *a*, having flanges *d*, with inclined sides *c*, curved sides *f*, curved edges *g*, and convex outer sides *h*, of a rubber tire proper *i*, having a curved crown *k*, and straight inclined sides *l*, converging from the base toward each other and joining with the side curves of the crown, and one or more longitudinal wires or bands extending entirely through the rubber and united at their ends, all substantially as shown and described for the purposes set forth.

No. 69,261. Railway Spike. (*Cheville de chemin de fer.*)

Barnard Mortimer Chase, Hudson, New York, U.S.A., 8th November, 1900; 6 years. (Filed 19th October, 1900.)

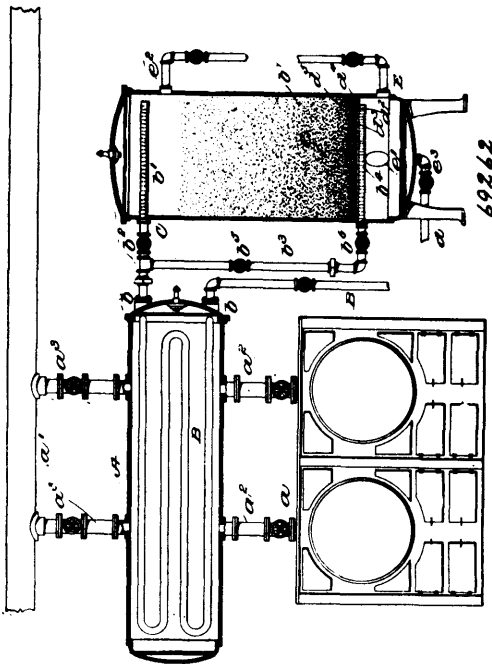
Claim—1st. A railroad-spike, comprising a substantially-rectangular shank, having a head, which projects laterally at the forward side thereof, the front and rear sides of the shank being free from projections, and the opposite edges of the shank having a plurality of longitudinally-aligned projections of ribs, the opposite longitudinal sides of which are bevelled and intersect substantially midway between the opposite sides of the spike, the opposite lowermost ribs having their sharp longitudinal edges inclined inwardly toward the point of the spike, and their upper end bevelled upwardly and

inwardly, the opposite ends of the other ribs having their opposite ends bevelled to converge outwardly, and the adjacent bevelled ends



forming sockets or recesses, the uppermost ribs terminating short of the head.

No. 69,262. Feed Water Heater and Purifier.
(*Réchauffeur et purificateur d'eau.*)

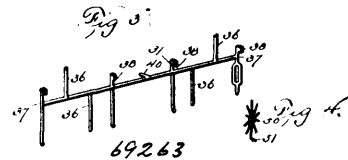
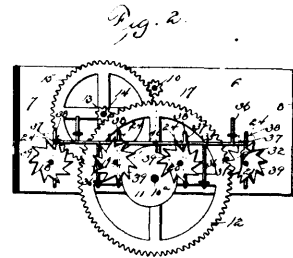
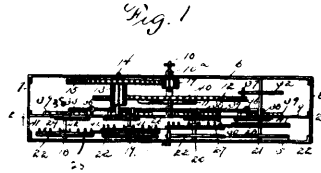


Thomas Gunning, Pittsburg, Pennsylvania, U.S.A., 8th November, 1900; 6 years. (Filed 20th October, 1900.)

Claim.—1st. In a feed water heater and purifier, the combination of a chamber for superheating the feed water, means for supplying live steam direct to such chamber, means for conveying water of condensation away from such chamber, a feed water pipe arranged tortuously within such chamber, and a filter into which such pipe opens after it leaves the chamber, the water in such feed pipe in its passage through the chamber being heating to practically boiler temperature, as set forth. 2nd. The combination with a boiler or boilers, and an overhead steam main, of a steam chamber horizontally disposed above said boiler or boilers and intermediate of the latter and said main, pipes connecting said steam chamber with said boiler or boilers, pipes connecting said steam chamber with said steam main, and a feed water pipe extending into said steam chamber and arranged tortuously therein, substantially as set forth. 3rd. The combination with a boiler or boilers, and an overhead steam main, of a steam chamber horizontally disposed above said boiler or boilers, and intermediate of the latter and said main, pipes connecting said steam chamber with said boiler or boilers, pipes connecting said steam chamber with said steam main, a feed water pipe extending into and passes through said steam chamber, a filter into which said feed water pipe opens at one end, a filtering bed located therein, and a pipe leading from the other end of said filter

to said boiler or boilers, substantially as set forth. 4th. The combination with a boiler or boilers and a super-heating chamber mounted thereon and communicating with the steam space of the boilers, of a feed water pipe arranged tortuously within said superheating steam chamber and having a perforated portion, a filter into the upper portion of which the perforated portion of said pipe enters, a filter bed with said filter, a support therefor, a water chamber located therebelow, a branch pipe leading from said feed water pipe and having a perforated portion extending into said water chamber, valves in said feed water pipe and branch, a pipe leading from said water chamber and having a valve, and a second valved pipe leading from said filter above the filtering bed, substantially as set forth.

No. 69,263. Gas Meter Register. (*Régistre de gazomètre.*)



Charles F. J. Wernert, Evansville, Indiana, U.S.A., 8th November, 1900; 6 years. (Filed 7th August, 1900.)

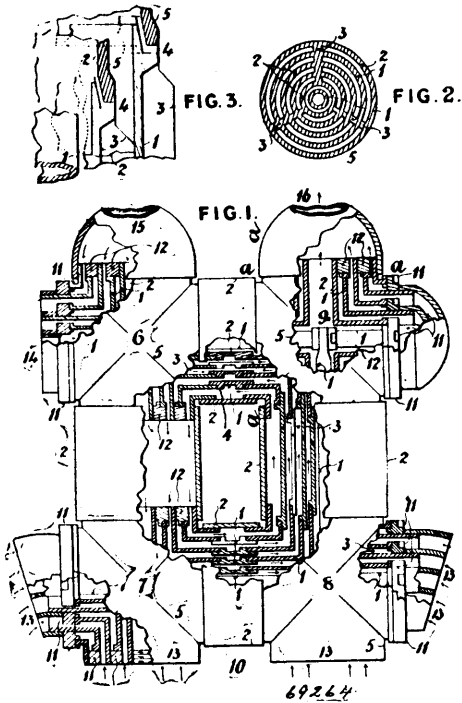
Claim.—1st. In a register for meters, the combination of a drive shaft and a plurality of dial shafts, of step-by-step mechanism for rotating the several shafts, one from another, escapement wheels carried by the dial shafts, and means operated from the drive shaft for engagement with the escapement wheels to hold the dial shafts against rotation when the step-by-step mechanism is inactive. 2nd. In a register, the combination with a drive shaft and a plurality of dial shafts, of a step-by-step mechanism for rotating the several shafts one from another, escapement mechanism carried by the dial shafts, and means operated by the drive shaft for engaging the escapement mechanism to hold the dial shafts immovable when the escapement mechanism is inactive. 3rd. In a register for meters, the combination with a drive shaft and a plurality of dial shafts, of an escapement wheel upon each of the dial shafts, means operated by the drive shaft for intermittent engagement with the escapement wheels to hold the dials against movement at times, step-by-step mechanism operated by the drive shaft for moving the dial shafts when released by the escapement mechanism, and ratchet mechanism co-operating with the escapement mechanism to hold the dials for oscillatory movement. 4th. In a register for meters, the combination with a drive shaft and a plurality of dial shafts having step-by-step operating means, of an escapement wheel upon each of the dial shafts, a reciprocatory bar having a plurality of knife edges adapted for engagement with the escapement wheels to hold them from rotation in one direction, a cam upon the drive shaft, an arm upon the rod engaging the cam to reciprocate the rod, and ratchet mechanism for holding the dial shafts from movement in a second direction.

No. 69,264. Apparatus for Boiling and Evaporating Water. (*Appareil pour bouillir et évaporer l'eau.*)

Robert Cooke Sayer, 11 Clyde Road, Redland, Bristol, England, 8th November, 1900; 6 years. (Filed 22nd September, 1900.)

Claim.—1st. A tubular boiler for heating and evaporating water, consisting of a number of concentric tubes with separating webs so

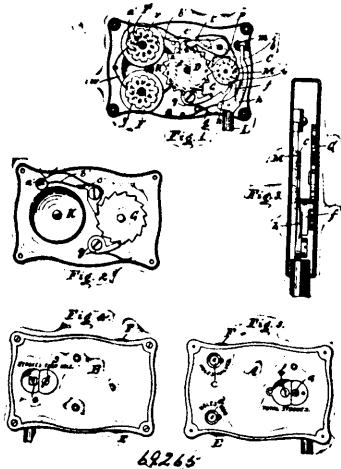
that when put together the bursting effort of one tube is taken by the whole, as described and shown on the drawing. 2nd. A tubular



boiler for heating water and evaporating it, consisting of a number of concentric tubes forming spaces and having separating webs to increase their strength, angle joints for connecting lengths of such tubes to form continuations of such spaces, a means for securing them together and closing the water or hot air spaces, entrances and exits for the hot gases, entrance for the water supply and exit for the generated steam, as described and shown on the drawing. 3rd. A tubular boiler consisting of concentric tubes and joints strengthened with webs and connected together to form circuits, an enclosing furnace in which the tubes are suspended over a source of heat, feed water tubes lining the walls inside to heat the feed water and doors in the walls, as described and shown on the drawing.

No. 69,265. Register. (*Régitre.*)

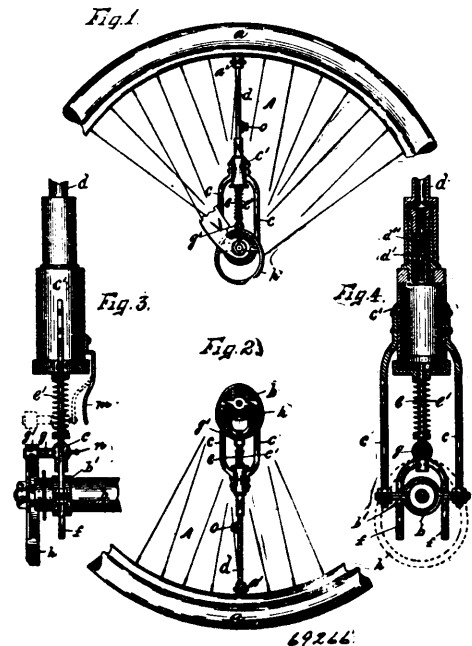
Edward B. Weston, Dayton, Ohio, U.S.A., 8th November, 1900; 6 years. (Filed 7th August, 1900.)



Claim.—1st. In a register, the combination, with the case having display openings in opposite sides thereof, a pair of ratchet registry wheels carrying numerals on the opposite faces thereof which are displayed through said openings, said wheels being arranged in parallel planes, and an operating lever with a single pawl mounted thereon engaging both of said registry wheel simultaneously, substantially as shown and described. 2nd. In a register, the combination, with the case having display openings in opposite

sides thereof, of a pair of ratchet registry wheels carrying numerals on the opposite faces thereof displayed through said openings, said wheels being arranged in parallel planes, and an operating lever with a single pawl mounted thereon engaging both of said wheels simultaneously, and an arm on said operating lever with a socket for receiving same, to act as a guide for the lever, substantially as shown and described. 3rd. In a register, the combination, with the case, of a units and tens wheel to register the total operations, an additional unit wheel mounted in a plane parallel with the total registering wheels, and means for operating said pair of units wheels simultaneously, an additional pair of separately mounted registry wheels rotating in opposite directions, with a single spring to prevent back movement thereof, and a bell with a spring actuated hammer mounted on a pawl in contact with one of said simultaneously operated units wheels, whereby with each movement thereof, the bell will be sounded, substantially as shown and described.

No. 69,266. Bicycle Pump. (*Pompe à bicyclette.*)



Albert Leman Crandall, Phelps, New York, U.S.A., 8th November, 1900; 6 years. (Filed 7th August, 1900.)

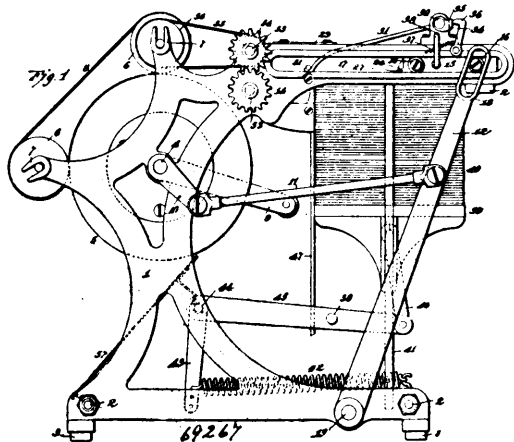
Claim.—1st. In a wheel having a pneumatic tire, a pump mounted between the hub and the rim, a lateral lug on the pump piston rod, and a finger on the pump cylinder adapted to engage said lug and hold the piston. 2nd. In a wheel having a pneumatic tire, a pump mounted between the hub and the rim, and provided with a spring controlled piston, a lateral arm on the piston rod having a roller at its end, and a cam on the end of the hub in alignment with said roller and bearing against the same. 3rd. In a wheel having a pneumatic tire, a collar secured on the hub, upright secured to the said collar and supporting a pump, a spring controlled piston in said pump, a guide rod projecting from the piston rod and through the collar of the hub, a lateral arm on the piston rod, and a cam on the end of the hub bearing against said lateral arm.

No. 29,267. Machine for Sealing Envelopes.
(*Machine pour sceler les enveloppes.*)

The A. B. Dick Company, assignee of Frederick B. Canode, all of Chicago, Illinois, U.S.A., 8th November 1900; 6 years. (Filed 13th March, 1900.)

Claim.—1st. In an envelope sealing machine, the combination of means for supporting envelopes in a pile, flap outermost, a reciprocating moistening and feeding carriage, moveable with respect to the outer envelope of the pile, whereby the said carriage may engage beneath the flap of the outermost envelope and apply moisture thereto, means for moving said carriage so as to withdraw the engaged envelope from the pile, and means for subsequently applying pressure to the flap, substantially as set forth. 2nd. In an envelope sealing machine, the combination of means for supporting envelopes in a pile, flap outermost, a reciprocating moistening and feeding carriage moveable with respect to the outer envelope of the pile, whereby the said carriage may engage beneath the flap of the outermost envelope and apply moisture thereto, means for moving said carriage so as to withdraw the engaged envelope from the pile, and means co-operating with the reciprocating carriage for automatically applying pressure to the flap, substantially as set forth.

3rd. In an envelope sealing machine, the combination of means for supporting envelopes in a pile, flap outermost, a reciprocating

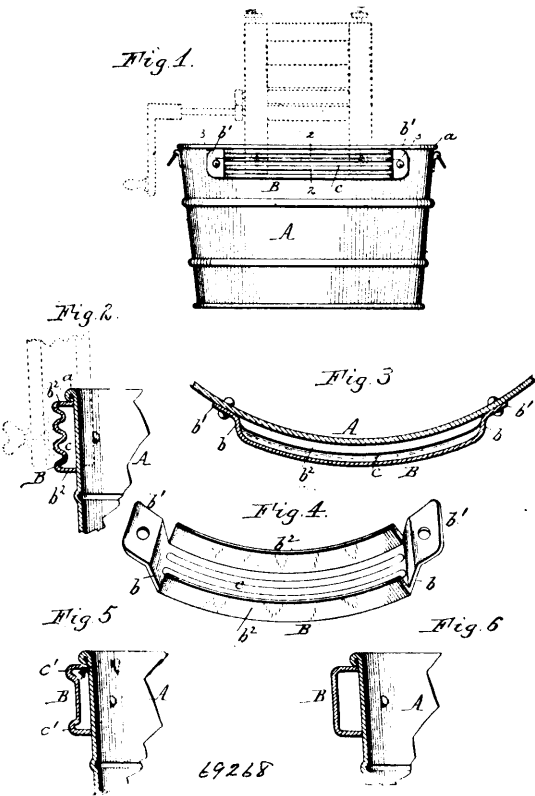


moistening and feeding carriage movable with respect to the outer envelopes of the pile, whereby the said carriage may engage beneath the flap of the outermost envelope and apply moisture thereto, means for moving said carriage so as to withdraw the engaged envelope from the pile, pressure devices for applying pressure to the flap delivered by said carriage, and intermediate mechanism for withdrawing the envelope from the carriage and depositing it into the pressure applying devices, substantially as set forth. 4th. In an envelope sealing machine, the combination of means for supporting envelopes in a pile, flap outermost, a reciprocating moistening and feeding carriage movable with respect to the outer envelope of the pile, whereby the said carriage may engage beneath the flap of the outermost envelope and apply moisture thereto, means for moving said carriage so as to withdraw the engaged envelope from the pile, means for subsequently applying pressure to the flap, and a spring pressed feed finger carried by said carriage for engaging beneath the flap of the outermost envelope, substantially as set forth. 5th. In an envelope sealing machine, the combination of means for supporting envelopes in a pile, flap outermost, a reciprocating moistening and feeding carriage movable with respect to the outer envelope of the pile, whereby the said carriage may engage beneath the flap of the outermost envelope and apply moisture thereto, means for moving said carriage so as to withdraw the engaged envelope from the pile, means for subsequently applying pressure to the flap, a spring pressed feed finger carried by said carriage for engaging beneath the flap of the outermost envelope, and means for elevating said finger during the forward stroke of the carriage, substantially as set forth. 6th. In an envelope sealing machine, the combination of means for supporting envelopes in a pile, flap outermost, a reciprocating moistening and feeding carriage movable with respect to the outer envelope of the pile, whereby the said carriage may engage beneath the flap of the outermost envelope and apply moisture thereto, means for moving said carriage so as to withdraw the engaged envelope from the pile, means for subsequently applying pressure to the flap, a spring pressed feed finger carried by said carriage for engaging beneath the flap of the outermost envelope, a cam finger connected to the feed finger, and a stationary plate with which the cam finger engages to elevate the feed finger during the forward stroke of the carriage, substantially as set forth. 7th. In an envelope sealing machine, the combination of means for supporting envelopes in a pile, flap outermost, a reciprocating moistening and feeding carriage movable with respect to the outer envelope of the pile, whereby the said carriage may engage beneath the flap of the outermost envelope and apply moisture thereto, means for moving said carriage so as to withdraw the engaged envelope from the pile, means for subsequently applying pressure to the flap, a spring pressed pressure foot co-operating with the carriage for forcing the engaged flap into contact with the moistening surface of the carriage, substantially as set forth. 8th. In an envelope sealing machine, the combination of means for supporting envelopes in a pile, flap outermost, a reciprocating moistening and feeding carriage movable with respect to the outer envelope of the pile, whereby the said carriage may engage beneath the flap of the outermost envelope and apply moisture thereto, means for moving said carriage so as to withdraw the engaged envelope from the pile, means for subsequently applying pressure to the flap, a spring pressed pressure foot co-operating with the carriage for forcing the engaged flap into contact with the moistening surface of the carriage, and means for locking the pressure foot in an elevated position at the completion of the forward movement of the carriage and for locking the pressure foot at the completion of the return movement of the carriage, substantially as set forth. 9th. In an envelope sealing machine, the combination of means supporting envelopes in a vertical pile and for impelling the pile vertically upwards, a pair of flat fingers for engaging

feeding and moistening carriage and means for moving the same, whereby the carriage may engage with its forward edge beneath the flap of the uppermost envelope to force the latter horizontally off of the pile, substantially as set forth. 10th. In an envelope sealing machine, the combination of means for supporting envelopes in a vertical pile and for impelling the pile vertically upwards, a pair of flat fingers for engaging the uppermost envelope and limiting its ascent, a reciprocating feeding and moistening carriage and means for moving the same, whereby the carriage may engage with its forward edge beneath the flap of the uppermost envelope to force the latter horizontally off of the pile, and a spring pressed pressure foot for applying pressure to the flap of the uppermost envelope to engage it with the moistening surface of the carriage, substantially as set forth. 11th. In an envelope sealing machine, the combination of means for supporting envelopes in a vertical pile and for impelling the pile vertically upwards, a pair of flat fingers for engaging the uppermost envelope and limiting its ascent, a reciprocating feeding and moistening carriage and means for moving the same, whereby the carriage may engage with its forward edge beneath the flap of the uppermost envelope to force the latter horizontally off of the pile, a spring pressed pressure foot for applying pressure to the flap of the uppermost envelope to engage it with the moistening surface of the carriage, and means co-operating with the carriage for applying pressure to the envelope after it has been fed off of the pile by the movement of the carriage, substantially as set forth. 12th. In an envelope sealing machine, the combination of means for supporting a number of envelopes in a vertical pile, flap uppermost, a reciprocating carriage the forward edge of which engages beneath the flap of the uppermost envelope, a moistening surface carried by said carriage, and a water well reciprocating with the carriage and supplying water to said surface, substantially as set forth. 13th. In an envelope sealing machine, the combination of means for supporting a number of envelopes in a vertical pile, flap uppermost, a reciprocating carriage the forward edge of which engages beneath the flap of the uppermost envelope, a moistening surface carried by said carriage, a water well reciprocating with the carriage and supplying water to said surface, and a pressure foot for applying pressure to the flap to force it into engagement with the moistening surface, substantially as set forth. 14th. In an envelope sealing machine, the combination of a vertically movable spring pressed platen carrying a pile of envelopes flap uppermost, a guide mounted adjacent to the platen for guiding the flap or upper end of said envelopes, and a reciprocating feeding and moistening carriage arranged to engage beneath the flap of the uppermost envelope to thereby carry the engaged envelope over the upper edge of said guide, substantially as set forth. 15th. In an envelope sealing machine, the combination of a vertically movable spring pressed platen carrying a pile of envelopes flap uppermost, a guide mounted adjacent to the platen for guiding the flap or upper end of said envelopes, a reciprocating feeding and moistening carriage arranged to engage beneath the flap of the uppermost envelope to thereby carry the engaged envelope over the upper edge of said guide, and a feed finger mounted on said carriage for engaging said flap, substantially as set forth. 16th. In an envelope sealing machine, the combination of a vertically movable spring pressed platen carrying a pile of envelopes flap uppermost, a guide mounted adjacent to the platen for guiding the flap or upper end of said envelopes, a reciprocating feeding and moistening carriage arranged to engage beneath the flap of the uppermost envelope to thereby carry the engaged envelope over the upper edge of said guide, a feed finger mounted on said carriage for engaging said flap, and means for elevating said finger during the forward stroke of the carriage to carry the envelope up and over the upper edge of the guide, substantially as set forth. 17th. In an envelope sealing machine, the combination of a spring pressed platen carrying a vertical pile of envelopes flap uppermost, a vertical guide adjacent to said platen, flat restraining fingers for limiting the upward movement of the pile, and a reciprocating combined feeding and moistening carriage reciprocating over the pile and arranged to engage beneath the flap of the uppermost envelope, substantially as set forth. 18th. In an envelope sealing machine, the combination of a spring pressed platen carrying a vertical pile of envelopes flap uppermost, a vertical guide adjacent to said platen, flat restraining fingers for limiting the upward movement of the pile, a reciprocating combined feeding and moistening carriage reciprocating over the pile and arranged to engage beneath the flap of the uppermost envelope, means for applying pressure to the envelope removed from the pile by the movement of said carriage, substantially as set forth. 19th. In an envelope sealing machine, the combination of a spring pressed platen carrying a vertical pile of envelopes flap uppermost, a vertical guide adjacent to said platen, flat restraining fingers for limiting the upward movement of the pile, a reciprocating combined feeding and moistening carriage reciprocating over the pile and arranged to engage beneath the flap of the uppermost envelope, means for applying pressure to the envelope removed from the pile by the movement of said carriage, and connections between the pressure applying devices and said carriage, whereby said devices carriage, whereby said devices will move in unison, substantially as set forth. 20th. In an envelope sealing machine, the combination of a drum to which power is applied, an endless belt co-operating with said drum, means for supporting a vertical pile of envelopes flap uppermost, a reciprocating combined feeding and moistening carriage for moistening the flap of the uppermost envelope and

simultaneously removing it from the pile, and connections between the drum and said carriage, substantially as set forth. 21st. In an envelope sealing machine, the combination of a drum to which power is applied, an endless belt co-operating with said drum, means for supporting a vertical pile of envelopes flap uppermost, a reciprocating combined feeding and moistening carriage for moistening the flap of the uppermost envelope and simultaneously removing it from the pile, connections between the drum and said carriage, and feed rollers located between the carriage and said drum for removing the envelope from the carriage and directing it between the drum and said endless belt, substantially as set forth. 22nd. In an envelope sealing machine, the combination of a spring pressed platen carrying a pile of envelopes, a reciprocating carriage movable horizontally above said pile for engaging the flap of the uppermost envelope and simultaneously moistening it, a feed finger on said carriage for engaging beneath the flap, and feed rolls for receiving the envelope removed from the pile by the carriage, said rolls being separated by a greater extent than the length of said finger, whereby the finger may carry the envelope into actual contact with the feed rolls, substantially as set forth.

No. 69,268. Wash Tub. (Baignoire.)



Sidney Shephard & Co., assignee of Anthony Ferber, Buffalo, New York, U.S.A., 8th November, 1900; 6 years. (Filed 19th October, 1900.)

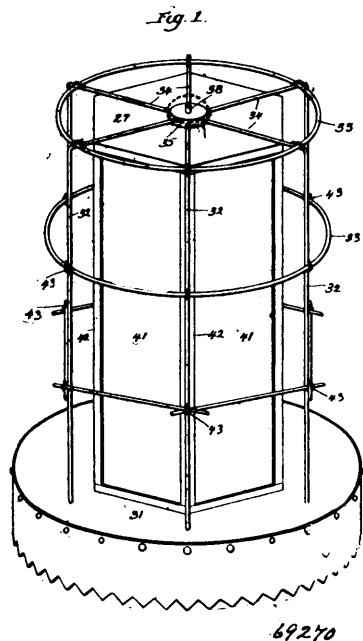
Claim.—1st. The combination with a sheet metal wash tub or similar vessel, of a curved metallic cleat secured to the vessel adjacent to its edge and consisting of a box-shaped bar which is closed on all sides, except its rear side and which rests against the tub at its open side, substantially as set forth. 2nd. The combination with a sheet metal wash tub or similar vessel, of a curved box-shaped cleat applied to the vessel adjacent to its edge and consisting of a continuous metallic strip provided at its ends with attaching ears which are offset inwardly beyond the body of the strip, and at its longitudinal edges with inwardly extending flanges which bear against the side of the vessel, substantially as set forth. 3rd. The combination with a sheet metal wash tub or similar vessel, of a curved box-shaped cleat applied to the vessel adjacent to its edge, and consisting of a continuous metallic strip provided at its ends with attaching ears which are offset inwardly beyond the body of the strip, at its longitudinal edges with inwardly extending flanges which bear against the side of the vessel, and between its upper and lower edges with longitudinal corrugations, substantially as set forth. 4th. A cleat or bearing bar for a wash tub or similar vessel, consisting of a curved box-shaped strip of metal provided at its ends with attaching ears which are offset inwardly beyond the body of the strip, and at its longitudinal edges with inwardly extending flanges which are disconnected from said ears and which are adapted to bear against the side of a wash tub, or similar vessel, substantially as set forth.

No. 69,269. Artificial Leather. (Cuir artificiel.)

Harald Lykke Bagger-Morch, Ostre Fasonvy, 20 Fredericksberg, Denmark, 12th November, 1900; 6 years. (Filed 29th January, 1900.)

Claim.—1st. Artificial leather consisting of a felt made of vegetable fibres and wool, imbedded in a compound of linseed oil, turpentine, glue, caseine and wax. 2nd. The method of producing artificial leather, consisting herein, vegetable fibres are felted together with wool, and the felt formed in this way is saturated with a compound formed by mixing and heating linseed oil, colophony, turpentine, wax, glycerine, glue, caseine and a smaller quantity of borax and bichromate of potash, is partly dried and then placed in a solution of acetate of alumina, whereupon the drying is completed and the manufacture rubbed off, pressed between heated rollers and glazed.

No. 69,270. Display Apparatus. (Appareil d'etalage.)



Mary Ellen Xander, Pennsburg, Pennsylvania, U.S.A., 12th November, 1900; 6 years. (Filed 8th January, 1900.)

Claim.—1st. A display rack comprising an inner rotary member consisting of a frame or box polygonal in horizontal cross section with mirrors on each outer panel, and an outer member surrounding the inner member and consisting of a cage comprising a skelton top with a central hub and upright side, arms connected by ring in combination with a motor geared to rotate the two members in opposite directions, substantially as described. 2nd. A display rack comprising an inner rotary member consisting of a frame or box polygonal in horizontal cross section, having mirrors on each outer panel and angle uprights with hooks upon which to display merchandise, an outer rotary member, surrounding the inner member, consisting of a cage composed of uprights bent at the top to form radial arms meeting at the centre, a hub to which to secure the radial arms, rings horizontally arranged to connect the uprights of the cage, and hooks on the uprights and rings upon which to display merchandise, in combination with a motor geared to rotate the two members in opposite directions, substantially as described.

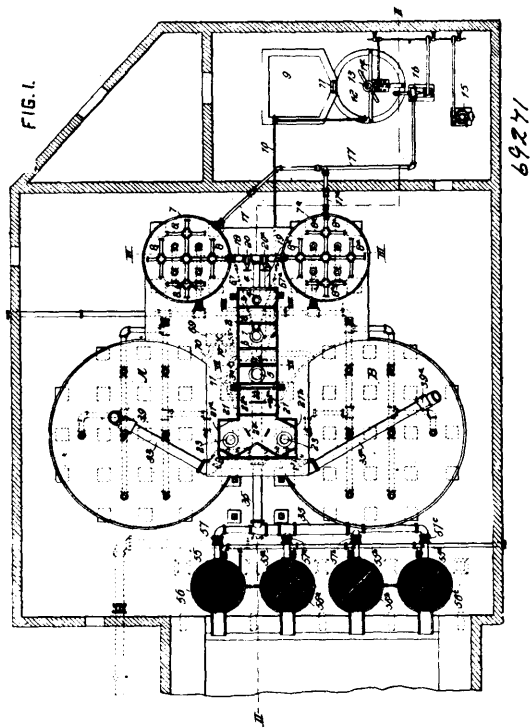
No. 69,271. Apparatus for Treating Liquids.

(Appareil pour le traitement des liquides.)

The Pittsburg Testing Laboratory, assignee of Arthur Benedict Bellows, all of Pittsburg, Pennsylvania, U.S.A., 12th November, 1900; 18 years. (Filed 1st March, 1900.)

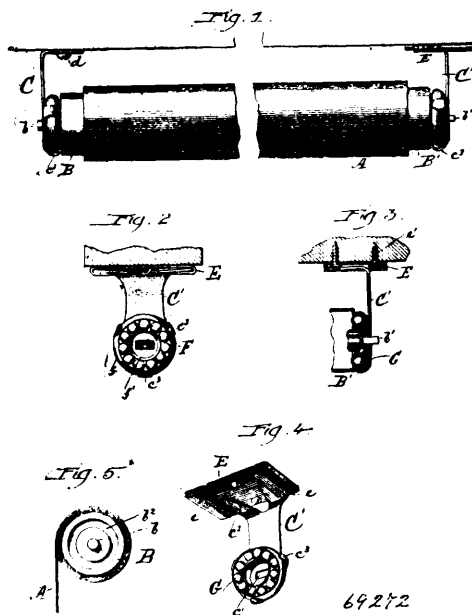
Claim.—1st. In a plant for the treatment of water, the combination of means of dividing a stream of water into two or more fractional streams, a tank containing a supersaturated solution of the treating material, a pipe for delivering one of the fractional streams into the lower end of said tank, a mixing or baffle trough or channel connected to the upper position of said tank and a pipe for conducting the other fractional stream to trough or channel, substantially as set forth. 2nd. In a plant for the treatment of water, the combination of a box or trough connected to a supply pipe and provided with two or more outlets, wier plates for effecting a proportional division of the inflowing stream interposed between the supply pipe and the outlets, a mixing or baffle trough or channel connected to the outlets from the dividing box and a

treating tank interposed between one of the outlets of the dividing box and the mixing trough or channel, substantially as set forth. 3rd.



In a plant for the treatment of water, the combination of means for dividing a stream of water into two or more fractional streams, a tank containing a supersaturated solution of the treating material, distributing pipes having perforations in their under sides, arranged near the bottom of the tank, a pipe for conducting one of the fractional streams to the distributing pipes, a mixing or baffle trough or channel connected to the upper portion of the tank and a pipe for conducting the other fractional stream to the trough or channel, substantially as set forth. 4th. In a plant for the treatment of water, a saturating or "take-up-tank" having discharge outlets in its bottom and a series of pipes having angularly arranged perforations in their under sides, arranged around the outlets and connected to a supply pipe, whereby the sediment in the tank can be driven towards the outlets, substantially as set forth. 5th. In a plant for the treatment of water, the combination of means for dividing a stream of water into two or more fractional streams, a tank containing the treating material arranged to receive one of said streams, a trough or channel connected to said tank and adapted to receive the other stream, a series of baffle plates arranged transversely of the trough or channel, two settling tanks, arranged to receive the water from the mixing trough or channel, valves controlling the flow of water to the tanks and means operated by the water flowing into the tanks for opening and closing said valves, substantially as set forth. 6th. In a plant for the treatment of water, a settling tank having a valved discharge pipe and means operative automatically at a predetermined time after the filling and emptying of the tank to open and close the discharge valve, substantially as set forth. 7th. In a plant for the treating water, the combination of a tank, a pivotally mounted discharge pipe, a float connected to the pipe, an auxiliary float carried by said pipe and connected to the pipe, and a siphoning pipe connected to the auxiliary float, substantially as set forth. 8th. In a plant for treating water, the combination of a tank having a valved outlet, a bucket or shell connected to the valve and having flexible connections to the tank near its upper and lower ends, and valves controlling the flow of water to and from the buckets, substantially as set forth. 9th. In a plant for treating water, the combination of a vat or tank having inlet and outlet holding or supporting frames arranged intermediate of the inlet and outlet, a sponge arranged between said frame and means for moving one of said frames towards and from the other, substantially as set forth. 10th. In a plant for treating water, the combination of a mixing or baffle trough or channel, a settling tank arranged to receive the treated water from the trough or channel and means for adding sludge or previously formed precipitate to the water as it flows through the mixing trough or channel, substantially as set forth. 11th. In a plant for treating water, the combination of a vat or tank having an outlet and inlet, a sponge filter arranged intermediate of the inlet and outlet, a pipe for forcing water charged with carbonic acid through the sponge, substantially as set forth.

No. 69,272. **Shade Roller.** (*Bâton pour stores de fenêtres.*)



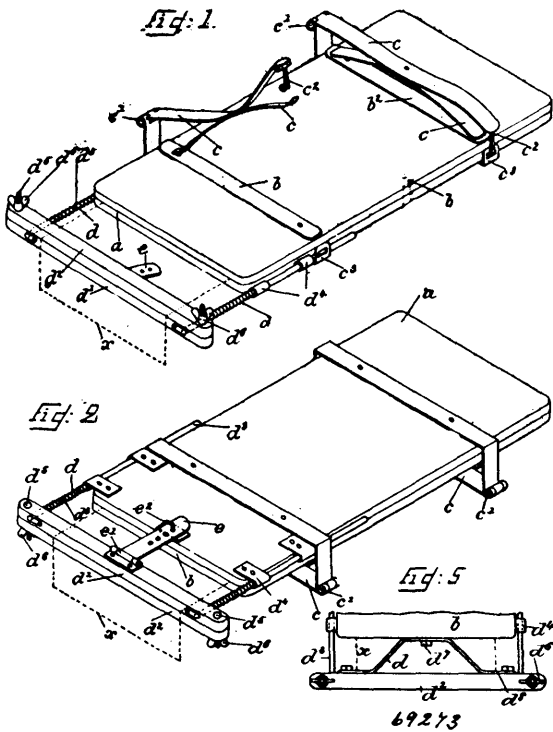
The Ball Bearing Shade Roller Company, assignee of Charles Albert Baker and James Edward Darby, all of Waukesha, Wisconsin, U.S.A., 12th November, 1900; 6 years. (Filed 15th October, 1900.)

Claim.—1st. A fixture for shade rollers, comprising a cap for the end of the roller, a bracket for said end, bearing balls interposed between said cap and said bracket, and means for retaining said balls in position upon one of said parts. 2nd. A fixture for shade rollers, comprising a cap for the end of the roller, a bracket for said end, bearing balls interposed between said cap and said bracket, and an intermediate annular ball holding plate or cage provided with flanges for retaining the balls in position. 3rd. A fixture for shade rollers, comprising a cap for the end of the roller, a bracket for said end, bearing balls interposed between said cap and said bracket, said bracket being provided with inwardly turned flanges and a ball holding plate or cage having an annular channel engaged by the flanges of the bracket. 4th. A fixture for shade rollers, comprising a cap for the end of the roller, a bracket for said end, bearing balls between said cap and said bracket, said cap and said bracket being provided one with means for retaining the balls in position thereon and the other with an annular grooved track whereon said balls will bear. 5th. A fixture for shade rollers, comprising a cap for the end of the roller, a bracket for said end having its inner end bent at substantially right angles to the body of the bracket and a flanged bearing plate adapted to adjustably sustain said bracket. 6th. A fixture for shade rollers, comprising a cap for the end of the roller, a bracket for said end, bearing balls interposed between said cap and said bracket, means for retaining said balls in position in one of said parts, said bracket being adjustably supported, whereby the pressure upon the bearing balls may be varied. 7th. In a shade roller, a fixture therefor comprising a plate secured within the hollow end portion of the roller, a bracket for said end, bearing balls interposed between said plate and said bracket, and means for retaining said balls in position upon one of said parts. 8th. The combination with a shade roller formed of sheet metal, having hollow end portions and flanged plates placed within said hollow end portions and secured therein by the crimped or turned edges of the ends of the roller, of brackets for said ends, bearing balls interposed between said brackets and said plates and means for retaining the balls in place upon one of said parts. 9th. A fixture for shade rollers, comprising a plate secured to the end of the roller, a bracket for said end, bearing balls interposed between said bracket and said plate and means for retaining them in place upon said plate. 10th. The combination with a shade roller formed of sheet metal, having hollow end portions, and flanged plates held within said end portions by the crimped edges thereof, of brackets for said end, bearing balls interposed between said brackets and said plates, said plates having annular grooves with outwardly and inwardly turned edges for retaining said balls in position. 11th. In a fixture for shade rollers, a bracket for the end of the roller, comprising a flat plate having a central projection, a perforated cap, bayonet slots on said projection, lugs on said cap engaging said slots, and cushion spring between said projection and said cap. 12th. In a fixture for shade rollers, a bracket for the end of the roller, comprising a flat plate having a central projection, a perforated cap, bayonet slots on said projection, lugs on said cap engaging said slots, and cushion spring between said projection and said cap. 13th. In a fixture for shade rollers, a plate secured to the

end of the roller, a spring held longitudinally movable, bracket for said end and bearing balls interposed between said bracket and said plate. 14th. In a fixture for shade rollers, the combination with a plate secured to the end of the roller, of a longitudinally movable, spring pressed bracket, balls interposed between said bracket and said plate and means for securing the balls in position upon one of said parts. 15th. In a fixture for shade rollers, the combination with a roller having a hollow end portion and a flanged plate secured within said end portion, of a bracket for said end consisting of two detachable interlocking parts, one of which is fixed and the other longitudinally movable, bearing balls interposed between the movable part of said bracket and said plate, and a cushion spring interposed between the parts of said bracket. 16th. In a shade roller, a series of grooves in the surface of said roller, pins for securing the shade cloth to said roller, adapted to fit in said depressions, and means for retaining said pins in said depressions. 17th. In a shade roller, the combination with a roller formed of a cylinder of sheet metal, and having a series of short longitudinal grooves or depressions in the surface thereof and openings at the end of said grooves beneath said outer surface, of a series of pins for securing the shade cloth to said roller having sharpened ends and a central depression arranged in said grooves with their end projecting through the openings at the end thereof and beneath the outer surface of the roller.

No. 69,273. Apparatus for Pressing and Stretching Garments and Fabrics.

(Appareil pour presser et tendre les vêtements.)

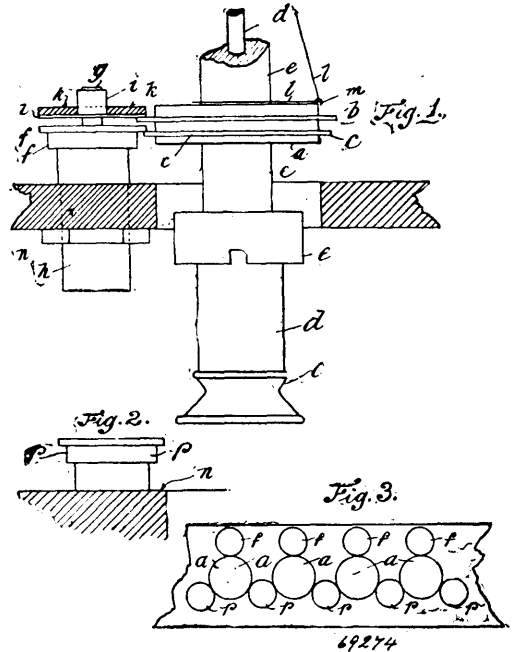


Edmund William Dawson, 9 and 10 Pancras Lane, London, co-inventor with and assignee of Robert Hodges Bishop, Holly Bank, Turnpike Lane, Hornsey, Middlesex, both in England, 12th November, 1900; 6 years. (Filed 10th September, 1900.)

Claim.—1st. Apparatus for pressing and stretching trousers and other garments, fabrics and the like characterized by the co-operative combination of a pair of separable presser boards, spring operating means for automatically pressing the boards together independently applied to the boards at different locations towards their ends, a pair of separable holding rails having means for clamping the same together to hold the garment at one part and means for guiding the rails in endway parallel relation to the presser boards, springs for automatically separating the stretcher rails from the presser boards in such endway relation when required to stretch the garment, and means for holding the stretcher rails to the presser boards out of operation, as set forth. 2nd. In apparatus of the nature aforesaid, the arrangement of presser boards and springs, stretcher rails and springs, and stretch rail guides and holder, hereinbefore described and illustrated in Figures 1 and 2 of the drawings. 3rd. In apparatus of the nature aforesaid, the arrangement of presser boards and springs, stretcher rails and springs, and stretcher rail guides and holder, hereinbefore described and illustrated in figures 3 and 4, of the drawings.

No. 69,274. Spinning and Doubling Frame.

(Cadre pour filer et doubler.)

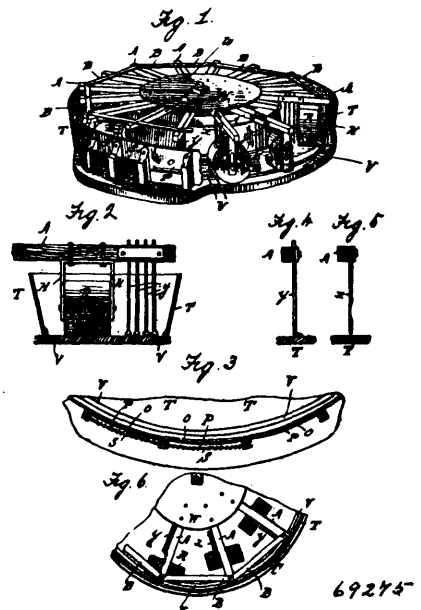


Robert Wighton Moncrieff, Newport Pagnell, Buckingham, England, 12th November, 1900; 6 years. (Filed 6th November, 1899.)

Claim.—In spinning and doubling frames, wherein a rotating ring and horizontal revolving supporting pulleys or runners are employed in lieu of a stationary ring and a revolving traveller, the revolving ring, a, formed with a drag flange b, and the sleeved weight disc i, carried upon the extended pulley or runner spindle g, in combination with a regulating weight or weights k, or equivalent pressure applying media, constructed, arranged and operating substantially as and for the purpose specified.

No. 69,275. Pulverizing and Separating Machine.

(Machine à broyer et séparer.)

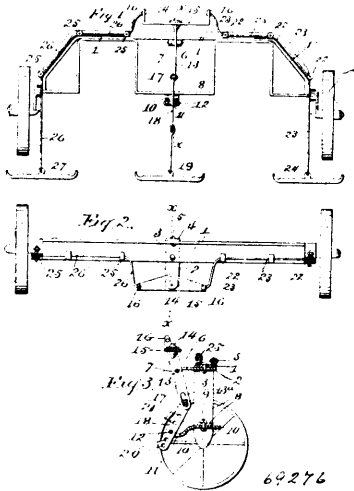


Charles Wesley Day, Santa Cruz, California, U.S.A., 12th November, 1900; 6 years. (Filed 21st August, 1900.)

Claim.—The improved mill for reducing talc and clay ores, comprising a vertical post, or shaft, a series of radiating arms, hangers

pendent from said arms and provided with vertical slots, rollers journalled in said slots, and arranged at different distances from the post, a series of scrapers and stirrers attached to and pendent from said arms and arranged in radial line with said rollers, exteriorly of interiorly thereof, and the scrapers or stirrers alternating on the respective arms, and the circular trough, having a flat bottom with side grooves, as and for the purpose specified.

No. 69,276. Draught Equalizer. (Régulateur de tirage.)

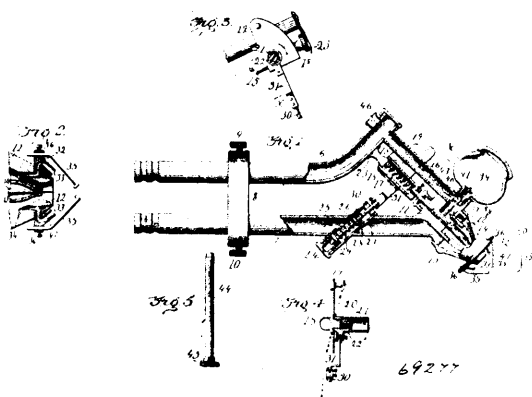


Matthes Zöllner and Carl Zöllner, both of Fate, Texas, U.S.A., 12th November, 1900; 6 years. (Filed 13th August, 1900.)

Claim.—1st. A draught equalizer comprising a pair of levers pivoted together, each lever having another separate pivot, a yoke swivelled to one of the levers, a suitable cable or rope attached to each end of the yoke and carrying singletrees, and a singletree connected to the other lever. 2nd. The combination, with a cultivator or similar frame, a slotted pivot bearing arm secured to the top of the frame, and a slotted pivot bearing plate secured to the bottom of the said frame, of the levers pivoted together one in each of the said slots, a singletree connected to one of said levers, a yoke pivoted to the other of the said levers and having vertically disposed ears to which is attached a cable or rope carrying a singletree. 3rd. The combination of the levers pivoted together, each of said levers being further pivoted separately, and a yoke pivoted or swivelled to the end of one of the levers to turn at right angles to the motion of the levers. 4th. The combination, with the cultivator frame having a series of guide pulleys, of the levers pivoted together and to the said frame, a yoke swivelled to one of the levers, a cable attached to each end of the yoke and extending through said pulleys and having singletrees, and a singletree connected to the other of the said levers, as set forth.

No. 69,277. Air Brush or Spray Painter. (Brosse à air, etc.)

(Brosse à air, etc.)



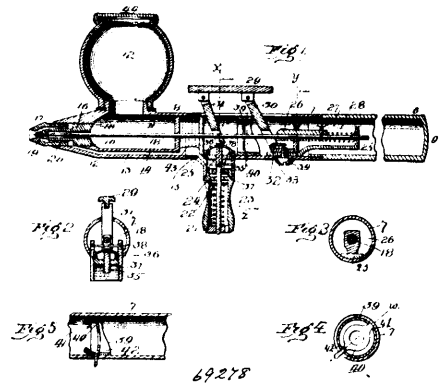
Charles L. Burdick, London, Middlesex, England, 12th November, 1900; 6 years. (Filed 17th January, 1900.)

Claim.—1st. In an air brush, a body, a nozzle, a needle valve, and means for reciprocating it to open and close the nozzle, a cam mounted to rotate upon the valve stem in a plane parallel with its line of motion to engage a shoulder at the rear end of its path, and

means for frictionally securing the cam as set. 2nd. In an air brush, a tube for the passage of the air under pressure, and a valve tube located across and within the air tube oblique to the line thereof, there being an inlet opening from the air tube to the valve tube above the valve seat, and an outlet opening from the valve tube to the air tube below the valve seat. 3rd. In an air brush, a reciprocating needle, paint supply valve having a laterally projecting stud, an air supply spring impelled valve located substantially at right angles with the line of the paint supply valve and a pitman connecting the said stud with the air supply valve substantially as described, whereby the rocking of the paint supply valve around its axis will operate the air supply valve. 4th. In an air brush, a needle, paint supply valve having a laterally projecting stud, a stop cam mounted to rotate against a shoulder upon the said stud, a sleeve upon the said stud, bearing against the cam and serving as the operating key, and a binding screw therefor, an air supply valve located substantially at right angles to the line of the paint supply valve, and a pitman connecting the air supply valve with the said key. 5th. In an air brush, a delivery nozzle having a screw-threaded front end and air passages leading to the shoulder of the screw, a washer-shaped nozzle fitted upon the said screw and having one or more jet deliveries communicating with the said air passages and pointing in a direction obliquely crossing the central line of the main nozzle delivery, and a screw nut for holding the washer nozzle in place. 6th. In an air brush, a delivery nozzle having an air passage within, and a pair of oppositely inclined side jets connected with the said passage and pointed in directions obliquely crossing the central line of delivery of the said nozzle. 7th. In an air brush, a paint conducting tube or tubes having a delivery nozzle and a stripper located beyond the delivery end of the nozzle and to one side of the line or plane of delivery, there being free opening at the sides or edges of the stripper. 8th. In an air brush, a delivery nozzle and strippers located beyond the end thereof, each stripper being adjustable independently of the other in distance from the end of the nozzle and from the central line of delivery.

No. 69,278. Air Brush or Spray Painter. (Brosse à air, etc.)

(Brosse à air, etc.)

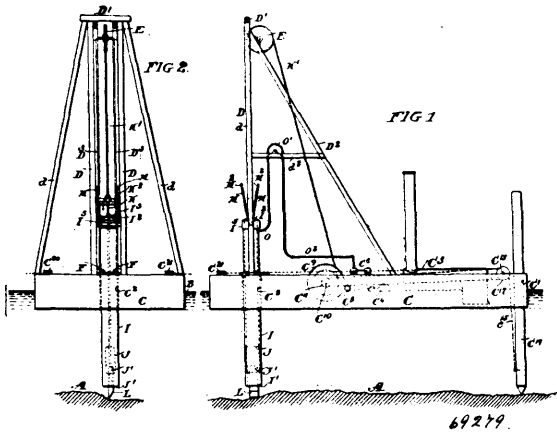


Charles L. Burdick, London, County of Middlesex, England, 12th November, 1900; 6 years. (Filed 17th January, 1900.)

Claim.—1st. In an air brush, a paint receptacle section having a paint delivery, a valve seat therefor, and an air passage thereto, a handle section having a needle valve projecting into the receptacle section to engage the aforesaid valve seat, and means for operating the valve, the said sections being provided each an end partition, and the tubular body of one of the sections projecting beyond its end partition and removably engaging the other section, and forming a chamber between the end partitions, the aforesaid air passage communicating with the said chamber, and means in the handle for admitting and controlling the supply of air to the said chamber, the stem of the said valve passing through the said end partitions and the chamber between, and packing material around the said stem in the said chamber. 2nd. In an air brush, a paint receptacle section having a screw threaded bore through its front end, a valve tube screw threaded into the rear end of the said bore, and externally reduced along its forward portion, and having a valve seat within, an air passage leading into the said bore at the reduced portion of the valve tube, a nozzle screw threaded into the bore, and a passage for air within the nozzle and along the reduced portion of the valve tube. 3rd. In an air brush, a paint receptacle having a nozzle delivery, a valve seat, and an air passage leading to the nozzle, a handle connected with the receptacle, a paint delivery valve extending from the handle to the said valve seat, and a spring therefor, a nipple on the handle to connect with a compressed air supply pipe, an air delivery valve in the nipple, and a passage therefrom communicating with the passage leading to the nozzle, an operating key pivotally mounted on parallel bars, one of the said bars being a lever communicating with the paint delivery valve, and the other bar being a pitman communicating with the air delivery valve. 4th. In an air brush a handle a needle valve mounted longitudinally therein

and having a block attached to it, an operating lever bifurcated to straddle the valve and having a pivot pin across from leg to leg, a bracket in the handle hook shaped to engage the said pin between the legs, and a screw securing the bracket to the handle, the end of the screw entering the bracket hook opening to prevent misplacement of the said pivot pin. 5th. In an brush, a tubular handle having a partially circumferential slot at one side, a valve operating lever pivoted to the handle for longitudinal motion, a ring fitted to partially rotate within the tube of the handle and shaped at one edge as a cam located across the path of forward movement of the said lever, a spring passing through the said ring, one end of the spring bearing on the inner side of the handle, a shoulder near the other end of the spring bearing on the inner side of the ring, the spring being arched midway and projecting as a handle through the aforesaid slot in the air brush handle.

No. 69,279. Subaqueous Rock Breaker.
(*Brisse roche subaquatique.*)

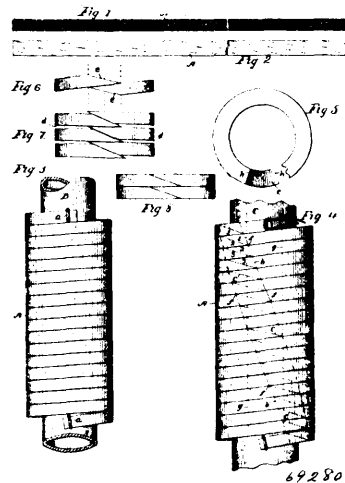


Barton Haxall Coffey, New York City, New York, U.S.A., 12th November, 1900; 6 years. (Filed 10th August, 1900.)

Claim.—1st. A subaqueous rock breaker, consisting of a tubular caisson closed at the top and open at the bottom, in combination with a heavily weighted chisel vertically movable in the tubular caisson, means for elevating the chisel in and dripping it through the caisson and means for forcing compressed air into the caisson to maintain it substantially free from water. 2nd. A subaqueous rock breaker, consisting of a tubular caisson closed at the top and open at the bottom and provided with longitudinal guides as I¹, in combination with a weight as J, movable on the guides in the caisson and adapted to hold a rock breaking chisel in its lowered end, means for elevating the weight in and dropping it through the caisson and means for forcing compressed air into the caisson to maintain it substantially free from water. 3rd. A subaqueous rock breaker, having in combination, a tubular caisson closed at top and open at bottom, a weight adapted to hold a chisel longitudinally movable in said caisson, means for raising and dropping said weight and means for connecting the weight and caisson together at will. 4th. A subaqueous rock breaker, having in combination, a staging having an opening therethrough, a tubular caisson closed at top and open at bottom passing through opening, a weight adapted to hold a chisel longitudinally movable in said caisson, means for raising and dropping said weight and a clamp adapted to secure the caisson to the staging arranged as described to have a capacity to rotate with the caisson. 5th. A framing or derrick as D, D¹, having guides as D², in combination with a tubular caisson arranged to extend down into water beneath said derrick, a weight vertically movable in the caisson and adapted to hold a rock breaking chisel, a rod as K, extending through a stuffing box in the top of the caisson and adapted to connect with the weight aforesaid to raise it, a cross head as K², moving in the guides D² and connected to the top rod K, a cord connected to said cross head and leading over a pulley on the derrick to a hoisting drum, and means as hook arms M, M, for connecting the top of the caisson to the cross head K². 6th. A framing or derrick as D, D¹, having guides as D², in combination with a tubular caisson arranged to extend down into water beneath said derrick, a weight vertically movable in the caisson and adapted to hold a rock breaking chisel, a rod as K, extending through a stuffing box in the top of the caisson and adapted to connect with the weight aforesaid to raise it, a cross head as K², moving in the guides D² and connected to the top of the rod K, a cord connected to said cross head and leading over a pulley on the derrick to a hoisting drum, means as hook arms M, M, for connecting the top of the caisson to the cross head K², and means as clamp G, for holding the caisson in depressed position. 7th. In a subaqueous rock breaker, a tubular caisson closed at top and open at bottom, in combination with a weight adapted to hold a chisel and longitudinally movable in said caisson, said weight having a catch engaging device

at the top, a catch situated in the caisson above the weight and also longitudinally movable therewith, said catch being adapted to engage and hold the weight when forced against its top, means for moving the catch in the caisson and a catch disengaging device attached at the top of the caisson and whereby the catch is made to disengage the weight when drawn upwards to the disengaging device.

No. 69,280. Packing Ring. (*Garniture de piston.*)

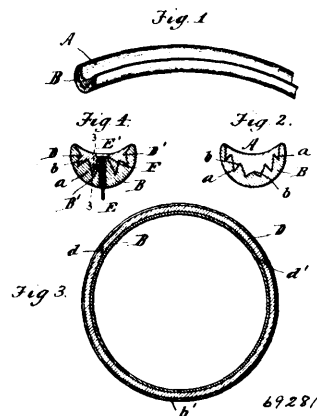


Olin James Garlock, Palmyra, New York, U.S.A., 12th November, 1900; 6 years. (Filed 10th August, 1900.)

Claim.—1st. The method of forming packing rings, which consists in winding a strip of material about a mandrel, subjecting the same to a treatment to set the material, while thus wound to its coiled form, and subsequently cutting the coiled strip upon lines disposed spirally of said coil, as set forth. 2nd. The method or process of forming packing rings out of strips of packing material by first winding a strip on a mandrel, in spiral form, then subjecting it to the action of heat, and finally placing the coil upon a second mandrel of larger diameter and cross-cutting the coil disposed spirally with reference to said coil into rings, substantially as shown and set forth. 3rd. The process of forming packing rings from strips of material, herein described, by winding a strip of the material upon a mandrel and cross-cutting it into rings, the cross-cuts being made with reference to spiral lines, substantially as shown and described. 4th. The herein described method of forming packing rings, which consists in spirally winding a strip of material, setting the same in its coiled form, cutting the same into rings with their opposite faces in spiral planes and carrying the ends past each other to bring said faces in horizontal parallel planes, as set forth. 5th. Packing rings formed from coiled strips of packing material, in the manner described, cut diagonally across at their sides, said cuts being radial, the planes of said rings being turned from a spiral to a horizontal plane, substantially as shown.

No. 69,281. Wooden Rim for Wheels.

(*Jante en bois pour roues.*)

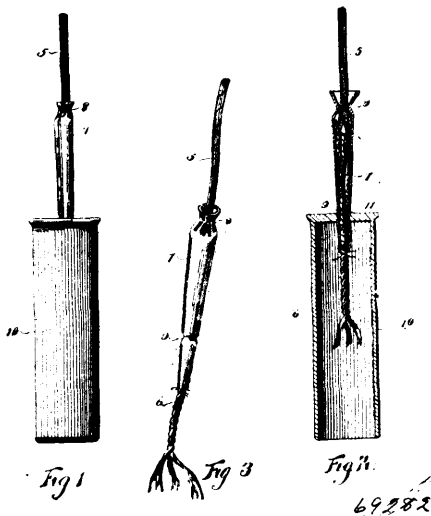


Calvin L. Washburn and Alfred C. Perham, both of Paris, Maine, U.S.A., 12th November, 1900; 6 years. (Filed 8th August, 1900.)

Claim.—A wooden rim consisting of adjacent annular strips of opposing grains, provided with longitudinal interlocking tongues and grooves, and having the lateral parts of said strips converging outwardly to the same lateral line on each side, in order that the opposing grains of these converging lateral parts may brace each other and make a single strong edge on each side, substantially as set forth. 2nd. A wooden rim consisting of adjacent annular strips provided with interlocking longitudinal tongues and grooves which are pointed in cross-section and of varying depths, in order that the strain may be distributed through different layers of the grooved wood, substantially as set forth. 3rd. A wooden rim consisting of adjacent annular strips, having longitudinal interlocking tongues and grooves, which are pointed in cross-sections and of depths varying so that a mean line in said cross-section passing through all the tongues from edge to edge of the rim is approximately at an equal distance from the convex and concave surfaces of the said rim at all points, thus bisecting the said rim into two crescent from parts, substantially set forth. 4th. A wooden rim, concave-convex in cross-section and composed of an annular strip B, forming the convex or inner periphery of said rim, and two parallel annular strips D, D', forming the concave or outer periphery of said rim, said strips being provided with interlocking longitudinal tongues and grooves, said parallel strips not quite meeting at their inner edges, so as to leave a narrow annular portion B' of the strip B visible between said edges, each of the countersinkings for the spoke washers being made in said strip B at B', and in adjacent parts of the strips D, D', substantially as and for the purpose set forth.

No. 68,282. Blasting Apparatus.

(Appareil de tirage à poudre.)



John A. Fuszner, Manchester, Missouri, U.S.A., 12th November, 1900; 6 years. (Filed 3rd May, 1900.)

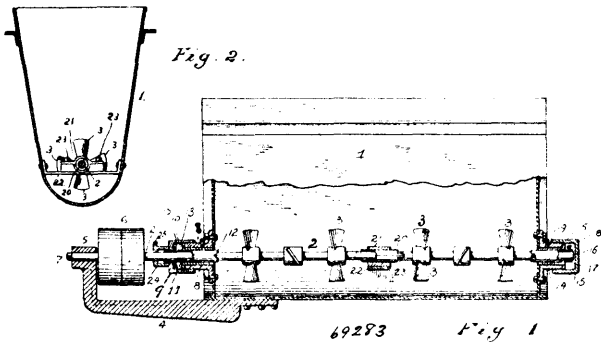
Claim.—1st. In a time fuse, the combination with a waterproof section having one end split, of a second fuse section disposed with one end in the split of the first section, said second section including a plurality of strands adapted to be twisted and untwisted, and a casing inclosing the connected portions of the fuse section and tightly encircling the second section to prevent untwisting thereof within the casing. 2nd. In a time fuse, the combination with a waterproof fuse having one end split, of a cotton fuse section having one end disposed in the split of the waterproof section, said cotton fuse section comprising a plurality of strands adapted to be twisted to form a rope and to be untwisted said cotton fuse section being trusted at its connected end, and a casing enclosing the connected portions of the fuse sections, said casing tightly encircling the cotton fuse section to prevent untwisting thereof within the casing.

No. 69,283. Paint Agitator. (Agitateur pour peinture.)

Charles John McLennan, Buffalo, New York, U.S.A., 12th November, 1900; 6 years. (Filed 11th April, 1900.)

Claim.—1st. In an agitating tank for mixed paints, the combination with the revolving shaft and its bearings, of a metallic sleeve removably secured around the shaft at its points of bearings to receive the wear and prevent injury to the shaft. 2nd. In an agitating tank for mixed paints, the combination with the revolving shaft, the stuffing box support or bearing, the stuffing box nut and brass bushing of the metallic sleeve removably secured around the shaft inside the stuffing box support and nut, to receive the wear and prevent injury to the shaft. 3rd. In an agitating tank

for mixed paints, the combination with the revolving shaft and its bearings on the tank, of the bearing support or bracket rigidly



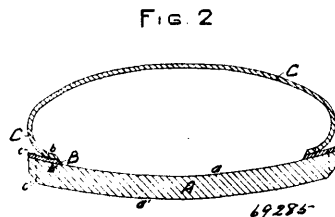
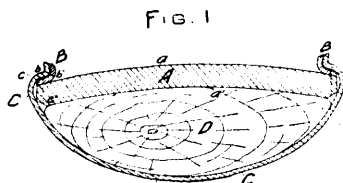
secured at one end to the tank and provided at its outer end with an auxiliary bearing for the shaft, as and for the purpose stated. 4th. In an agitating tank for mixed paints, the combination with the revolving shaft, the stuffing box support or bearing, the stuffing box nut, the brass bushing and the small stuffing box, of the metallic sleeve removably secured around the shaft inside the stuffing box support and nut, and the small stuffing box to receive the wear and prevent injury to the shaft.

No. 69,284. Paint. (Peinture.)

William Edwin Harris, Niles, Ohio, U.S.A., 12th November, 1900; 6 years. (Filed 22nd May, 1900.)

Claim.—1st. As a new composition of matter, a paint, the principal ingredient of which is tar-like waste palm oil, out of which the more inflammable constituents have been burned. 2nd. A composition of matter for use as a paint, comprising a mixture of partially burned oil, ordinary resin and slacked lime in about the proportions specified. 3rd. A composition of matter for use as a paint, consisting of a mixture of partially burned palm oil resin and slacked lime in about the portions specified, and a dryer. 4th. As a new article of manufacture, a paint, the principal ingredients of which is waste palm oil out of which the inflammable constituents have been burned.

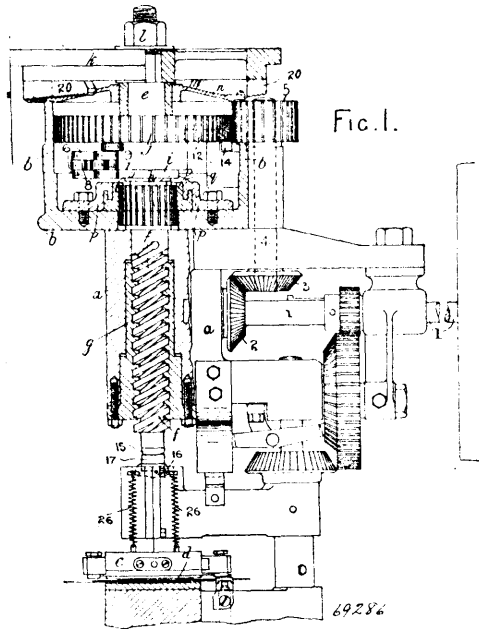
No. 69,285. Shoe. (Chaussure.)



Sarah Guertin, Longueil, Québec, 12 novembre, 1900; 6 ans. (Dépôt 7 septembre, 1900.)

Résumé.—1°. Dans la confection d'une chaussure simple dite retournée, l'emploi d'une semelle simple A, sans entaille et le procédé d'assembler la dite semelle A avec la trépointe B, à l'aide des points de conture c c', tel que substantiellement décrit et pour les fins mentionnées. 2°. Dans la confection d'une chaussure simple dite retournée, le procédé de l'assemblage de l'empeigne c avec la trépointe B, à l'aide des points de conture b b', tel que substantiellement décrit et pour les fins mentionnées.

No. 69,286. Press for Printing or Embossing.
(*Presse à imprimer et bosseler.*)



The Johnston North American Patents Company, assignee of Joseph Yardley Johnston, both of 22 Bride Lane, Fleet Street, London, England, 13th November, 1900; 6 years. (Filed 7th March, 1900.)

Claim.—1st. In a printing, an embossing, or a printing and embossing press, impression mechanism comprising a weighted screw plunger, a fixed nut in which said plunger works, a continuously rotating part mounted on said plunger, means whereby said plunger and rotating part are intermittently coupled, means whereby said plunger is temporarily locked in its raised position and whereby it is subsequently released, and springs which are compressed by the upward movement of the plunger and subsequently re-act thereon so as to cause its rapid descent when released, as set forth. 2nd. In a printing, an embossing, or a printing and embossing press, impression mechanism comprising a weighted screw plunger, a fixed nut in which said plunger works, means whereby said plunger is successively raised, locked and released, a rack engaging with a pinion formed upon said plunger, and a spring arranged in the path of said rack and adapted to be compressed thereby during the upward movement of the plunger, as set forth. 3rd. In a printing, an embossing, or a printing and embossing press impression mechanism comprising a weighted screw plunger, a fixed nut in which said plunger works, a pinion screwed to said plunger, a rack engaging said pinion, an abutment, a spring arranged between said rack and abutment so as to be compressed as the rack is moved by the rise of the plunger, a connector secured to said plunger, a continuously rotating part loosely mounted on said plunger, and adapted to intermittently engage said connector, a fixed cam adapted to cause the disengagement at the required time of said connector and part, a locking device adapted to engage said connector after its disengagement from said rotating part and a connector releasing cam carried by said continuously rotating part, as set forth. 4th. In impression mechanism of printing, embossing or printing and embossing presses, the combination of a weighted screw plunger, a link pivotally connected to said plunger, a locking roller carried by said link, a guide formed with a recess adapted to receive and hold said roller, a continuously rotating part, means for engaging said part to said link, means for disengaging said part and link and for causing said roller to roll into said recess, and means for causing said roller to roll out of said recess, all at the required times, as set forth. 5th. In impression mechanism of printing, embossing or printing and embossing presses, the combination of a weighted screw plunger, a link pivotally connected to said plunger, a locking roller carried by said link, a guide formed with a recess adapted to receive and hold said roller, and the entry to which is curved, the curve being struck from the centre of the pivot of said link, a continuously rotating part, means for engaging said part to said link, means for disengaging said part and link and for causing said roller to roll into said recess, and means for causing said roller to roll out of said recess all at the required times, as set forth. 6th. In impression mechanism of printing, embossing or printing and embossing presses, the combination of a weighted screw plunger, a link pivotally connected to said plunger, a locking roller carried by said link, a guide formed with a recess adapted to receive and hold said roller, a continuously rotating part, a drag roller carried by said link, a cam arm carried by said

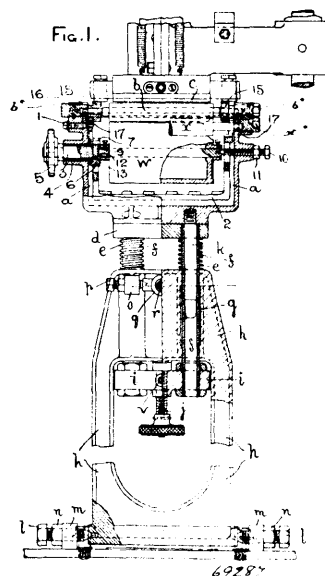
part and having its forward face so formed as to make contact with the drag roller at the point at which a line, passing through the axes of said drag roller and of the pivot of the link, cuts the periphery of the drag roller, means for disengaging said cam arm and drag roller and for causing the locking roller to roll into and out of said locking recess at the required times, as set forth. 7th. In impression mechanism of printing, embossing, or printing and embossing presses, the combination of a weighted screw plunger, a link pivotally connected to said plunger, a locking roller carried by said link, a guide formed with a recess adapted to receive and hold said roller, and the entry to which is curved, the curve being struck from the centre of the pivot of said link, a continuously rotating part, a drag roller carried by said link, a cam arm carried by said part and having its forward face so formed as to make contact with the drag roller at the point at which a line, passing through the axes of said drag roller and of the pivot of the link, cuts the periphery of the drag roller, means for disengaging said cam arm and drag roller and for causing the locking roller to roll into and out of said locking recess at the required times, as set forth. 8th. In impression mechanism of printing, embossing, or printing and embossing presses, the combination of a weighted screw plunger, a continuously rotating part mounted thereon, a cam arm and a tripping cam carried by said part, a link pivotally connected to said plunger, a drag roller carried by said link and adapted to be engaged by said cam arm, a locking roller carried by said link, a guide formed with a recess adapted to receive and hold said locking roller, means for disengaging said drag roller from said cam arm and means for causing said locking roller to roll into and to roll out of said recess at the required times, as set forth. 9th. In impression mechanism of printing, embossing, or printing and embossing presses, the combination of a weighted screw plunger, a continuously rotating part mounted thereon, a cam arm and a tripping cam carried by said part, a link pivotally connected to said plunger, a drag roller carried by said link and adapted to be engaged by said cam arm, a locking roller carried by said link, a guide formed with a recess adapted to receive and hold said locking roller, a cam roller carried by said link and adapted to be operated by said tripping cam at the required time and a cam plate so arranged that said cam roller will be brought into contact therewith and the locking roller caused to become engaged with the guide at the required time, as set forth. 10th. In impression mechanism of printing, embossing, or printing and embossing presses, the combination of a fixed cylinder or casing, a fixed nut in line therewith, a screw plunger working in said nut and extending through said cylinder or casing, a continuously driven spur wheel free to rotate on said plunger, a link pivotally connected to said plunger, a drag roller, a locking roller and a cam roller mounted on said link, a guide with recess and a cam plate both carried by said cylinder or casing and a cam arm and tripping device both carried by said spur wheel, as set forth. 11th. In impression mechanism of printing, embossing, or printing and embossing presses, the combination of a fixed cylinder or casing, the fixed nut in line therewith, a screw plunger working in said nut and extending through said cylinder or casing, a continuously driven spur wheel free to rotate on said plunger, a link pivotally connected to said plunger, a drag roller, a locking roller and a cam roller mounted on said link, a guide with recess and a cam plate both carried by said cylinder or casing and a cam arm and tripping device both carried by said spur wheel, a pinion fixed to said plunger, a pair of sliding racks extending towards abutments, and springs arranged between said racks and abutments, the parts being adapted to operate so as to cause the raising, locking, releasing and descent of the plunger, as set forth. 12th. In impression mechanism of printing, embossing, or printing and embossing presses, the combination with a screw plunger of a fly wheel secured thereto, as set forth. 13th. In impression mechanism of printing, embossing, or printing and embossing presses, the combination with a screw plunger of a fly wheel secured thereto, a continuously rotating part loosely mounted on said plunger, means for connecting said plunger and part and means for preventing longitudinal movement of said rotating part along said plunger, as set forth. 14th. In impression mechanism of printing, embossing, or printing and embossing presses, the combination with a screw plunger of a fly wheel secured thereto, a continuously rotating part loosely mounted on said plunger, means for connecting said plunger and part, a sleeve fitting said plunger and extending between said fly wheel and part, as set forth. 15th. In impression mechanism of printing, embossing, or printing and embossing presses, the combination with a screw plunger, of a fly wheel secured thereto, a continuously rotating part loosely mounted on said plunger, means for connecting said plunger and part, a sleeve fitting said plunger and extending between said fly wheel and part, and a bearing in which said sleeve is journalled, as set forth. 16th. In impression mechanism of a printing, embossing, or printing and embossing presses, the combination with a screw plunger of a fly wheel secured thereto, and means whereby it is prevented from descending on the completion of its rebound until it has again been raised to the top of its stroke, as set forth. 17th. In impression mechanism of printing, embossing, or printing and embossing presses, the combination with a screw plunger of a fly wheel secured thereto, and means for raising, locking, and releasing said plunger, as set forth. 18th. In impression mechanism of a printing, embossing, or a printing and embossing press, the combination of a screw plunger, plunger raising, locking and releasing means, a cylinder or casing surrounding said means, and a cover to

said cylinder or casing, said cover being formed with a central aperture or bearing through which said plunger extends, as set forth. 19th. In impression mechanism of a printing, embossing, or a printing and embossing press, the combination of a screw plunger, plunger raising, locking and releasing means, a pinion secured to said plunger, a pair of sliding racks gearing therewith, rack guides, fixed boxes into which said racks extend, cap nuts closing the ends of said boxes, and coiled springs located in said boxes, as set forth. 20th. In impression mechanism of a printing, embossing or a printing and embossing press, the combination of a screw plunger, plunger raising, locking, and releasing means, a pinion secured to said plunger, a pair of sliding racks gearing therewith, rack guides, fixed boxes into which said racks extend, cap nut closing the ends of said boxes, and coiled springs located in said boxes, said springs being of such length that they will not exert pressure on the racks and plunger when the latter is at the end of its impression stroke as set forth. 21st. In impression mechanism of a printing, embossing, or a printing and embossing press, the combination of a screw plunger, plunger raising, locking and releasing means, a pinion secured to said plunger, a pair of sliding racks gearing therewith, rack guides, fixed boxes into which said racks extend, cap nuts closing the ends of said boxes, and coiled springs located in said boxes, and spring adjusting screws as set forth. 22nd. In impression mechanism of a printing, embossing, or a printing and embossing press, the combination of a screw plunger, plunger raising, locking and releasing means, a pinion secured to said plunger, a pair of sliding racks gearing therewith, rack guides, fixed boxes into which said racks extend, cap nuts closing the ends of said boxes, and coiled springs located in said boxes, screw threaded apertures through said cap nuts, screw spindles with heads and hand wheels and working through said apertures and lock nuts as set forth. 23rd. In impression mechanism of a printing, embossing, or a printing and embossing press, the combination of a screw plunger, plunger raising, locking and releasing means, and means whereby it is prevented from descending on the completion of its rebound until it has again been raised and locked as set forth. 24th. In impression mechanism of a printing, embossing, or a printing and embossing press, the combination of a screw plunger, plunger raising, locking and releasing means, and a rack and a pawl, said rack and pawl being adapted to engage at the required time and prevent the descent of the plunger as set forth. 25th. In impression mechanism of a printing, embossing or a printing and embossing press, the combination of a screw plunger, plunger raising, locking and releasing means, a rack carried by said plunger, and a pawl pivoted in fixed bearing, so as to engage with said rack at the required time as set forth. 26th. In impression mechanism of a printing, embossing, or a printing and embossing press, the combination of a screw plunger, plunger raising, locking and releasing means, a rack carried by said plunger and having its toothed surface formed as part of a screw path and a pawl pivoted in fixed bearing so as to engage with said rack at the required time, the length of the rack being such that it will clear or move beyond the said pawl at the ends of both the impression and return strokes, of the plunger as set forth. 27th. In impression mechanism of a printing, embossing or a printing and embossing press, the combination of a screw plunger, plunger raising, locking and releasing means, a rack carried by said plunger and having its tooth surface formed as part of a screw path and a pawl pivoted in fixed bearings so as to engage with said rack at the required time, and so loaded as to print lengthwise of the plunger, as set forth. 28th. In impression mechanism, of a printing, embossing or a printing and embossing press, the combination of a screw plunger, plunger raising, locking and releasing means, a fly wheel secured to the upper part of said plunger, racks secured thereto and having toothed undersides formed as parts of screw paths, pawls fixed to spindles journaled in fixed bearings so as to be capable of being turned in either direction, springs connected to said spindles and tending to retain said pawls pointing upwardly, the length of the said racks being such that they will clear or move beyond their respective pawls at the ends of both the impression and return strokes of the plunger, as set forth. 29th. In impression mechanism, of a printing, embossing or a printing and embossing press, the combination of a screw plunger, plunger raising, locking and releasing means, a fly wheel secured to the upper part of said plunger, racks secured thereto and having toothed undersides formed as parts of screw paths, pawls fixed to spindles journaled in fixed bearings so as to be capable of being turned in either direction, helical springs, one of which is attached by its inner convolution to each pawl spindle, means for detachably securing the outer end of each spring in either of two positions, in one of which the pawl will be operative, in the other inoperative, as set forth. 30th. In impression mechanism of a printing, an embossing, or a printing and embossing press, the combination of a screw plunger, plunger raising, locking and releasing means, a movable die block and a renewable part adapted to bear the impact and friction between said plunger and die block, as set forth. 31st. In impression mechanism of a printing, an embossing, or a printing and embossing press, the combination of a screw plunger, a renew-

able wearing button attached thereto, plunger raising, locking and releasing means, a movable die block, and a renewable wearing piece carried by said block, as set forth. 32nd. In impression mechanism of a printing, embossing or a printing and embossing press, the combination of a screw plunger, plunger raising, locking and releasing means, a fly wheel secured to the upper part of said plunger, racks secured thereto and having toothed undersides formed as parts of screw paths, pawls fixed to spindles journaled in fixed bearings so as to be capable of being turned in either direction, springs connected to said spindles and tending to retain said pawls pointing upwardly, the length of the said racks being such that they will clear or move beyond their respective pawls at the ends of both the impression and return strokes of die plunger, permitting said pawls to assume a vertical attitude at such times and pushing said pawls into an operative position at the commencement of the ascent of the plunger and into a reverse or inoperative position at the commencement of the descent to give the impression, as set forth.

No. 69,287. Inking Apparatus for Printing Presses.

(Appareil pour encrer les presses à imprimer.)



The Johnston North American Patents Company, assignee of Joseph Yardley Johnston, 22 Bride Lane, Fleet Street, London, England, 13th November, 1900; 6 years. (Filed 7th March, 1900.)

Claim.—1st. An inking apparatus for printing, or printing and embossing presses comprising a table, a removable ink reservoir freely supported by said table and means for ensuring the correct relative positions of said table and reservoir, as set forth. 2nd. An inking apparatus for printing, or printing and embossing presses comprising a table formed with sockets, and a removable ink reservoir having projections adapted to fit said sockets, as set forth. 3rd. An inking apparatus for printing, or printing or embossing presses, comprising a spring supported table, a removable ink reservoir freely supported by said table, and means for ensuring the correct relative positions of the said table and reservoir as set forth. 4th. An inking apparatus for printing, or printing or embossing presses comprising a vertically adjustable spring supported table, a removable ink reservoir freely supported by said table, and means for ensuring the correct relative positions of the said table and reservoir, as set forth. 5th. An inking apparatus for printing, or printing and embossing presses comprising a table carried by a standard adjustably mounted on the press frame, a removable ink reservoir freely supported by said table, and means for ensuring the correct relative positions of said table and reservoir, as set forth. 6th. An inking apparatus for printing, or printing and embossing presses comprising a table carried by a standard pivoted to the press frame, means for turning said standard upon its pivots, and a removable ink reservoir freely supported by said table, as set forth. 7th. In an inking apparatus for printing, or printing and embossing presses, the combination of an ink reservoir with inking roller, a spring supported table carried by a pivoted standard mounted on the press frame, means for vertically adjusting said table and parts supported thereby and for turning the standard about its pivots so as to laterally adjust it and the parts carried by it, as set forth. 8th. In an inking apparatus for printing, or printing and embossing presses, the combination of a table, tubes extending through and projecting below said table, a standard formed with guide holes adapted to receive said tubes, springs interposed between said standard and table, a cross head connecting the lower ends of said tubes, an adjusting screw passing through said cross head, and an ink reser-

voir provided with pins adapted to fit into said tubes, as set forth. 9th. In an inking apparatus for printing, or printing and embossing presses, the combination of a table, tubes extending through and projecting below said table, a pivoted standard formed with guide holes adapted to receive said tubes, springs interposed between said standard and table, a cross-head connecting the lower ends of said tubes, an adjusting screw passing through said cross-head, a trunnion nut carried by said standard, a longitudinally immovable adjusting screw passing through said nut, and an ink reservoir provided with pins adapted to fit into said tubes, as set forth. 10th. In an inking apparatus for printing, or printing and embossing presses, the combination of an ink reservoir and an ink agitator, arranged within said reservoir and comprising a pair of horizontal bars suspended from pivots at the ends of the reservoir, the bars being formed with teeth inclined in opposite directions, as set forth. 11th. In an inking apparatus for printing, or printing and embossing presses, the combination of an ink reservoir, an ink agitator pivoted within said reservoir, a short spindle supported in a bearing at one end of the reservoir, means for rotating said spindle, an eccentric fixed to said spindle and faces formed on the agitator between which the eccentric rotates so as to oscillate said agitator, as set forth. 12th. In an inking apparatus for printing, or printing and embossing presses, the combination of an ink reservoir, an ink agitator pivoted within said reservoir, a short spindle supported in a bearing at one end of the reservoir, means for rotating said spindle, an eccentric fixed to said spindle, faces formed on the agitator between which the eccentric rotates so as to oscillate said agitator, an ink conveying roller, a flange at one end of the spindle of said roller, an axial recess in the face of said eccentric to receive the said flange, means to prevent relative rotation of the spindle and eccentric and a screw centre for supporting the other end of said spindle, as set forth. 13th. In an inking apparatus for printing, or printing and embossing presses, the combination of an ink reservoir, an ink conveying roller mounted therein, an inking roller whose spindle has partly spherical end portions, and adjustable plugs extending through the ends of the reservoir and formed with eccentric holes in which the end portions of the spindle rest, as set forth. 14th. In an inking apparatus for printing, or printing and embossing presses, the combination of an ink reservoir, an ink conveying roller mounted therein, an inking roller whose spindle has partly spherical end portions, an evening roller whose spindle has partly spherical end portions and adjustable plugs extending through the ends of the reservoir and formed with eccentric holes in which the end portions of the spindles rest, as set forth. 15th. In an inking apparatus for printing, or printing and embossing presses, the combination of an ink reservoir, an inking roller whose spindle has partly spherical end portions, an evening roller whose spindle has partly spherical end portions, and adjustable plugs extending through the ends of the reservoir and formed with eccentric holes in which the end portions of the spindles rest, an ink agitator pivoted within said reservoir, a short spindle supported in a bearing at one end of the reservoir, means for rotating said spindle, an eccentric fixed to said spindle, faces formed on the agitator between which the eccentric rotates so as to oscillate said agitator, an ink conveying roller, a flange at one end of the spindle of said roller, an axial recess in the face of said eccentric to receive the said flange, means to prevent relative rotation of the spindle and eccentric and a screw centre for supporting the other end of said spindle, as set forth.

No. 69,288. Means of Removing Superfluous Ink from the Dies of Printing Presses. (*Appareil à enlever l'encre de trop des caractères de presse à imprimer.*)

The Johnson North American Patents Company, assignee of Joseph Yardley Johnston, both of 22 Bride Lane, Fleet Street, London, England, 13th November, 1900; 6 years. (Filed 7th March, 1900.)

Claim.—1st. In the wiping apparatus of printing or printing and embossing presses, the combination of a support, a table mounted thereon, a pad carried by said table, a wiping paper supply roll, a waste wiping paper roll, means for feeding wiping paper from one roll to the other across said pad and means for scraping from said paper ink wiped from the printing surface of the press, as set forth. 2nd. In the wiping apparatus of printing or printing and embossing presses, the combination of a support, a table mounted thereon, a pad carried by said table, a wiping paper supply roll, a waste wiping paper roll, means for feeding wiping paper from one roll to the other across said pad, means for scraping from said paper ink wiped from the printing surface of the press and a movable frame adapted to support said parts, as set forth. 3rd. In the wiping apparatus of printing or printing and embossing presses, the combination of a support, a table mounted thereon, a pad carried by said table, a wiping paper supply roll, a waste wiping paper roll, means for feeding wiping paper from one roll to the other across said pad, means for scraping from said paper ink wiped from the printing surface of the press, a movable frame adapted to support said previously mentioned parts, and means whereby said frame and parts are raised at the required times, as set forth. 4th. In the wiping apparatus of printing or printing and embossing presses, the combination of a support, a table mounted thereon, a pad carried by said table, springs interposed between said table and support, and means for preventing forward movement of said table relatively to said sup-

port, as set forth. 5th. In the wiping apparatus of printing or printing and embossing presses, the combination of a support, a

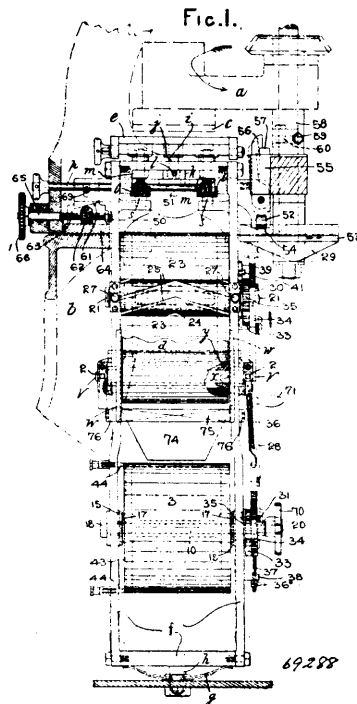
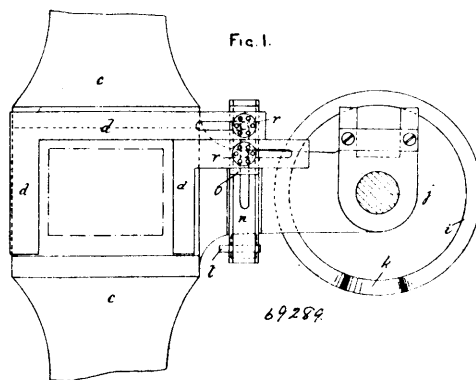


table mounted thereon, a pad carried by said table, springs interposed between said table and support, and lugs formed respectively upon the table and support, and adapted to abut against each other and prevent forward movement of said table relatively to said support, as set forth. 6th. In the wiping apparatus of printing or printing and embossing presses, the combination of a support, a table mounted thereon, a pad carried by said table, a wiping paper supply roll, a waste wiping paper roll, means for feeding wiping paper from one roll to the other across said pad, means for scraping from said paper ink wiped from the printing surface of the press, a movable frame adapted to support said previously mentioned parts, a lever on which said frame rests, and the fulcrum end of which is formed with an incline on its underside, a movable fulcrum piece on which said incline rests, and means for adjusting the position of said fulcrum piece, as set forth. 7th. In the wiping apparatus of printing or printing and embossing presses, the combination of a support, a table mounted thereon, a pad carried by said table, a wiping paper supply roll, a waste wiping paper roll, means for feeding wiping paper from one roll to the other across said pad, means for scraping from said paper ink wiped from the printing surface of the press, a movable frame adapted to support said previously mentioned parts, a lever on which said frame rests and the fulcrum end of which is formed with an incline on its underside, a movable fulcrum piece on which said incline rests, a longitudinally fixed screw passing through said fulcrum piece, and means for rotating said screw, as set forth. 8th. In the wiping apparatus of printing, or printing and embossing presses, the combination of a support, a table mounted thereon, a pad carried by said table, a wiping paper supply roll, a waste wiping paper roll, means for feeding wiping paper from one roll to the other across said pad, means for scraping from said paper ink wiped from the printing surface of the press, a movable frame adapted to support said previously mentioned parts, a lever on which said frame rests and the fulcrum end of which is formed with an incline on its underside, a movable fulcrum piece on which said incline rests, a longitudinally fixed screw passing through said fulcrum piece, a worm wheel fixed to said screw, a rotatable spindle with accessible hand wheel, and a worm gearing with said worm wheel, as set forth. 9th. In the wiping apparatus of printing, or printing and embossing presses, the combination of a support, a table mounted thereon, a pad carried by said table, a central adjustable connection between said table and support, screw studs extending upwardly through said support, springs resting between said studs and table, worm wheels fixed to said studs and worm spindles gearing therewith, as set forth. 10th. In the wiping apparatus of printing, or printing and embossing presses, the combination of a support, a table mounted thereon, a pad carried by said table, a central adjustable connection between said table and support, screw studs extending upwardly through said support, springs resting between said studs and table, worm

wheels fixed to said studs, worm spindles gearing therewith and removable abutments carried by the support and adapted to limit the movement of the screw studs, as set forth. 11th. In the wiping apparatus of printing, or printing and embossing presses, the combination of a support, springs carried by said support, a table resting on said springs, a central boss upon the underside of said table, a boss upon the underside of the support, a hole through said boss of decreasing diameter towards the lower part and a screw stud having a rounded head and adapted to be secured into boss on the table, as set forth. 12th. In the wiping apparatus of printing or printing and embossing presses, the combination of a support, a table mounted thereon, a pad carried by said table, a wiping paper supply roll, the spindle of the supply roll being provided with conical sleeves adapted to be forced into the ends of the roll of wiping paper and with adjustable flanges having means for fixing thereto the spindle and lateral projections adapted to engage with said sleeves, a waste wiping paper roll, and means for feeding wiping paper from one roll to the other across said pad, as set forth. 13th. In the wiping apparatus of printing, or printing and embossing presses, the combination of a support, a table mounted thereon, a pad carried by said table, a wiping paper supply roll, adjustable friction blocks capable of being pressed against the journals of the spindle of said roll, a waste wiping paper roll, and means for feeding wiping paper from one roll to the other across said pad, as set forth. 14th. In the wiping apparatus of printing, or printing and embossing presses, the combination of a support, a table mounted thereon, a pad carried by said table, a wiping paper supply roll, and means for feeding wiping paper from one roll to the other across said pad, the roller on which said waste wiping paper is wound comprising parts hinged together and having a gap between their free edges when expanded, displaceable pieces adapted to occupy said gap, and yielding means for holding said pieces in position, as set forth. 15th. In the wiping apparatus of printing or printing and embossing presses, the combination of a support, a table mounted thereon, a pad carried by said table, a wiping paper supply roll, and means for feeding wiping paper from one roll to the other across said pad, the roller on which said waste wiping paper is wound, bushes capable of sliding on but keyed to the spindle of the waste roller and extending through the frame of the apparatus, friction washers arranged between said bushes and the respective ends of the roller hub, and means for drawing said bushes towards each other, along said spindle as set forth. 16th. In apparatus for wiping the printing surface of a printing or a printing and embossing press, the combination with a frame movable towards and from said printing surface of a wiping paper supply roll, a feed roller, a friction roller pressed towards said feed roller so as to grip paper passing between said feed of action rollers, a yielding pad across which the wiping paper is fed, a waste wiping paper roll, means for scraping ink from the waste paper as it passes to the waste paper roller, means for causing the rotation of said feed roller and waste paper roller so as to feed the wiping paper across said pad, and means for imparting movement to the said frame, as set forth. 17th. In apparatus for wiping the printing surface of a printing or a printing and embossing press, the combination with a frame movable towards and from said printing surface of a wiping paper supply roll, a feed roller, a friction roller pressed towards said feed roller so as to grip paper passing between said feed of action rollers, a yielding pad across which the wiping paper is fed, a waste wiping paper roll, ratchet wheels secured to the spindles of the feed roller and waste wiping paper roller respectively, spring pressed pawls adapted to engage therewith, partial spur pinions loosely mounted to rotate about said spindles, a rack bar engaging with said spur pinions, means for causing a to and fro movement of said bar and for limiting said movement, as set forth. 18th. In the wiping apparatus of printing or printing and embossing presses, the combination of a support, a table mounted thereon, a pad carried by said table, a wiping paper supply roll, a waste wiping paper roll, means for feeding wiping paper from one roll to the other across said pad, ratchet teeth upon said waste paper roller, and spring catches adapted to engage therewith, as set forth. 19th. In the wiping apparatus of printing or printing and embossing presses, the combination of a support, a table mounted thereon, a pad carried by said table, a wiping paper supply roll, a waste wiping paper roll, means for feeding wiping paper from one roll to the other across said pad, and means for rotating said feed and waste paper rollers by hand, as set forth. 20th. In the wiping apparatus of printing or printing and embossing presses, the combination of a support, a table mounted thereon, a pad carried by said table, a wiping paper supply roll, a waste wiping paper roll, means for feeding wiping paper from one roll to the other across said pad, a guide roller over which the wiping paper passes on its way from the pad to the waste paper roller, a fixed scraper plate adapted to bear against the inked surface of the wiping paper at an angle thereto, and a weighted plate so suspended as to bear against the uninked surface of the paper so as to press the inked surface against the edge of the scraper plate, as set forth. 21st. In the wiping apparatus of printing or printing and embossing presses, the combination of a support, a table mounted thereon, a pad carried by said table, a wiping paper supply roll, a waste wiping paper roll, means for feeding wiping paper from one roll to the other across said pad, a guide roller over which the wiping paper passes on its way from the pad to the waste paper roller, a fixed scraper plate adapted to bear against the inked surface of the wiping paper at an angle thereto, and a weighted plate so suspended as to bear against the uninked surface of the paper so as to press the inked surface against the edge of the scraper plate, as set forth.

No. 69,289. Means of Holding Paper and Other Material Whilst Being Operated upon in Printing and Embossing Machines. (*Porte papier etc., pour presse à imprimer.*)

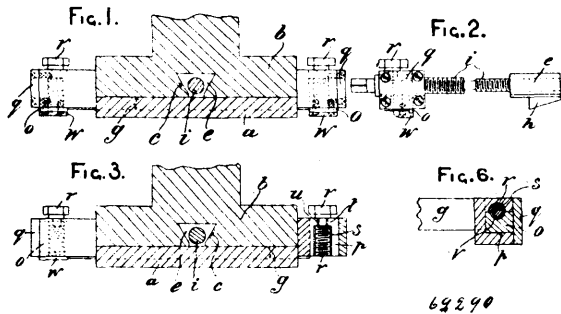


The Johnston North American Patents Company, assignee of Joseph Yardley Johnston, 22 Bride Lane, Fleet Street, London, England, 13th November, 1900; 6 years. (Filed 7th March, 1900.)

Claim.—1st. A device for holding paper or other material whilst being operated upon a printing, embossing, or printing and embossing press, comprising fingers adapted to rest upon the paper or other material, means for supporting, for guiding and for raising and lowering at the required times the said fingers, as set forth. 2nd. A device for holding paper or other material whilst being operated upon in a printing, embossing, or printing and embossing press, comprising fingers adapted to rest upon the paper or other material, a longitudinally movable pin in which said fingers are attached, means for guiding said pin and attached parts, means for raising and lowering them at the required times, as set forth. 3rd. A device for holding paper or other material whilst being operated upon in a printing, embossing, or printing or embossing press, comprising fingers adapted to rest upon the paper or other material, a vertically movable pin to which said fingers are attached, rollers carried by said pin, a vertical face against which said rollers bear, and means for raising and lowering said pin and attached parts at the required times, as set forth. 4th. A device for holding paper or other material whilst being operated upon in a printing, embossing, or printing and embossing press, comprising fingers adapted to rest upon the paper or other material, a longitudinally movable pin to which said fingers are detachably connected, means for guiding said pin and attached parts, and means for raising and lowering them at the required times, as set forth. 5th. A device for holding paper or other material whilst being operated upon in a printing, embossing, or printing and embossing press, comprising fingers adapted to rest upon the paper or other material, means for supporting, for guiding and for raising and lowering at the required times the said fingers, and means for adjustably connecting said fingers to the supporting means, as set forth. 6th. A device for holding paper and other material whilst being operated upon in a printing, embossing, or printing and embossing press, comprising fingers adapted to rest upon the paper or other material, a vertically movable pin, a cross bar detachably fitted to its upper end, a carriage which supports the fingers and which is mounted so as to be capable of sliding on said cross bar, and means for raising and lowering the pin and its attached parts at the required times, as set forth. 7th. A device for holding paper or other material whilst being operated upon in a printing, embossing, or printing and embossing press, comprising fingers adapted to rest upon the paper or other material, a longitudinally movable pin to which said fingers are attached, and a cam whereby the raising and lowering of said pin and fingers is effected, as set forth. 8th. A device for holding paper or other material whilst being operated upon in a printing, embossing, or printing and embossing press comprising slotted fingers adapted to rest upon the paper or other material, a slotted cross bar, means for detachably securing said cross bar to said pin, a carriage adapted to slide on said cross bar and formed with holds, a clamping strip formed with tapped holes, and set screws adapted to pass through said fingers, carriage, cross bar into the clamping strip, as set forth. 9th. A device for holding paper or other material whilst being operated upon in a printing, embossing, or printing and embossing press, comprising fingers adapted to rest upon the paper or other material, a vertically movable pin to which said fingers are attached, rollers carried by said pin, a vertical face against which said rollers bear, a cam roller carried by said pin and a rotary cam bearing against said roller, as set forth. 10th. A device for holding paper or other material whilst being operated upon in a printing, embossing, or printing and embossing press, comprising fingers adapted to rest upon the paper or other material, a longitudinally movable pin with dovetailed head, a cross bar to which said fingers are secured and formed with a transverse recess fitting said head, and a spring bolt

carried by said pin and adapted to engage with said cross bar, as set forth. 11th. A device for holding paper or other material whilst being operated upon in a printing, embossing, or printing and embossing press, comprising fingers adapted to rest upon the paper or other material, means for supporting, for guiding and for raising and lowering at the required times the said fingers, and an adjustable stop for limiting the downward movement of the said fingers, as set forth.

No. 69,290. Inking Devices of Presses for Printing and Embossing. (*Appareil à encreur les presses à imprimer et bosseler.*)



The Johnston North American Patents Company, assignee of Joseph Yardley Johnston, both of 22 Bride Lane, Fleet Street, London, England, 13th November, 1900; 6 years. (Filed 7th March, 1900.)

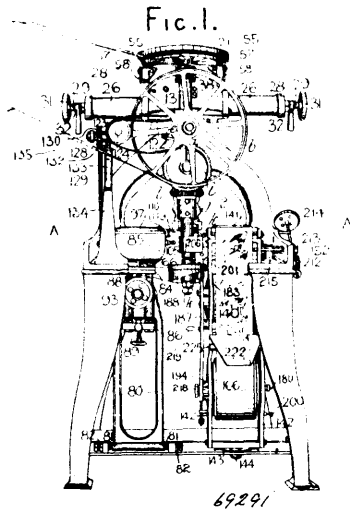
Claim.—1st. The combination with the means for clamping or holding in position the dies or the like of printing or printing and embossing presses, of adjustable means for regulating contact between said dies or the like and the inking devices of the press, as set forth. 2nd. The combination with die clamping jaws of adjustable means for regulating contact between said dies or the like and the inking devices of the press, as set forth. 3rd. The combination with die clamping jaws of which the forward or leading jaw is formed with lateral extensions of adjustable means carried by said extensions for regulating contact between said die and the inking device of the press, as set forth. 4th. The combination of a pair of die clamping jaws, means for causing them to grip a die and vertically adjustable guards, as set forth. 5th. The combination with a die clamping jaw having lateral extensions each formed with an opening, a vertically adjustable block located in each of said openings and means for adjusting said block, as set forth. 6th. The combination with a die clamping jaw having lateral extensions each formed with an opening, a vertically adjustable block located in each of said openings and formed with a renewable wearing surface and means for adjusting said block, as set forth. 7th. The combination with a die clamping jaw having lateral extensions each formed with an opening, a vertically adjustable block located in each of said openings and formed with a renewable wearing surface and with a half nut, a screw engaging in said half nut and means for preventing said screw moving longitudinally, as set forth. 8th. The combination with a die block having a dovetail groove of a pair of clamp jaws each formed with projections fitting in said groove, means for causing said clamp jaws to move towards and from each other, vertically adjustable blocks contained in openings formed in lateral extensions of the forward or leading clamping jaw, and having renewable wearing surfaces and half nuts, screws engaging in said half nuts and each formed with a recess into which a part collar formed on the clamp jaw enters, as set forth.

No. 69,291. Printing or Embossing Press. (*Presse à imprimer et bosseler.*)

The Johnston North American Patents Company, assignees of Joseph Yardley Johnston, both of 22 Bride Lane, Fleet Street, London, England, 13th November, 1900; 6 years. (Filed 7th March, 1900.)

Claim.—1st. In a printing, embossing or printing and embossing press, the combination of a device adapted to give an impression, a device adapted to resist the impression blow, means for causing said devices to come in contact at the required times and a layover device adapted to rest upon the material which is to receive the impression at the required times so as to hold it in position between said devices but out of contact with the edges of the impression device and prevent it being carried away therewith, as set forth. 2nd. In a printing, embossing or printing and embossing press of the kind in which a die carrying arm is fixed to an intermittently revolved shaft, the combination with said die carrying arm and shaft of a die adapted to give an impression, a device adapted to resist the impression blow, means for causing said devices to come in contact at the required times and a layover device adapted to rest upon the material which is to receive the impression at the required times so as to hold it in position between said devices but out of contact with the edges of the impression device and prevent

it being carried away therewith, and a cam carried by said shaft and adapted to operate said layover device at the required times, as



set forth. 3rd. In a printing, embossing or printing and embossing press of the kind in which a die carrying arm is fixed to an intermittently revolved shaft, the combination with said die carrying arm and shaft of a die, a die inking apparatus, a die wiping apparatus, a device adapted to receive the impression blow, means for causing the die to give the impression blow, a layover device and cams carried by said shaft and adapted to operate at the required times, the wiping apparatus and the layover device, as set forth. 4th. In a printing, embossing or printing and embossing press of the kind in which a die carrying arm is fixed to an intermittently revolved shaft, the combination with said die carrying arm and shaft of a die, a die inking apparatus, a die wiping apparatus, comprising a wiping pad and a strip of paper adapted to be intermittently fed across said pad, a device adapted to receive the impression blow, means for causing the die to give the impression blow, a layover device and cams carried by said shaft and adapted to operate at the required times, the wiping apparatus and the layover device, and to feed the paper strip, as set forth. 5th. In a printing, embossing or printing and embossing press of the kind in which a die carrying arm is intermittently revolved from a continuously driven shaft, the combination of a die inking apparatus, a die wiping apparatus, means for holding the die in its printing attitude, means for causing it to give the impression and means for scraping from the wiping material ink deposited thereon during the wiping operation, as set forth. 6th. In a printing, embossing or printing and embossing press of the kind in which a die carrying arm is intermittently revolved from a continuously driven shaft, the combination of gear for causing the revolution of said arm, means for locking said arm in the printing position, and means for gradually setting said die arm into motion independently of said gear, as set forth. 7th. In a printing, embossing or printing and embossing press of the kind in which a die carrying arm is intermittently revolved from a continuously driven shaft, the combination with die arm, locking means of a rotary cam, a lever actuated by said cam, a locking block engaged by said lever and a projection on said die arm capable of being held by said block, a wedge surface on said lever and another wedge surface carried by the die arm, as set forth. 8th. In a printing, embossing or printing and embossing press of the kind in which a die carrying arm is intermittently revolved from a continuously driven shaft, the combination with die arm locking means of a rotary cam, a lever actuated by said cam, a locking block engaged by said lever fitting and sliding in a rectangular channel in part of the press frame, a wear compensating strip adjusted by a screw, and a protection on said die arm capable of being held by said block, a wedge surface on said lever and another wedge surface carried by the die arm, as set forth. 9th. In a printing, embossing or printing and embossing press the combination with the press frame of an anvil surface, frames fixed around said anvil surface, a fixed pin adapted to enter a recess on one side of a counter plate, the under edges of which are recessed to receive removing tools, as set forth. 10th. In a printing, embossing or printing and embossing press of the kind in which a die carrying arm is intermittently revolved from a continuously driven shaft, the combination of a die inking apparatus, a die wiping apparatus, means for holding the die in its printing attitude, means for causing it to give the impression, a continuously driven main shaft constantly geared to said impression mechanism, means whereby said shaft may be geared at will to said die arm revolving mechanism, as set forth. 11th. In a printing, embossing or printing and embossing press of the kind in which a die carrying arm is intermittently revolved from a continuously driven shaft, the combination of a die

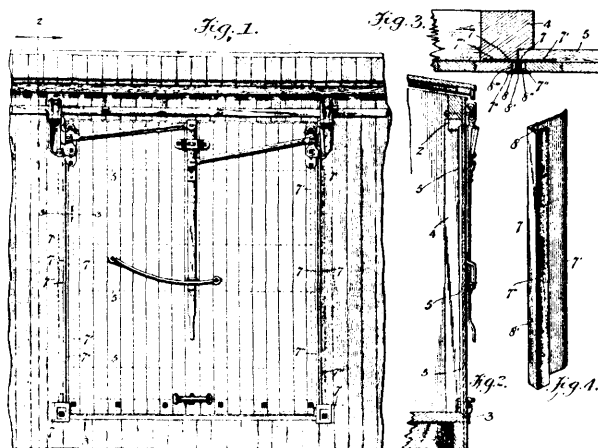
inking apparatus, a die wiping apparatus, means for holding the die in its printing attitude, means for causing it to give the impression, a continuously driven main shaft constantly geared to said impression mechanism, a pinion capable of being slidden along the said shaft, a feather connection between said shaft and pinion, means for fixing said pinion in or out of gear with the die arm revolving mechanism, as set forth. 12th. In a printing, embossing or printing and embossing press of the kind in which a die carrying arm is intermittently revolved from a continuously driven shaft, the combination of a die inking apparatus, a die wiping apparatus and means for causing the die to give an impression comprising a vertical screw plunger carrying a weighted fly wheel and a pinion spring pressed racks engaging said pinion and contained in tubular boxes provided with screw spindles a continuously rotating driving part, means for intermittently connecting said plunger thereto and for locking and releasing the said parts, as set forth. 13th. In a printing, embossing, or printing and embossing press of the kind in which a die carrying arm is intermittently revolved from a continuously driven shaft, the combination of die wiping apparatus, means for causing the die to give an impression and an apparatus for inking the face of an impression device, comprising a reservoir formed with pins or projections, an inking roller fed with ink from said reservoir, a vertically adjustable spring supported table carried by the press frame, sockets formed in said table and adapted to receive the pins or projections on the reservoir, whereby the reservoir and its appurtenances are accurately located and secured in the exact position required, as set forth. 14th. In a printing, embossing, or printing and embossing press of the kind in which a die carrying arm is intermittently revolved from a continuously driven shaft, the combination of die inking apparatus, means for causing the die to give an impression and apparatus for wiping the impression surfaces comprising a frame, wiping paper rollers carried thereby, means for operating said rollers so as to intermittently feed wiping paper forward and present a fresh wiping surface to the die, a table supported on springs and provided with a pad over which the paper is drawn by said rollers, a lever supporting said frame, a cam carried by the die arm shaft and adapted to raise said lever and frame at the required times and a device for scraping ink off the wiping paper, as set forth. 15th. In a printing, embossing, or printing and embossing press of the kind in which a die carrying arm is intermittently revolved from a continuously driven shaft, the combination of a die inking apparatus, a die wiping apparatus, means for causing the die to give an impression and a device adapted to resist the impression blow, means for holding paper or other material whilst being operated upon, comprising adjustable plates or fingers, means for supporting and guiding, and raising and lowering at the required times, which plates or fingers are adapted to bear upon the material to be impressed around the device which is to resist the impression blow, as set forth. 16th. In a printing, embossing, or printing and embossing press of the kind in which a die carrying arm is intermittently revolved from a continuously driven shaft, the combination of a die inking apparatus including a spring supported inking roller, a die wiping apparatus, means for causing the die to give an impression, clamping jaws connected to the die block of the press and capable of being caused to grip the die and at the same time centre it under the block, the forward or leading jaw of which is formed with laterally projecting ends fitted with vertically adjustable guards adapted to depress the spring supported inking roller, as set forth.

No. 69,292. Freight Car. (Char à fret.)

Sinclair Joseph Johnson, Nutley, New Jersey, U.S.A., 13th November, 1900; 6 years. (Filed 22nd October, 1900.)

Claim.—1st. The combination, in a door, of a door margin or boundary portion made of material not subject to shrinkage or swelling to a material degree and secured to a part free of appreciable shrinkage or swelling in a direction to shift the relations of the margin or boundary portion, and a body portion having free relation to such boundary portion or margin to permit the swelling or shrinkage of said body portion and adapted to engage such margin or boundary portion intermediate the outer and inner edges of such margin portion when in engagement therewith. 2nd. The combination, in a door, of a door margin or boundary portion made of material not subject to shrinkage or swelling to a material degree and secured to a part free of appreciable shrinkage or swelling in a direction to shift the relations of the margin or boundary portion, and a body portion having free relation to such boundary portion or margin to permit the swelling or shrinkage of said body portion, said margin lapping a side of said body portion to an extent equal to the difference in dimensions of the door when swollen and when shrunk to the greatest amount which occurs in practice. 3rd. A car door comprising a body and margin or boundary means comprising shaped irons each secured to a part free of appreciable shrinkage or swelling in a direction to shift the relations of said margin or boundary means, and each in position to form a space intermediate thereof and said body when such body is in its normal condition or contracted and adapted when in engagement with such body to engage it intermediate the outer and inner edges of said margin means. 4th. A car door the body of which has each edge subject to the effect of atmospheric changes provided with a channel iron secured in position free of such body and lapping the side of the body to an

extent at least equal to the difference in dimensions of the body when swollen and when shrunk to the greatest amount which occurs



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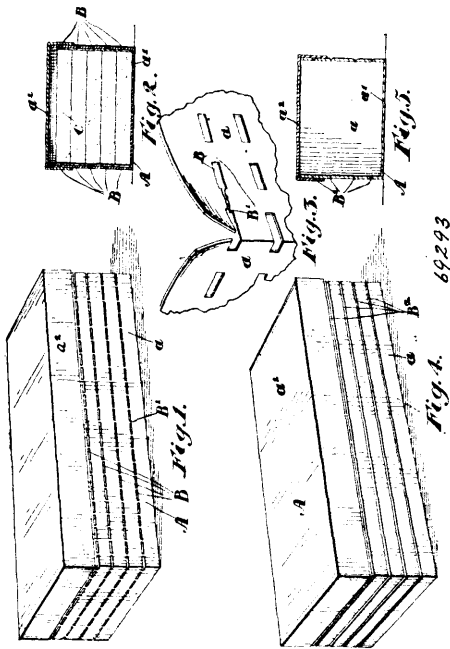
in practice, whereby the door is permanently of the same size whether the body thereof be in a shrunken or swollen condition. 5th. A car wall having a doorway and a doorway margin or boundary portion made of material not subject to shrinkage or swelling to a material degree and secured to a part free of appreciable shrinkage or swelling in a direction to shift the relations of the margin or boundary portion, said wall having free relation to such boundary portion, the organization being such that the same size of the doorway is permanently maintained whether the car wall be in a shrunken or swollen condition. 6th. A car wall having a doorway and a doorway margin or boundary portion made of material not subject to shrinkage or swelling to a material degree and secured to a part free of appreciable shrinkage or swelling in a direction to shift the relations of the margin or boundary portion, said wall having free relation to such boundary portion, and said margin lapping a side of said wall to an extent at least equal to the difference in dimensions of the door when swollen and when shrunk to the greatest amount which occurs in practice, the organization being such that the same size of the doorway is permanently maintained whether the car wall be in a shrunken or swollen condition. 7th. A car wall having a doorway, a plurality of the edges of which wall contiguous to such doorway are provided with shaped or channel irons, each so secured in position as to form a closed space between the web of such iron and the edge of the wall when the latter is in its normal condition or contracted, and thereby prevent the formation of a gap or opening between said iron and the edge of the wall. 8th. A car structure comprising a wall having a doorway, and a door therefor comprising a body, said doorway and body each having margin means free of material shrinkage or swelling and secured to parts free of appreciable shrinkage or swelling in a direction to shift the relations of said margin means, said margin means being free of said wall and body, hereby to permit the swelling or shrinkage of said wall and body while permanently maintaining the same size of said door and doorway, and each such margin means overlapping its respective member, thereby to prevent the formation of a gap or opening between said margin means and said member when such member contracts.

No. 69,293. Card Board Box. (Boîte en carton.)

George Hollis Megloughlin, Charles Audley Belford and Edward Robert Bremner, all of Ottawa, Ontario, Canada, 13th November, 1900; 6 years. (Filed 20th October, 1900.)

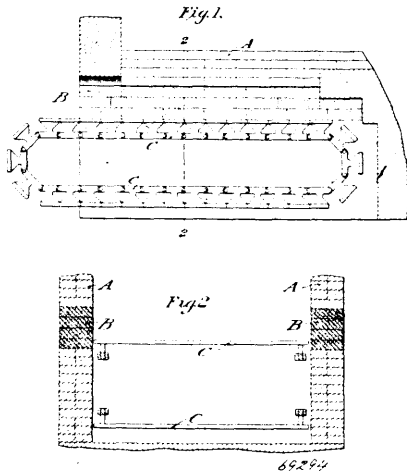
Claim.—1st. As an improved article of manufacture, a box made of card or other suitable material, having the sides thereof formed with a perforated or scored line of incision arranged around the box and parallel with the bottom thereof, as and for the purpose specified. 2nd. As an improved article of manufacture, a box made of card or other suitable material, having the sides thereof formed with perforations or scored lines of incisions arranged in tiers around the box and parallel with the bottom thereof, and with each other, as and for the purpose specified. 3. As an improved

article of manufacture, a box made of card or similar material having the sides thereof formed with perforations arranged around the



box in tiers, and flaps of paper arranged to cover the perforations or scoring as and for the purpose specified.

No. 69,294. Furnace Construction. (Fournaise.)



Maximilian Marbur Suppes, Elyria, Ohio, U.S.A., 13th November, 1900; 6 years. (Filed 22nd October, 1900.)

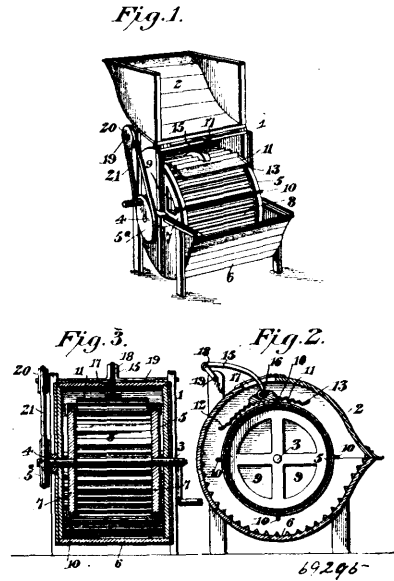
Claim.—1st. A steam boiler or other furnace in which coal is burned on a grate, having those portions of its fire box which are exposed to clinker formation constructed with an inset or lining of sand or silica stone. 2nd. A steam boiler or other furnace in which coal is burned on a grate, having the walls of its fire box adjacent to the grate provided with a lining composed of sand or silica stone.

No. 69,295. Washing Machine. (Machine à laver.)

Ira Boyd, Slocum, Pennsylvania, U.S.A., 13th November, 1900; 6 years. (Filed 22nd October, 1900.)

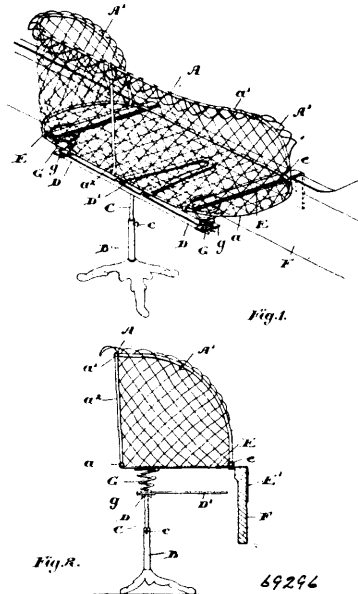
Claim.—1st. A washing machine comprising a body, a rotary cylinder journaled therein, a reciprocating rubber within the body above the cylinder, and actuating means connected centrally and pivotally to the rubber, which is otherwise unsupported and free to turn on its pivotal connection for equalizing the pressure thereof, substantially as described. 2nd. A washing machine comprising a rotary cylinder journaled therein, clothes retaining wire loops projecting from the rubbing surface of the cylinder, a reciprocating rubber with the body above the cylinder, and having outwardly deflected ends, and actuating means connected centrally and

pivotaly to the rubber, which is otherwise unsupported and free to turn on its pivotal connection for equalizing the pressure thereof,



substantially as described. 3rd. A washing machine comprising a body, a rotary cylinder therein, a reciprocating rubber arranged over the top of the cylinder and within the body, a crank shaft parallel with the cylinder shaft, and a connecting rod or pitman extending from the crank shaft through an opening in the body and having the rubber centrally pivoted to its extremity, the rubber being otherwise unsupported, substantially as described.

No. 69,296. Cot. (Lit d'enfant.)

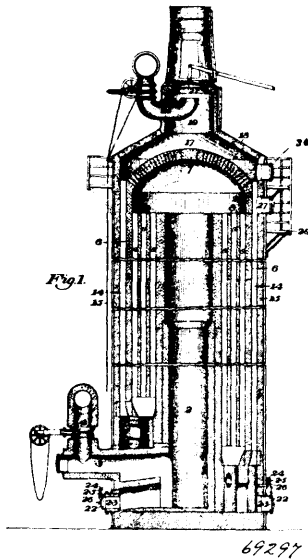


Susie Poole, Toronto, Ontario, Canada, 13th November, 1900; 6 years. (Filed 23rd October, 1900.)

Claim.—1st. A cot comprising a frame having an open inner side and closed outer side and arc-shaped ends designed to extend downwardly towards the side of the bed, adjustable means for fastening it to the side of the bed and a suitable support for the outer side of the cot, as and for the purpose specified. 2nd. The combination with the cot having an open side designed to be placed next the side of the bed, of suitable strips secured to the bottom of the cot and having bent ends, designed to overhang the side of the bed and a suitable standard for supporting the outer side of the cot, as and for the purpose specified. 3rd. The combination with the cot having an open side designed to be placed next the side of the bed, of suitable strips secured to the bottom of the cot and having bent ends designed to overhang the side of the bed, a socket standard to the

outside of the bed, a longitudinal cross bar, having a stem or standard fitting in the socket and springs interposed between the strips and ends of the longitudinal bar as and for the purpose specified. 4th. The combination with the cot having an open side designed to be placed next the side of the bed, of suitable strips secured to the bottom of the cot and having bent ends designed to overhang the side of the bed, a socket standard to the outside of the bed, a longitudinal cross bar having a stem or standard fitting in the socket, springs interposed between the strips and the ends of the longitudinal bar and a loop extending from the longitudinal bar inwardly as and for the purpose specified.

No. 69,297. Hot Blast Stove. (Poêle à soufflet.)



George Washington McClure, Pittsburg, Pennsylvania, U.S.A., 13th November, 1900; 6 years. (Filed 22nd October, 1900.)

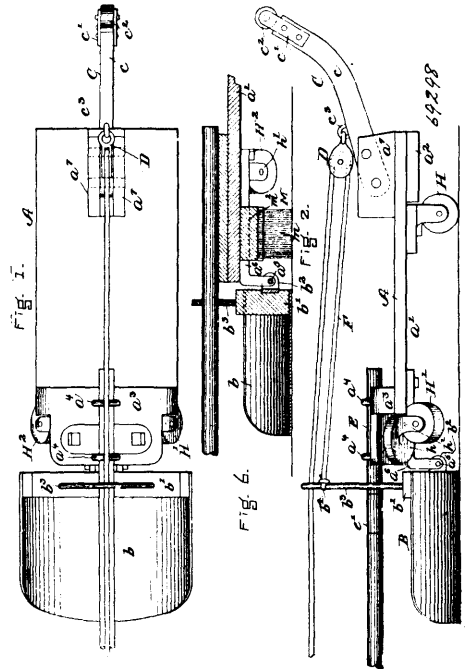
Claim.—1st. A hot-blast stove a central or initial first pass, an annular second pass surrounding the first pass, and an annular third pass surrounding the second pass, said second pass, having a greater amount of heating surface than the third pass. 2nd. A hot-blast stove having an annular flue sub-divided by circular and radial walls, the bricks composing the circular walls being continuous at one course, in which course the radial bricks abut against the same intermediate of their ends, while in the next course the bricks forming the radial walls are continuous, the bricks forming the circular walls in this course abutting against the radial bricks intermediate of the ends of the latter. 3rd. A hot-blast stove having an inner or front pass, a second or intermediate pass outside of the first pass, and a third pass outside of the second pass said second or intermediate pass being sub-divided into flues by horizontal courses of bricks forming radial and circular walls, the bricks forming the circular walls being continuous at one course, in which course the radial bricks abut against the circular walls intermediate of the ends of the bricks composing said walls, while in the next course above and below the radial bricks are continuous and are tied to the outer wall of the pass, the bricks forming the circular walls in the latter course abutting against the radial bricks intermediate of their ends.

No. 69,298. Machine for Cleaning Sewers and Drain Pipes. (Machine pour nettoyer les tuyaux d'égoûts, etc.)

Patrick J. Haley, Hyde Park, Massachusetts, U.S.A., 13th November, 1900; 6 years. (Filed 27th September, 1899.)

Claim.—1st. In a sewer cleaning and exploring machine, the combination of a truck body, and suitable wheels therefor operatively mounted thereon with a shovel having a hinge connection with the truck and its front end below the truck body, a propelling device for moving the truck along the sewer bottom, means for tilting upwardly the front end of the shovel, and an upwardly extending arm carried by the truck and adapted to engage an upper wall of the sewer. 2nd. In a sewer cleaning and exploring machine, the combination of a truck body, and suitable wheels therefor operatively mounted thereon with a shovel at one end of the truck and having a hinge connected therewith, a rigid propelling device for moving the truck along the sewer bottom, a flexible shovel tilting device having a connection with the rear portion of the shovel, a pulley for said flexible device, and an upwardly extending arm at the other end of said truck. 3rd. In a sewer cleaning and exploring machine, the combination of a truck body and suitable wheels therefor operatively mounted thereon with a tilting shovel

carried by the truck at one of its ends, an upwardly extending arm carried by the rear end of the truck, means for tilting the shovel,



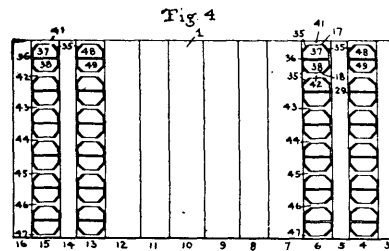
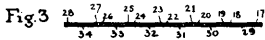
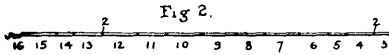
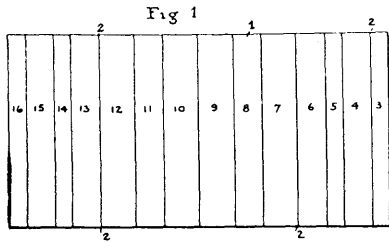
said means extending forwardly as to the front end of the shovel, and a rigid propelling device extending forwardly as to the front end of the shovel. 4th. In a sewer cleaning and exploring machine, the combination of a truck body and suitable wheels therefor operatively mounted thereon, with a tilting shovel operatively connected to the truck, means for tilting the shovel, an upwardly extending arm carried by the truck and in the plane of the central lengthwise axis of the truck, and means for propelling said truck. 5th. In a sewer-cleaning and exploring machine, the combination of a truck body, wheels therefor operatively mounted thereon with their lower peripheries inclined outwardly from the vertical, an arm extending upwardly with its free end in the plane of the central lengthwise axis of the truck, a shovel hinged on the carriage, means for tilting the front end of the shovel, and a rigid propelling device made up in sections of known length. 6th. In a sewer-cleaning and exploring machine, the combination of a truck body, suitable wheels therefor operatively connected therewith, a platform carried by the truck, means for tilting the shovel, means for propelling the truck, and an upwardly extending arm carried by the truck rear, wardly of the shovel. 7th. In a sewer cleaning and exploring machine, the combination of a truck body, comprising a platform and suitable wheels therefor operatively mounted on the trucks a shovel mounted at one end of the truck, an arm which extend-upwardly from the truck back of shovel, means for operating the shovel, a truck propelling device comprising sections of known length, and a platform carried by the truck, said upwardly extending arm being adapted to engage an upper wall of the sewer to steady the machine in its passage through the sewer, and the platform being above the wheels and shovel and adapted to support lanterns, substantially as and for the purpose set forth.

No. 69,299. Compartment Box. (Boîte à compartiment.)

Jonah Rogers Cole, New York City, New-York, U.S.A., 13th November, 1900; 6 years. (Filed 19th October, 1900.)

Claim.—1st. A new article of manufacture, a shipping box consisting of two boxes, each having a base and four walls, and each having a top and a central horizontal partition, the said top and partitions being provided with central apertures to receive the subject matter to be enclosed therein, the said boxes being bound together so that their open ends close each other, substantially as described. 2nd. As a new article of manufacture, a packing box consisting of two boxes having each a base and four walls, a top and a central horizontal partition and apertures in said box and partitions to receive the articles to be enclosed therein with elastically hinged flanges interposed in said apertures, the said boxes being hinged together so that their open tops will close each other; a strip of suitable material interposed between said boxes when they are thus closed, and a band encircling both boxes, substantially as described. 3rd. As a new article of manufacture, a compartment box consisting of two right angular forms, each having a central horizontal partition, suitable apertures in the top of the box and the partitions to receive the articles to be enclosed therein; said forms being hinged together at the edges of their tops, so that when folded

together, the top of one closes the top of the other, with a partition interposed between the boxes when folded together, a suitable band



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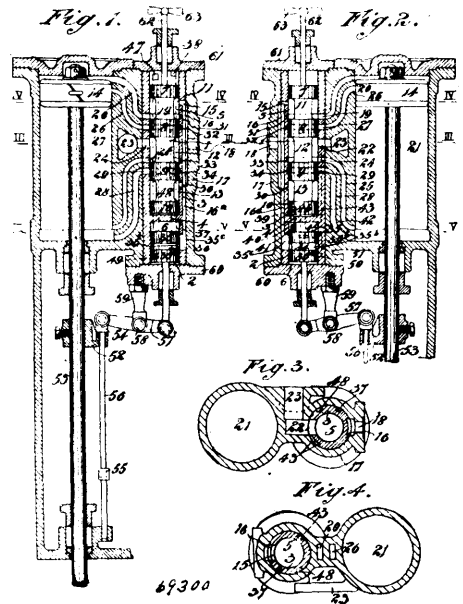
binding the two boxes together, substantially as described. 4th. As a new article of manufacture a compartment box consisting of two right angular forms, each having a central horizontal partition, suitable apertures in the top of the box and the partitions to receive the articles to be enclosed therein, with flanges interposed in said apertures, said flanges being hinged with a suitable spring tension, and said forms being hinged together at the edges of their tops, so that when folded together, the top of one closes the top of the other, with a partition interposed between the boxes when folded together, a suitable band binding the two boxes together, substantially as described. 5th. As a new article of manufacture, a compartment box formed of one piece of card board, or equivalent material scored transversely to divide the same into suitable strips or walls, certain of said strips being provided with suitable apertures of a size to receive the article to be enclosed, flanges cut out of the card board to form the apertures, the flanges being interposed into the apertures to form cushion bearings, said card board being folded and secured to form two connected boxes, substantially as described. 6th. As a new article of manufacture, a compartment box formed of one piece of card board, or equivalent material scored transversely to divide the same into suitable strips or walls, certain of said strips being provided with suitable apertures of a size to receive the article to be enclosed, flanges cut out of the card board and forming the apertures, these flanges being interposed in the apertures to form cushion bearings, said board being folded and secured to form two connected boxes, and means to bind said boxes together with a suitable cushioning strip interposed between them, substantially as described.

No. 69,300. Means of Distributing Actuating Fluid in Engines or Motors. (*Moyen de distribution des fluides dans les moteurs en machines à vapeur.*)

William Armstrong Woodeson, Victoria Works, Gateshead, Durham, England, 13th November, 1900; 6 years. (Filed 28th September, 1900.)

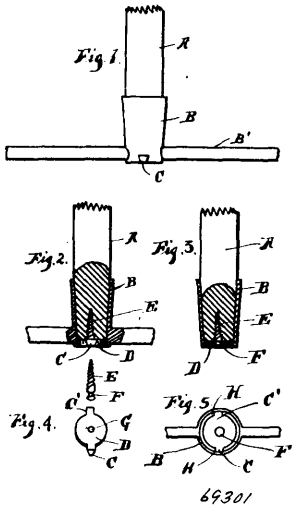
Claim.—1st. Means for distributing and controlling the actuating fluid in engines or motors, comprising a main valve and an auxiliary valve placed in line with each other and working in two valve chambers contained within the same liner, ports through its walls and passages formed in its outer walls connecting the ports with the steam inlet, exhaust outlet and with the motor cylinder, as set forth. 2nd. Means for distributing and

controlling the actuating fluid in engines or motors, comprising a main valve and an auxiliary valve placed in line with each other



and working within a liner divided into two chambers by a partition plate, as set forth. 3rd. Means for distributing and controlling the actuating fluid in engines or motors, comprising a main valve and an auxiliary valve placed in line with each other and working in two valve chambers contained within the same liner, having ports through its walls and passages formed in outer walls connecting the ports with the steam inlet, exhaust outlet and with the motor cylinder and the two valve chambers, together, substantially as described. 4th. Means for distributing and controlling the actuating fluid in engines or motors, comprising a main valve and an auxiliary valve placed in line with each other and working in a liner divided into two valve chambers by a partition plate, and ports and passages formed in the wall of the liner connecting the steam inlet and exhaust passages with the motor cylinder and the two valve chambers, substantially as described. 5th. Means for distributing and controlling the actuating fluid in engines or motors, comprising two valve chambers in line with each other and contained within the same liner, a main distributing valve in one of said chambers, an auxiliary distributing valve in the other of said chambers and adapted to operate the said main distributing valve by controlling the passage of actuating fluid thereto, and means for moving said auxiliary slide valve to and fro, as set forth. 6th. Means for distributing and controlling the actuating fluid in engines or motors, comprising a main valve and an auxiliary valve placed in line with each other and working in two valve chambers contained within the same liner, ports and passages formed in the wall of the liner connecting the steam inlet and exhaust passages with the motor cylinder and the two valve chambers, and means for operating said auxiliary valve to and fro to control said ports and passages, substantially as described. 7th. Means for distributing and controlling the actuating fluid in engines and motors, comprising two valve chambers in line with each other and contained within the same liner, ports and passages formed in the wall of the liner connecting the steam inlet and exhaust passages with the motor cylinder and the two valve chambers together, an exhaust port near each end of the main distributing valve chamber and adapted to cause the valve to be cushioned at the end of its strokes, as set forth. 8th. Means for controlling the passage of actuating fluid to or from an engine or motor cylinder 21, comprising two valve chambers 5, 6 in line with each other and contained with the same liner 3, a main slide valve 1, an auxiliary slide valve 2, an inlet 18 for actuating fluid, an exhaust outlet 23, passages formed in the wall of the liner 3 and adapted to put the ends of said cylinder 21 into full communication respectively with the said inlet 18 and with the said exhaust outlet 23 through the chamber 5 containing the said main valve when the said valve is in one of its end positions, means for moving the said auxiliary 2 to and fro, and passages formed in the wall of the liner for connecting the chamber 6 with the inlet 18, the exhaust outlet 23 and the chamber 5, so as to put the ends of the chamber 5 into communication respectively with the inlet 18 and the exhaust outlet 23 for the purpose of moving the said main slide valve 1 quickly from one of its extreme positions to the other.

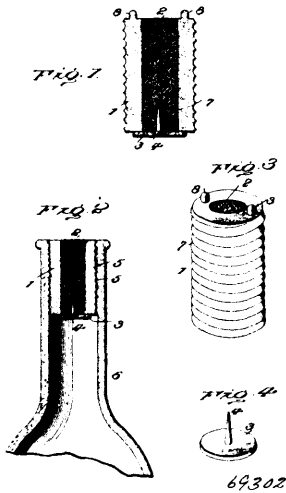
No. 69,301. Device for attaching Handles to Carpet Sweeper Rails. (*Appareil pour attacher les manches aux balayuses de tapis.*)



Francis C. Mason, Grand Rapids, Michigan, U.S.A., 13th November, 1900; 6 years. (Filed 25th October, 1900.)

Claim.—The combination of the ferrule B, provided with slots at its lower end, the attaching plate D, provided with lugs engaging said slots and secured therein, and screw E, all constructed as and for the purpose described.

No. 69,302. Bottle Closure. (*Fermeture de bouteilles.*)



William Henry Lockhart and George Henry Klein, both of Fowler, Colorado, U.S.A., 13th November, 1900; 6 years. (Filed 22nd October, 1900.)

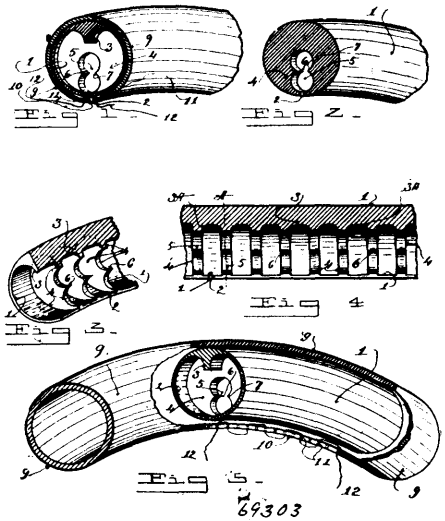
Claim.—In combination with a bottle having its neck interiorly threaded, an exteriorly threaded sleeve of frangible material secured within the neck of the bottle by a cement and threaded joint, said sleeve having oppositely disposed lugs at its outer end to facilitate the positioning of the sleeve and which lugs are removed after the sleeve has been placed in position, a cork fitted into the sleeve, an index placed against the inner end of the sleeve and cork, and a pin having its head embedded in the material of the index and serving to secure the latter to the cork, substantially as set forth.

No. 69,303. Elastic Bicycle Tire.
(*Bandage élastique de bicyclette.*)

Mary E. Brooke, assignee of Charles G. Fawkes, both of Denver, Colorado, U.S.A., 14th November, 1900; 6 years. (Filed 8th August, 1900.)

Claim.—1st. In an elastic bicycle tire, the combination with an endless tread tire having a closable opening at a pre-determined point in its inner periphery and an elastic tire adapted to be inserted through said closable opening and to fit in said outer tire and comprising a round, elastic shell having an internal depending rib at its

tread portion, a plurality of discs extending across said shell throughout its length at short distance apart, an oblong hole in each of said



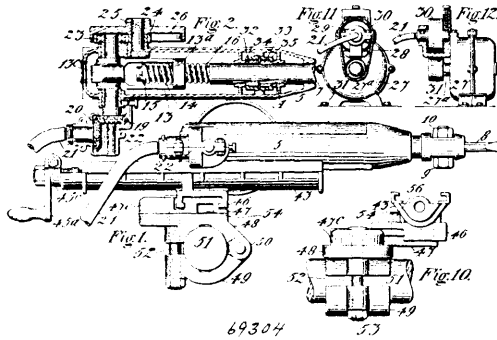
discs extending from the inner edge of the said shell to near the said shell to near the said rib and having the inner periphery of said shell divided into two separate parts by divisional opening extending through said shell into said oblong hole of each disc, substantially as described. 2nd. In an elastic bicycle tire, the combination of a round shell of elastic material moulded to form a separate circular tire, a plurality of partitions a short distance apart throughout the length of said tire, a hole in each disc having its opposite ends round and of larger diameter than its centre, two oppositely disposed points of each partition extending into the centre of said oblong hole and having said tire divided and separated into two equal parts by a narrow slot or opening along its inner periphery through its shell into said hole, with a suitable endless covering having a closable entrance and adapted to admit and surround said elastic tire, substantially as described. 3rd. In an elastic bicycle tire the combination with the outer endless tread tire, provided with a laced opening of an inner elastic tire adapted to be adapted to admitted into said tread tire through said laced opening and comprising a rubber shell having an internally depending rib at its tread portion, a plurality of partitions integral with said shell extending across it at short distances apart, a hole in each of said partitions substantially like the figure 8, and a narrow slot through said shell along its inner periphery into said hole, substantially as described. 4th. The combination in an elastic tire of the endless outer tread tire, the entrance opening in said tire, the lacing in said opening arranged to manually close said opening with the inner separated elastic tire comprising the rubber shell having a rib projecting towards its axis from the tread portion of its periphery, disc-shaped partitions formed integral with said shell and rib extending diametrically across said shell and at short distances apart throughout the length of said elastic tire, the round fillets at the junction of said partion with said shell and rib, a hole in each of said discs and a narrow slot or cut through said shell along its inner periphery into said hole of each of said partitions arranged and adapted to divide the inner peripheral portion of said tire into two separate parts, substantially as described.

No. 69,304. Rock Drilling Machine.
(*Machine à forer la roche.*)

Manetho Cortes Jackson, John McDonough and Arther John Clark, all of Denver, Colorado, U.S.A., 14th November, 1900; 6 years. (Filed 12th February, 1900.)

Claim.—The combination with a casing and a reciprocating device, of a yoke located in the casing and connected with the reciprocating device, and a crank shaft whose crank engages a slot formed in the yoke for operating the reciprocating device. 2nd. The combination with a casing and a reciprocating device, of a yoke located in the casing, a yielding connection between the yoke and the reciprocating device, and a crank shaft whose crank engages a slot formed in the yoke for operating the latter in conjunction with the reciprocating device. 3rd. The combination with a casing and a reciprocating device enclosed thereby, a yoke also enclosed by the casing, a yielding connection between the yoke and the said device permitting either of them a limited independent movement in either direction, but causing them to reciprocate together, and suitable operating means connected with the yoke. 4th. The combination with a casing and a reciprocating device enclosed thereby, of a yoke also enclosed by the casing and connected with the reciprocating device, and a buffer spring located between the yoke and a stop on the reciprocating device, and suitable means

connected with the yoke for operating said device. 5th. The combination with a casing and a reciprocating device enclosed



69304

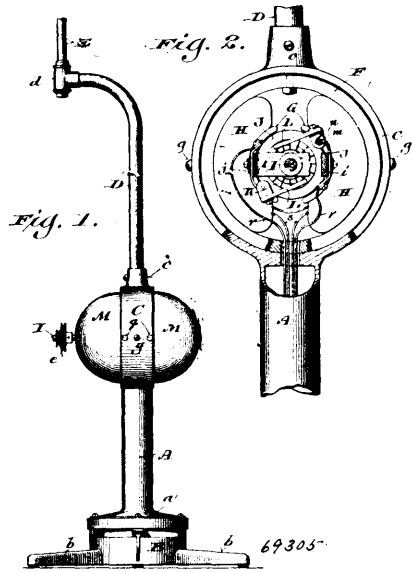
thereby, of a yoke also enclosed by the casing and connected to move with the said device, and two buffer springs surrounding the reciprocating device and engaging stops thereon, their opposite extremities engaging on opposite sides a part of the yoke through which the said device passes, and suitable means connected with the yoke for operating the reciprocating device. 6th. In a rock drilling machine or other kindred instrument, the combination with a casing, a guide shell on which the casing is mounted, and a reciprocating shaft enclosed by the casing, of a yoke also enclosed by the casing and yieldingly connected with the shaft, means connected with the yoke for operating the shaft, feed mechanism mounted on the guide shell and connected with the casing and means for automatically rotating the shaft. 7th. The combination with a casing, a guide shell upon which the casing is mounted, a feed screw for moving the casing on the shell, a reciprocating shaft enclosed by the casing, and means for rotating the shaft, of a slotted yoke also enclosed by the casing and yieldingly connected with the drill shaft, a crank shaft whose crank engages the slot in the yoke, a flexible shaft connected with the crank shaft, and a motor, engine or other power for operating the flexible shaft. 8th. In a rock drilling machine, the combination with the casing, a drill shaft enclosed thereby, and means for reciprocating the same, of means for rotating the drill shaft comprising two ratchet wheels surrounding the shaft, and respectively provided with lugs respectively engaging a straight and a spiral groove formed in the drill shaft, two detachable keepers located in the casing and respectively enclosing the ratchet wheels, means for locking the keepers against rotation and longitudinal movement in the casing, and spring held dogs pivotally mounted on the keepers and engaging the ratchet teeth of the wheels. 9th. In a rock drilling machine, the combination with a casing and a reciprocating shaft enclosed thereby, of a yoke also enclosed by the casing and yieldingly connected with the shaft in such a manner as to allow the shaft to rotate, the yoke being locked against rotation, the crank shaft engaging a slot formed in the yoke, a flexible shaft connected with the crank shaft and means for rotating the flexible shaft. 10th. In a rock drilling machine, the combination of a casing, a reciprocating shaft, an operating crank shaft, a flexible shaft connected with the crank shaft, a motor and a connection between the flexible shaft and the motor comprising the pulleys and a belt. 11th. The combination with a drill bit or tool, of a reciprocating shaft having a bit socket in its forward extremity and a transverse opening intersecting said socket, and a fastening bolt inserted in the said transverse opening and apertured to receive the shank of the bit, the parts being so arranged that the shaft is revolvably balanced. 12th. In a rock drilling machine, the combination with a guide shell and suitable drilling mechanism mounted thereon, of a supporting bar, a clamp embracing the bar, a slotted plate bolted to the clamp and a bolt passing through an opening in the guide shell and slot of the plate whereby the shell and drill mechanism may be shifted laterally without loosening the clamp members. 13th. In a rock drilling machine, the combination of the casing, the reciprocating drill shaft, a crank shaft for operating the drill shaft, and a fly wheel geared to the crank shaft in such a manner that the speed of the wheel is greater than that of the crank shaft.

No. 69,305. Electric Motor. (Moteur électrique.)

The Browning Manufacturing Company, assignee of Thomas Sidney Watson, Milwaukee, Wisconsin, U.S.A., 14th November, 1900; 6 years. (Filed 26th April, 1900.)

Claim.—1st. The combination with a suitable hollow standard expanded into a ring at its upper end, said ring being undercut on each inner edge, of an annular magnet frame, comprising a continuous metal ring having opposed inner shanks integral therewith, fitted within the said standard ring, field coils on said shanks, separate curved pole pieces secured to said shanks by screws passing therethrough and through both of said rings, connecting pieces uniting the opposed ends of said pole pieces, a shaft journalled in said connecting pieces, an armature and commutator on said shaft, insulated metallic strips secured to one of said connecting pieces,

spring controlled commutator brushes hinged to said strips, series of conducting wires leading up through said hollow standard, and



69305

connected, respectively, to said stripes, and to said field coils, and semi-spherical shells clamped between the annular magnet frame and the standard ring, one of said shells having a central aperture for the passage of the armature shaft therethrough. 2nd. In an electric motor for rotary dental tools and the like, the combination with a hollow standard expanded into a ring at its upper end, a motor having an annular magnet frame fitting within the ring of the standard, conducting wires leading up through said hollow standard and connected to said motor, and semi-spherical shells fastened to said standard ring and enclosing said motor, one of said shells having a central aperture for the passage of the shaft of the motor therethrough. 3rd. In an electric motor for rotary dental tools and the like, the combination with a motor controlling device, of a hollow standard secured to and rising from said controlling device and expanded into a ring at its upper end, a motor having an annular magnet frame fitting within the ring of the standard, conducting wires leading up from said controlling device through the hollow standard and connected to said motor, and semi-spherical shells fastened to said standard ring and enclosing said motor, one of said shells having a central aperture for the passage therethrough of the motor shaft.

No. 69,306. Heel Stiffener. (Contre-fort de talon.)

James Dixon Cooper, Toronto, Ontario, Canada, 14th November, 1900; 6 years. (Filed 29th October, 1900.)

Claim.—1st. A bed room slipper comprising a heel provided sole, provided with a suitable stitching on its upper outer edge extending round its foot and insole portions only, a heel stiffener, a heel piece securing said heel stiffener to said slipper sole, a row of holes in the lower portion of said stiffener, said holes opening above said heel piece, a cord sewn to the upper edge of said stiffener, and an upper, the foot and insole portions of which are sewn to said stitching extending round the foot and insole portion only, of said slipper sole, and the heel portion of said upper being sewn to said heel stiffener by means of said holes and said cord, as and for the purpose specified. In a bed room slipper, in combination with a slipper sole provided with a suitable stitching on its upper outer edge extending round its foot and insole portions only, to which the foot and insole portions of an upper can be sewn by hand, of a heel stiffener, a heel piece securing said stiffener to said sole, holes in the lower portion of said heel stiffener, said holes opening above said heel piece, and a cord sewn to the upper edge of said heel stiffener so that the heel portion of an upper can be sewn to said stiffener by hand, by means of said holes and said cord, as and for the purpose specified. 3rd. In a bed room slipper, in combination with a slipper sole provided with a suitable stitching on its upper outer edge extending round its foot and insole portions only, to which the foot and insole portions of an upper can be sewn by hand, and the heel of said slipper sole, of a heel stiffener, a heel piece securing said heel stiffener to said sole, holes in the lower portion of said stiffener, said holes opening above said heel piece, and a cord sewn to the upper edge of said heel stiffener so that the heel portion of an upper can be sewn to said stiffener by hand, by means of said holes and said cord, as and for the purpose specified. 4th. In a bed room slipper, the combination with a slipper sole provided with a suitable stitching on its upper outer edge extending round its foot and insole portions only, a heel secured to said sole, a heel stiffener, a heel piece placed over the in-turned edges of said heel stiffener securing the

same to said sole, a cord sewn on the upper edge of said heel stiffener, and a row of holes in said stiffener, said holes opening above said

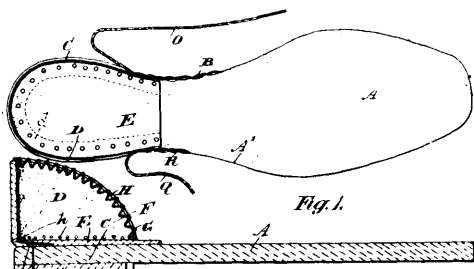


Fig. 2.

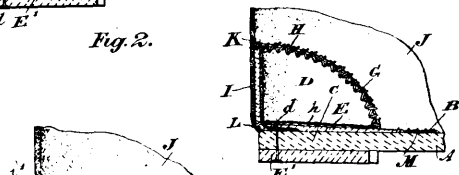


Fig. 3.

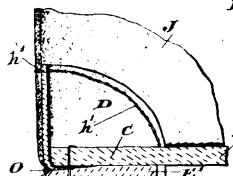


Fig. 4.

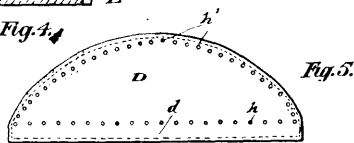


Fig. 5.

heel piece, of an upper, the foot and insole portions of which are sewn to said stitching extending round the foot and insole portions only, of said slipper sole, and by means of said holes and said cord being sewn by hand to said heel stiffener, as and for the purpose specified. 5th. A heel stiffener for bed room slipper soles provided with a suitable stitching on their upper outer edge, for their foot and insole portions only, comprising a suitably shaped piece, a row of holes made in the lower portion of said stiffener but sufficiently far from the edge of said lower portion to permit said lower portion being secured to a slipper sole so that said holes will open above said sole, and a cord sewn to the upper edge of said suitably shaped piece, as and for the purpose specified.

No. 69,307. Clothes Peg. (Epingles à linge.)

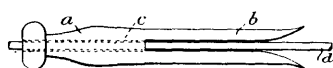


Fig. 1.



Fig. 2.

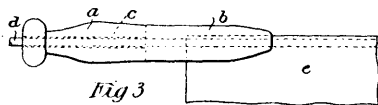


Fig. 3.



Fig. 4.



Fig. 5.

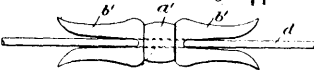


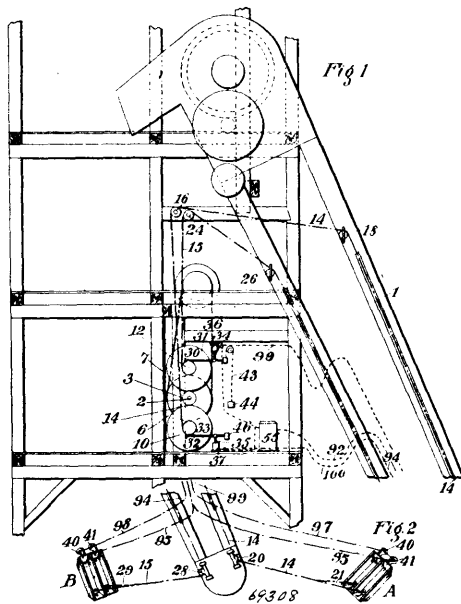
Fig. 6. 69307

Alfred Launcelot James Tait, Raglan street, Sale, Gippsland, Victoria, Australia, 14th November, 1900; 6 years. (Filed 29th October, 1900.)

Claim.—1st. A clothes peg comprising a main body and forked portions and having a longitudinal hole through the main body

whereby such peg is threaded upon a line, substantially as and for the purposes set forth. 2nd. A clothes peg comprising main body a and forked portion b and having a longitudinal hole through the main body, whereby such peg is threaded upon a line, substantially as and for the purposes set forth. 3rd. A clothes peg comprising a main body bifurcated at both ends and having a longitudinal hole through the main body, whereby such peg is threaded upon a line, substantially as and for the purposes set forth.

No. 69,308. Devices for Controlling the Operation of Grain Shovels. (Appareil pour controller les pelles à grain.)

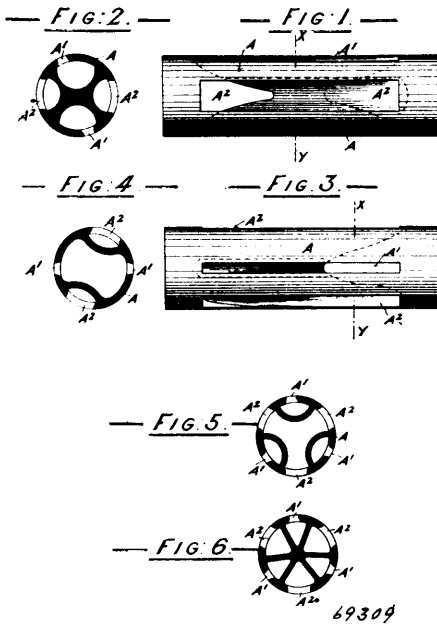


James George Westbrook, Ogdensburg, New York, U.S.A., 14th November, 1900; 6 years. (Filed 29th October, 1900.)

Claim.—1st. The combination in grain shoveling apparatus, of a shovel, a cable for operating the same, a drum for actuating said cable, a motor for throwing the drum friction into and out of contact with a driving friction, a valve for controlling said motor, and means at the shovel for controlling the operation of said valve, substantially as set forth. 2nd. In friction gear devices for actuating an appliance at a distance from the said friction gear devices, the combination of a motor for throwing said devices into and out of action, a valve controlling said motor, and means on said appliance for controlling said valve, substantially as set forth. 3rd. In apparatus for operating a grain shovel and other appliances, the combination of a friction gear train, a fluid pressure motor for connecting and disconnecting said train, a piston valve on said motor adapted to control the admission of such pressure to and its exhaust from said motor, and means for actuating said piston valve from the shovel or appliance, whereby the connecting and disconnecting of said friction gear can be controlled from the shovel, or appliance, substantially as set forth. 4th. In apparatus for operating grain shovels and other appliances, the combination of a friction gear train, a fluid pressure motor, for connecting and disconnecting the gear train, a piston valve adapted to be actuated by fluid pressure and to control the admission and exhaust of such pressure to and from said motor, and a valve at the shovel or other appliance operatively connected with said first-named valve, so as to admit and release fluid pressure to and from the same, substantially as set forth. 5th. In friction gear trains, and in combination with a fluid pressure motor, a piston valve containing two balanced pistons, a port to admit fluid pressure to throw said pistons to the open position, a port to admit fluid pressure between said pistons, a port connecting the space between the pistons with an outlet to the motor, a relief port, and a spring adapted to normally move said pistons, to the closed position, substantially as described. 6th. In friction gear trains, and in combination with a fluid pressure motor, a piston valve containing balanced pistons, 82,84, a valve stem and a plunger 78 on said stem adapted to work in a dash pot, a port 68 admitting fluid pressure to move said pistons to the open position, a port 51 to admit fluid pressure between said pistons, an outlet port 52 to deliver the fluid pressure to the motor, and an exhaust channel or chamber and port, substantially as described. 7th. In friction gear trains, the combination, with a fluid pressure motor and a piston valve, of a control valve at a distance from said first-named valve, provided with balanced pistons and means to actuate the same in one direction, a fluid pressure inlet port, and a fluid pres-

sure outlet port communicating with said first-named valve, and a spring adapted to throw said pistons to the closed position, substantially as described.

No. 69,309. Rotary Steam Engine. (Moteur Rotatoire.)



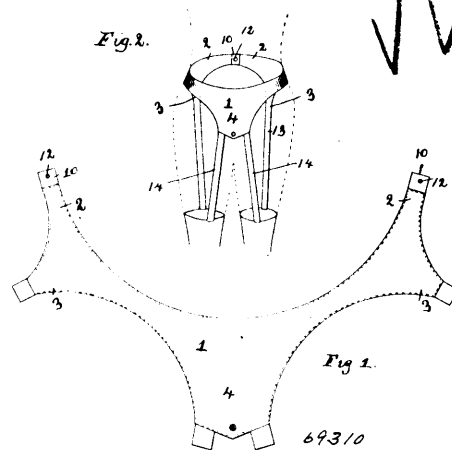
Birger Ljungstrom, Stockholm, Sweden, 14th November, 1900; 6 years. (Filed 29th October, 1900.)

Claim.—1st. In rotary steam engines of the type herein designated, forming steam ways in the bases of the cylinders, and introducing between the bases of the cylinders, and at the axis of revolution of the same, a cylindrical steam supply and exhaust valve, together with flexible means for holding the valve against rotation, while allowing steam to be conducted thereto, and the valve to follow any vibratory movements of its surrounding parts, substantially as described. 2nd. In rotary engines of the type herein designated, having a central steam supply and exhaust valve, forming steam-ways in the bases of the cylinders extending entirely across the bores of the same and corresponding ports in the central valve for the purposes described. 3rd. In rotary engines having a central cylindrical exhaust valve and steam ways and ports extending entirely across the cylinder bore, the use of a flexible tube connected at one end to the supply end of the valve and at the other to a stationary part of the engine, forming a tubular extension of the valve by which steam is conducted thereto and rotation of the valve prevented, the flexibility of the connection allowing the valve to follow any vibratory movements of the revolving cylinders, substantially as described. 4th. In rotary engines such as are claimed in the third claim, providing a track formed with concentric segments, and means to allow of the rotation of the valve relatively to said segments, substantially as and for the purposes described. 5th. In rotary steam engines such as are claimed in first claim, means for partially rotating the valve and a cover tube fitting closely over the valve and flexibly connected with a sleeve having means by which the cover tube may be adjusted, ports formed in the cover tube to conduct steam from the valve to the cylinders so that the relative adjustment of the valve and the cover tube places the ports in position for the reversal of the engine, substantially as described. 6th. In balanced rotary steam engines of the type herein designated, and as claimed by claim 3, providing the valve with means for rotary adjustment, if desired, and forming the said valve with longitudinally grooves to receive longitudinally extending cover blades, extending from a ring surrounding the end of the valve, the ring being connected by a form of universal joint with mechanism by which it and the blades may be adjusted relatively to the valve, to control the size of the steam admission ports, and thereby regulate the supply of steam to the cylinders, substantially as described. 7th. In balanced rotary steam engines of the type herein designated and as claimed by claim 4, mounting three cylinders within a surrounding stationary track, the track being so formed that each piston may make three strokes during each revolution of the cylinders. 8th. In balanced rotary steam engines of the type herein designated, forming steam ways in the bases of a series of cylinders arranged for expansion, the steam ways extending entirely across the bores of each of the cylinders, introducing at the axis of rotation of the cylinders and between the basis of same a balanced cylindrical steam supply and exhaust valve, which receives steam at one end and exhausts from the other, admission and

exhaust ports formed within the valve for each cylinder, the exhaust ports of the high pressure cylinders being in communication with the admission ports of the lower pressure cylinders, and also with steam chambers for the reception of steam chambers passing from one cylinder to another, together with flexible means for holding the valve against rotation and conducting steam thereto while allowing the valve to follow any vibratory movements of its surrounding parts, substantially as described. 9th. In balanced rotary steam engines of the type herein designated and as claimed by claim 8, forming a series of controlling valves, one for each set or pair of cylinders in the series, separately, of cylindrical formation and of a diameter in proportion to the cylinder to which it belongs, together with flexible or rigid means for connecting the valves forming the series, substantially as described. 10th. The construction and arrangement of the parts composing the balanced rotary engine, substantially as described with reference to Figs. 7 and 8. 11th. The construction and arrangement of parts composing a balanced rotary engine, substantially as described with reference to Fig. 12. 12th. The construction and arrangement of parts composing a balanced rotary engine, substantially as described with reference to Figs. 9 and 10. 13th. The construction and arrangement of parts composing a balanced rotary engine, substantially as described with reference to Fig. 11. 14th. The construction and arrangement of parts composing a balanced rotary engine, substantially as described with reference to Figs. 18 to 24. 15th. In rotary engines of the type herein stated and as claimed by claim 1, the construction and arrangement of the parts composing a balanced valve, substantially as described with reference to Figs. 25 to 27. 16th. The construction and arrangement of the parts composing a triple expansion balanced rotary engine, substantially as described with reference to Fig. 28. 17th. The construction and arrangement of the parts composing a triple expansion balanced rotary engine, substantially as described with reference to Fig. 31. 18th. The arrangement in triple expansion balanced rotary engines as herein described, of the cylinders, substantially as set forth with reference to Fig. 30. 19th. The arrangement in double expansion balanced rotary engines as herein described, of the cylinders, substantially as set forth with reference to Fig. 35. 20th. The arrangement and construction of parts forming the flexible and adjustable steam conduit, substantially as set forth with reference to J, J', G² and H in Fig. 9.

No. 69,310. Hose and Stocking Supporter.

(Support de bas.)



Emily Waiter Thayer, Shirley, Massachusetts, U.S.A., 14th November, 1900; 6 years. (Filed 29th October, 1900.)

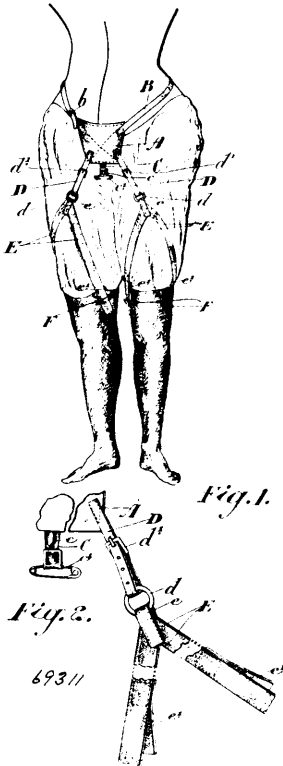
Claim.—The combination of the belt adapted to have its ends united at the back of the wearer, the lower central edge of the belt being enlarged into the large tab or apron, and the lower edge of the belt near its ends being formed with smaller tabs adapted to come over the hollow of the thigh of the wearer, elastics attached to the front tab or apron and descending substantially vertically to the front edges of the wearer's hose, and the elastics attached to the said smaller tabs and descending substantially vertically to the rear edges of the hose, substantially as hereinbefore described.

No. 69,311. Hose Supporter. (Support de bas.)

Geraldine Mary Plummer, Sault Ste Marie, Ontario, Canada, 14th November, 1900; 6 years. (Filed 27th October, 1900.)

Claim.—1st. In a figure improver and hose supporter, the combination with the shield shaped flat abdominal pad formed in one piece with a smooth surface and designed to lie against the front edge of the corset opposite the hypogastric region, of the upper supporting strap attached diagonally to said pad at the side edges and designed to extend around the hip portion of the corset and the hose

supporting straps connected diagonally to the pad at the lower portion of the side edges thereof, and extending downwardly from the



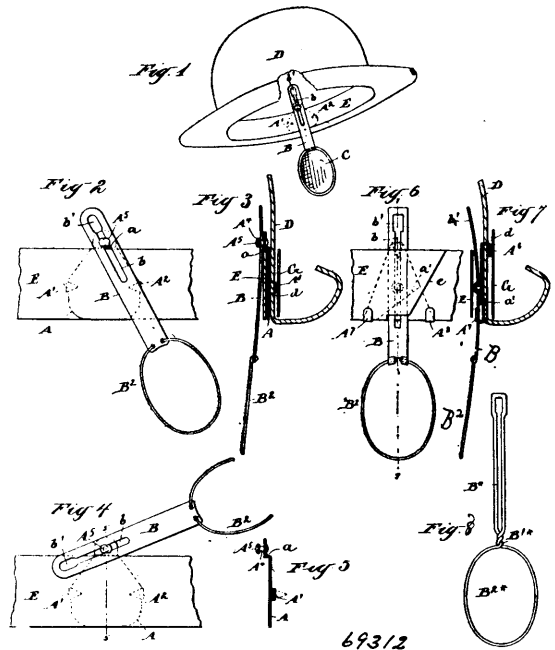
sides to the top of the hose as and for the purpose specified. 2nd. In a figure improver and hose supporter, the combination with the shield shaped flat abdominal pad formed in one piece with a smooth surface and designed to lie against the front edge of the corset opposite the hypogastric region, of the upper supporting strap attached diagonally to said pad at the side edges and designed to extend around the hip portion of the corset, and the hose supporting straps connected diagonally to the pad at the lower portion of the side edges thereof, and extending downwardly from the sides to the top of the hose and a central tab connected to the bottom edge of the pad and provided with a fastening device as shown and for the purpose specified. 3rd. In a figure improver and hose supporter, the combination with the shield shaped flat abdominal pad formed in one piece with a smooth surface and designed to lie against the front edge of the corset opposite the hypogastric region, of the upper supporting strap attached diagonally to said pad at the side edges and designed to extend around the hip portion of the corset and the hose supporting straps connected diagonally to the pad at the lower portion of the side edges thereof and formed with a loop and buckle, a ring through which such loop extends, a supplemental loop connected to such ring and provided with branches and means for fastening the lower ends of the branches to the upper end of the hose as and for the purpose specified. 4th. In a figure improver and hose supporter, the combination with the shield shaped flat abdominal pad formed in one piece with a smooth surface and designed to lie against the front edge of the corset opposite the hypogastric region, of the upper supporting strap attached diagonally to said pad at the side edges and designed to extend around the hip portion of the corset and the hose supporting straps connected diagonally to the pad at the lower portion of the side edges thereof, and formed with a loop and buckle, a ring through which such loop extends, a supplemental loop connected to such ring and provided with branches, double flaps at the lower ends of the branch straps and safety pins extending through the flaps and hose as and for the purpose specified. 5th. In a figure improver and hose supporter, the combination with the hose supporting straps, of double flaps formed at the lower end of the straps, one of such straps being designed to extend to the inside of the hose and the other to the outside and safety pins extending through the straps and hose as shown and for the purpose specified.

No. 69,312. Ear Muff. (Cache-oreilles.)

Climpson Moore Knight, Manhattan, New York, U.S.A., 14th November, 1900; 6 years. (Filed 24th October, 1900.)

Claim.—1st. As an improvement in ear muffs, the combination with a plate A adapted for engagement with a hat and a pivot A⁴ set therein, of the longitudinally slotted turning part B arranged to both turn and slide on such pivot and the wider frame B² adapted

to carry a fabric C, all substantially as herein specified. 2nd. As an improvement in ear muffs, the combination with a plate A hav-



ing prongs adapted for engagement with a hat, and a pivot A⁴ set therein, of the longitudinally slotted turning part B arranged to both turn and slide on such pivot, and the circular loop B² and slach fabric C extending across the latter, adapted to serve substantially as specified. 3rd. As an improvement in ear muffs, the plate A having an offset a, prongs A¹, A², adapted for engagement with a hat, and a pivot A⁴ set in such plate, the longitudinally slotted part B adapted to both turn and slide on such pivot, the wider loop or frame B² constituting an elastic extension of such turning part, adapted to carry a fabric C, a hat D and a sweat leather E, all combined and arranged to serve, substantially as herein specified. 4th. As an improvement in ear muffs, the combination of the plate A, having an off set a and prongs A¹, A², adapted for engagement with a hat, the pivot A⁴ set in such plate, the longitudinally slotted part B adapted to both turn and slide on such pivot, the wider loop or frame B² constituting an elastic extension of such turning part adapted to carry a fabric C, a hat D and the ordinary outside band G, the prongs so arranged that they are covered and concealed by the band, all substantially as herein specified. 5th. As an improvement in ear muffs, the plate A, having an off set a and prongs A¹, A², adapted for engagement with a hat, the pivot A⁴ set in such plate having a head A⁵ elongated horizontally, the longitudinally slotted turning part B having a part b¹ of the slot wider than the main part b to provide for connecting and disconnecting, such part being adapted to both turn and slide on such pivot, all combined and arranged to serve in hat D, substantially as herein specified. 6th. As an improvement in ear muffs, the combination with a plate A, having prongs adapted for engagement with a hat, and a pivot set therein, of the longitudinally slotted turning part B, b, b¹, adapted to turn and slide on such pivot and also to be disconnected when required, and the wider loop or frame b² forming an extension of such part and carrying a fabric C, and also of a hat D and a sweat leather E, having a slit e adapted to allow the turning part to move in such slit, all arranged to serve, substantially as herein specified.

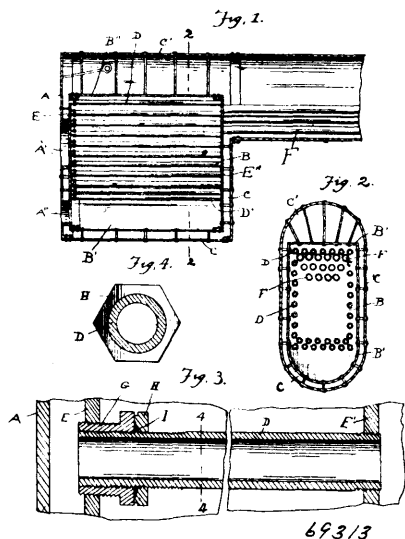
No. 69,313. Steam Boiler. (Chaudière à vapeur.)

John T Turnbow, Crossland, Kentucky, U.S.A., 14th November, 1900; 6 years. (Filed 24th October, 1900.)

Claim.—In a boiler, the combination with the front and rear heads of the fire box, each of which is provided with a row of screw threaded holes around each side of the top edges thereof and across near the bottom, the holes in one end being larger than in the other, of a series of tubes, each tube being of greater length than the distance the said heads are apart, and having each end screw

threaded, the thread at one end extending farther from the end than the other, the end having the shorter threads fitting in the smaller

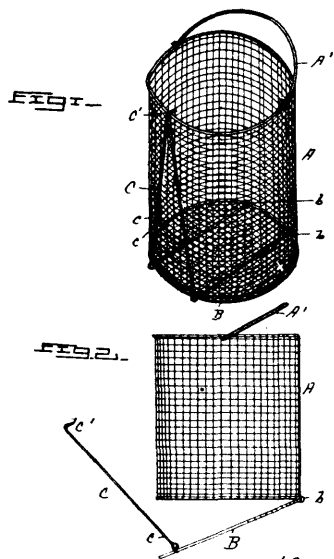
sprockets, transverse slats on said chains to place the butts of the sheaves and means to drive said sprockets, substantially as specified.



69313

holes, an interiorly and exteriorly screw threaded sleeve and a lock nut on the longer threads, the head of the sleeve being inward and a packing between said head and the lock nut.

No. 69,314. Culinary Vessel. (Ustensile de cuisine.)



69314

James H. Rose, Tiverton, Rhode Island, U.S.A., 14th November, 1900; 6 years. (Filed 24th October, 1900.)

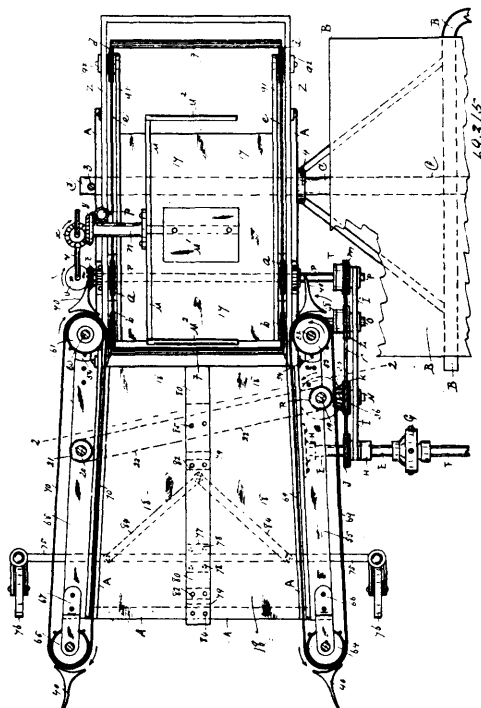
Claim.—A culinary vessel of the character described, having a downwardly swinging bottom provided with wires extending transversely under it and hinged at one end to the lower edge of the body, and a catch composed of a forked length of wire with its diverging ends hinged to the free ends of the transverse wires, and its opposite end bent to form a lip or catch to snap over or engage the upper edge of the basket.

No. 69,215. Grain Shocking Machine.

(Machine a engerber.)

Thomas A. Wooley and Herbert Fox, both of Hamilton, Ontario, Canada, 14th November, 1900; 6 years. (Filed 26th October, 1900.)

Claim.—1st. In a machine for shocking grain, a frame, sides secured to said frame by means of straps, an inner sheaf receptacle supported by said sides, at the receiving end of the machine, spaces formed between the said receptacle and said sides, at the upper ends of said receptacle, sprockets in said spaces and journaled in bearings on said sides and in the sheaf receptacle, chains on said



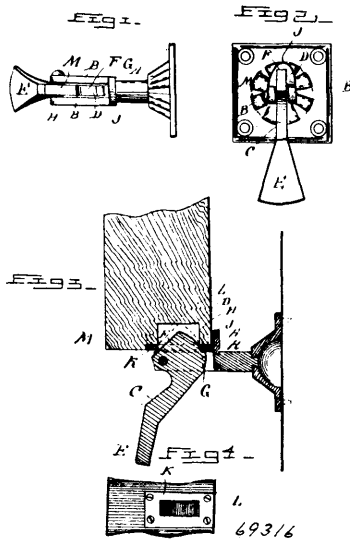
2nd. In a machine for shocking grain, a frame, sides secured to said frame, an inner sheaf receptacle supported by said sides, sprockets journaled between said sides and receptacle, chains on said sprockets, transverse slats on said chains, a spring board pivoted at the receiving end of the receptacle, said transverse slats capable of operating said spring board to place the butts of the sheaves downwards to allow the transverse slats to place the sheaves into the shock receptacle of the machine, and actuating mechanism for said sprockets, substantially as specified. 3rd. In a machine for shocking grain, a frame, sides secured to said frame, an inner sheaf receptacle supported by said sides, a bent trip lever with end crank suspended over the receiving end of the sheaf receptacle, a support for said trip lever, said support fastened to the receiving end of the machine, a stop lever pivoted to the side of the machine at the receiving end, a vertical rod connecting said lever and crank, the opposite end of said lever capable of releasing a catch on a clutch upon the reception of a sheaf which engages the said suspended bent rod to allow the sheaf to be placed into position by mechanism, substantially as specified. 4th. In a machine for shocking grain, a sheaf receptacle and a shock receptacle, supported by said frame, sprockets mounted on the upper ends of the sheaf receptacle, and on the outer sides thereof, chains on said side sprockets, lower side sprockets to receive said chains, and side rollers mounted on the lower part of the sides of the sheaf receptacle, said chains passing under said rollers, transverse slats on said chains, said rollers to allow freedom to transit to said slats, and an opening between the junction of the floors of said receptacles to allow the operation of the transverse slats, substantially as specified. 5th. In a machine for shocking grain, a frame, sides secured to said frame, an inner sheaf receptacle supported by said sides, sprockets mounted between said sides and receptacle, a lower transverse shaft below said receptacle and mounted on said frame, sprockets on said shaft, oppositely disposed chains engaging with said sprockets, side rollers pivoted to the lower part of said receptacle and adapted to guide said chains, transverse slats on the chains, a spring board pivoted to the receiving end of said receptacle, the transverse slats capable of engaging with the underside of said spring board at the reception of each sheaf, and to place the butt ends of the sheaves downwards, to allow said transverse slats to forward the sheaves, towards the discharging end of the machine, and actuating mechanism connected to said shaft, substantially as specified. 6th. In a machine for shocking grain, a frame, a sheaf receptacle and a shock receptacle secured on said frame, a bent trip lever suspended over the receiving end of said sheaf receptacle, a crank on the forward end of the horizontal part of said trip lever, a bent supporting rod for said trip lever, said supporting rod fastened to the receiving end of the machine, a stop lever pivoted to the side of the machine, at the receiving end thereof, a vertical rod connecting the end of said lever and crank, the opposite end of said lever capable of releasing a catch on a clutch, upon the reception of a sheaf which engages the said suspended bent rod, to allow the sheaf to be placed into position, oppositely dis-

posed sprockets mounted on the outer sides of the sheaf receptacle, a transverse shaft capable of revolving in bearing on said frame and underneath said shaft receptacle, sprockets on said shaft, chains with transverse slats on said sprockets, guide rollers at the receiving end of the sheaf receptacle for said chains, and actuating mechanism for said shaft, substantially as specified. 7th. In a machine for shocking grain, a frame, a sheaf receptacle secured to said frame, a vertical side post with lower extension transversely secured on said frame, a vertically adjustable transverse bearing on said post, a reel mounted on said bearing and immediately over the said receptacle, and means for revolving the reel one-half revolution at the reception of each sheaf in the receptacle, substantially as specified. 8th. In a machine for shocking grain, a frame, a sheaf receptacle secured to said frame, a reel capable of revolving over said receptacle, a vertical side post with lower part extending transversely on said frame and fastened thereto, vertically adjusting bearing on said post to support said reel, a main transverse drive shaft mounted on said frame and revolved by an attached binder machine, and actuating mechanism connecting said main shaft to said reel to revolve the same one-half turn at each reception of a sheaf, substantially as specified. 9th. In a machine for shocking grain, a frame, a sheaf receptacle secured to said frame, a reel, a vertical side post with lower extension transversely secured on the upper side of said frame, a transverse bearing on said post, said bearing capable of vertical adjustment, said reel capable of revolving with its shaft in said bearing, an inclined shaft capable of revolving in a lower bearing on said frame, an upper sleeve for said shaft, a vertically adjustable arm on said post, a slot in said arm to allow said arm to fasten to said incline shaft sleeve, a gear wheel secured on the shaft of the shaft of the reel, a gear wheel secured on said incline shaft to mesh into said wheel and drive the reel by actuating mechanism connected to said incline shaft to revolve the reel one-half revolution at the reception of a sheaf, substantially as specified. 10th. In a machine for shocking grain, a frame, sides secured to said frame, a vertical knotted shaft column and a vertical needle shaft column, said columns connected by an oblique tube secured to the underside of said frame, vertical shafts through said columns, collars on said shafts resting on the columns, said sides inclining towards the discharge end of the machine, outer flanges on said sides, and supported by said columns, horizontally inclined sprockets with chains supported by said flanges, at both ends thereof, horizontally inclined discharging arms, attached to said chains, and actuating mechanism connected to said sprocket at the receiving end of the shock receptacle, to revolve said discharging arms one-half revolution, substantially as specified. 11th. In a machine for shocking grain, a frame, a shock receptacle forming a part thereof, said receptacle widening out toward and to the discharging end thereof, the sides of said receptacle inclining toward and to the said discharging end flanges on said sides, sprockets mounted at both ends of said inclined flanges and supported by said flanges and capable of revolving with chains in line with said inclines, arms on said chains, vertically inclined shafts, at right angles to said chains, lower bearings secured to the frame for said shafts, the upper end of said shafts supported by said upper flange bearings, said upper incline sprockets secured on said incline shafts, lower sprockets on said shafts and in line, a chain connecting said sprockets, and actuating mechanism to revolve the chains with arms one-half revolution at the discharge of each shock, substantially as specified. 12th. In a machine for shocking grain, a frame, sides secured to said frame, a sheaf receptacle secured to said sides at the receiving end of the machine, said sides and frame widened out at the shock discharging end of the machine to facilitate the discharge of said shock, said sides of the shock receptacle inclining toward and to the discharging end of the machine to facilitate the discharge of the shock in a vertical position, and an opening formed between the floors of said receptacle, spaces formed between the ends of the grain receptacle and said sides, sprockets mounted on said spaces, transverse slats on the said sprocket chains to place the sheaves, said floor opening to allow said slats to operate, and mechanism to actuate said sprockets to revolve the same one half revolution at the reception of each sheaf, substantially as specified. 13th. In a machine for shocking grain, a frame, a sheaf receptacle and a shock binding and discharging receptacle supported on said frame, adjusting bars having a series of recesses, said bars secured to the underside of the frame immediately below said sheaf receptacle, a transverse tubefitting in any of the opposing said recesses to support the said part of the machine and to adjust the machine endways, said tube extending to and secured to a binder machine, a pin through the outer end of said tube to engage with the outer side of said adjusting bar, and a strap or collar on the said extending part of the tube to engage with the side of an adjusting bar next to the binder to hold the shock machine in position, substantially as specified. 14th. In a machine for shocking grain, a frame widened out at the discharging end and supported on castor wheels, sides secured to the frame, a shock receptacle between said sides, upper flanges on the sides to strengthen the same, vertical needle and knotted shaft columns in oblique position, oblique tube connecting said columns, said tube fastened to the underside of said frame, said flanges fastened to said columns, a main shaft in bracket bearing secured to one said side, said bearing projecting toward the binder machine to support said main shaft and the end of the connected bearings, a sprocket secured on said main power shaft, a transverse shaft supported at the receiving end of said connected bearing and in bearings on the frame, a sprocket mounted loosely on said trans-

verse power from the binder, a shaft in the bearing of the lower part of the knotted column, and in the lower part of said connected bearing, a sprocket mounted loosely on said shaft, an intermediate sprocket mounted loosely on a shaft journaled in said connected bearing and in a bearing secured to the frame, a chain connecting said sprockets, and mechanism connected to said sprockets to transmit power to the machine, substantially as specified. 15th. In a machine for shocking grain, a frame, sides secured to said frame, a sheaf receptacle in said sides at the sheaf receiving end thereof, a transverse spring board pivoted to the sides of said receptacle and extending to the end of the machine, coil tension springs on the pivotal ends of said spring board to incline said board toward the receiving end of the machine and retain said board in said incline position until actuated upon by described mechanism upon the reception of each sheaf, substantially as specified. 16th. In a machine for shocking grain, a frame, a vertical side post with transverse lower extension, secured on and to said frame, a reel suitably mounted on a transverse shaft, a transverse bearing secured to said post, said reel capable of revolving with its shaft in said bearing, a gear wheel secured on said shaft, an incline shaft in a lower bearing secured to said frame, a bearing or sleeve on said incline shaft, said bearing adjustably connected to an arm on said post, a gear wheel secured on said incline shaft above said sleeve, to mesh into the gear wheel on the said reel shaft, a gear wheel secured on the lower part of the incline shaft, a transverse shaft capable of revolving in bearings secured to said frame, a gear wheel on said transverse shaft to mesh into said lower wheel, a loosely revolving sprocket on the opposite end of the transverse shaft, said opposite end of the transverse shaft supporting the connected bearing, a clutch connected to said sprocket, a catch on said clutch and means to actuate to stop said clutch to revolve said reel one half revolution at the reception of each sheaf, substantially as specified. 17th. In a machine for shocking grain, a frame, sides secured to said frame, opposed incline shafts supported in bearing on the sides of said frame, a sprocket with bevel wheel to revolve loosely on the lower end of one said shaft, and below said frame, a bevel wheel secured on the same said shaft above said bearing, a shaft at right angles with said frame and journaled in said bearing, a connecting bearing secured to the frame as a bearing for the other end of said shaft, a sprocket to run loosely on said shaft, a clutch and bevel wheel secured on said shaft, said bevel wheel to drive said wheels on the incline shaft, a chain transversely connecting said lower sprockets on the incline shafts and mechanism to actuate said clutch to operate said discharge arm chains one-half revolution at the discharge of each shock, substantially as specified. 18th. In a machine for shocking grain, a frame, sides secured to said frame, a floor on said frame, said sides inclining to the end of said frame, vertically opposed inclined shafts on each side of the frame, and located at the beginning of said inclined sides, and at right angles therewith, bearings on the sides of the frame for the lower parts of said shafts, sprockets secured on the upper parts of said shafts, upper strengthening flanges on the incline sides, strap bearings secured to said flanges to support said shafts, sprockets at the discharging end of said flanges, strap bearing secured to said incline flanges to support said sprockets, chains connecting said sprockets, arms secured to said chains, to discharge the shock, sprockets secured to the lower ends of said shafts and a transversely operating chain connecting said lower sprockets, and means for actuating said chains with arms at the discharge of each shock, substantially as specified. 19th. In a machine for shocking grain, a frame, sides secured to said frame, vertical needle and knotted columns with lower oblique tubes fastened obliquely to the under side of said frame, vertical needle and knotted shafts supported by said columns, collars on said shafts resting on said columns, a cam on the knotted shaft collar, a vertical rod to engage with said cam, a horizontal stop bar, the lower end of said rod pivoted to said stop bar, a main drive shaft, collars on said shaft to hold loosely one end of said stop bar which is loosely connected on said shaft and between said collars, an incline lip on said vertical rod, said discharge arms to engage with said lip to lower said rod, a catch on a clutch secured on shaft O, the other end of said stop bar to engage with said catch at the said lowering of the vertical rod to cause said clutch to stop, and allow the discharge arm chains to stop, substantially as specified. 20th. In a machine for shocking grain, a frame, sides secured to said frame, an inner sheaf receptacle secured to said sides, sprockets mounted between said sides and receptacle, lower sprockets on a transverse shaft journaled on said frame, chains connecting said sprockets, chain guide rollers mounted on the lower receiving end of said receptacle, to engage with said chains, transverse slats on said chains to place the sheaves in position in the shock receptacle, a stop lever pivoted to a side of the machine, a branch on said lever, said transverse bars to engage with said branch to raise one end of said lever and cause the depression of the other end of said lever, a catch on a clutch secured to a transverse shaft, the depressed end of said lever to engage said catch to cause said transverse slats to stop at one-half revolution of the chains at the reception of each sheaf, substantially as specified. 21st. In a machine for shocking grain, a bent transverse tube, with casters suitably mounted on the ends thereof, a longitudinal plate, the central part of said plate fastened to the central part of said tube, an upper longitudinal plate, a frame, the needle and knotted columns, lower oblique tube fastened to said frame, one end of said longitudinal plate fastened to said oblique tube, and the other end of said oblique plate fastened to said

frame at the discharging end thereof, brackets fastened to the under side of said upper plate, near the ends thereof, and to the upper side of said lower plate, to conform therewith, a longitudinal rod passing through said brackets and secured thereto, as a pivoted centre to said transverse caster tube, and braces connecting said caster tube to said upper plate, to allow swivel side movement to the discharging end of the machine, substantially as specified.

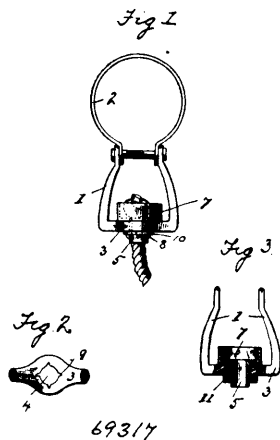
No. 69,316. Shutter Fastener. (*Arrête contrevent.*)



William Daniels Stansbury, Jenkintown, Pennsylvania, U.S.A., 14th November, 1900; 6 years. (Filed 24th October, 1900.)

Claim.—1st. In a shutter fastener, a gravitating head, an ear on which said head is eccentrically mounted, a securing shank carrying said ear, a weighted arm pendent from said head, an angular nose projecting upwardly from said head, the rear upper face of said nose being segmental, and a horizontal shoulder at the base of said rear upper face. 2nd. In a shutter fastener, a gravitating head, an upwardly projecting nose thereon, a horizontal shoulder at the base of rear upper face of said nose, a shank on which said head is mounted and a shoulder on said shank rearward of said shank on the head. 3rd. A shutter fastener, consisting of a gravitating head, an upwardly projecting nose thereon, a weighted arm pendent from said head, an ear on which said head is eccentrically mounted, a securing shank carrying said ear, a shoulder rising from said shank and a shoulder on said nose at the base of the rear upper face thereof.

No. 69,317. Swivel Connections. (*Joint d'embrillon.*)

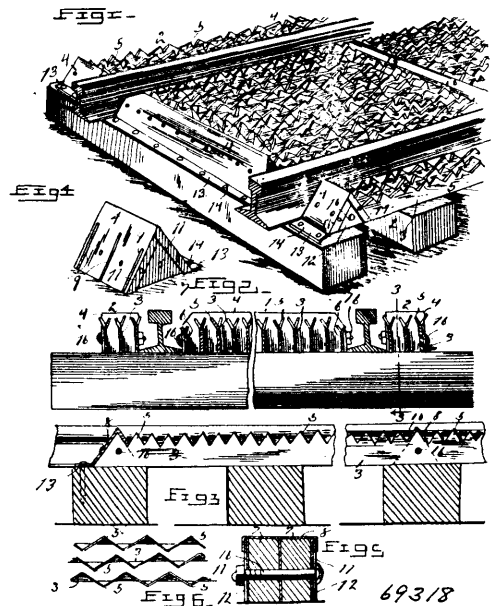


Norman Isachson, Albion, Idaho, U.S.A., 14th November, 1900; 6 years. (Filed 24th October, 1900.)

Claim.—1st. In combination, the clevis, the band pivotally connected to the arms thereof and a hollow thimble having free turning movement with means for rotating the same in the clevis and a rope or cable held by said thimble, substantially as described. 2nd. In combination, the clevis having an opening through the base thereof, a thimble extending through said opening having the head thereof seated on the face of said base with means for retaining the same

thereon, said thimble having free turning movement and a rope held by said thimble, substantially as described. 3rd. In combination, a clevis or loop having an opening through the base thereof, a hollow thimble extending through said opening having a shoulder or flange seated upon the inner face of the base to retain said thimble in position said thimble having free turning movement and a cable or rope extending through the thimble and held therein, substantially as described. 4th. In combination, the clevis or loop having an opening through the base thereof, a thimble having an enlarged part seated on said base and a shank extending through said opening said thimble having free turning movement and a cable or the like extending through the thimble having its end knotted to prevent its withdrawal through the thimble, substantially as described. 5th. In combination, a clevis or loop having an opening through the base thereof, a thimble having an enlarged portion seated on said base and a shank extending through said opening, ball bearings interposed between the thimble and the base, a nut threaded on said shank adapted to abut the base to retain said thimble in place and a cable or rope adapted to pass through said thimble and be held therein, substantially as described. 6th. In combination, a clevis or loop having an opening through the base thereof, a thimble having an enlarged portion seated on said base, and a shank extending through said opening, a nut threaded on said shank adapted to abut the base to retain said thimble in place and a cable or rope adapted to pass through said thimble and be held therein, substantially as described. 7th. In combination, the clevis having an opening through the base thereof, a thimble having an enlarged head and a shank extending through said opening and means adapted to find a bearing against the lower face of the clevis base for rotating the thimble in place, substantially as described.

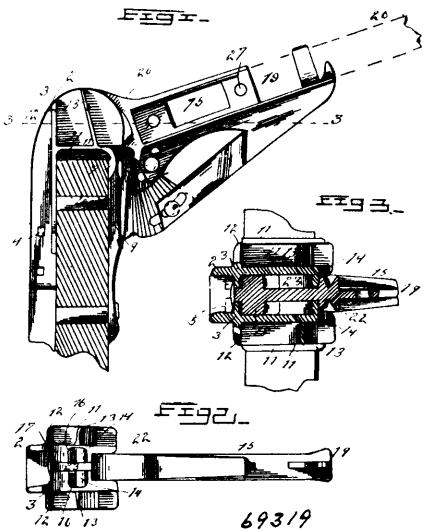
No. 69,318. Railway Cattle Guard. (*Garde-bétail de chemin de fer.*)



Smith Abernathy, Keener, Alabama, U.S.A., 14th November, 1900; 6 years. (Filed 24th October, 1900.)

Claim.—1st. A railway cattle guard, comprising longitudinal bars provided along their upper edges with teeth, and adapted to be set edgewise upon and across the ties, the combined supports and guards of substantially triangular shape, each having a filling a core of wood, and an inverted V-shaped covering of metal provided with kerfs extending from the bottom thereof upward and terminating short of the top, said cover being extended at the base and fastened to the ties, the toothed bars being inserted through said kerfs into the core, and a fastening device passing through the core and the bars, the said supports serving as the sole means of connection between the toothed bars and the ties, substantially as described. 2nd. A railway cattle guard comprising the longitudinal bars provided along their upper edges with teeth and set on edge across the ties, and the combined guards and supports of substantially triangular shape and of greater height than the bars, composed of a filling or core of wood made in sections, and a covering of metal, the metallic covering being extended at the base to provide attaching flanges to spike the supports in place, the metallic covering being provided with kerfs to receive the ends of the longitudinal bars, and the wooden blocks being located at opposite sides of the bars, and the transverse bolts passing through the blocks and bars, substantially as described.

No. 69,319. Hay Rack. (Rattelier à foin.)



69319

Eli White, Sodus, New York, U.S.A., 14th November, 1900; 6 years. (Filed 24th October, 1900.)

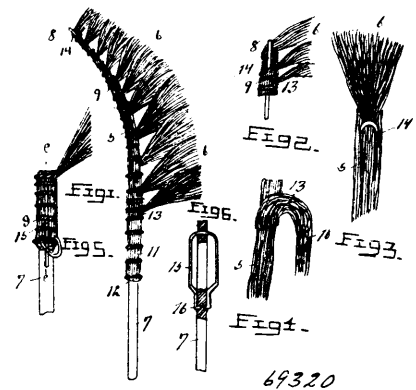
Claim.—1st. The combination of the post head having circular socket rims, with the arm holder having similar socket rims embracing those first named, and lugs fixed to the common bottom of one pair of the sockets adapted to bear on the interior of the other rims. 2nd. The combination of the post head having circular socket rims, with the arm holders having similar socket rims embracing those first named, and lugs fixed to the common bottom of one pair of the sockets adapted to bear on the interior of the other rims, said lugs being eccentrically situated in their respective sockets. 3rd. The combination of the post head having circular rims inclosing sockets, said rims being mutilated and provided with re-entrant guide portions, and the arm holder having rims rotatably mounted and bearing on the head socket rims, and lugs seated in sockets formed by the arm rims, formed by the arm rims, adapted to be entered through the head rims alongside the guides. 4th. In a detachable coupling two members having sockets formed by mutilated rims, the rims of one member rotatably bearing on those of the other, and lugs seated in the sockets embraced by the outer rims and bearing against the interior of the inner rims. 5th. In a detachable coupling, two members having sockets formed by mutilated rims, the rims of one member rotatably bearing on those of the other, and lugs seated in the sockets embraced by the outer rims and bearing against the interior of the inner rims, one of said members being rotatable about the other from an operative position to a position on the opposite side of the vertical to permit removal. 6th. In combination, the post, the post head having lugs 7, the bent plate provided with a head engaging the lugs of the post head and bolts securing the heads together. 7th. In combination, the post, the post head having lugs 7, the bent plate provided with a head engaging the lugs of the post head, and bolts securing the parts together, said post head being made in separate sections. 8th. In combination, the post, the post head having lugs 7, the bent plate provided with a head engaging the lugs of the post head, and bolts securing the parts together, said post head having lugs entered in a slot in the post.

No. 69,320. Broom. (Balai.)

William Fackbner, Schoolcraft, Michigan, U.S.A., 14th November, 1900; 6 years. (Filed 24th October, 1900.)

Claim.—1. A broom, comprising bunches of broom corn laid upon each other in a manner to increase the length of the structure, some of the bunches being thrown out laterally to form the brush portion of the broom, a cord wound between the brushes and around the bunches, locks of broom corn folded over a strand or wind of the cord at the brushes, and carried around said brushes, and bound down on the body of the broom by the winding cord, and a handle bound in the end of the body of the broom and a hair-pin-like wire attaching said handle to the body, substantially as set forth. 2nd. A broom comprising bunches of broom corn laid upon each other in a manner to increase the length of the structure, some of the bunches being thrown out laterally forming the brush portion of the broom, a cord wound around the bunches which form

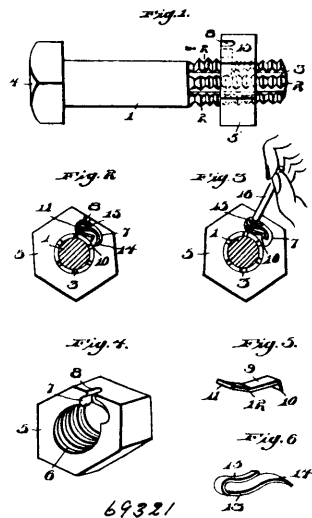
the body, and a hair-pin shaped wire astride of the uppermost brush and buried and wound in the body to stiffen the same and



69320

hold the upper brush in a bent-over position, substantially as set forth.

No. 69,321. Nut Lock. (Arrête-écrou.)



69321

Fred C. Shellito, Remington, Pennsylvania, U.S.A., 14th November, 1900; 6 years. (Filed 25th October, 1900.)

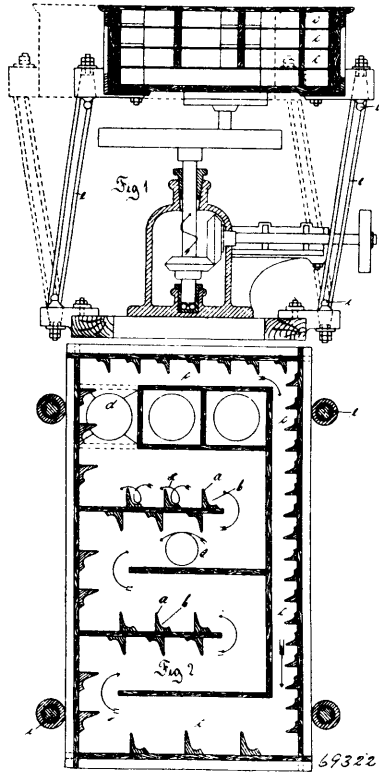
Claim.—In a nut lock, the combination with the bolt provided in its threaded portion with a series of longitudinally extending grooves, of a nut mounted upon said bolt and provided with an internal recess 7 registering with the threaded opening of the nut and with a smaller opening 8 provided in the exterior of the nut, a fastening plate adapted to be arranged within the internal recess of the nut and provided at one end with a downwardly extending tapering barb and having its other end bent at an incline in the opposite direction to the barb, and a substantially S-shaped spring adapted to be located within the internal recess of the nut on top of the fastening plate to hold the barb thereof in engagement with one of the grooves of the bolt and its other leg frictionally engaging the wall of the recess, as and for the purpose set forth.

No. 69,322. Bolting Apparatus. (Blutoir.)

Louis Graf, Obermüller, Munich, Bavaria, Germany, 14th November 1900; 6 years. (Filed 24th October, 1900.)

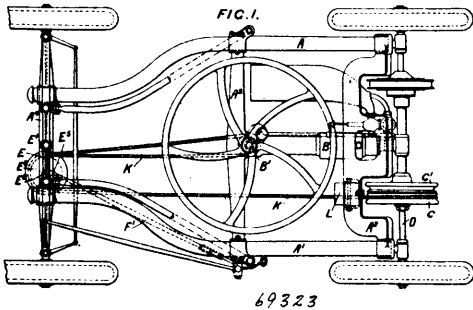
Claim.—1st. In a bolting apparatus with parallel crank motion, combination of transporting blade *a* provided with a tail *b* curved in a direction opposite to that of the motion of the material, in order to prevent a clogging up of the corners between the sieve and blades. 2nd. In a bolting apparatus having parallel crank motion, the combination of a path *c* leading from the outlet of the sieve around the same back to the inlet, and returning the granular cleaning material

into the apparatus over the sieves. 3rd. In a bolting apparatus having parallel crank motion, the combination of a series of yielding



rods to support the sieve box and enabling the circular motion of the latter.

No. 69,323. Transmission Gear for Self-Propelled Vehicles. (*Engrenage pour voitures à propulsion automatique.*)

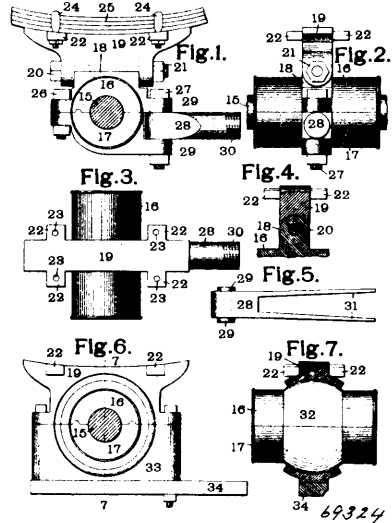


William Baines, 22 Victoria Road, Crosby, near Liverpool, England, 14th November, 1900; 6 years. (Filed 14th August, 1900.)

Claim.—1st. In transmission gear for self-propelled vehicles, the combination with a driven pulley at one end of the vehicle, two idler pulleys at the opposite end adapted to be simultaneously moved toward or from the driven pulley and a rope passing around the several pulleys. 2nd. In a transmission gear for self-propelled vehicles, the combination with an engine placed approximately in the longitudinal centre of the vehicle and two idler pulleys running in opposite directions and one or both of them adjustable at the other end of the vehicle, of a rope or equivalent power transmitter connecting these parts and having separate runs passing around the respective idler pulleys, substantially as and for the purposes described. 3rd. In a transmission gear for self-propelled vehicles, the combination with a driven pulley, two idler pulleys adapted to be simultaneously moved toward or from the driven pulley, a driving pulley arranged intermediate of the driven pulley and the idler pulleys, and a rope passing around the various pulleys in the manner set forth. 4th. In a transmission gear for self-propelled vehicles, the combination with a driven pulley, two idler pulleys, an arm at one end, two idler pulleys carried by the opposite end of

the arm, a rod connected at one end to the said arm, and an operating lever connected with the opposite end of the rod, a driving pulley, and a rope passing around the several pulleys, as set forth.

No. 69,324. Spring Bearing. (*Coussinet à ressort.*)



Henry Frederick Borbein, St. Louis, Missouri, U.S.A., 14th November, 1900; 6 years. (Filed 20th August, 1900.)

Claim.—1st. The combination with an axle bearing, of a spring block carried thereby, lugs on said spring block for securing it to a spring, and means for securing a reach to said bearing. 2nd. The combination with a rotating axle, of a bearing therefor, and a spring block pivoted to said bearing so as to swing in a plane, substantially parallel with said axle. 3rd. The combination with a rotating axle, of a bearing therefor, and a reach pivotally secured to said bearing so as to swing in a plane substantially parallel with said axle. 4th. The combination with an axle bearing, of a spring block carried by said bearing, means for permitting movement between said spring block and bearing, means for securing a reach to said bearing, and means for permitting movement between said reach and bearing. 5th. The combination with an axle bearing, of a spring block pivotally mounted on said bearing, and a reach pivotally secured to said bearing. 6th. The combination with an axle bearing, of a reach, a bolt pivoting said reach to said bearing, and a wearing surface between said reach and bearing independent of said bolt.

No. 69,325. Motive Power Apparatus. (*Appareil moteur.*)

Robert Cooke Sayer, Engineer, 11 Clyde Road, Redland, Bristol, County of Gloucester, England, 14th November, 1900; 6 years. (Filed 7th August, 1899.)

Claim.—1st. A motive power apparatus consisting of a toothed wheel, a lever mounted to oscillate opposite the teeth of the wheel, a means for oscillating the lever, a movable end to the lever and a means for operating the movable end so that at one extreme position of the lever it is placed in gear with the teeth and at the other extreme position withdrawn out of gear. 2nd. A motive power apparatus consisting of two parallel toothed wheels, a shaft connecting the two wheels, a lever mounted on an axis at right angles to the lever and having its ends adapted to gear with the teeth of the wheels at opposite points, a means for oscillating the lever, a means for oscillating the lever ends, jointed ends to the lever adapted to move transversely to the lever oscillations to gear with the teeth or be withdrawn, and a valve switch or equivalent operated by the oscillating lever and by the oscillating lever end to control means for oscillating the lever and lever ends. 3rd. A motive power apparatus consisting of a wheel, of two or more concentric sets of teeth on the wheel, a lever mounted on a slide and adapted to be moved opposite any set of teeth, a means for oscillating the lever, a lever end jointed to the lever, a means for oscillating the lever end at right angles to the lever to gear it with or ungear it from the teeth, and a means for traversing the lever on its guides from one series of concentric teeth to another. 4th. A motive power apparatus consisting of a toothed wheel, two or more levers mounted to

oscillate opposite the teeth of the wheels, a means for oscillating the lever movable ends to the levers, a means for operating the movable

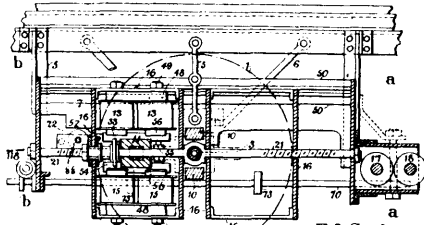


FIG. 1.

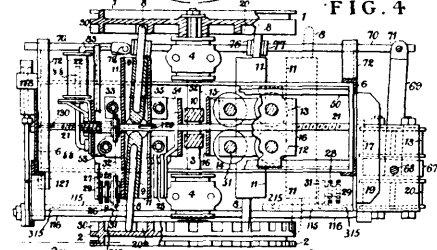
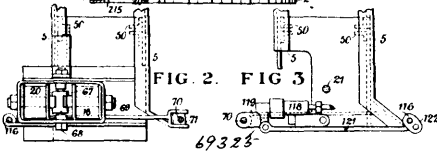


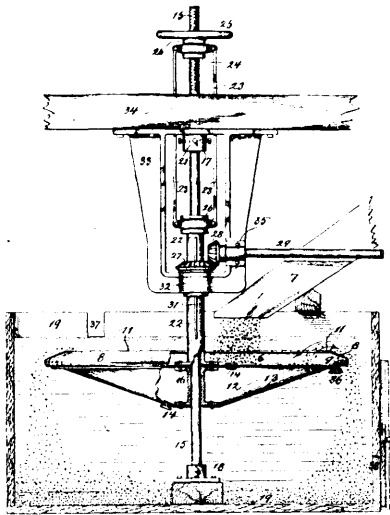
FIG. 2. FIG. 3.



69325

ends to gear or ungear with the teeth and a means for connecting the levers so that the power applied to both levers is transmitted to the working lever.

No. 69,326. Ore Separator. (*Séparateur de minéral.*)



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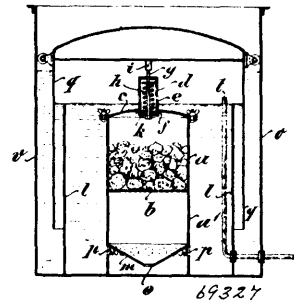
Harry C. Robinson, Cincinnati, Ohio, U.S.A., 14th November, 1900; 6 years. (Filed 3rd August, 1899.)

Claim.—1st. In a centrifugal separator, the combination of a horizontally supported pan, consisting substantially of a flat bottom having an annular pocket 9, formed at its outer edge, and means to rotate said pan in a manner that by reason of the ensuing centrifugal force developed, matter resting upon the bottom of the pan will slide outwardly thereon until arrested and received by pocket 9. 2nd. In an ore separator, the combination of a body of water, a pan with an annular pocket 9, horizontally supported below the surface of such water, and means to rotate the pan. 3rd. In an ore separator, the combination of a body of water, a pan with an annular pocket 9, horizontally supported below the surface of such water, means to rotate this pan, an upright post serving as a centre of such rotation and holding the pan to its proper position, and an air chamber under this latter to aid in sustaining the same at a certain level. 4th. In an ore separator, the combination of a body of water, a pan with an annular pocket 9, an upright post on which it is horizontally supported, means to rotate this pan and means to adjust

the position thereof horizontally and with reference to the water level. 5th. The method of separating in a mineral conglomerate the heavier from the lighter substances, which consists in subjecting the mass to rotation while supported upon a pan submerged in water and provided with an annular pocket, the water causing the mass to disintegrate, after which the same is thrown outwardly by centrifugal force, the heavier matter remaining on the bottom and sliding thereon into the pocket of the pan, while the lighter matter is carried with the water over the edge of the same. 6th. In an ore separator, the combination of an upright post, a hub mounted thereon, a pan horizontally supported on this hub, an annular pocket provided at the outer edge of this pan and means to rotate this latter. 7th. In an ore separator, the combination of an upright post, a hub mounted thereon, a pan horizontally supported on this hub, an annular pocket provided on this pan, a sleeve 22, connected to the hub, and a pair of bevel wheels, one mounted on sleeve 22, to effect rotation of the pan. 8th. In an ore separator, the combination of an upright post, a hub mounted thereon in a manner to be capable of a sliding adjustment, a pan horizontally supported on this hub and provided with an annular pocket, a sleeve connected to this hub, and a hand wheel mounted on the upper portion of the post which is screw threaded thereat and operatively connected to the device for the purpose of raising or lowering the same. 9th. In an ore separator, the combination of a horizontally supported pan, means to rotate the same and an annular pocket at the outer edge thereof, formed by turning up such edge and attaching thereto an upwardly and inwardly projecting rim 8. 10th. In an ore separator, the combination of an upright post supported in bearings 17 and 18, a hub mounted thereon, a pan horizontally supported on this hub, a sleeve connected to this latter, a pair of bevel wheels, one operatively connected to the sleeve and supported in a bearing 32, a shaft 29, driving the other bevel wheel and supported at one of its ends in a bearing 35, and a bracket 33, containing bearings 35, 32 and 17.

No. 69,327. Acetylene Gas Generator.

(*Générateur de gaz acétylène.*)



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Hans Berger, 15-16 Kaiserin Augusta Allee, Berlin, Germany, 14th November, 1900; 6 years. (Filed 29th August, 1899.)

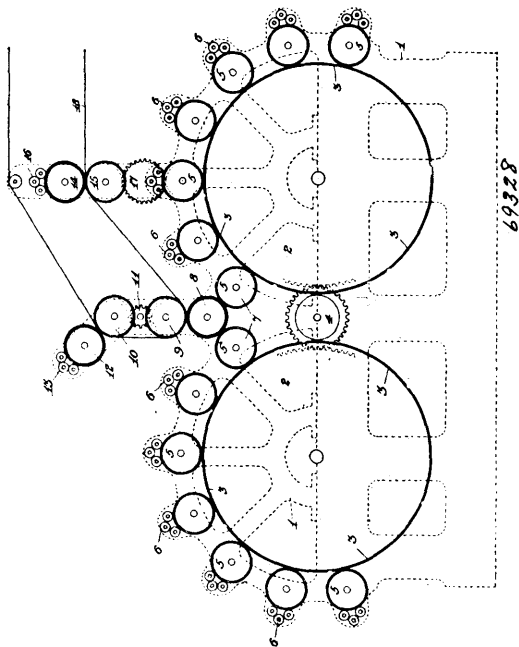
Claim.—1st. In an acetylene gas generating apparatus, the combination with the vertically movable water sealed gas reservoir, of an inner water holding tank, a carbide holder mounted in said tank, surrounded by and communicating with the water in the tank, a water inlet arranged to communicate with the interior of the carbide holder, and a self closing gas outlet valve adapted to be opened by the movement of said gas reservoir, whereby the flow of water into the carbide holder through said water inlet is controlled, substantially as described. 2nd. In an acetylene gas generating apparatus, the combination of the removable perforated holder or receiver containing the calcium carbide closed at its upper end and having an opening in the lower end for the passage of water and the gas generator, a water holding tank surrounding the said holder and in communication with the carbide through the said opening in the holder, a self closing valve communicating with the interior of the holder, a vertically movable water sealed gasometer or reservoir surrounding and enclosing said tank, holder and valve, arranged to open the latter when the supply of gas in the reservoir is nearly exhausted, thereby allowing the water to unite with the carbide to generate acetylene gas and re-charge the reservoir, substantially as hereinbefore described. 3rd. In an acetylene gas generator, a shell for containing water, a vertically movable gasometer, and a tank which is submerged in the water and provided with a valve in its top, and an opening through its bottom, combined with a carbide holder placed in said tank, and means for operating the valve when the gasometer descends, substantially as shown.

No. 69,328. Printing Machine. (*Machine à imprimer.*)

Johnson Ross Corbin, Philadelphia, Pennsylvania, U.S.A., 14th November, 1900; 6 years. (Filed 14th March, 1900.)

Claim.—1st. In a printing machine, means for imparting a multi-colour print at a single impression, a plurality of carriers each carrying a plurality of surfaces each inked in multi-colour, and means for transferring said inkings successively to the printing means, each

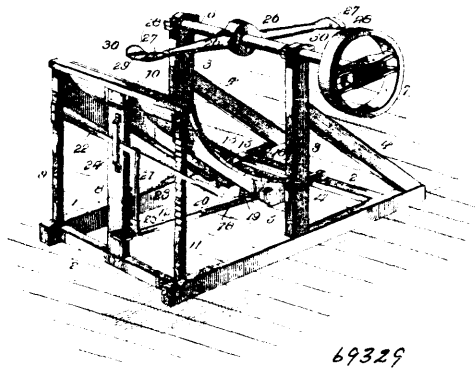
single combined transfer from said surfaces constituting a complete inking for a single impression. 2nd. In a printing machine, means



for imparting a complete multi-colour print at a single impression, a plurality of carriers each carrying a plurality of surfaces each inked in multi-colour, and means for transferring said inkings successively to the printing means, each single combined transfer from said surfaces constituting a complete inking for a single impression. 3rd. In a printing machine, a single printing cylinder carrying a suitable form or plate for imparting a multicolour print at a single impression, a plurality of cylinders each carrying a plurality of surfaces each inked in multi-colour, and means for transferring said inkings successively to the printing cylinder, each single combined transfer from said surfaces constituting a complete inking for a single impression. 4th. In a printing machine, a single printing cylinder carrying a suitable form or plate for imparting a complete multi-colour print at a single impression, a plurality of cylinders each carrying a plurality of surfaces each inked in multi-colour, and means for transferring said inkings successively to the printing cylinder, each single combined transfer from said surfaces constituting a complete inking for a single impression. 5th. In a printing machine, means for imparting a multi-colour print at a single impression, a plurality of carriers each carrying a plurality of surfaces each inked in multi-colour, and intermediate transfer surfaces receiving the supplies of inks and transmitting them successively to the printing means, each single combined transfer from said intermediate surfaces constituting a complete inking for a single impression. 6th. In a printing machine, means for imparting a multi-colour print at a single impression, a plurality of cylinders for assembling a plurality of supplies of ink in multi-colour, and intermediate transfer cylinders receiving the supplies of ink and transmitting them successively to the printing surface, each single combined transfer of said intermediate cylinders constituting a complete inking for a single impression. 7th. In a printing machine, a single printing surface for imparting a multi-colour print at a single impression, a plurality of cylinders for assembling a plurality of supplies of ink in multi-colour, and intermediate transfer cylinders receiving the supplies of inks and transmitting them successively to the printing surface, each single combined transfer of the intermediate cylinders constituting a complete inking for a single impression. 8th. In a printing machine, a single printing cylinder carrying a suitable form or plate for imparting a multi-colour print at a single impression, two transfer cylinders for assembling a plurality of supplies of ink in multi-colour, and intermediate transfer cylinders receiving the supplies of inks and transmitting them successively to the printing cylinder, each single combined transfer of said intermediate cylinders constituting a complete inking for a single impression. 9th. In a printing machine, a single printing surface for imparting a multi-colour print at a single impression, a plurality of cylinders each carrying a plurality of transfer surfaces, a plurality of pattern design forms for each transfer cylinder successively contacting with the transfer surfaces thereon, a separate inking train for each pattern design form, an intermediate transfer cylinders receiving the supplies of inks from the transfer surfaces and transmitting them successively to the printing surface, each single combined transfer of the intermediate cylinders constituting a complete inking for a single impression. 10th. In a printing machine, a single printing surface for imparting a

multi-colour print at a single impression, a plurality of cylinders each carrying a plurality of yielding planographic transfer surfaces, cylinders carrying a plurality of pattern design forms successively contacting with said transfer surfaces, and intermediate transfer cylinders receiving the supplies of inks from said transfer surfaces and transmitting them successively to the printing surface, each single combined transfer of the intermediate cylinders constituting a complete inking for a single impression. 11th. In a printing machine, the combination of a single printing surface for imparting to a web or sheet a multi-colour print at a single impression, a plurality of transfer surfaces for assembling each a plurality of supplies of ink in multi-colour, intermediate transfer surfaces receiving the supplies of inks and transmitting them successively to the printing surface, each single combined transfer of said intermediate surfaces constituting a complete inking for a single impression, a printing couple for imparting to said web or sheet an impression on the opposite side, and a printing couple for imprinting the design to complete the multi-colour print in register after the imprint of said multi-colour print. 12th. In a printing machine, the combination of a single printing surface for imparting to a web or sheet a complete multi-colour print at a single impression, a plurality of transfer surfaces for assembling a plurality of supplies of ink in multi-colour, intermediate transfer surfaces receiving the supplies of inks and transmitting them successively to the printing surface, each single combined transfer of said intermediate surfaces constituting a complete inking for a single impression, a printing couple for imparting to said web or sheet an impression on the opposite side, and a printing couple for imprinting the design to complete the multi-colour print in register after the imprint of said multi-colour print. 13th. In a printing machine, the combination of a single printing cylinder carrying a suitable form or plate for imparting to a web or sheet a multi-colour print at a single impression, two transfer cylinders for assembling a plurality of supplies of ink in multi-colour, intermediate transfer cylinders receiving the supplies of inks and transmitting them successively to the form or plate on the printing cylinder, each single combined transfer of said intermediate cylinders constituting a complete inking for a single impression, a printing couple for imparting to said web or sheet an impression on the opposite side, and a printing couple for imprinting the design to complete the multi-colour print in register after the imprint of said multi-colour print. 14th. In a printing machine, the combination of a single printing cylinder carrying a suitable form or plate for imparting to a web or sheet a complete multi-colour print at a single impression, two transfer cylinders for assembling a plurality of supplies of ink in multi-colour, intermediate transfer cylinders receiving the supplies of inks and transmitting them successively to the form or plate on the printing cylinder, each single combined transfer of said intermediate cylinders constituting a complete inking for a single impression, and a printing couple for imparting to said web or sheet an impression on the opposite side.

No. 69,329. Leather Working Machine. (*Machine pour travailler le cuir.*)

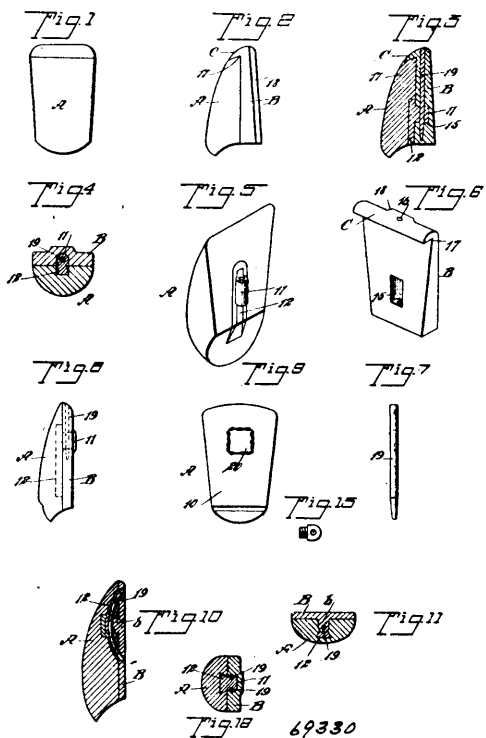


James Henry Topp and Edwin Vosburg, both of Johnston, New York, U.S.A., 15th November, 1900; 6 years. (Filed 22nd June, 1900.)

Claim.—1st. In machinery for working leather and the like, and in combination with a staking mechanism, an apron, a tension device having one end of the apron connected therewith, and mounted for tilting movement, an operating lever, a spring positively connected at its ends with, respectively, the tension device and the operating lever, and means for holding the lever in an adjusted position to vary the tension of the said connecting spring and apron, substantially as set forth. 2nd. In leather working machinery of the character described and in combination with a staking mechanism, a tension regulating device at one end of the apron and connected therewith and mounted so as to turn about an axil support, an operating lever, a spring connecting the tension device with the operating lever, and a second spring disposed for returning the tension device to a normal position when the operating lever is released, substantially as specified. 3rd. In leather working machinery and in combination with a staking mechanism,

an apron a pivotally mounted tension device disposed to vary the relation of the apron with reference to the staking mechanism, an operating lever, a spring connecting said lever with the tension device, a hand lever operatively connected with the first mentioned lever, and a spring for returning the parts to a normal position, substantially as set forth. 4th. In leather working machinery, staking mechanism including an arm having its outer end flattened, outwardly flared and transversely curved, a blade transversely curved and having its edge made rounding or convex and formed with parallel slots, and fastenings adjustably connecting the blade with the outer end of the aforesaid arm, substantially as described. 5th. A machine of the character described, comprising a base, uprights forming the base, staking mechanism applied to the upper ends of the uprights, a cross timber connecting the uprights, concave beds transversely spaced and having their lower ends attached to the cross timber, an apron located in the space formed between said beds, a pivotally mounted cam having the lower end of the apron attached thereto, a foot lever, a spring connecting one end of the cam with the foot lever, a second spring connecting the opposite end of the cam with the said cross timber, a hand lever connected with the foot lever, and a spring for returning the parts to a normal position, substantially as set forth.

No. 69,330. Backing and Crowns for Artificial Teeth.
(*Couronne pour dents artificielles.*)



Cephas Whitney, Kingston, Jamaica, British West Indies, 15th November, 1900; 6 years. (Filed 19th April, 1900.)

Claim.—1st. A tooth, composed of a facing and a backing, one of which has a recess and a bore leading thereto, while the other has a lug fitting the recess and a locking pin passing through the bore and locking the lug, substantially as described. 2nd. A tooth, composed of a facing and a backing, one of which has a recess and a bore leading thereto, while the other has a lug fitting the recess and a locking pin passing through the bore and locking the lug, the backing having at one end a projection extending over the facing to form a crown therefor, substantially as described. 3rd. A tooth, composed of a facing and a backing, one of which has a recess and a bore leading thereto, while the other has a lug fitting the recess and a locking pin passing through the bore and locking the lug, the lug and the bores adapted to receive the same, being curved, substantially as described.

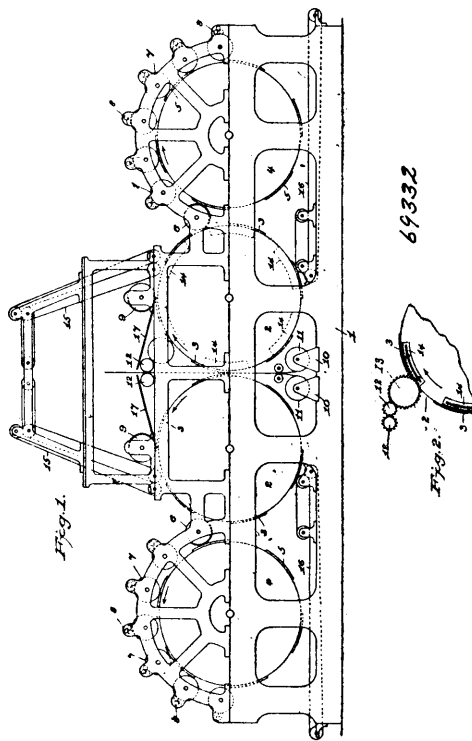
No. 69,331. Food Product. (*Produit alimentaire.*)

Illius Augustus Timmis, London, Middlesex, England, 15th November, 1900; 6 years. (Filed 27th March, 1900.)

Claim.—Process of extraction of nutritive substances from the bones and sinews of beasts, birds and fish, consisting in treating with water at a temperature not exceeding 50 degrees C., the bones and sinews ground to a fine paste for the purpose of extracting the coagulable (albuminous) nutritive substances, the residuum of

this operation being then subjected to a further extraction at a temperature of 100 degrees C. or more for the purpose of obtaining further nutritive substances, (soluble phosphates and other salts) the extracted product to be used by itself or with other extracts or with flesh.

No. 69,332. Printing Machine. (*Machine à imprimer.*)



Johnson Ross Corbin, Philadelphia, Pennsylvania, U.S.A., 15th November, 1900; 6 years. (Filed 14th March, 1900.)

Claim.—1st. In a printing machine, a plurality of inking trains, a plurality of ink transferring surfaces, each adapted to successively receive a complete supply of ink for a single impression from said trains, a design surface receiving successive complete inkings from each of said transferring surfaces, and means for transferring the inked designs from said design surface onto the paper to be printed. 2nd. In a printing machine, a plurality of inking trains, a plurality of ink transferring surfaces adapted to receive inks of different colours in register from said trains, a design surface receiving successive complete inkings from each of said transferring surfaces, and means for transferring the inked designs from said design surface onto the paper to be printed. 3rd. In a printing machine, a plurality of inking trains, a plurality of ink transferring surfaces adapted to receive inks from said trains, a design surface receiving successive complete inkings in register from each of said transferring surfaces, and means for transferring the inked designs from said design surface onto the paper to be printed after any predetermined number of inkings. 4th. In a printing machine, a plurality of inking trains, a plurality of ink transferring surfaces adapted to receive inks of different colours in register from said trains, a design surface receiving successive complete inkings in register from each of said transferring surfaces, and means for transferring the inked designs from said design surface onto the paper to be printed after any predetermined number of inkings. 5th. In a printing machine, a plurality of inking trains, a plurality of ink transferring surfaces adapted to receive inks from said trains, a design surface receiving successive complete inkings from each of said transferring surfaces, and printing surfaces adapted to successively receive inked designs from said design surface and impart them to the paper to be printed. 6th. In a printing machine, a design surface, means for imparting successive inkings in register to the entire surface of said design, and printing surfaces adapted to successively receive inked designs from said design surface after any predetermined number of inkings. 7th. In a printing machine, a design surface, means for imparting successive inkings in multi-colour design in register to the entire surface of said design, and printing surfaces adapted to successively receive inked designs from said design surface after any predetermined number of inkings. 8th. In a printing machine, a plurality of inking trains, a plurality of ink transferring surfaces adapted to receive inks from said trains, a design surface receiving successive inkings in register over its entire surface from said transferring surfaces, and printing surfaces adapted to

successively receive inked designs from said design surface after any predetermined number of inkings. 9th. In a printing machine, a plurality of inking trains, a plurality of ink transferring surfaces adapted to receive inks of different colours in register from said trains, a design surface receiving successive inkings in multi-colour design in register over its entire surface from said transferring surfaces, and printing surfaces adapted to successively receive inked designs from said design surface after any predetermined number of inkings. 10th. In a rotary printing machine, a cylinder carrying a plurality of yielding ink transferring surfaces, a plurality of inking trains, a plurality of pattern design forms contacting with said surfaces to successively deliver ink thereto in pre-determined forms from said inking trains, a cylinder carrying a relief design also contacting with said surfaces to receive successive inkings therefrom over its entire design surface, and means for transferring the inked designs from said design surface onto the paper to be printed. 11th. In a rotary printing machine, a cylinder carrying a plurality of yielding ink transferring surfaces, a plurality of inking trains, a plurality of pattern design forms contacting with said surfaces to successively deliver inks of different colours in register thereto in pre-determined forms from said inking trains, a cylinder carrying a relief design also contacting with said surfaces to receive successive inkings in multi-colour designs therefrom, and means for transferring the inked designs from said design surface onto the paper to be printed. 12th. In a rotary printing machine, a cylinder carrying a single relief design, means for imparting successive complete inkings to said design, a cylinder carrying a plurality of yielding planographic printing surfaces adapted to successively contact with the design on said design cylinder and receive ink impressions therefrom, and means for printing from said printing surfaces. 13th. In a rotary printing machine, a cylinder carrying a relief design, means for imparting successive complete multi colour inkings in register to said design, a cylinder carrying one or more yielding planographic printing surfaces adapted to successively contact with the design on said design cylinder and receive ink impressions therefrom, and means for printing from said printing surfaces. 14th. In a rotary printing machine, a cylinder carrying a relief design, means for imparting successive complete inkings to register to said design, a cylinder carrying a series of removable yielding planographic printing surfaces adapted to successively contact with the design on said design cylinder and receive ink impressions therefrom, and means for printing from said printing surfaces. 15th. In a rotary printing machine, a cylinder carrying a plurality of yielding planographic printing surfaces, means for imparting ink designs to said surfaces, and a cylinder carrying a yielding planographic surface adapted to contact with said printing surfaces between which paper may be fed to receive impressions. 16th. In a rotary printing machine, two cylinders rotating in unison and each provided with a plurality of yielding planographic surfaces adapted to contact, and means for imparting to said surfaces ink impressions, whereby a plurality of double impressions may be simultaneously imparted to paper fed therebetween for each rotation of said cylinders. 17th. In a rotary printing machine, two cylinders rotating in unison and each provided with a plurality of yielding planographic surfaces adapted to contact, a relief design cylinder for each said cylinder and contacting with the surfaces thereon, means for inking said design cylinder before the contact of each yielding surface there-with, and means for passing webs of paper between said yielding surfaces to receive impressions therefrom. 18th. In a rotary printing machine, two cylinders rotating in unison and each provided with a plurality of yielding planographic surfaces adapted to contact, means for imparting to said surfaces ink impressions, means for passing webs of paper between said yielding surfaces, and means for intermittently feeding along said webs between impressions. 19th. In a rotary printing machine, two cylinders rotating in unison and each provided with a plurality of removable yielding planographic surfaces adapted to contact and between which the paper to be printed may be fed, a design cylinder for each said cylinder and contacting with said surfaces, a cylinder for each design cylinder carrying a plurality of yielding ink transferring surfaces adapted to contact with said design cylinder, a plurality of pattern design forms contacting with said ink transferring surfaces, and a plurality of inking trains, one for each pattern design form, whereby inks of different colours may be imparted to said pattern design forms and from them to the ink transferring surfaces in predetermined forms to constitute a single complete inking on each ink transferring surface, said inkings being transferred in turn to the design cylinder, from which an inked design is transferred to each planographic surface, from which it is imparted to the paper to be printed.

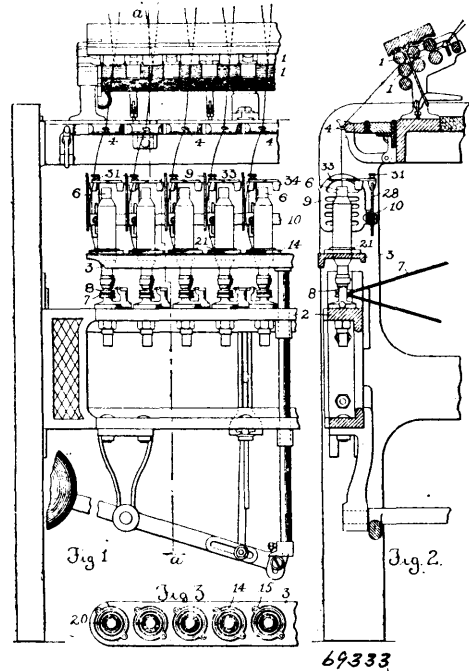
No. 69,333. Spinning and Twisting Machines.

(Machine à retordre le fil.)

Victor Belanger, Sea View, Massachusetts, U.S.A., 15th November, 1900; 6 years. (Filed 8th January, 1899.)

Claim.—1st. In a spinning or twisting frame, a rotatable ring freely yielding in any direction under unbalanced strains. 2nd. The combination of a rotatable ring capable of radial movement relatively to the spindle under the stress of the yarn, and means for limiting the movement of the ring. 3rd. The combination of a rotatable ring capable of axial movement relatively to the spindle under the stress of the yarn, and means for limiting the movement of the ring. 4th. The combination of a ring casing, and a rotatable ring capable

of radial movement relatively to said casing. 5th. The combination with a ring casing, of a rotatable ring loosely confined by said casing



to yield perceptibly laterally. 6th. In combination, a rotatable ring and a casing with a space between them to admit of radial movement of said ring relatively to the casing. 7th. The combination with a ring casing, of a ring rotatable by the yarn and capable of axial and radial movement relatively to the casing. 8th. The combination of a rotatable ring, and a ring casing, there being a space between the ring and the casing whereby the ring is capable of radial and axial movement when in operation. 9th. The combination of a rotatable ring and yielding means for limiting the radial movement of said ring. 10th. The combination of a rotatable axially movable ring, and yielding means for limiting the axial movement of said ring. 11th. The combination of a rotatable ring capable of radial movement, and yielding means for limiting the radial movement of said ring. 12th. The combination of a rotatable ring capable of radial and axial movement, and a yielding casing for said ring. 13th. The combination of a yieldingly supported ring casing, and a ring capable of movement relatively to said casing. 14th. The combination of a rotatable ring, and a yieldingly supported casing for said ring. 15th. The combination of a ring casing and a ring movable radially and axially relatively to said casing, said ring and casing having adjacent surfaces curved in the direction of their axes. 16th. A drag for a spinning or twisting frame consisting of a bell shaped ring. 17th. A drag for a spinning or twisting frame consisting of a bell shaped ring having a race to receive a traveller. 18th. The combination of a radially movable ring, means for limiting the radial movement of said ring, and a traveller revolvable on said ring. 19th. The combination of a ring axially and radially movable relatively to the spindle, said ring having a race, a traveller revolvable about the said race, and means for limiting the described movement of said ring. 20th. The combination of a rotatable ring having a race, a traveller revolvable about said race, and yielding means for limiting the radial or axial movement of said ring. 21st. The combination with a rail and a yarn drag supported thereon, of a ballooning regulator carried by the rail and adapted to enclose the bobbin, said regulator having rocking weighted arms for releasing the bobbin when moved laterally. 22. The combination with a rotatable ring, capable of axial movement relatively to the spindle under the stress of the yarn, and means for limiting the movement of the ring, of a device for regulating the ballooning of the yarn.

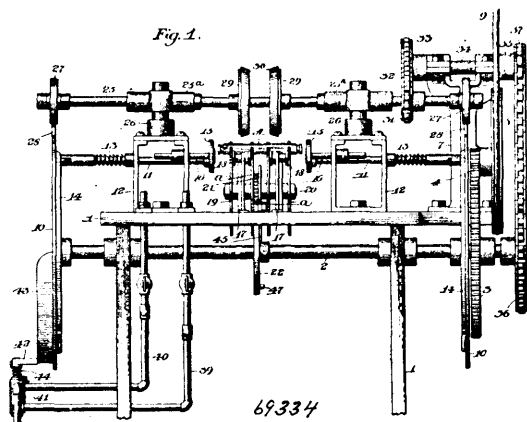
No. 69,334. Machine for Making Vials, Syringes, etc.

(Machine à faire des fioles, seringues, etc.)

James Bache Conde, Clifton Heights, Pennsylvania, U.S.A., 15th November, 1900; 6 years. (Filed 25th November, 1899.)

Claim.—1st. The combination with means for supporting a glass section or tube, of a heating device, and means adapted to bear upon the body of said tube or section and thereby rotate the same by frictional contact, substantially as described. 2nd. The combination with parallel rollers adapted to support a glass section or tube, means for supporting said rollers, and heating devices, of means for bearing upon the body of said tube or section and thereby

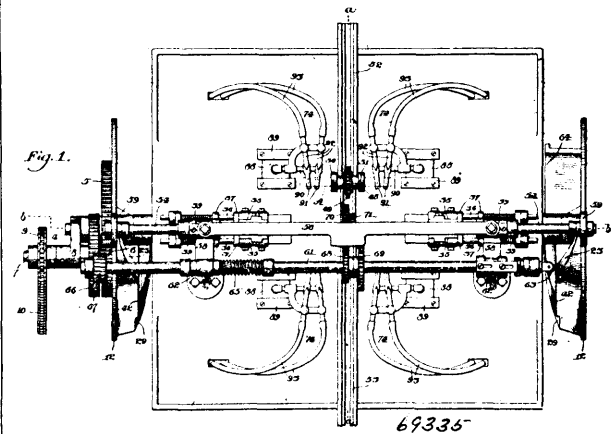
rotating the same by frictional contact, substantially as described. 3rd. The combination with means for supporting a glass section or



tube, of a heating device, and means for bearing upon the body of said tube or section and thereby rotating and longitudinally moving the same by frictional contact. 4th. The combination with means for supporting a glass section or tube, of a heating device for dividing section or tube, means for bearing upon the body of said tube or section and thereby rotating the same and drawing the two parts thereof longitudinally in opposite directions by frictional contact, substantially as described. 5th. The combination with means for supporting a glass section or tube, of a heating device, a shaft, a disc thereon adapted to bear upon the body of said section or tube and rotate it by frictional contact, and means for rotating said shaft, substantially as described. 6th. The combination with parallel rollers adapted to support a glass section or tube, means for supporting said rollers, and heating devices, of a shaft, a disc thereon adapted to bear upon the body of said section or tube and rotate it by frictional contact, and means for rotating said shaft, substantially as described. 7th. The combination with means for supporting a glass section or tube, of a heating device, a shaft, a disc thereon having a bevelled yielding periphery adapted to bear upon the body of said section or tube, and means for rotating said shaft, substantially as described. 8th. The combination with means for supporting a glass section or tube, of a shaft, two discs thereon having oppositely bevelled yielding peripheries adapted to bear upon the body of said section or tube, means for rotating said shaft, and means for heating the tube intermediate the discs, substantially as described. 9th. The combination with means for supporting a glass section or tube, of end heads, means for supporting and operating the same in respect to the ends of said section or tube, means for bearing upon the body of said tube and thereby rotating the same by frictional contact, and a heating device, substantially as described. 10th. The combination with means for supporting a glass section or tube, of end heads, means for supporting and operating the same in respect to the ends of said section or tube, means for bearing upon the body of said tube and thereby rotating and longitudinally moving the same by frictional contact, and a heating device, substantially as described. 11th. The combination with means for supporting a glass section or tube, of end heads, supporting rods therefor, means for reciprocating said rods at predetermined intervals, a shaft having means for rotating said section or tube, means for rotating said shaft, means for raising and lowering said shaft at intervals, and a heating device, substantially as described. 12th. The combination with means for supporting a glass section or tube, of end heads, supporting rods therefor, means for reciprocating said rods at predetermined intervals, a shaft having discs thereon with oppositely bevelled yielding peripheries, means for rotating said shaft, means for raising and lowering the same, and a heating device, substantially as described. 13th. The combination with means for supporting a glass section or tube, of end heads, supporting rods therefor, governor wheels co-acting with said rods, means for supporting and rotating said wheels, a shaft having means for rotating said section or tube, means for rotating said shaft, means for raising and lowering said shaft at intervals, and a heating device, substantially as described. 14th. The combination with a suction or tube support, of a feed device, its supporting and operating parts, means for delivering the sections or tubes to said feed device, devices adapted to bear upon the tubes or sections on said support and thereby rotate and draw said tubes or sections, means for rendering said latter devices active and inactive at predetermined intervals, and heating devices, substantially as described. 15th. The combination with a section or tube support, of a feed device, its supporting and operating parts, means for delivering sections or tubes to said device, devices adapted to bear upon the tubes or sections on said support and thereby rotate and draw said tubes or section, means for rendering said latter devices active and inactive at predetermined intervals, heating devices, and automatic means for regulating the operation thereof at intervals, substantially as described. 16th. The combi-

ation with means for supporting a glass section tube, of end heads, means for supporting and operating the same in respect to the ends of said section or tube, means for bearing upon the body of said section or tube and thereby rotating and longitudinally moving the same, and heating device, a bottoming plate, and means for operating the same, substantially as described. 17th. The combination with a section or tube support, of a feed device, its supporting and operating parts, means for delivering the sections or tubes to said feed device, devices adapted to bear upon the tubes or sections on said support and thereby rotate and draw said tubes or sections, means for rendering said latter devices active and inactive at predetermined intervals, end heads, means for supporting and operating the same, a swinging bottoming plate, and means for actuating the same, together with the heating devices, substantially as described. 18th. The combination with the supporting frame, of the main shaft, the governor wheels thereon, the reciprocative rods controlled thereby, the end heads of said rods, a support for glass sections or tubes intermediate said heads, means for feeding sections or tubes to said support, means for rotating and drawing said tubes or sections, and heating devices for said tubes or sections, substantially as described. 19th. The combination with the supporting frame, of the main shaft, the governor wheels thereon, the reciprocative rods controlled thereby, the end heads of said rods, means for rotating a tube or section or said support, a lever-shaped bottoming plate, means on said gear or sector adapted to co-act therewith at predetermined intervals, and heating devices, substantially as described. 21st. The combination with means for supporting a glass tube or section, of a shaft, vertically movable bearings therefor, means on said shaft adapted to bear up the body of a tube or section and rotate the same, means for driving said shaft, a second shaft, governor wheels thereon adapted to raise and lower said first-named shaft at predetermined intervals, and heating devices, substantially as described.

No. 69,335. Machine for Necking and Lipping Vials, etc. (Machine pour faire les goulets etc. de fioles.)



James Bache Conde, Clifton Heights, Pennsylvania, U.S.A., 15th November, 1900; 6 years. (Filed 25th November, 1899.)

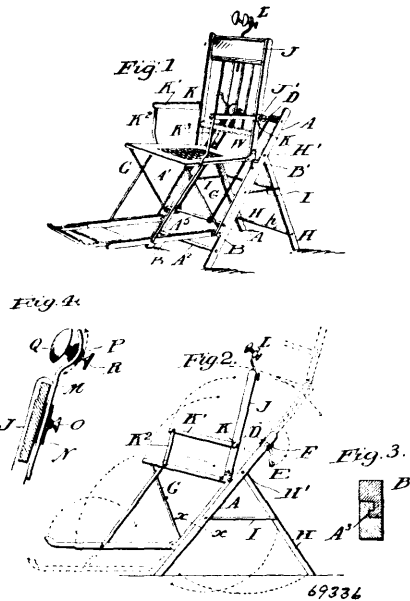
Claim.—1st. In a machine for necking and lipping vials, etc., the combination with a tube support, mechanism for rotating the tube, and heating devices directed to the end of said tube, of a plug, normally open dies, and means for operating said plug and dies in relation to each other and the heated end of the tube, and means whereby the tube is freed from the rotating mechanism, substantially as described. 2nd. In a machine for necking and lipping vials, etc., the combination, with a tube support, mechanism for rotating the tube, and heating devices directed to the end of said tube, of a reciprocative plug, means for reciprocating the same toward and from the heated end of the tube, a pair of normally open dies, and means for closing said dies when the plug has been advanced, together with means whereby the tube is freed from the rotating mechanism, substantially as described. 3rd. In a machine for necking and lipping vials, etc., the combination, with a tube support, mechanism for rotating the tube, and heating devices directed to the end of said tube, of a carriage movable toward and from the heated end of the tube, a plug and dies on said carriage, means for operating said carriage, means for relatively operating the dies, and means whereby the tube is freed from the rotating mechanism, substantially as described. 4th. In a machine for necking and lipping vials, etc., the combination, with a tube support

beyond which both ends of the tube project, means operating intermediate said ends for rotating the tube, and heating devices directed to the respective ends of the tube, of oppositely disposed plugs and dies adjacent to said ends, and means for operating said plugs and dies in relation to each other and to the ends of the tube, substantially as described. 5th. In a machine for necking and lipping vials, etc., the combination with a support, a tube-holding gear device, a co-acting driving gear, supporting and actuating mechanism therefor, and means for engaging and disengaging the gears, of a plug, normally open dies, and means for relatively operating said plug and dies, together with heating devices, substantially as described. 6th. In a machine for necking and lipping vials, etc., the combination with a tube support beyond which both ends of the tube project, a gear device on the body of said tube intermediate the ends of the latter, a co-acting driving gear, supporting and actuating means therefor, and means for engaging and disengaging the gears, of the heating devices directed to the respective ends of said tube, oppositely-disposed plugs and dies, adjacent to said ends, and means for operating said plugs and dies in relation to each other and to the ends of the tube, substantially as described. 7th. In a machine for necking and lipping vials, etc., the combination of a tube support, mechanism for rotating a tube, a reciprocative carriage, adjacent to said support, means for supporting said carriage, a plug and disc on said carriage, and independent means for operating the dies, together with heating devices directed to the end of said tube, substantially as described. 8th. The combination with a hollow holder, means for clamping a tube therein, and means for positively rotating said holder, of a plug, normally open dies, and means for relatively operating said plug and dies, substantially as described. 9th. The combination with a hollow holder, means for clamping a tube therein, a gear on said holder, and a co-acting driving gear, of a plug, normally-open dies, and means for relatively operating said plug and dies, together with heating devices, substantially as described. 10th. The combination with means for supporting a glass sectional tube, of a carriage adjacent thereto, means for reciprocating said carriage toward and from the end of the section or tube, a plug in said carriage, means for reciprocating said plug, dies on said carriage, and means for actuating said dies, substantially as described. 11th. The combination with means for supporting a glass section tube, of a plug and die supporting carriage adjacent thereto, a governor wheel adapted to actuate the carriage, its plug and the dies independently of each other, and means for operating said wheel, substantially as described. 12th. The combination with means for supporting a glass section or tube, of a normally retracted carriage adjacent thereto, a horizontally reciprocative rod in said carriage, a central plug on one end of said rod, a spring to maintain said rod normally retracted, normally open dies on said carriage, slides to close said dies, supporting rods for said slides, means to maintain the rods normally retracted, and means for operating the carriage and the slide and plug supporting rods at predetermined intervals, substantially as described. 13th. The combination with means for supporting a glass section, etc., of a plug and die supporting carriage comprising a base, and a vertically adjustable head piece thereon, a guide for said carriage, and means for actuating the carriage, its plug and the dies, substantially as described. 14th. The combination with means for supporting a glass section, etc., of a plug, its supporting parts, means for forcing the plug inward and holding it inward under automatically yielding pressure, the dies, and means for supporting and operating the same, substantially as described. 15th. The combination with means for supporting a glass section, etc., of a plug, its supporting parts, a governor wheel provided with a spring controlled cam portion adapted to actuate the plug, means for supporting and rotating said wheel, the dies, and means for supporting and operating the same, substantially as described. 16th. The combination with a section or tube holder, supporting means therefor, and differential speed mechanism for rotating said holder at different rates of speed, of a plug, dies, means for supporting said plug and dies, and means for relatively operating the same, substantially as described. 17th. The combination with a hollow holder, a gear thereon, means for supporting said holder, differential speed gearing therefor, and means for throwing said gearing into and out of operation, of the plug, the dies, and their supporting and operating parts, substantially as described. 18th. The combination with a hollow holder, a gear thereon, differential speed gearing therefor, the plug and die supporting carriage, and a governor wheel adapted to control said gearing, the carriage, and its plug and dies, substantially as described. 19th. The combination with the feed wheel, a support therefor, means for intermittently rotating said wheel, hollow holders, means for delivering them to said feed wheel in succession, and means whereby glass sections are clamped in said holders, of the dies, the plug, and their supporting and operating parts, substantially as described. 20th. The combination with a feed device, and its supporting and operating parts, of hollow holders, means for delivering them to said feed device, means for independently rotating said holders, arms adapted to embrace said holders, means for supporting said arms, and means for moving said arms toward and from the holders at predetermined intervals, substantially as described. 21st. The combination with a feed device, and its supporting and operating parts, of hollow holders, means for delivering them to said feed device, means for independently rotating said holders, arms adapted to embrace said holders, means for supporting said arms, and means for moving said arms toward and

from the holders at predetermined intervals, together with the dies, the plugs, and means for supporting and operating the same, substantially as described. 22nd. The combination with a hollow holder, a gear thereon, and means for supporting said holder, of a shaft, a gear thereon adapted to co-act with the first named gear, vertically movable bearings for said shaft, guide brackets or supports for said bearings, means for rotating said shaft, and means for raising and lowering said shaft at predetermined intervals, substantially as described. 23rd. The combination with a hollow holder, a gear thereon, and means for supporting said holder, of a shaft, a gear thereon adapted to co-act with the first named gear, vertically movable bearings for said shaft, guide brackets or supports for said bearings, means for rotating said shaft, governor wheels adapted to raise and lower said shaft at predetermined intervals, and means for supporting and operating said wheels, substantially as described. 24th. The combination with a hollow holder, a gear thereon, and means for supporting said holder, of a shaft, two gears thereon, one of which is adapted to co-act with the first named gear, bearings for said shaft, a second shaft, a gear thereon, means for longitudinally moving said second shaft, and means for rotating the same, substantially as described. 25th. The combination with a hollow holder, a gear thereon, and means for supporting said holder, of a shaft, gearing thereon adapted to co-act with the first named gear, bearings for said shaft, a second shaft, gearing thereon, a spring to hold said second shaft in one position, a governor wheel adapted to shift said latter shaft in opposition to the spring, means for supporting and operating said wheel, and means for driving said second shaft, substantially as described. 26th. The combination with a hollow holder, a gear thereon, and means for supporting said holder of a shaft, gearing thereon adapted to co-act with the holder gear, raising and falling bearings for said shaft, supports for said bearings, and means for raising and lowering the shaft at predetermined intervals, together with the dies, the plug or plugs, the heating devices and means for supporting and relatively operating the same, substantially as described. 27th. The combination with a hollow holder, and means for supporting the same, of a shaft, co-acting bearing between the same and said holder, supports for said shafts, governor wheels, adapted to raise and lower said shaft at predetermined intervals, and means for supporting and operating said wheels, together with the dies, the plug or plugs, the heating devices, and means for supporting and relatively operating the same, substantially as described. 28th. The combination with a hollow holder, a gear thereon, and means for supporting said holder, of a shaft, two gears thereon, one of which is adapted to co-act with the first named gear, bearings for said shaft, a second shaft, a gear thereon, means for longitudinally moving said second shaft, and means for rotating the same, together with the dies, the plug or plugs, and means for supporting and relatively operating the same, substantially as described. 29th. The combination with a hollow holder, a gear thereon, and means for supporting said holder, of a shaft, gearing thereon adapted to co-act with the first named gear, bearings for said shaft, a second shaft, gearing thereon, a spring to hold said second shaft in one position, a governor wheel adapted to shift said latter shaft in opposition to the spring, means for supporting and operating said wheel, and means for driving said second shaft, together with the tie dies, the plug or plugs, and means for supporting and relatively operating the same, substantially as described. 30th. The combination with a tube support, and means for rotating a tube, of a plug, dies and means for supporting and operating said plug and dies, heating devices, and automatic means for regulating the operation of said devices at predetermined intervals, substantially as described. 31st. The combination with the feed wheel, and its supporting and operating parts, of a plug, dies, means for supporting said plugs and dies, means for relatively operating the same, the heating devices, and automatic means for regulating the operation thereof at predetermined intervals, substantially as described. 32nd. The combination with the feed wheel, means for intermittently rotating the same, hollow holders, means for delivering them to said wheel, and means for independently rotating said holders, of the plug, dies, heating devices and means for supporting and relatively operating said plug, dies and heating devices, substantially as described. 33rd. In an automatic machine for necking and lipping vials, etc., the combination with a tube support and a main driving shaft, of tube rotating mechanism, operative connections between said mechanism and the shaft, heating devices directed towards the end of the tube, a plug, dies, and their supporting parts, and operative connections between the same and the main shaft, substantially as described. 34th. The combination with means for supporting a glass section or tube, of a horizontally reciprocative device adapted to act on the opposing end of said section or tube, means for supporting and guiding said device, means to maintain said device normally retracted, a governor wheel to actuate said device, and means for rotating said wheel, substantially as described. 35th. The combination with means for supporting a glass section or tube, of a horizontally reciprocative device, adapted to co-act on the opposing end of said section or tube, means for supporting and guiding said device, means for maintaining said device normally retracted, a governor wheel for actuating said device, means for rotating said wheel, mechanism for rotating section or tube, and operative connection between said mechanism and the governor wheel, substantially as described. 36th. The combination with feed wheel and its supporting and operating parts, of a horizontally reciprocative de-

vice adapted to act on the opposing end of a suitably supported section or tube, a governor wheel adapted to actuate said device, means for rotating said wheel, heating devices, and automatic means for controlling the same, substantially as described.

No. 69,336. Dental Chair. (*Fauteuil de dentistes.*)



Jesse W. McConnell, Cornelia, Georgia, U.S.A., 15th November, 1900; 6 years. (Filed 14th September, 1900.)

Claim.—1st. The combination with the inclined support having folded legs pivoted thereto, the rack, the angled plates pivoted to the upper ends thereof, the seat pivoted to said plates and the chair back fastened to the plates, the foot rest pivoted to the lower end of the rack, pivotal braces between the seat and the foot rest, the pivotal arms and braces connecting their outer ends with the seat, thumb-screw for locking the arm rest to the back, as shown and described. 2nd. In combination with the inclined support having folding legs pivoted thereto, a rack having grooved edge interlocking with a grooved edge of said inclined support, a windlass and connections between the same and the rack for raising and lowering the latter, the angle plates pivoted to the upper ends of the rack, the seat pivoted to said plates and the chair back fastened to the plates, the foot rest pivoted to the lower end of the rack; pivotal braces between the seat and the foot rest, and pivotal arms and braces connecting their outer ends with the seat, as shown and described.

No. 69,337. Art of Tanning Hides.

(*Procédé pour tanner les peaux.*)

Theodore DeCue Palmer, Newark, New Jersey, U.S.A., 15th November, 1900; 6 years. (Filed 22nd May, 1900.)

Claim.—1st. The process herein described, for tanning leather which consists of adding a suitable clarifying agent as herein described, to clarify the tanning liquor and immersing the hide therein, after which it is submitted to an acid bath to reprecipitate the liquor in the hide, substantially as described. 2nd. The art of tanning hides or skins, by clarifying the tanning liquor, and reciprocating it when in the hide, substantially as described.

No. 69,338. Tanning Process. (*Procédé de tannage.*)

Franz Walther Wartenberger, Hamburg, German Empire, 15th November, 1900; 6 years. (Filed 4th August, 1899.)

Claim.—The improved tanning process, which consists in dressing the usually prepared hides or skins in a weak lie or solution of picric acid and in subsequently treating the dressed hides or skins in a solution of hyposulphite of soda or suitable tannic vegetable substances, substantially as and for the purpose set forth.

No. 69,339. Pneumatic Tire Pump.

(*Pompe pour bandages pneumatiques.*)

Daniel Williamson, Sunbury, Pennsylvania, U.S.A., 15th November, 1900; 6 years. (Filed 29th August, 1900.)

Claim.—The combination of a frame of a vehicle, of a wheel journaled thereto and provided with a pneumatic tire, a pump carried by said wheel for inflating the tire, said pump being provided

with a spring actuated pump rod the upper end of which is off-set and is formed with a fork to engage the journal of the wheel and be

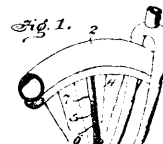


Fig. 2.

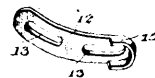
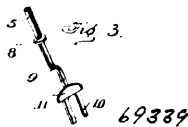
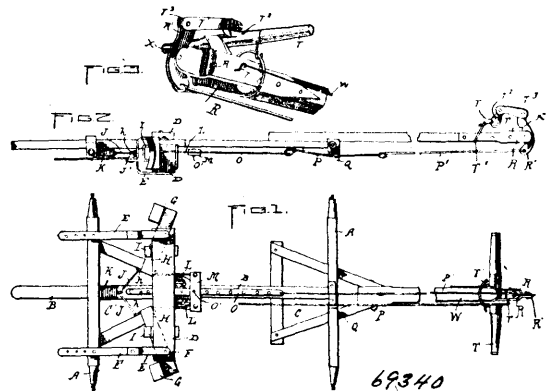


Fig. 3.



guided thereby in its movement, a cross head secured to the forked end of the pump rod, and cam bracket adjustably secured to the frame of the vehicle and adapted to be moved in the path of movement of the cross head, substantially as set forth.

No. 69,340. Wagon Brake. (*Frein de wagon.*)



Christian Bakkom, Cashlon, Wisconsin, U.S.A., 15th November, 1900; 6 years. (Filed 21st August, 1900.)

Claim.—1st. An automatic brake for wagons, comprising, in combination with the truck of a wagon, the brake shoes and levers carrying the same, the yoke supporting said levers and adjustably held to the axle of the wagon, a spring for normally holding the brake shoes from engagement with the wheels of the wagon, the plates M, the links connecting the same with said levers, the apertured bar B to which said plate are adjustably held, the neck yoke and connections between same and said bar, whereby the brakes may be applied, as set forth. 2nd. In combination with the truck of a wagon, the levers H, and the brake shoes, the spring secured at one end to the rear axle of the wagon, the links connecting said spring with the inner ends of said levers, the forked yoke and pin carried thereby on which pin said levers are connected, one end of said yoke having a series of apertures and adjustably held to said axle, the plates N, the links connecting the latter with said levers H, the apertured bar B adjustably held to said plates m, the lever R¹ pivoted at one end of the tongue of the wagon, the neck yoke having link connections with the upper end of the lever R¹, suitable connections between the lower end of the latter and said bar B, and means for holding the brakes from setting, as described.

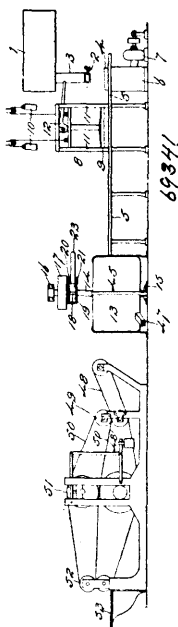
No. 69,341. Machine for Forming Leather Board.

(*Machine pour la fabrication de planche de cuire.*)

Edwin Dwight Alvord, Talcottville, Vermont, and Harry Robert Knox, Hartford, Connecticut, both in U.S.A., 15th November, 1900; 6 years. (Filed 25th May, 1900.)

Claim.—1st. A centrifugal machine for forming sheets of pulp, consisting of a rotary shaft, boxes with outwardly facing perforated

bottoms supported by the shaft, and perforated movable covers loosely located in the openings in the boxes and free to move out-



wardly from the shaft toward the bottoms of the boxes under centrifugal action when the machine is in operation, substantially as specified. 2nd. A pulp box for a centrifugal machine, consisting of solid side and end walls, a perforated bottom fixed to the side walls, and a perforated weighted cover freely movable flatwise into and out of the opening between the side and end walls and capable of movement in the box under centrifugal action toward the bottom for compressing the stock, substantially as specified. 3rd. A centrifugal machine for forming sheets of pulp, consisting of a rotary shaft, perforated plates supported by the shaft, boxes with perforated bottoms located with their bottoms facing the plates, and perforated movable covers located in the openings in the boxes, substantially as specified. 4th. A centrifugal machine for forming sheets of pulp, consisting of a rotary shaft, perforated plates supported by the shaft, boxes with perforated bottoms located with their bottoms facing the plates, perforated movable covers located in the openings in the boxes, and skeleton weights located in front of the covers in such positions that they will move outwardly under centrifugal action as the moisture is thrown from the sheets of pulp, substantially as specified. 5th. A centrifugal machine for forming sheets of pulp, consisting of a rotary shaft, perforated plates supported by the shaft, boxes with perforated bottoms located with their bottoms facing the plates, perforated movable covers located in the openings in the boxes, skeleton weights located in front of the covers, and levers loosely connected with the weights in such manner that the weights may be moved outwardly by centrifugal action, and inwardly by the levers, substantially as specified. 6th. A centrifugal machine for forming sheets of pulp, consisting of a rotary shaft, perforated plates supported by the shaft, boxes with perforated bottoms located with their bottoms facing the plates, perforated movable covers located in the openings in the boxes, skeleton weights loosely placed in front of the covers and a station shell surrounding the plates, substantially as specified. 7th. A centrifugal machine for forming sheets of pulp, consisting of a rotary shaft, a floor plate supported by the shaft, perforated plates mounted vertically upon the floor plate, bands and bolts for retaining the plates in position, boxes with perforated bottoms located with their bottoms facing the plates, perforated movable covers located in the openings in the boxes, skeleton weights loosely placed in front of the covers, rods loosely connecting the weights with the shaft, levers mounted upon the rods and connected with the weights, and a shell surrounding the plates, substantially as specified.

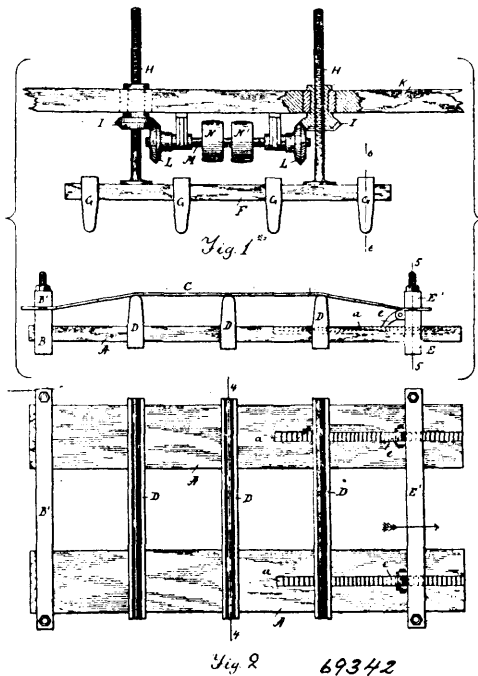
No. 69,342. Leather Stretching Machine.

(Machine pour tendre le cuir.)

Fred Herbert Adams, Beverly, Massachusetts, U.S.A., and Edwin Eastman Stevens, Medford, 15th November, 1900; 6 years. (Filed 2nd February, 1900.)

The herein described leather stretching machine, consisting in combination, a bed or base, a series of cleats, adjusly arranged on

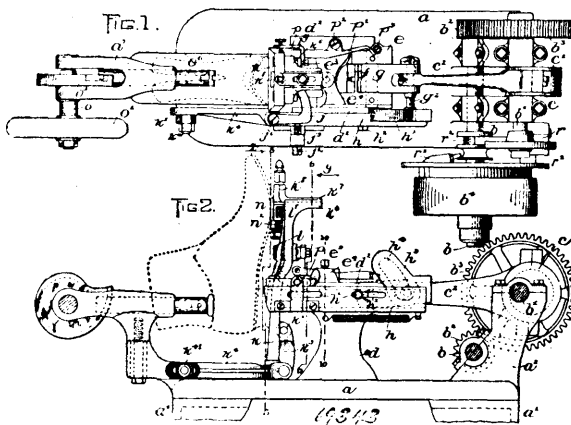
said base, a pair of clamping devices, one or both of which may be longitudinally adjustable on said base, and a vertically adjustable



cleat carrying frame or head, having adjustable cleats, alternately arranged relative to the lower cleats, substantially as and for the purpose set forth.

No. 69,343. Heel Breasting Machine.

(Machine à cuirasser les talons de chaussures.)



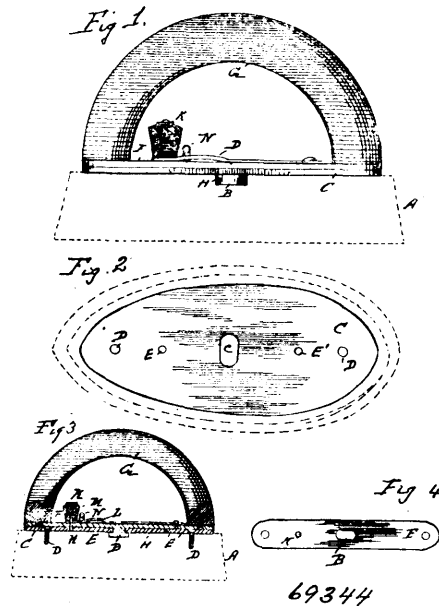
The United Shoe Machine Company of Canada, Montreal, Quebec, Canada, assignee of John James Heyes, Lynn, Massachusetts, U.S.A., 15th November, 1900; 6 years. (Filed 22nd October, 1900.)

Claim.—1st. A heel breasting machine comprising a shoe support, a knife, mechanism for forcing the knife positively or unyieldingly through the heel to the sole, and mechanism for automatically checking the movement of the knife when it has cut through the heel. 2nd. A heel breasting machine comprising a shoe support, a knife, power devices for actuating the knife positively or unyieldingly to breast the heel, and automatic mechanism for checking the movement of the knife relatively to the shoe without affecting the power devices. 3rd. A heel breasting machine comprising a shoe support, a knife, a knife carrier, mechanism for imparting a positive or unyielding movement to the knife carrier, and automatic devices for checking the movement of the knife carrier relatively to the shoe. 4th. A heel breasting machine comprising a shoe support, a knife, mechanism for moving the knife positively or unyieldingly, and an automatic device constructed and arranged to engage the sole of the shoe and check the movement of the knife relatively to the said shoe. 5th. A heel breasting machine comprising a shoe support, a reciprocating driver, a knife, a knife carrier actuated

positively or unyieldingly by said driver, and mechanism for automatically throwing the said driver out of operative relation with respect to the knife carrier when the knife has cut through the heel. 6th. A heel breasting machine comprising a shoe support, a knife, a knife carrier, a driver for positively or unyieldingly actuating the knife, and a bunter arranged to slide relatively to said carrier and to disengage the carrier from the driver when the bunter engages the shoe. 7th. A heel breasting machine comprising a shoe support, a knife, a knife carrier, a toggle for operating the knife carrier, and mechanism for automatically breaking said toggle when said knife has cut through the heel. 8th. A heel breasting machine, comprising a shoe supporter, a reciprocating driver, a knife, a knife carrier, a link connecting the knife carrier and the said driver, and mechanism for automatically swinging the link and the driver at an angle to each other when the knife cuts through a heel. 9th. A heel breasting machine, comprising a shoe support, a carrier, having a knife, a sole engaging bunter having a guide, and a driver for actuating the knife carrier and adapted to engage the guide, whereby when the bunter is held against movement by the shoe, the guide is engaged by the driver, and the operative relation of the driver and the carrier is destroyed. 10th. A heel-breasting machine, comprising a shoe support, a carrier having a knife, an eccentric, an eccentric rod, a link hinged to the eccentric rod and to the carrier, and a bunter, constructed and arranged to engage a shoe and stop the travel of the knife-carrier relatively to the shoe by throwing the link and the eccentric rod at an angle to each other. 11th. A heel-breasting machine comprising power devices, a knife and its carrier positively actuated by said power-devices, and a bunter arranged to stop the travel of the knife without affecting the power devices, said bunter including a finger with its end substantially parallel to the knife edge, and adapted to engage the sole of a shoe. 12th. A heel-breasting machine comprising power devices, a knife and its carrier positively actuated by said power devices, and a bunter arranged to stop the travel of the knife without affecting the power devices, said bunter including a finger with its end substantially parallel to the knife edge, and adapted to engage the sole of a shoe, and means for adjusting the finger. 13th. A heel-breasting machine including a shoe support and a knife, of which elements one is movable relatively to the other, and a bunter yieldingly connected to the movable member and adapted to engage the sole of the shoe for the purpose of limiting the movement of the movable member. 14th. A heel-breasting machine comprising a shoe support, a moveable knife, and mechanism for automatically driving said knife through a heel of any height to the sole, said mechanism including a bunter for limiting the movement of the knife, said bunter being arranged to engage the sole with a pressure less than that with which the knife engages the heel. 15th. A heel-breasting machine comprising power devices having a regular range of movement, a knife connected to said power devices, whereby it is positively actuated, and means for automatically varying the range of movement of the knife whereby it automatically breasts a heel of any height. 16th. A heel-breasting machine, comprising a knife, a shoe support, means for operating the knife, a bunter yieldingly connected to the knife, and mechanism interposed between the bunter and the knife-operating means for automatically varying the movement of the knife whereby it breasts heels of varying heights. 17th. A heel-breasting machine, comprising a bed, having a table, and a bearing bracket at one end, and a bracket at the other end, all in substantially the same horizontal plane, a carrier and knife, mounted on said table, a shaft journaled in the first said bracket and connected to the knife slide, and a jacking device mounted in the second said bracket, substantially as described. 18th. A heel-breasting machine, comprising a shoe support, and a knife, in combination with mechanism to engage the corners and the thread of the heel and position with respect to the knife. 19th. A heel-breasting machine, comprising a knife, means to engage and hold the shoe to the knife, and mechanism located between the said means and the knife for positioning the shoe with respect to the knife. 20th. A heel breasting machine, comprising a knife, a support for the shoe, means for moving one of said parts relatively to the other, and mechanism for engaging the tread surfaces of the sole and heel, and adjusting them relatively to the knife and the support. 21st. A heel-breasting machine, comprising a shoe support, a knife mounted on one side of said support and movable in a plane transverse to the plane of the support, and mechanism on the other side of the support for jacking a shoe there against, the said knife and said jacking mechanism moving in substantially the same or parallel planes. 22nd. A heel-breasting machine comprising a bed, a knife a knife carrier, a support pivoted to the bed, and means for jacking a shoe against the support. 23rd. A heel-breasting machine comprising a bed, a knife and its carrier, a shoe support pivoted upon the bed and arranged to receive the tread surface of the shoe, a link connected to the support on one side of its pivot, and means for fastening the free end of the link to the bed. 24th. A heel-breasting machine, comprising a knife, a support for the shoe, means for moving one of said parts relatively to the other, and mechanism for engaging the corners of the top lift and positioning the heel with respect to the knife. 25th. A heel-breasting machine, comprising a shoe support, a knife, and mechanism for automatically positioning the heel of a shoe relatively to the knife irrespective of the size of the heel. 26th. A heel-breasting machine, comprising a shoe support, a knife, and automatic heel-positioning

devices movable towards and from each other in a line parallel to the edge of the knife. 27th. A heel-breasting machine, comprising a shoe support, a knife, devices for engaging the corners of the heel and positioning a shoe on said support with relation to the knife, and means for jacking the shoe against the support. 28th. A heel-breasting machine, comprising a shoe support, a knife, and heel positioning devices connected to move in unison but in opposite directions and mounted on said support. 29th. A heel-breasting machine, comprising a shoe support, a knife, pivoted heel positioning devices connected to move in unison, and means for bodily moving said devices. 30th. A heel-breasting machine, comprising a shoe support, a knife, heel-positioning devices mounted upon said support to engage the corners of the heel, and means for adjusting said devices relatively to said knife. 31st. A heel-breasting machine, comprising a knife, a shoe support, centrally pivoted positioning fingers mounted on said support, means connecting said fingers to cause them to move in unison in opposite directions, and a curved guide to receive the upper ends of said fingers. 32nd. A heel-breasting machine, comprising a shoe support, devices on said support for positioning a heel, a knife and mechanism for moving said devices out of the path of the knife. 33rd. A heel-breasting machine, comprising a knife and its carrier, a shoe support, positioning devices on the support for a heel, and means actuated by the carrier for moving said devices out of the path of the knife. 34th. A heel-breasting machine, comprising a knife and its carrier, a shoe support, positioning devices on the support for a heel, and means actuated by the carrier for moving said devices out of the path of the knife, said means including a pivoted lever, and a projection on the carrier to engage the lever. 35th. A heel-breasting machine having a knife blade at an angle to the tread surface of the heel, and mechanism for engaging the sole heel of a shoe and positioning it with respect to the knife. 36th. A heel-breasting machine, having a knife blade with a cutting edge for breasting a heel and mechanism for engaging the sole and heel and the edges of the top lift of the heel, and positioning the shoe with respect to the knife. 37th. A heel-breasting machine, comprising a knife, positioning gauges or arms, and mechanism for adjusting said gauges or arms in unison, whereby the operator can cut any desired quantity of stock from the top lift of the heel.

No. 69,344. Sad Iron Handle. (Manche de fer à repasser.)

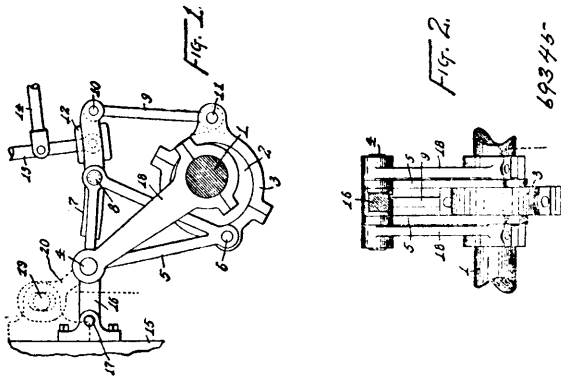


Rhesa Allen Hawkins, and James Snelling, both of Lakeview, Oregon, U.S.A., 15th November, 1900; 6 years. (Filed 9th October, 1900.)

Claim.—The combination with a sad iron body having a recess of depression formed in its upper surface, of plate, having a smooth lower face, secured to said body and extending over the depression therein, a plate or bar forming part of a removable handle and provided on its lower face with an integral boss or lug adapted to extend through a slot formed in the cover or body plate when the handle is in an inoperative position relative to the body and having an expanded head at its lower end adapted to engage with said body plate when the handle is turned in either direction to bring it into operative position relative to the body, a spring arm secured at one end to the upper surface of the handle plate and having at its free end an upwardly extending thumb piece and a depending pin adapted, when the handle is in operative position, to extend through the handle plate and into a socket in the body plate to hold the

handle from lateral movement relative to the iron, and a keeper secured to the handle plate and extending across said spring arm to limit the upward movement of its free end.

No. 69,345. Valve Gear. (*Engrenage de soupape.*)



The Lang Radial Valve Gear Company, St. Paul, Minnesota, assignee of Lincoln Alexander Lang, Yule, North Dakota, all in the U.S.A., 15th November, 1900; 6 years. (Filed 24th September, 1900.)

Claim.—In a valve gear, the combination, substantially as set forth, of a shaft, an eccentric thereon, a rodless eccentric strap carrying a pair of pivots, a stretcher engaging the shaft, a guide for the outer end of the stretcher, a pivot carried by the stretcher, a bell crank lever mounted on said pivot and capable of pivotal motion only with reference to said stretcher and having one of its arms engaging one of the pivots of the eccentric strap, a link pivoted to the other extremity of said bell crank lever, and a connecting bar connecting the other pivot of the eccentric strap with the link.

No. 69,346. Method of Preparing Fodder.

(*Méthode de préparer le fourrage.*)

Adolf Halasz, Hotel Metropole, Budapest, Hungary, and Stephen Hagyi-Ristic, Vienna, Austria, 15th November, 1900; 6 years. (Filed 11th June, 1900.)

Claim.—1st. An improved method of preparing fodder, consisting in compressing directly in a press without preliminary compression whole grain or grain bruised or flattened with or without maize pod meal, in combination with industrial or agricultural waste products, or products, such as hay and straw. 2nd. The improved compressed fodder consisting of whole grain or grain bruised or flattened with or without maize pod meal combined with industrial or agricultural waste products or products, such as hay and straw.

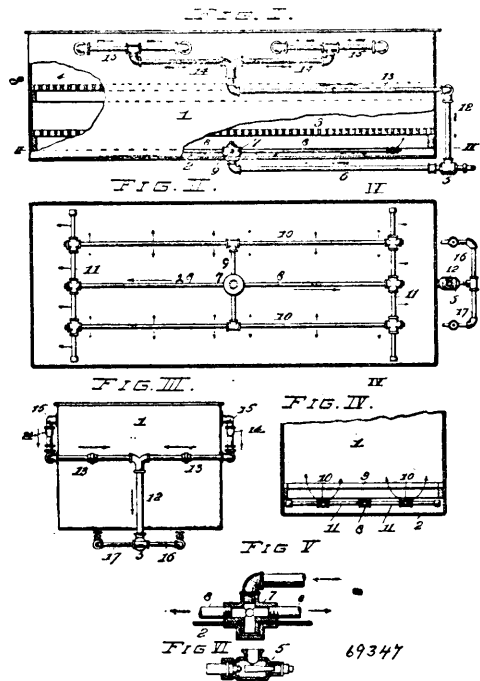
No. 69,347. Apparatus for Pasteurizing Beer.

(*Appareil pour pasteuriser la bière.*)

William John Ruff, Quincy, Illinois, U.S.A., 15th November, 1900; 6 years. (Filed 18th July, 1899.)

Claim.—1st. An apparatus for pasteurizing bottled liquids comprising a tank adapted to receive the bottled liquid to be treated, means for circulating water through said tank, and means located outside of the tank for commingling a heating or cooling liquid with the water, as it passes from and to the tank, for changing the temperature of the water before it is introduced into the tank, whereby the temperature of the bottled liquid to be treated is raised and lowered by constantly replacing the tank contained water by water of changed temperature until the desired temperature within the tank is reached for both heating and cooling the beer, substantially as described. 2nd. In an apparatus for pasteurizing beer, the combination of a tank for containing water, a perforated partition within the tank for supporting the bottles, a jet pump, suction pipe connecting with the jet pump and having branches communicating with the upper part of said tank, an eduction pipe connected to the jet pump and extending to the bottom of the tank, and steam and cold water pipes connecting with said pump, substantially as set forth. 3rd. In an apparatus for pasteurizing beer, the combination of a tank for containing water, a perforated partition within the tank for supporting the bottles, a jet pump, a suction pipe connecting with the jet pump, and having branches communicating with the upper part of said tank, an eduction pipe connected to the jet pump and extending to the bottom of the tank, distributing pipes located within the tank at the bottom thereof and communicating with said eduction pipe, and steam and cold water pipes connecting with said pump, substantially as set forth. 4th. In an apparatus for pasteurizing beer, the combination of a tank containing water, a perforated partition within the tank for supporting the bottles, a jet pump, a suction pipe connecting

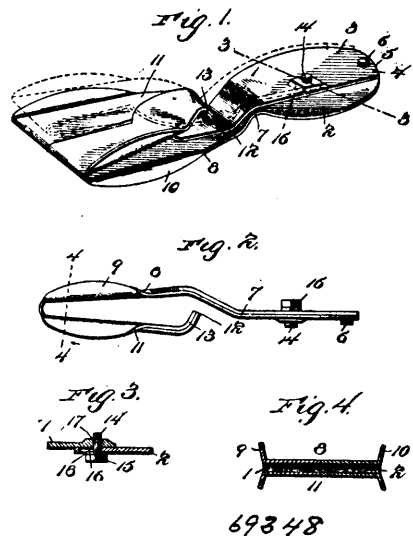
with the jet pump and having branches communicating with the upper part of said tank, an eduction pipe connected to the jet pump



and extending to the bottom of the tank, feed pipes 8 and 9, and distributing pipes 10 and 11 located within the tank at the bottom thereof and communicating with said eduction pipe, and steam and steam and water pipes connecting with said pump, substantially as set forth. 5th. In an apparatus for pasteurizing beer, the combination of a tank for containing water, a perforated partition within the tank for supporting the bottles, a jet pump, a suction pipe connecting with the jet pump, and communicating with the upper part of the tank through means of pipes 13, 14 and 15, an eduction pipe connected to the jet pump and extending to the bottom of the tank, feed pipes 8 and 9, and distributing pipes 10 and 11 located within the tank at the bottom thereof and communicating with the said eduction pipe, and steam and cold water pipes connecting with said pump, substantially as set forth.

No. 69,348. Dental Articulating Plate.

(*Plaque d'embrèvement dentaire.*)

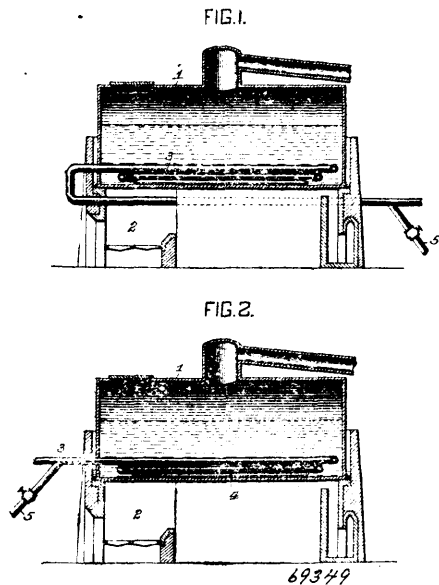


Theodore Frederick Driskill, Corsicana, Texas U.S.A., 15th November, 1900; 6 years. (Filed 31st August, 1900.)

Claim.—1st. An articulating plate comprising upper and lower mould cups, and means for yieldingly retaining the mould cups in a

manner to permit their approach under pressure, whereby said mould cups are capable of limited relative movement under the clamping action of the patients jaw. 2nd. An articulating plate bent to form a pair of opposed mould cups. 3rd. An articulating plate bent back upon itself to form opposed, oppositely disposed upper and lower mould cups. 4th. An articulating plate bent back upon itself to form a pair of opposed mould cups, said plate being composed of a plurality of longitudinal plate members capable of relative lateral movement. 5th. An articulating plate comprising relatively movable members, means for yieldingly retaining said members in their adjusted positions, and yieldingly related upper and lower mould cups. 6th. An articulating plate comprising a pair of mould cups composed of laterally adjustable members, a member of each cup being integral with a member of the other cup. 7th. An articulating plate comprising upper mould cups and a lower mould cup, means for connecting one end of the lower mould cup to the contiguous end of the upper mould cup in a manner to yieldingly retain said cups in spaced relation and to permit said mould cups to approach each other under the pressure of the patient's jaw, and means for limiting such relative movement of the mould cups. 8th. An articulating plate comprising longitudinal plate members, each of which is bent back upon itself to form one side of both a lower and an upper mould cup, said members being overlapped at their opposite ends. 9th. An articulating plate comprising a pair of members detachably connected by a hinge connection and bent to form upper and lower mould cups, means for limiting the relative lateral movement of the members, and means opposing a frictional resistance to said relative movement. 10th. An articulating plate comprising laterally adjustable members, bent back upon themselves to form corresponding side sections of upper and lower mould cups, said members being provided with terminal flanges in frictional contact and opposing resistance to the separation of the members. 11th. An articulating plate comprising a pair of relatively, laterally movable members pivotally connected at one end and bent to form upper and lower mould cups, a flange at the free end of the lower mould cup arranged to abut against the plate to limit the relative movement of the cups, and means for limiting the relative movement of the members. 12th. An articulating plate comprising a pair of members hinged at one end and bent to form upper and lower mould cups, overlapping flanges extending from the free end of the lower mould cup and designed to impinge against the upper member to limit the relative movement of the cups, one of said members being slotted, a compression screw passed through the slot and screwed into the other member, and a resilient resistance interposed between the head of the screw and the contiguous face of the slotted member. 13th. An articulating plate comprising a pair of relatively movable members, and resilient means for opposing frictional resistance to the movement of said members. 14th. An articulating plate bent back upon itself to form a plurality of mould cups, and a flange or projection extending from the mould cups and designed to abut against the plate.

No. 69,349. Distilling Oil. (*Distillation de l'huile.*)

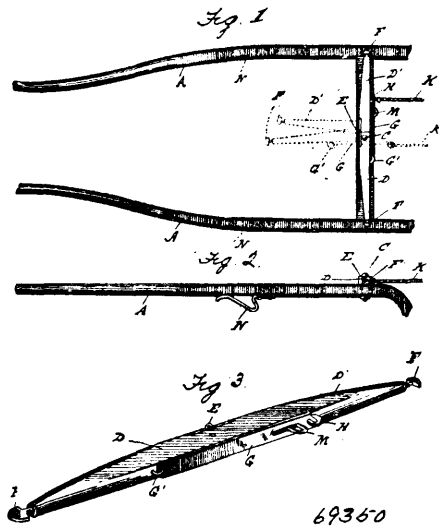


Jesse Adam Dubbs, Piquetteburg, Pennsylvania, U.S.A., 15th November, 1900; 18 years. (Filed 1st March, 1900.)

Claim.—As an improvement in the art of vaporizing oil, the method herein described which consists in producing an initial vaporization of the oil by heating the same, then forcing air through the oil in such regulated quantities that the volume of air thus introduced will not at any time be greater than four times the

volume of vapour given off by the oil, and maintaining the oil at a vapourizing temperature during the introduction of air, substantially as set forth.

No. 69,350. Whiffletree. (*Palonnier.*)



Albert Shepard, Oakley, Idaho, U.S.A., 15th November, 1900; 6 years. (Filed 21st August, 1900.)

Claim.—1st. A horse detaching device, comprising in combination with the thills, a whiffletree made up of two hinged sections hinged together, said sections being of unequal length, the longer of the two being pivoted to the cross piece of the thills, a hasp for holding said sections in alignment with each other, and means for disconnecting said hasp, as set forth. 2nd. A horse detaching device comprising in combination with the thills of a buggy a whiffletree made up of two sections of unequal length and hinged together, the longer of said sections being pivoted, near its hinged end, to the cross piece of the thills, a hasp pivoted to said pivoted section of the whiffletree, a staple carried by the shorter of the whiffletree sections, and over which staple the apertured end of the hasp is designed to engage, a cord secured to the free end of the said hasp, as shown and described.

No. 69,351. Preparation of Sterilized Milk Powder. (*Préparation de lait en poudre stérilisé.*)

Carl Janson, Stockholm, Sweden, 15th November, 1900; 6 years. (Filed 30th June, 1900.)

Claim.—1st. The production of sterilized milk powder by purifying, vapourizing and drying milk, adding to it before vapourization a non-organized or soluble ferment, prepared from bacteria and of such a kind that has a solvent action upon casein, for the purpose of obtaining a readily soluble product. 2nd. In the preparation of milk powder the addition of bacterial ferment obtained from carcasses such as *dispora caucasica*, *bacillus peptonificans* and the like, substantially as described.

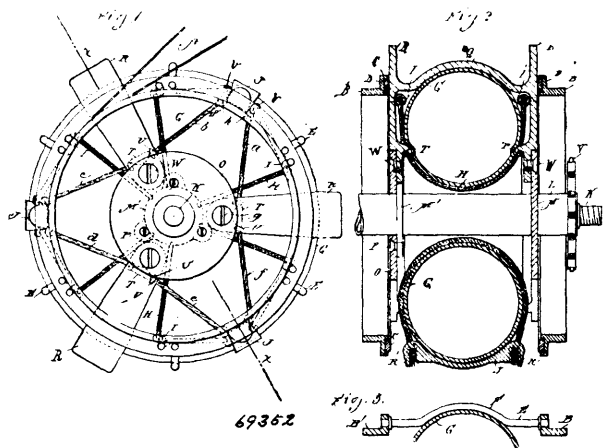
No. 69,352. Vehicle Wheel. (*Roue de voiture.*)

Marion Milton Bailey, Springfield, Ohio, U.S.A., 15th November, 1900; 6 years. (Filed 20th August, 1900.)

Claim.—1st. In a vehicle wheel, the combination with an auxiliary hub, of a primary hub mounted within said auxiliary hub, means for connecting said hubs with each other, and means for moving said primary hub out of a vertical line through the wheel centre and relatively to said auxiliary hub to cause the load to act on the motion of said wheel. 2nd. In a vehicle wheel, the combination with an auxiliary hub, and a primary hub suspended within said auxiliary hub, of a pneumatic tube sustained by one of said hubs, and suspending the other through intermediate connections, and means for throwing said primary hub forward and backward of the wheel centre, all substantially as shown and described. 3rd. In a vehicle wheel, the combination with an auxiliary hub, of a suitably supported resilient body, a hub proper supported by said resilient body, and means to move said hub proper in advance of the wheel centre, whereby the cushioning effect and a forward impulse are imparted to the wheel, substantially as shown and described. 4th. In a vehicle wheel, the combination with an auxiliary hub, of a pneumatic tube supported by said hub, a primary hub suspended within said auxiliary hub from said pneumatic tube and means for engaging with said auxiliary hub to prevent lateral movement of said primary hub, substantially as shown and described. 5th. In a vehicle wheel, the combination with an auxiliary hub, of a primary

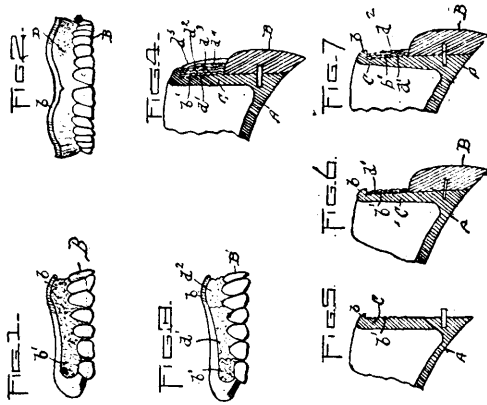
hub suspended within said auxiliary hub, a resilient body carried by said auxiliary hub, and suspending means for connecting said primary

affixed to each other and to the face of the gum plate. 2nd. In an artificial denture, the combination of a gum plate having its face roughened or dentated, and the gum, consisting of a series of layers of composition affixed to each other and to the roughened or dentated face of the gum plate.



hub with said resilient body, such means being also adapted to ac upon such resilient body to rotate it and said auxiliary hub. 6th. In a vehicle wheel having an auxiliary hub, of a primary hub consisting of a sleeve mounted on an axle and carrying pivoted hangers, a sprocket wheel carried by said primary hub and adapted to rotate it, means for connecting said auxiliary hub intermediate of said hangers, said means acting to assist in rotating the wheel proper when the weight and rotary motion is applied to said primary hub, all substantially as shown and described. 7th. In a vehicle wheel, the combination with an auxiliary hub, said auxiliary hub being composed of a pair of rings connected with each other by bridge pieces, of supports carried by said rings extending inward, a pneumatic tube mounted within said auxiliary hub, loops of cord engaging with said supports and supporting said pneumatic tube, a primary hub mounted within said auxiliary hub, and having hangers pivoted thereto, said hangers extending between said rings of the auxiliary hub and across said pneumatic tube intermediate of said hangers, means to hold said saddles with said primary hub, all substantially as shown and described. 8th. In a vehicle wheel, the combination with an auxiliary hub consisting of rings and cross pieces, of a primary hub consisting of a hub sleeve carrying a pair of flanges, an annular ring for one of said flanges and adapted to be secured thereto, hangers pivoted to said annular ring, and to one of said flanges, said hangers adapted to fit between said auxiliary hub, rings and resiliently supported in such position, a friction surface between each of said rings, and means to draw said hub out of the centre of the wheel structure when the hub is partially rotated relatively to said auxiliary hub, all substantially as shown and described. 9th. In a vehicle wheel having an auxiliary hub and a primary hub, of hangers pivotally carried by said primary hub and having friction contact with said auxiliary hub to prevent lateral movement, and a pair of supports carried by said hangers and extending inward, all substantially as shown and described.

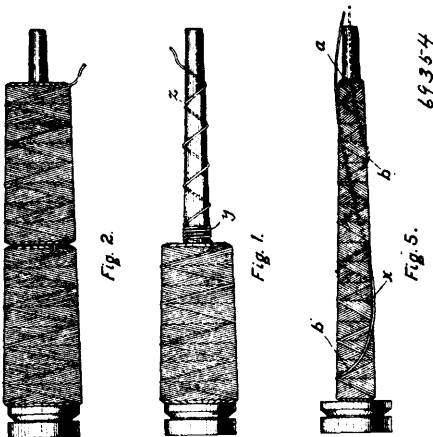
No. 69,353. Artificial Denture. (Dent artificielle.)



John Harrigan Doyle, Atlanta, Georgia, U.S.A., 15th November, 1900; 6 years. (Filed 24th July, 1900.)

Claim.—1st. In an artificial denture, the combination of a gum plate, and the gum, consisting of a series of layers of composition

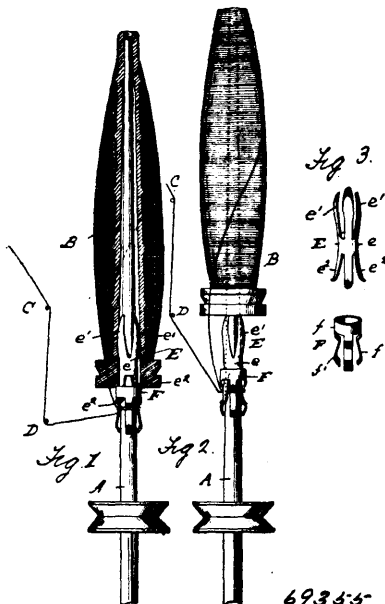
No. 69,354. Shuttle Cop. (Bobine de navette.)



Simon W. Wardwell, Jr., Providence, Rhode Island, U.S.A., 16th November, 1900; 6 years. (Filed 25th June, 1900.)

Claim.—1st. A composite shuttle cop, consisting of a plurality of separate sections of continuous thread wound upon and supported by a single tube or holder, the core of the outer section at the delivery end of the cop connected with the outer layer of the succeeding section, and each section consisting of succeeding concentric layers, each composed of crossed helices of thread, substantially as set forth. 2nd. A thread passage for use in loom shuttles, comprising a tube or holder and a continuous thread wound in successive sections on and permanently supported by said holder, and each consisting of successive layers, each layer composed of crossed helices extending from end to end of its section and each parallel and close to the adjacent helices lying in the same direction, the thread at the core of the section of the delivery end of the cop connecting with that of the outer layer of the succeeding section, whereby the thread is delivered from the outside of each section and from the sections successively, substantially as set forth.

No. 69,355. Loom Spindle Mechanism. (Mecanisme de fuscau de metier.)

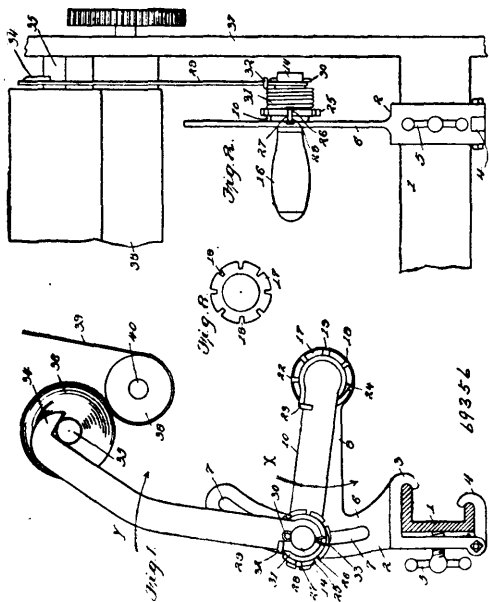


Oliver Cromwell Burr, North Adams, Massachusetts, U.S.A., 16th November, 1900; 6 years. (Filed 20th June, 1900.)

Claim.—1st. In a bobbin holder, a band carried by the spindle and provided with members which are engaged by the bore of the

bobbin, and depending thread grasping members, the lower ends of which are bent outward from the spindle, together with a thread carrier movably mounted upon the bobbin holder. 2nd. In combination with a spindle, a bobbin holder and thread grasping device, consisting of a band which encircles the spindle, bobbin engaging members which project from the band, said members being curved longitudinally and transversely, and thread grasping members which diverge from the opposite side of the band. 3rd. In a bobbin holder and thread grasper for spindles, the combination with a spindle, a bobbin holder and thread grasper mounted on the spindle and comprising a retaining band with sets of resilient members which project therefrom, one set of the members being adapted to engage the bore of the bobbin when placed on the spindle, the other set of members diverging from the band, of a thread carrier movably mounted on the thread-grasping members of the device, for the purpose set forth. 4th. In combination with a spindle, a thread holder therefor, consisting of a band fixedly attached to the spindle and provided with diverging members, of a thread carrier movably mounted upon said members and adapted when moved thereon to carry the thread beneath the diverging members. 5th. In combination with a spindle, a thread holder and bobbin carried by the spindle, of a thread carrier which is movably mounted on the bobbin and thread holder, the same comprising a band which surrounds the holder and has depending members with shoulders, for the purpose set forth. 6th. In combination with a spindle, a bobbin holder and a thread grasping device mounted upon the spindle, of a thread carrier or guide mounted movably on the thread grasping device, the parts having intermeshing members between which the thread is grasped when wrapped about the members of the thread carrier, which carrier is raised by the thread attached to the bobbin in doffing and lowered to release the grasped thread when engaged by the bobbin. 7th. In a thread grasper for spindles, the combination with a spindle, bobbin and bobbin holder, and thread grasping means comprising arms which diverge from the spindle, the lower ends of said arms being bent outward, of a thread carrier consisting of a band having thread receiving and guiding arms.

No. 69,356. Guide Lever for Looms.
(Guide levier pour métiers.)

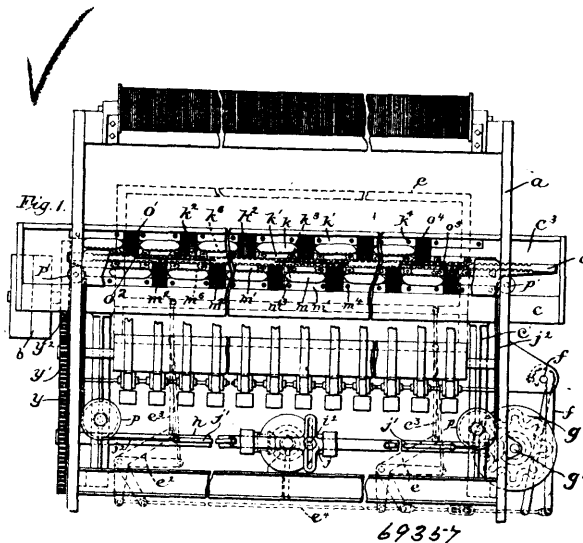


Louis A. King, Salem, Massachusetts, U.S.A., 16th November, 1900; 6 years. (Filed 17th April, 1900.)

Claim.—1st. An attachment for looms, comprising a frame securable to the loom frame, an arm pivoted thereto and yieldingly pressed downward at its outer end, and a hooked lever pivoted to the end of the arm and yieldingly pressed inward, its hooked end being adapted to engage over a journal of the cloth roll, substantially as described. 2nd. An attachment for looms, comprising a frame securable to the frame of the loom, an arm pivoted thereto, a spring engaging the attachment frame and the arm and normally pressing the arm downward, a lever pivoted to the arm and having a hooked upper end, and a spring engaging the arm and lever with a normal tendency to maintain the hooked end in engagement with a journal of the cloth roll, substantially as described. 3rd. An attachment for looms, comprising a pair of levers having hooked outer ends, springs for normally maintaining said hooks engaged over the journals of the cloth roll and drawing said levers downward, and adjustable fastenings for securing the levers at different positions

on a cross beam of the loom, whereby they also act as side guides for the cloth as wound upon the cloth roll, substantially as described. 4th. In an attachment for looms, the combination with a frame adapted for attachment to the loom frame and provided with a round opening and a curved slot in an arc having the opening for a centre, of a horizontally disposed arm pivoted in the opening, a pin at its outer end seated in the curved slot, a lever pivoted to the outer end of the arm and having a hooked upper end, and spring tending normally to press the horizontal arm downward and the lever inward, substantially as described. 5th. In an attachment for looms, the combination with a frame provided with a fixed hook to engage one inner edge of a cross beam of the loom frame, a pivoted hook adapted to engage the other inner edge of the cross beam, and a screw or bolt threaded through the attachment frame and adapted to bear against the cross beam to hold the hooks in engagement therewith, substantially as described. 6th. In a loom attachment, the combination with a frame adapted to be secured to the loom frame and provided with a round opening and curved slot, of an arm pivoted in the opening, a pin on the arm seated in the slot, a boss on each end, on opposite sides of the arm, a hooked lever pivoted to the boss at the outer end of the arm, a notched disc on each boss secured against rotation, and a spring coiled around each boss having one end engaged in one of the notches of the respective discs, one of said springs bearing downward on the arm, and the other bearing laterally against the hooked lever, substantially as described.

No. 69,357. Loom. (Métier.)



Thomas Brindle and Merrill O. Steere, both of Pawtucket, Rhode Island, U.S.A., 16th November, 1900; 6 years. (Filed 19th April, 1900.)

Claim.—1st. A loom having a suitable frame, two lays located on opposite sides of the loom, a single crank shaft having cranks for operating said lays, and connections between said cranks and the lays, the said cranks and connections being constructed and arranged to operate in opposition. 2nd. A loom having a suitable frame, two lays located on opposite sides of the loom, a single crank shaft having two sets of cranks for operating the respective lays, the cranks of one set being mounted on a half turn with respect to the cranks of the other set, whereby the lays are caused to alternately approach and recede from each other, and pitman connecting said cranks with the lays. 3rd. The combination with the lay back and the shuttle guides k^1 , m^1 and the intervening reeds, of the rack bar o , and the dust guard strip o^6 having offsets or lips o^7 covering the rack bar between said guides k^1 , m^1 .

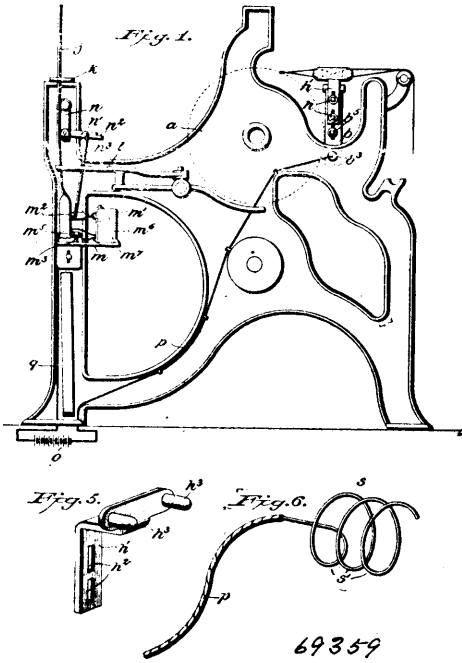
No. 69,358 Medicinal Compound.

(Composition médicale.)

J. O. Alfred Côte, Bulstrode Station, Québec, Canada, 16 novembre 1900; 6 ans. (Déposé 28 septembre 1900.)

Résumé.—Un remède ou composé médicinal formé d'écorce de bouleau blanc, écorce de sapin, salsapareille, savoyanne, herbe percée, vervienne blanche, vervienne bleue, verge d'or, plantin fougère de savanne, artichaux, herbe à mille feuilles, herbe mortelle et sang de dragon, dans les proportions énumérées et pour les fins décrites.

No. 69,359. Stop Motion for Looms.
(*Mouvement d'arrêt pour métiers.*)



Joseph Coldwell and Christopher Giles Gildard, both of Fall River, Massachusetts, U.S.A., 16th November, 1900; 6 years. (Filed 25th May, 1900.)

Claim.—1st. In a loom, the combination with an electrical stop motion, comprising a hollow contact roll and a conducting wire, said conducting wire extending into the said roll from one end sufficiently far to constitute a surplus of wire capable of being withdrawn therefrom for mending purposes, as specified, said wire having sliding contact with said roll at its inner end, and drop bars or detectors having contact externally with the said roll. 2nd. The combination, in a loom, of opposite supports, overhanging brackets adjustably secured to said supports, the inner horizontal ends of said brackets being of approximately T-shape, inwardly disposed integral studs carried by said T-shaped ends, and tubular lease rods receiving at their ends the said studs. 3rd. In a loom, the combination with opposite supports, bearing brackets carried thereby, a tubular contact roll, plugs for the ends of the same provided intermediate their ends with annular bosses and having their outer ends reduced to form journals fitting the brackets, one of said plugs having a bore, a circuit wire passing through said bore, a coiled spring connected to said circuit wire, the coils of the former gradually increasing in diameter until they engage the inner surface of said contact roll, superimposed lease rods, and drop bars or detectors in electrical circuit with the support and supported above the contact roll. 4th. In a loom, the combination with a hollow contact roll terminating in journals or trunions, one of which is bored, and an electrical contact device co-operating therewith, of an electrical circuit wire passed loosely through the former, and a coiled wire connected to said circuit wire, the coils of the former gradually increasing in diameter until they engage the inner walls of said roll. 5th. As an article of manufacture, a drop bar or detector, formed of flexible metal and provided with a longitudinal slot terminating at its upper end in an enlarged eye and at its lower end in a flared entrance. 6th. An electrically operated stop motion for looms, comprising longitudinally arranged circuit rods, and a lower intermediate electrical conductor, opposite series of drop bars loosely embracing said circuit rods and adapted to be normally supported out of contact with the aforesaid electrical conductor by the warp threads of the loom, said circuit rods serving to guide said drop bars in their movements towards the conductor. 7th. In an electrically operated stop motion for looms, the combination with a pair of flat electrical parallel circuit rods, a lower rotatable roller also in circuit, and opposite series of drop bars having parallel arms straddling their respective circuit rods and normally supported out of contact with the aforesaid roller by the warp threads of the loom. 8th. In an electrically operated stop motion for looms, the combination with an electrical circuit rod, and a lower contact roll also in circuit, of the herein described improved drop bar or detector formed of thin resilient metal and having a longitudinal slot g^1 , loosely receiving said circuit rod, and terminating in its upper end in the enlarged eye g^2 , and having at its lower end flared, as at g^3 , said drop bar being normally held out of contact with said con-

tact roll by the warp thread passing through said eye. 9th. In an electrically operated stop motion for looms, and in combination with an electrical circuit rod, and drop bars loosely embracing the same, a loose contact roll below and in the path of said drop bars and also in circuit, and a wiping device arranged to contact therewith and against which said roll may be rotated. 10th. An electrically operated stop motion for looms, comprising an electrical circuit rod, and drop bars having parallel arms loosely embracing the same, a loose roll there below in the path of the said drop bars, and also in circuit, and a wiping bar parallel and arranged to contact with said roll and against which said roll may be rotated. 11th. In an electrically operated stop motion for looms, and in combination with an electrical circuit rod, and drop bars loosely embracing the same, a loose roll there below in the path of said drop bars, and also in circuit, a wiping bar parallel and arranged to contact with said roll and against which said roll may be rotated, said bar having its contacting surface longitudinally grooved to conform to the surface of the roller, and provided with a textile covering. 12th. An electrically operated stop motion for looms, comprising supporting brackets, a pair of parallel circuit rods supported hereby, a lower contact device also in circuit and supported by said brackets, adjustable brackets supported by said latter brackets, a pair of lease rods supported by the adjustable brackets and located above and at opposite sides of the said circuit rods, drop bars straddling the circuit rods and designed to contact with said contact device, said circuit rods also serving as guides for the drop bars, and warp threads passed alternately under and over the lease rods and through the said drop bars, whereby the same are held suspended out of contact with the said contact device. 13th. An electrical stop motion for looms, comprising the loom frame arranged in circuit, a pair of opposite brackets secured to the frame, a contact roll loosely mounted in the brackets, a pair of parallel circuit rods arranged above the contact roll in the brackets, overhanging brackets adjustably supported by said former brackets, a pair of lease rods arranged above the circuit rods, supported by said latter brackets, drop bars loosely straddling the circuit rods and supported out of contact with the contact roll by the warp threads about the lease rods, and an electrical conductor leading from the said contact roll. 14th. In an electrically operated stop motion for looms with a shipper, a magnet supported adjacent thereto and having an armature lever, a circuit wire leading from a source of electrical supply to the magnet, and a contact spring connected to the magnet, by an electrical conductor and arranged to engage the shipper when the latter is in its locked position, of a swing knock-off device supported in front of said shipper and having one of its arms extending opposite the latter, a latch pivoted to said arm and normally out of the path of the lay of the loom, a connection between the latch and armature lever, a contact device arranged in the loom below the path traveled by the warp threads and in electrical circuit with the magnet through the frame of the loom, when the shipper is swung into operative position, a series of drop bars normally supported out of contact with said contact device by the warp threads, and electrical conductors leading from the electrical supply to the drop bars. 15th. The combination with a loom, a magnet supported adjacent to and in rear of the shipper thereof, and having an armature lever, a circuit wire leading from a source of electrical supply to the said magnet, and a contact spring electrically connected to the magnet and arranged to engage said shipper when the same is in its locked and operative position, of a swing knock-off pivotally connected with the loom frame and extending into the path of the said shipper, a latch pivotally mounted on said knock-off and normally out of the path of the loom, a rod connecting said latch with said armature lever, whereby a rising of the latter serves to cause a rising of the former, a contact device arranged in the loom below the travel of the warp threads and in electrical circuit with the magnet when the shipper is in contact with the contact spring, a series of drop bars supported by the warp threads above the contact device, and electrical conductors leading from the supply to and guiding the drop bars.

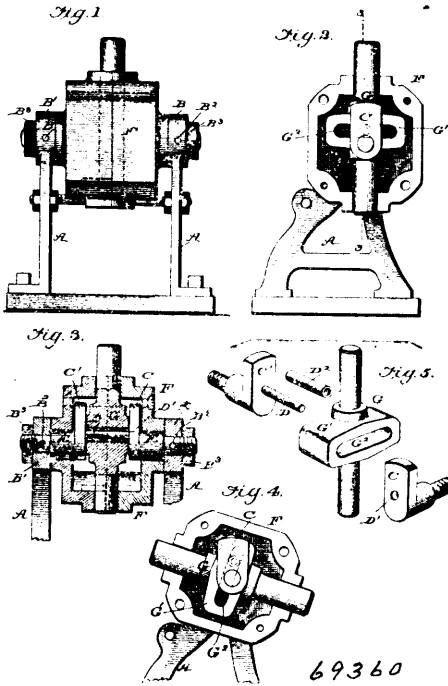
No. 69,360. Mechanical Movement.
(*Mouvement mécanique.*)

John Schies, Anderson, Indiana, U.S.A., 16th November, 1900; 6 years. (Filed 31st August, 1900.)

Claim.—1st. The combination substantially as described of a revolving body or carrier, a plunger moving with and also movable longitudinally in the carrier as the latter is revolved, and arranged to protrude alternately at its opposite ends beyond the carrier, and means for moving the plunger longitudinally during the revolution of the carrier. 2nd. The combination of a revolving body or carrier, a plunger movable longitudinally in the carrier and arranged to protrude alternately at its opposite ends beyond the carrier and means within the carrier by which to move the plunger longitudinally as the carrier is revolved. 3rd. The combination of the framing, the bearings for the carrier, the crank pin eccentric to said bearings, the carrier supported and arranged to be revolved on said bearings, and the plunger movable longitudinally within the carrier and having between its ends a yoke for engagement by the crank pin and arranged to protrude alternately at its opposite ends beyond the carrier, substantially as described. 4th. The combination of the bearing piece having spindles forming bearings for the carrier, crank

arms forming guides, and the crank pin between said crank arms and eccentric with respect to the spindles, the carrier arranged to

which said rocker is mounted, said pin being provided with a head or shouldered portion for preventing longitudinal movement in one

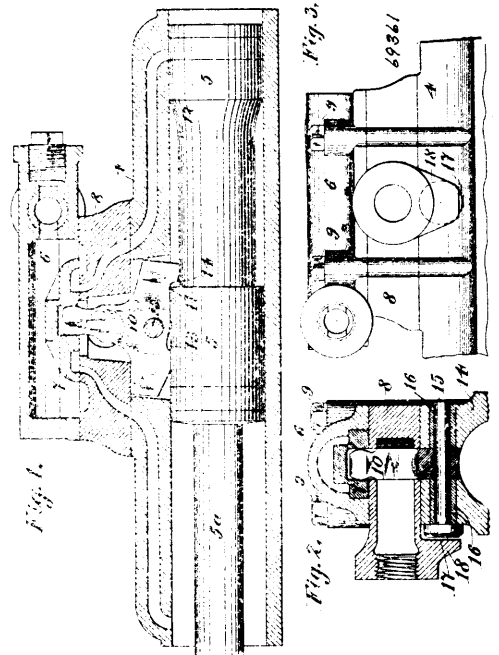


revolve on the spindles, and the plunger movable longitudinally in said carrier and provided between its ends with means for engagement by the crank pin and arranged to protrude alternately at its opposite ends beyond the carrier, substantially as set forth. 5th. An apparatus substantially as described comprising the carrier body composed of a box formed in sections having in their abutting faces bearings for the plunger, a support on which said carrier is journaled to revolve, a plunger movable longitudinally in the carrier, and means within the carrier for operating the plunger longitudinally as the carrier is revolved, substantially as set forth. 6th. The combination of the opposite bearing pieces having spindles, the crank pin extending between said pieces and arranged eccentric to the spindles thereof, the carrier revolving on the spindles, and the plunger movable longitudinally in the carrier and engaged between its ends with the crank pin and arranged to protrude alternately at opposite ends beyond the carrier, substantially as set forth. 7th. The combination of the framing uprights, the bearing pieces held thereto and having spindle portions and a crank pin extended between said bearing pieces and arranged eccentric to the spindle portion, the carrier composed of the box sections journaled on the spindles and having in their abutting faces bearings for the plunger and the plunger having between its ends a yoke for engagement by the crank pin, substantially as set forth.

No. 69,361. Rock Drill. (*Machine à percer.*)

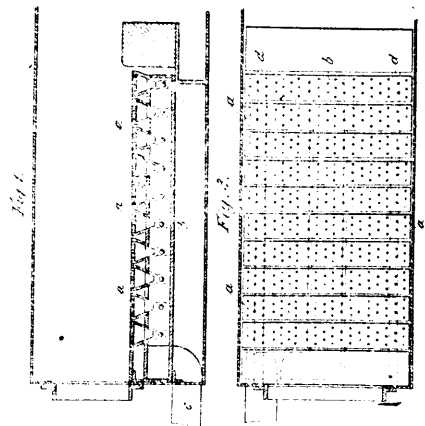
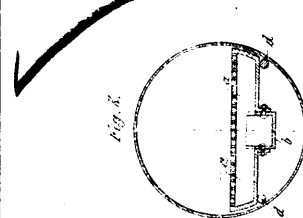
The Rand Drill Company, assignee of Hugh Vincent Conrad, North Tarrington, New York, U.S.A., 16th November, 1900; 6 years. (Filed 13th October, 1899.)

Claim.—1st. In a rock drill, the combination with the cylinder and the piston arranged to reciprocate therein, a valve chest and a valve for controlling the supply and exhaust of the motive fluid to and from the cylinder, of a rocker actuated by the movement of the piston to control the movement of the valve, a cylindrical pivot pin upon which said rocker is mounted, and a retaining device, secured to the frame which carries the rocker and pin, but independent of the pin itself, whereby longitudinal movement of the pin is prevented, substantially as specified. 2nd. In a rock drill, the combination, with the cylinder and the piston arranged to reciprocate therein, a valve chest and a valve for controlling the supply and exhaust of the motive fluid to and from the cylinder, of a rocker actuated by the movement of the piston to control the movement of the valve, a cylindrical pivot pin upon which said rocker is mounted, and a lug or overhanging ear upon a portion of the frame of the drill removably secured to that portion of the frame carrying the rocker arm and pin, said lug being in close proximity to and adapted to prevent longitudinal movement of the pin, substantially as specified. 3rd. In a rock drill, the combination with the cylinder and the piston arranged to reciprocate therein, a valve chest and a valve for controlling the supply and exhaust of the motive fluid to and from the cylinder, of a rocker actuated by the movement of the piston to control the movement of the valve, a cylindrical pivot pin upon



direction, and a lug or overhanging ear upon a portion of the frame for preventing longitudinal movement in the other direction, substantially as specified. 4th. In a rock drill, the combination with the cylinder and the piston arranged to reciprocate therein, a valve chest and a valve for controlling the supply and exhaust of the motive fluid to and from the cylinder, of a rocker mounted in the cylinder casting, a cylindrical pivot pin upon which said rocker is mounted, a head or shouldered portion on the said pivot pin for preventing longitudinal movement of the pin in one direction, an intermediate chamber between the cylinder casting and the valve chamber, a lug or overhanging ear upon the said intermediate chamber adapted to prevent the longitudinal movement of the pin in the other direction, and means for securing the valve chest, intermediate chamber, and cylinder together, substantially as specified

No. 69,362. Fire Grate. (*Grille de foyer.*)



The Internationale Dampfkesselfeuerungs Gesellschaft Mit Beschränkter Haftung, 17 and 18 Chausseestrasse, Berlin N., Germany, 16th November, 1900; 6 years. (Filed 24th October, 1900.)

Claim.—1st. The combination with a main channel, to which compressed air, gases and the like are conveyed, arranged in the longitudinal direction of the fire grate, of a series of hollow fire bars placed across and above said main channel, which distributes the air, gases and the like to the cavities of said fire bars, from which they enter the fire through suitable openings, substantially as set forth. 2nd. The combination with a series of hollow fire bars placed across the longitudinal direction of the fire grate, of a main channel placed in the longitudinal direction and supporting said hollow fire bars at the middle, while it communicates with their cavities for the purpose of distributing thereto compressed air, gases and the like, which enter the fire through suitable openings, substantially as set forth. 3rd. The combination with a main channel arranged in the longitudinal direction of the fire grate in the centre of the latter, of a series of hollow fire bars placed in the cross direction on said main channel and slating at their top faces from the centre down to the sides, so as to form two slanting planes on which the coals and cinders may guide down to the sides, the said main channel serving for distributing to the cavities the said fire bars compressed air, gases and the like which enter the fire through suitable openings provided in the top parts of said fire bars, substantially as set forth.

No. 69,363. Loom. (Metric.)

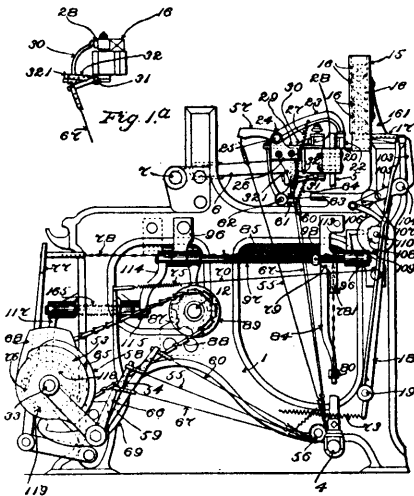


Fig. 1. 69363

The American Loom Company, New Jersey, assignee of Henry Ingraham Harriman, Brooklyn, New York, U.S.A., 16th November, 1900; 6 years. (Filed 30th May, 1900.)

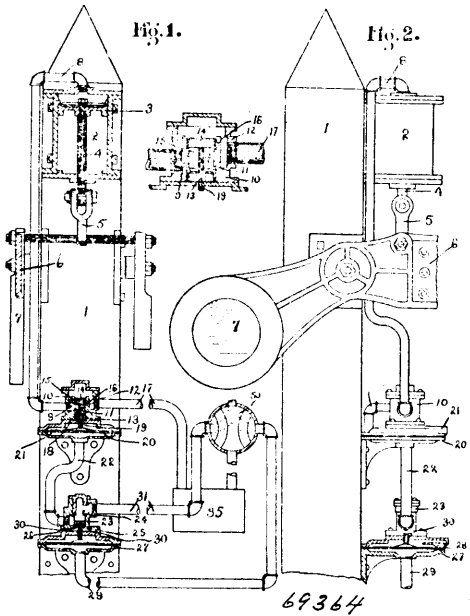
Claim.—1st. In a loom, weft replenishing mechanism, driving mechanism to drive the loom at a high speed for regular working and also at a definite reduced rate of speed during replenishment, and weft indicator devices controlling the working of the said mechanisms, all combined and operating to reduce the speed of the loom to the said definite lower rate for the performance of the operations incident replenishment and to restore the speed to the normal rate of running after such operations have been performed. 2nd. In a loom, the lay, weft replenishing mechanism comprising essentially a holder for a reserve supply independent of the lay and means to feed from the said holder to the lay, driving mechanism to drive the loom at a high speed for regular working and at a reduced speed during a replenishment, and weft indicator devices controlling the working of the said mechanisms, combined and operating to reduce the speed of the loom for the performance of the operations incident to replenishment and to restore the normal high speed after such performance. 3rd. In a loom, in combination, weft replenishing mechanism, driving mechanism having separate fast and slow speed transmitting devices both making positive connection with the driving shaft of the loom, a shifter device to control the action of said driving mechanism, weft indicator devices, and means under the control of the said weft indicator devices to actuate the said shifter device and the weft replenishing mechanism, the said means acting to cause the shifter device to be moved to re-start the loom under normal conditions after the operation of the weft replenishing mechanism. 4th. In a loom, in combination, weft replenishing mechanism, comprising essentially a holder for reserve supply and means to effect replenishment by transfer therefrom, loom driving mechanism having a shifter device to control the action thereof, weft indicator devices, and means under the control of the said weft indicator devices for causing the said shifter device to be actuated to occasion a dwell in the regular working of the loom, the weft replenishing mechanism to perform its operations, and the shifter device to be

moved to re-start the loom under normal working conditions after such performance, substantially as described. 5th. In a loom, in combination, the lay, weft replenishing mechanism comprising essentially a holder for reserve shuttles independent of the lay and means providing for replacing the spent or failed shuttle on the lay by one from the said holder, loom driving mechanism having a shifter device to control the action thereof, weft indicator devices, and means under the control of the said weft indicator devices for causing the said shifter device to be actuated to occasion a dwell in the regular working of the loom, the weft replenishing mechanism to perform its operations, and the shifter device to be moved to re-start the loom under normal working conditions after such performance, substantially as described. 6th. In a loom, in combination, loom driving mechanism having a shifter device to control the action thereof, picking mechanism, weft replenishing mechanism, weft indicator devices, and means under the control of the weft indicator devices for causing the said shifter device to be actuated to occasion a dwell in the regular working of the loom, the weft replenishing mechanism to perform its operations, the picking of the shuttle to be arrested during such performance, and the shifter device to be moved to re-start the loom under normal working conditions after such performance, substantially as described. 7th. In a loom, in combination, loom driving mechanism having a shifter device to control the action thereof, picking mechanism, weft replenishing mechanism comprising essentially a holder for a reserve supply independent of the lay, and means to feed therefrom to the lay, weft indicator devices, and means under the control of the weft indicator devices for causing the said shifter device to be actuated to occasion a dwell in the regular working of the loom, the weft replenishing mechanism to perform its operations, the picking of the shuttle to be arrested during such performance, and the shifter device to be moved to re-start the loom under normal working conditions after such performance, substantially as described. 8th. In a loom, in combination, weft replenishing mechanism, driving mechanism to drive the loom at a high speed for regular working and at a reduced speed during replenishment, picking mechanism, weft indicator devices, and means under the control thereof for causing the speed of the loom to be reduced for performance of the operations incident to replenishment, the picking of the shuttle to be arrested during such performance, and the replenishment to be effected, and for re-starting the loom under normal working conditions and speed after such performance. 9th. In a loom, in combination, the lay weft replenishing mechanism comprising essentially a holder for reserve shuttles independent of the lay and means providing for replacing the spent or failed shuttle on the lay by one from the said holder, driving mechanism to drive the loom at a high speed for regular working and at a reduced speed during replenishment, picking mechanism, weft indicator devices, and means under the control thereof for causing the speed of the loom to be reduced for the performance of the operations incident to replenishment, the picking of the shuttle to be arrested during the said replenishment and the latter to be effected and for re-starting the loom under normal working conditions and speed after such performance. 10th. In a loom, in combination, weft indicating devices, a change shaft, means for rotating the change shaft under the control of the said weft indicating devices, weft replenishing mechanism operated from the said change shaft, and driving means for the loom having a shifter device to control the action thereof, the said shifter device being itself controlled from the change shaft, substantially as described. 11th. In a loom, in combination, driving means therefor having a shifter device to control the action of such means, weft indicating devices, a change shaft, means for rotating the change shaft under the control of the weft indicating devices, weft replenishing mechanism having its operation occasioned by the said change shaft and comprising essentially a holder for reserve shuttles independent of the lay and means providing for replacing the spent or failed shuttles on the lay by one from the said holder, and means for operating the said shifter device from the change shaft, substantially as described. 12th. In a loom, in combination, weft indicating devices, a change shaft, means for operating the said change shaft under the control of the said weft indicating devices, driving mechanism to drive the loom at a high speed for regular working and also at a reduced rate of speed during replenishment, shifter devices controlled by the said change shaft to effect the changes of speed, picking mechanism, means operated by the change shaft to discontinue and re-start the picking, and replenishing mechanism operatively connected with the said change shaft. 13th. In a loom, in combination, the lay, weft indicating devices, a change shaft, means for rotating the said change shaft under the control of the said weft indicating devices, driving mechanism to drive the loom at a high speed for regular working and also at a reduced rate of speed during replenishment, shifter devices operated by the said change shaft to effect the changes of speed, picking mechanism, means operated by the said change shaft to discontinue the picking prior to the replenishment and re-start it subsequently thereto, and weft replenishing mechanism comprising essentially a holder for reserve shuttles independent of the lay, and means operatively connected with the said change shaft for effecting replenishment by replacing a spent or failed shuttle on the lay by a reserve shuttle from the said holder. 14th. In a loom, in combination, weft indicating devices, the change shaft, means for rotating the same under the control of the said weft indicating devices, the holder for shuttles, the lay and its shuttle box, and means operated from the said change shaft for opening the shuttle

box to permit the ejection of the spent or failed shuttle and the transfer of a reserve shuttle from the holder, and also for effecting such transfer, substantially as described. 15th. In a loom, in combination, weft indicating devices, the change shaft, means for rotating the same under the control of the said weft indicating devices, the holder for shuttles, the lay and its shuttle box, the swell or binder, means operated from the said change shaft for relieving the pressure of the protector finger on the swell or binder, the opening the shuttle box to permit the ejection of the spent or failed shuttle and the transfer of a reserve shuttle from the holder, and also for effecting such ejection and transfer, substantially as described. 16th. In a loom, in combination, weft replenishing devices comprising a holder for a reserve supply independent of the lay and means of transferring from the said holder to the lay, and actuating mechanism for the replenishing devices extending the operations of the said devices throughout a predetermined number of revolutions greater than two of the crank shaft of the loom. 17th. In a loom, in combination, weft replenishing mechanism, picking mechanism, and actuating mechanism extending the operations of the replenishing mechanism throughout more than two revolutions of the crank shaft of the loom, and suspending the picking during the performance of such operations. 18th. The combination with the lay, its movable shuttle box front, the rocker pivotally supported on the lay and having the said front connected therewith, means to move the said rocker, and the ejector, of the bolt or slide connected with the said ejector and moving with the said rocker, and the stop with which the said bolt or slide engages in the movement of the lay in order to effect the action of the ejector. 19th. The combination with the lay, the movable shuttle-box front, the rocker pivotally supported on the lay and having the said front connected therewith, a rotatable shaft, a cam thereon, and a lever operated by said cam, and connected to the said rocker for operating the latter, substantially as described. 20th. The combination with the lay, of the ejector working in the shuttle-box on the lay, the change-shaft, and operating devices for the ejector controlled by the change-shaft, substantially as described. 21st. The combination with the lay, the movable shuttle-box front, the rocker pivotally supported on the lay and having the said front connected therewith, the swell or binder, the protector-shaft and its finger, the rocker mounted on the lay and acting in connection therewith, a rotatable shaft, cams thereon, levers operated by the said cams, and connections from the said levers to the said rockers for operating the latter, substantially as described. 22nd. In combination, the lay, a hopper, an injector for injecting from the said hopper into the shuttle box on the lay, the change-shaft, means to operate the injector under the control of said change-shaft, means to operate the change shaft, and weft indicator mechanism controlling the working of the change shaft, substantially as described. 23rd. The combination with the lay, its movable shuttle box front, and means to operate the latter, of the injector, a rotatable shaft, and means to move the injector to transfer a shuttle to the lay, the said means comprising a cam on said shaft, a lever operated by the said cam, and a connection between the said lever and injector including a spring, the said cam being constructed to occasion an excess of movement of the said lever and thereby strain the spring to cause the injector to follow the lay rearwardly while pressing against the shuttle and holding it in place until the shuttle box front is lowered. 24th. The combination with the hopper having the discharge opening at the lower end thereof, of the injector, and operating means therefor whereby the injector is caused to stand normally during the regular working of the loom in an intermediate position supporting the contents of the hopper above the said opening, and on being set in action is retracted to permit such contents to descend and then is advanced to transfer or inject from the hopper to the lay, it being afterward returned to the said intermediate position. 25th. In combination, the lay an ejector to discharge the spent or failed shuttle from the shuttle box on the lay, a hopper for reserve shuttles, an injector for transferring or injecting from the said hopper into the shuttle box, the change shaft means to operate the ejector and injector under the control of the change shaft, means to operate the change shaft, the weft indicator, mechanism controlling the working of the change shaft, substantially as described. 26th. The combination with the hopper having an opening at the bottom thereof for the escape of shuttles, of the injector, the spring acting with a tendency to draw the same forward, a rotatable shaft, a cam thereon, and a lever operated by the said cam and connected with the injector, the said cam having a portion thereof acting against the said lever constructed to hold the injector normally in an intermediate position supporting the shuttles in the hopper, and also having a drop which permits the injector to be drawn forward by the spring out from under the shuttles in the hopper. 27th. In a loom, the combination with one of the rotating shafts thereof, of the change shaft, driving connections between the said shafts embracing the change clutch, a clutch shipper, weft indicating devices, means for operating the said clutch shipper from the said weft indicating devices to occasion the working of the change shaft, a weft replenishing devices under the operative control of the said change shaft. 28th. In a loom, the combination with one of the rotating shafts thereof, of the change shaft, driving connections between the said shafts embracing the change clutch, a clutch shipper, weft indicating devices, means for operating the said clutch shipper from the said weft indicating devices to occasion the working of the change

shaft, weft replenishing devices under the operative control of the change shaft, and means under the control of the change shaft to occasion the unshipping of the change clutch when the change shaft has completed the required rotation. 29th. In a loom, the combination with one of the rotating shafts thereof, of the change shaft, devices for driving the latter from the former embracing a normally open change clutch, a clutch shipper, weft indicating devices, means for operating the said clutch shipper from the said weft indicating devices to occasion the working of the change shaft, weft replenishing devices under the operative control of the said change shaft, a catch to retain the change clutch in the closed condition which it is caused to assume by the operation of the weft indicating devices, and means to free the said catch and allow the change clutch to become disengaged after the desired rotation of the change shaft has occurred. 30th. In a loom, the combination with the cam shaft, the change shaft, driving connections between the said shafts embracing the change clutch, and weft replenishing mechanism operated by the said change shaft, of weft indicating devices, a pawl actuated at each movement of the weft indicating devices, a cam operated by the said pawl, and the clutch shipper operated by the said cam. 31st. In a loom, in combination, the cam shaft, the change clutch thereon, the change shaft, driving connections between the said change shaft and the loose member of said change clutch, weft replenishing mechanism operated by said change shaft, weft indicating devices, a pawl actuated at each movement of the weft indicating devices, a cam disc operated by the said pawl and having cam projections, a clutch shipper having an arm thereof engaged by the said cam projections to actuate the clutch shipper, a spring acting on the said clutch shipper, a catch engaging with said clutch shipper to retain the change clutch closed, and a cam carried by the change shaft to disengage the said catch for the purpose of allowing the change clutch to be opened. 32nd. In a loom, in combination, weft indicating devices, the picking arm, the picker stick, the lug strap having separable connections with one of the parts which it connects, and means actuated under the control of the weft indicating devices to determine the transmission of power by the lug strap. 33rd. In a loom, the combination with the picking arm 84, of the picker stick, the lug strap having the hook for engagement with a pin or the like carried by the said picking arm, and means to disengage the said hook from the said pin at certain times in the working of the loom. 34th. In a loom, the combination with the picking arm, and means to operate the same, of the picker stick, the lug strap having a separable connection with the said picking arm, the change shaft, a cam thereon, a lever operated by the said cam, and a connection between the said lever and the lug strap, whereby the times of the actuation of the picker stick are determined. 35th. In a loom, the combination with the lay, its shuttle box, the swells or binders thereof, the pressure devices acting against said swells or binders, the picking mechanism, a hopper receiving a plurality of shuttles, and devices by which the said shuttles successively are transferred to the lay, of devices whereby pressure on the swells or binders is removed prior to the pick and again applied before the shuttle completes its flight. 36th. In a loom, the combination with the lay, its shuttle boxes, the swells or binders thereof, the protector shaft and its fingers acting against the said swells or binders, the lay pitman or connecting rod, the lever 127 pivoted thereupon, the cam 128 on a fixed part of the loom and engaged by the said lever in the working of the loom, and the picking mechanism, whereby the pressure upon the swells or binders is removed prior to each pick and restored before the shuttle completes its flight. 37th. In a loom, in combination, weft indicating devices operative when the condition of the working weft supply necessitates replenishment thereof, a change shaft, instrumentalities under the control of said devices to operate the said change shaft, weft-replenishing instrumentalities under the operative control of the said change shaft, picking mechanism, and instrumentalities under the control of the change shaft operative to suspend the picking at the time of effective replenishment. 38th. In a loom, in combination, fast and slow speed driving mechanism, weft replenishing instrumentalities, weft indicating devices operative when the condition of the working weft supply necessitates replenishment thereof, instrumentalities under the control of such devices operative to reduce the speed of the loom for the action of the said weft-replenishing mechanism and to occasion such action while the loom is running at its reduced speed, and pick finding instrumentalities operative to cause the first pick of fresh weft to be laid in the predetermined shed. 39th. In a loom, in combination, weft replenishing instrumentalities, controlling and actuating means therefor, operative when the condition of the working weft supply necessitates replenishment thereof, picking mechanism, and instrumentalities operative to suspend the picking at time of replenishment and subsequently re-start the same in season to introduce the pick of fresh weft into a re-opening of a predetermined shed after a multiple of rounds or cycles of shed formations, counting from a deficient shed. 40th. In a loom, in combination, weft replenishing instrumentalities, controlling and actuating means therefor operative when the condition of the working weft supply necessitates replenishment thereof, picking mechanism, and instrumentalities operative to suspend the picking at time of replenishment and re-start the same at the end of a round or cycle of shed formations or a multiple of such round or cycle, greater than two shed formations, counting from a deficient shed, to introduce the first pick of fresh weft into a re-opening of the predetermined shed.

No. 69,364. Signal. (Signal.)



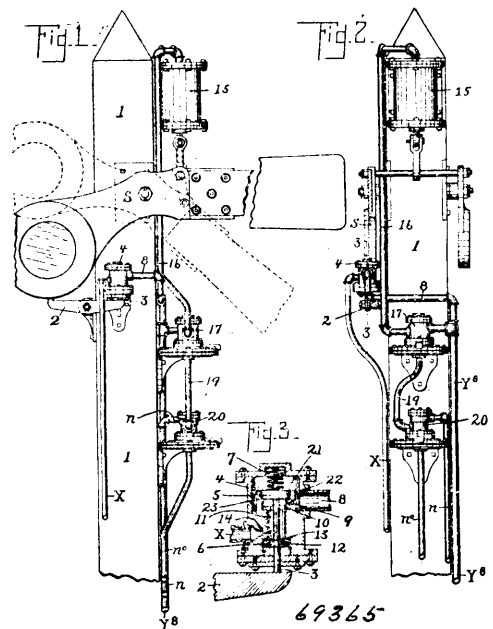
The Pneumatic Railway Signal Company, Virginia, assignee of Frank Lemont Dodgson, Cohoes, New York, U.S.A., 16th November, 1900; 6 years. (Filed 12th May, 1900.)

Claim.—1st. The combination with the cylinder and the piston operating therein, a reservoir for fluid under pressure adapted for connection with the cylinder, and two main pipes to which fluid under pressure is admitted alternately, of a differential valve actuated in one direction by the fluid from the reservoir and controlling the supply and exhaust to the cylinder, and a differential valve between the two main pipes controlling the passage of fluid to and from one side of the first-mentioned differential valve, substantially as described. 2nd. The combination, with the signal arm, the piston connected thereto, the cylinder, the supply and exhaust ports thereof, two valves, the first controlling the supply and exhaust to the cylinder, and the second controlling the operation of the first valve, two mains for fluid under pressure, one passing the valve and to the cylinder, and the other passing the second valve and to the first valve for operating the latter, a third main leading to the second valve for operating the same, and means for supplying and exhausting the second and third mains alternately. 3rd. The combination with the weighted signal arm, the piston connected thereto, the cylinder, the supply and exhaust ports for the cylinder, a reservoir for fluid under pressure, a valve operated by fluid from the reservoir in a direction to admit fluid to the cylinder, and a diaphragm for operating said valve to open the cylinder exhaust and close the supply valve, of two main fluid supply pipes, valve devices for admitting fluid under pressure to said pipes alternately, and a differential valve actuated by a difference in pressure in the supply pipes, the valve being actuated by pressure on the larger surface in a direction to cause the opening of the exhaust port of the cylinder, substantially as described. 4th. The combination with the signal arm and a weight for turning it to normal position, the piston connected thereto, the cylinder having the supply and exhaust ports, a reservoir for fluid under pressure, and a differential valve for controlling the supply and exhaust ports and moved in one direction by pressure from the reservoir, of two supply mains, valve devices for admitting fluid pressure to the mains, a differential valve actuated by difference in pressure in the mains and controlling the operation of the first-mentioned differential valve, and connections between the valves and mains whereby pressure in the main connected to the greater area of the second differential valve will cause the opening of the exhaust port in the cylinder and permit the signal to return to normal position, substantially as described. 5th. The combination with the cylinder and the piston operating therein, a reservoir for fluid under pressure adapted to be connected to the cylinder, of two supply mains for fluid under pressure and two differential valves actuated by variations in pressure in the supply mains, one of said valves controlling the admission of pressure from the reservoir to the cylinder when pressure is applied to its greater area, and the other always causing the exhaust from the cylinder when pressure is applied to the greater area, the greater areas of both valves being actuated by an increase in pressure in the supply mains, substantially as described. 6th. The combination, with the signal arm, the piston connected thereto, the cylinder, the supply and exhaust ports thereof, a pneumatically operated valve controlling the supply and exhaust to the cylinder and normally set for exhaust and normally tending to return to the exhaust position, a second pneumatically

operated valve for moving the first valve to the supply position and having fluid pressure on both sides thereof to move it in both directions, and means for alternately supplying and exhausting the pressure on both sides of said second valve, 7th. The combination, with the cylinder and piston operating therein, a reservoir for fluid under pressure adapted to be connected to the cylinder, the two supply mains for fluids under pressure, and two valves actuated by variation in pressure in the supply mains, one of said valves controlling the admission of fluid under pressure from the reservoir to the cylinder when operative pressure is applied to the valve from one supply main, and the other valve causing the exhaust from the cylinder, when operative pressure is applied to said valve from the other supply main, each valve being actuated by a change in pressure in the supply mains, substantially as described. 8th. The combination, in pneumatic semaphore, of a pivoted semaphore arm having a counterweight tending to raise said arm to indicate danger, a cylinder placed above said arm, a piston in said cylinder provided with connections to said arm, and a main connected with the cylinder for operating the piston by fluid pressure to depress said arm to indicate safety and upon reduction of pressure therein to permit the arm to return to indicate danger.

No. 69,365. Railway Signal and Switch Apparatus.

(Appareil de signal et aiguille de chemin de fer.)



The Pneumatic Railway Signal Company, assignee of Frank Lemont Dodgson, Cohoes, New York, U.S.A., 16th November, 1900; 6 years. (Filed 12th May, 1900.)

Claim.—1st. In an switch operating apparatus, a cylinder and piston for throwing the switch, said cylinder having two operating ports, a supply main, a separate motor valve controlling each port to admit air to said cylinder from said main and to exhaust air from said cylinder, a controlling pipe for operating each motor valve, and means for producing pressure in said controlling pipes alternately and for reducing the pressure in both controlling pipes simultaneously. 2nd. In a switch operating apparatus, a cylinder and piston for throwing the switch, said cylinder having two operating ports, a supply main, a separate motor valve controlling each port to admit air to said cylinder, from said main and to exhaust air from said cylinder, a controlling pipe for operating each motor valve, and means for producing pressure in said controlling pipes alternately and for exhausting both controlling pipes simultaneously. 3rd. In a switch operating apparatus, a cylinder and piston for throwing the switch, said cylinder having two operating ports, a supply main, a separate motor valve controlling each port to admit air to said cylinder from said main, and to exhaust air from said cylinder, a controlling pipe for operating each motor valve, and means for producing pressure in said controlling pipes alternately and for reducing the pressure in both controlling pipes simultaneously, a valve operated by the movements of said piston and connected with said supply main, signal pipes leading from said valve for operating indicating mechanism for the lever at the operating station, said indicating mechanism and ports in said valve at the switch which at mid stroke in either direction open both signal pipes to exhaust and at each end of its stroke produces pressure in one signal pipe, and exhausts the other and vice versa. 4th. In a switch operating apparatus, a cylinder and piston for throwing the

switch, said cylinder having two operating ports, a supply main, a separate motor valve controlling each port to admit air to said cylinder from said main and to exhaust air from said cylinder, a controlling pipe for operating each motor valve, and means for producing pressure in said controlling pipes alternately for exhausting both controlling pipes simultaneously, a valve operated by the movements of said piston and connected with said supply main, pipes leading from said valve for operating a locking mechanism for the lever at the operating station, said locking mechanism, and ports in said valve at the switch which at mid-stroke in either direction opens both signal pipes to exhaust and at the two ends of its stroke produces pressure in one signal pipe and exhausts the other and vice versa. 5th. In a switch operating and return signal device, a switch, a pneumatic supply main, a valve controlling said supply main, pipes connecting said valve with signalling apparatus at the operating station, a main plate operated by said motor and having a slot and pin connection with the switch and a slot and pin connection with said valve, the slots being of such form as to produce converse movements of the switch and valve. 6th. The combination of a switch and its operating cylinder and piston, a motor valve for controlling the movement of said piston in each direction, a pneumatic supply main, an operating valve for controlling both of said motor valves, a controlling pipe from said operating valve to each motor valve, said operating valve being adapted to produce pressure or exhaust alternately in said controlling pipes and to reduce the pressure in both controlling pipes simultaneously. 7th. The combination of a movable semaphore, a pneumatic motor for setting the same in safety position, an operating bar at the operating station for controlling the motor, a pneumatic locking device for the operating bar, a valve at the semaphore operated by the movements of the semaphore arm, and direct pneumatic connections between said valve and said locking devices, said locking devices being operated to lock said bar upon exhaustion of the air from said pneumatic connections and to unlock said bar when the semaphore has returned to danger position and has operated said valve to produce pressure in said pneumatic connections. 8th. In a switch operating apparatus, a pneumatic motor for throwing the switch, an operating bar at the operating station adapted to control the movements of said motor, a valve at the switch operated by the movements of the switch, a locking device for said operating bar, direct pneumatic connections between said valve and said locking devices, said valve being adapted to release said locking devices alternately by pressure in said pneumatic connections when the valve is at the ends of its stroke, and to set said locking devices when the valve is at mid-stroke by exhausting said pneumatic connections. 9th. In a switch operating mechanism, the combination of an actuating plate for moving the switch, a valve operating rod for transmitting a signal indicating the position of the switch, the plate having two slots, the first slot having end portions parallel with the movement of the actuating plate and a diagonal central portion, and the second slot having diagonal end portions set in parallel planes and the straight central portion parallel with the movement of the plate, a switch operating rod co-operating with the first slot and a valve operating rod co-operating with the second slot, whereby, in a movement of the actuating plate in either direction the valve is partly set before the switch begins to move, the switch is moved while the valve is stationary, and the stroke of the valve is finished after the switch has been fully moved. 10th. In a switch operating mechanism, the combination of an actuating plate for moving the switch, a valve operating rod for transmitting a signal indicating the position of the switch, the plate having two slots, the first slot having end portions parallel with the movement of the actuating plate and a diagonal central portion, and the second slot having the diagonal end portions set in parallel planes and the straight central portions in the line of movement of the plate, the switch operating rod co-operating with the first slot and the valve operating rod co-operating with the second slot, a pair of lugs upon said actuating plate and a locking bar connected with the switch having slots in which said lugs engage at the ends of the stroke of said actuating plate, whereby, in the movements of the actuating plate in either direction, the locking bar is released and the valve is partially set before the switch begins to move, the switch is moved while the valve is stationary and the stroke of the valve is finished, and the bar is locked after the switch has been fully moved. 11th. In a pneumatic switch operating apparatus, a cylinder, a piston for throwing the switch, said cylinder having two operating ports, a supply main, a separate motor valve controlling each port to admit air to said cylinder from said main and to exhaust air from said cylinder, a controlling pipe for operating each motor valve from which air is normally exhausted, and means for producing pressure in said controlling pipe alternately and for exhausting both controlling pipes simultaneously. 12th. In a pneumatic mechanism for operating switch and semaphore devices, the combination of a pneumatic motor, a valve controlling the same, an operating bar for said valve, a lock for said bar, a pneumatic operating mechanism for said lock, pneumatic connections from said mechanism to a valve at the switch or semaphore, connections between the switch or semaphore and the valve thereat for operating said valve, and means for returning the lock to its initial position, actuated by the movement of said bar. 13th. In a pneumatic mechanism for actuating switch and semaphore devices, a valve for controlling the same, an operating bar for said valve, said bar having a notched edge, a locking rod for engaging said notched edge, a

pneumatic actuating device for said rod, pneumatic connections from said device to a valve at the switch or semaphore, mechanism operated by the switch or semaphore for actuating the valve, the edge of the bar being so formed as to return the locking rod to its initial position. 14th. In a pneumatic mechanism for controlling the operating bars of switch and semaphore devices, the combination of an operating bar adapted to control the movements of the switch or semaphore, said bar having a notched edge, a rod adapted to engage said notched edge, a casing whereinto said rod extends, a flexible diaphragm in said casing, a valve at the switch or semaphore and operated by the movements thereof, a pneumatic connection from the valve at the switch or semaphore to said casing for operating said rod, and means upon the operating bar for returning the said locking bar positively to its initial position. 15th. In a switch operating device, the combination of an actuating plate, connections therefrom to said switch for operating the same, a locking bar movable with said switch and having grooves therein of different contours, lugs on said actuating plate, one of said lugs being adapted to enter one of the grooves only and the other lug being adapted to enter the other groove only. 16th. In a switch operating device, the combination of an actuating plate, connections therefrom to said switch for operating the same, a locking bar movable with said switch and having two grooves therein of different contours, two lugs on the actuating plate, each lug corresponding in contour to one of said grooves and having such a contour that it cannot enter the other of said grooves. 17th. The combination of a movable switch, an operating rod therefor, a rod actuating plate, a bed plate having ways in which said actuating plate slides, a switch locking rod, a keeper on the bed plate in which the locking rod works, a cam slot and pin connection between the switch rod and the actuating plate, and a locking connection between said plate and the locking rod, the same consisting of grooves or slots of different contour on one of the parts, and lugs or detents on the other part, one of said lugs being adapted to enter one of the grooves only, and the other lug being adapted only to enter the other groove. 18th. In a switch operating mechanism, the combination of an actuating plate for producing converse movements of a switch and a valve, oppositely disposed pin and slot connections between the plate and the switch and valve operating rods, a locking bar co-operating with the actuating plate and having grooves or slots therein of different contours, and lugs on the actuating plate one of said lugs being adapted to enter one of the grooves only, and the other lug being adapted to enter the other groove only. 19th. In a valve mechanism for pneumatic switch and signal operating apparatus, the combination of a casing having an internal bore, a piston fitting in said bore, and ports controlled by said piston, said internal bore extending into a cylindrical portion of the casing and having an annular space around the same. 20th. In a valve mechanism for pneumatic switch and signal operating apparatus, the combination of a casing having an internal bore, a pair of connected pistons working in said bore, and an inlet pipe at one end of the bore of the valve casing, an exhaust port at the opposite end of said bore, an outlet pipe intermediate the inlet and exhaust, a pneumatic mechanism for operating the piston in one direction, and a spring tending to move them in the opposite direction. 21st. In a valve mechanism for pneumatic switch and signal operating apparatus, the combination of a casing having a cylindrical bore, a pair of connected pistons fitting in said bore, and ports controlled by said pistons, one end of the bore being within a cylindrical extension projecting into the chamber of the casing, and one of said valves being adapted to move in said cylindrical extension. 22nd. In a valve mechanism for pneumatic switch and signal operating apparatus, the combination of a casing having a cylindrical bore, a pair of connected valves fitting in said bore and ports in said casing controlled by said valves, one of said ports being in cylindrical extension projecting into the chamber of the casing, means for moving the valves in one direction, and a spring tending to move them in the opposite direction. 23rd. In a valve mechanism for pneumatic switch and signal operating apparatus, the combination of a casing having an internal bore, a pair of connected pistons working in said bore, an annular chamber in the upper part of the casing surrounding and communicating with the upper part of said bore above the upper piston, an inlet pipe communicating with the annular chamber, an exhaust port leading from the lower part of said bore, an outlet pipe connecting said bore between the inlet and the exhaust, a pneumatic device for operating the pistons in one direction, and a spring tending to operate it in the reverse direction. 24th. In a valve mechanism for pneumatic switch and signal operating apparatus, the combination of a casing having a cylindrical bore, a pair of connected valves fitting in said bore, and ports controlled by said valves, one end of said bore being within a cylindrical extension projecting into the chamber of the casing, and one of said valves being adapted to move in said cylindrical extension, and a pneumatic mechanism for operating the valves. 25th. In a valve mechanism for pneumatic switch and signal operating apparatus, the combination of a casing provided with a cylindrical bore, a pair of connected pistons fitting in said bore, ports controlled by said pistons, one end of said bore being within a cylindrical extension projecting into the chamber of the casing, and one of said valves being adjusted to move in said cylindrical extension, said and a drip chamber outside the cylindrical extension, drip chamber extending from the first mentioned chamber downward in the body of the valves and having a plugged outlet. 26th

In a valve mechanism for pneumatic switch and signal operation apparatus, the combination of a supply pipe, a casing into which it leads, two inlet ports connecting the supply pipe with the casing, two outlet pipes leading from the casing, outlet ports connecting said outlet pipes with the casing, and ports and passages in the fixed and movable parts of the valve whereby either of said outlet pipes may be connected with the supply pipe, and the air may be exhausted simultaneously from both the outlet pipes. 27th. In a valve mechanism for pneumatic switch and signal operating apparatus, the combination of a supply pipe, a casing into which it leads, an exhaust port, two inlet ports connecting the supply pipe with the casing, two outlet pipes leading from the casing, outlet ports connecting said outlet pipes with the casing, and ports and passages in the fixed and moveable parts of the valve whereby either of said outlets may be connected with the supply pipe, the other outlet being meantime connected to the exhaust, and both of said outlets may be connected with the exhaust, the outlet ports being at such time closed. 28th. In a valve mechanism, for pneumatic switch and signal operating apparatus, the combination of a supply pipe, a casing into which it leads, two air outlet pipes leading from the casing, a valve seat having a medial exhaust port, an inlet port connected with the supply pipe, an outlet port connected with each outlet pipe, said four ports being arranged symmetrically with reference to said exhaust port, a slide valve having a single pair of ports adapted to connect one of the inlet ports with one of the outlet ports, a port constantly registering with the exhaust port, and two ports connected with the last mentioned port, each adapted to register with one or both of the outlet ports in the seat. 29th. In a pneumatic mechanism for operating switch and semaphore devices, the combination of a pneumatic motor, a valve controlling the same, an operating bar for the valve, said bar having a groove on one edge provided midway of its length with a locking wedge and having a sloping face at one end, a rod for locking the bar, said rod having a notch adapted to fit the grooved edge of the operating bar, and pneumatic devices for operating said rod transversely to the bar, whereby on operating said locking rod in one direction the operating bar may pass through the notch and engage behind the wedge thus preventing reverse movement of the bar, and upon releasing the rod from its actuating devices it is returned to its original position by the sloping face of the groove in the operating bar. 30th. In a combined switch and signalling apparatus, the combination of a movable semaphore, a pneumatic motor therefor, an operating bar for throwing the motor into action, a movable switch, a pneumatic motor for working the switch, an operating bar for this motor, mechanism for locking the switch-operating bar, and mechanism for locking the signal operating bar, said latter mechanism being adapted to release the signal operating bar only when the switch operating bar has completed its movement. 31st. In the combined switch and signalling apparatus, the combination of a movable semaphore, a pneumatic motor therefor, an operating bar for throwing the motor into action, a movable switch, a pneumatic motor for working the switch, an operating bar for throwing this motor into action, interlocking mechanism connecting the two bars together so that neither can be actuated until the other has completed its movement, individual locking devices for each of said bars, and mechanism for releasing said bar locking devices by means of a return impulse from the semaphore and switch respectively.

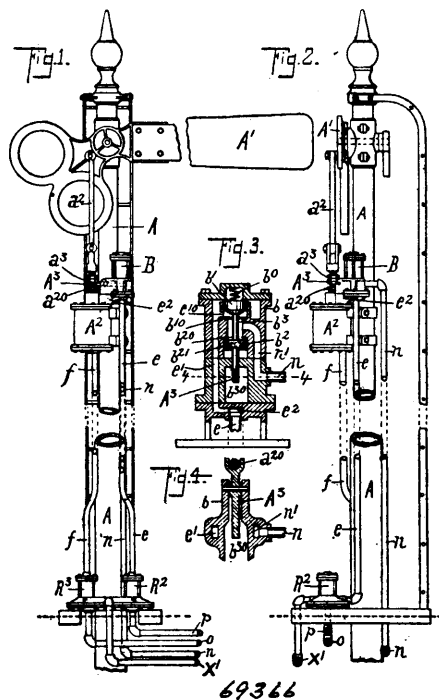
No. 69,366. Railway Switch and Semaphore.

(Aiguille et sémaphore de chemin de fer.)

The Pneumatic Railway Signal Company, Rochester, assignee of Frank Lemont Dodgson, Cohoes, both in New York, U.S.A., 16th November, 1900; 6 years. (Filed 12th May, 1900.)

Claim.—1st. The combination of a switch or semaphore mechanism, an operating device therefor, and means controlled by the movement of the switch or semaphore for producing an automatic movement of said operating device. 2nd. The combination of a switch or semaphore mechanism, an operating device adapted to connect and to cut-off the power supply for said mechanism, and means controlled by the movement of the switch or semaphore for moving said device automatically from the position adapted to connect the power supply to a cut-off position. 3rd. The combination of a switch or semaphore mechanism, an operating device adapted to connect and to cut-off the power supply for said mechanism, and means controlled by the movement of the switch for stopping said device at the position adapted to connect the power supply and also for moving said device automatically from said position to a cut-off position. 4th. The combination of a switch or semaphore mechanism, an operating device adapted to connect and to cut-off the power supply for said mechanism, means controlled by the movement of the switch or semaphore for stopping said device at the position adapted to connect the power supply and also for moving said device automatically from said position to a cut-off position, and means for holding said device in said stopped position against reversal of its movement. 5th. The combination of a pneumatically operated switch or semaphore mechanism, an operating valve therefor, and means controlled by the movement of the switch or semaphore for producing an automatic movement of said operating valve. 6th. The combination of a pneumatically operated switch or semaphore mechanism, an operating valve therefor, and means

controlled by the movement of the switch or semaphore for moving said valve automatically from a position adapted to operate upon



the switch or semaphore mechanism to a position inoperative upon said switch or semaphore. 7th. The combination of a pneumatically operated switch or semaphore mechanism, an operating valve therefor, and means controlled by the movement of the switch or semaphore for stopping the valve at a definite position in its full stroke and also for moving said valve automatically from said position to the limit of its movement. 8th. The combination of a pneumatically operated switch or semaphore mechanism, an operating valve therefor, means controlled by the movement of the switch or semaphore for stopping the valve at a definite position in its full stroke and also for automatically moving said valve from said position to the limit of its movement and a pawl mechanism for holding the operating valve in said stopped position against reversal movement of its movement. 9th. The combination of a pneumatically operated switch or semaphore mechanism, an operating valve therefor, means controlled by the movement of the switch or semaphore for moving said valve automatically from an inlet connection for actuating the said switch or semaphore to a cut-off and exhaust position at which the switch or semaphore mechanism is not operated. 10th. The combination of a pneumatic switch or semaphore mechanism, an operating valve therefor, an interlocking board, an operating bar and connections therefrom to said valve and to a tappet in said board, and means controlled by the movement of the switch or semaphore for moving said bar automatically from a part-stroke position whereby the movement of the valve and of the tappet is completed automatically. 11th. The combination of a pneumatic switch or semaphore mechanism, an operating valve therefor, an interlocking board, an operating bar and connections therefrom to said valve and to a tappet in said board and means controlled by the movement of the switch or semaphore for stopping said bar at a part-stroke position and also for moving said bar automatically from said position whereby the valve is held in a position for operating the switch or semaphore and the tappet is held in a position for locking out its related mechanism and the movement of the valve and of the tappet are automatically continued to a position of the tappet permitting the movement of the related mechanism and a position of the valve at which the switch or semaphore is normal. 12th. The combination of a pneumatically operated switch or semaphore mechanism, an operating valve therefor, means controlled by the movement of the switch or semaphore for automatically moving said valve from a part-stroke position to the limit of its movement and for stopping said valve at said part-stroke position and for retaining it there against movement in either direction. 13th. The combination in a pneumatic switch or semaphore mechanism of a cylinder and piston for operating the switch or semaphore, a relay valve controlling the inlet and exhaust to said cylinder, an operating valve for controlling the relay valve, pneumatic connection between said valves, indicator mechanism adapted to control the movements of said operating valve and to cause automatic movement thereof, an indicator valve controlled by the movement of the piston and

adapted to control said mechanism, and air supply to said operating valve, said indicator mechanism and said relay valve. 14th. In a pneumatic switch or semaphore mechanism, the combination of a cylinder and piston for operating the switch or semaphore, a relay valve controlling the inlet and exhaust to said cylinder, an operating valve for controlling the relay valve, pneumatic connection between the said valves, indicator mechanism adapted to control the movement of said operating valve and to cause automatic movement thereof, a relay valve for controlling the indicator mechanism, an indicator valve controlled by the movement of the piston and adapted to control said last mentioned relay valve, and air supply to said operating valve, said indicator mechanism and said relay valves. 15th. In a pneumatic switch or semaphore mechanism, the combination of a cylinder and piston for operating a switch or semaphore, a relay valve controlling the inlet and exhaust to said cylinder, an operating valve for controlling the relay valve, pneumatic connection between said valves, indicator mechanism adapted to stop said operating valve at a part-stroke position, and to cause automatic movement thereof, from said part-stroke position, an indicator valve controlled by the movement of the piston and adapted to control said indicator mechanism, and air supply to said operating valve, said indicator mechanism and said relay valve. 16th. In a pneumatic switch or semaphore mechanism the combination of a cylinder and piston for operating the switch or semaphore, a relay valve controlling the inlet and exhaust to said cylinder, an operating valve for controlling the relay valve, pneumatic connection between said valves, an indicator mechanism adapted to stop the movement of said operative valves at a part-stroke position and to cause automatic movement thereof from said part-stroke position, a relay valve for controlling the indicator mechanism, an indicator valve controlled by the movement of the piston and adapted to control said last mentioned relay valve, and air supply to said operative valve, said indicator mechanism and relay valves. 17th. In a pneumatic switch or semaphore mechanism, the combination of a cylinder and piston for operating a switch or semaphore, a relay valve controlling the inlet and exhaust to said cylinder, an operative valve for controlling the relay valve, pneumatic connection between the said valves, indicator mechanism adapted to stop said operating valve at a part-stroke position and to cause automatic movement thereof from the said part-stroke position, an indicator valve controlled by the movement of the piston and adapted to control said indicator mechanism, means for holding the operating valve when in a stopped position from reversal of its motion, and air supply to said operative valve, said indicator mechanism and said relay valve. 18th. In a pneumatic switch or semaphore mechanism, the combination of a cylinder and piston for operating a switch or semaphore, a relay valve controlling the inlet and exhaust to said cylinder, an operating valve for controlling the relay valve, pneumatic connection between said valves, indicator mechanism adapted to stop said operating valve at a part stroke position and to cause automatic movement thereof from the said part-stroke position, an indicator valve controlled by the movement of the piston and adapted to control said indicator mechanism, a pawl mechanism for holding the operating valve when in the stopped position from reversal of its motion, and air supply to said operating valve, said indicator mechanism and said relay valve. 19th. In a pneumatic switch or semaphore mechanism, the combination of a cylinder and piston for operating the switch or semaphore, a relay valve controlling the inlet and exhaust to said cylinder, an operating valve for controlling the relay valve, pneumatic connection between said valves, an indicator mechanism adapted to stop the movement of said operating valve at a part-stroke position and to cause automatic movement thereof from said part-stroke position, a relay valve for controlling the indicator mechanism, an indicator valve controlled by the movement of the piston and adapted to control said last mentioned relay valve, means for holding the operating valve when in a stopped position from reversal of its motion, and air supply to said operating valve, said indicator mechanism and said relay valve. 20th. In a pneumatic switch or semaphore mechanism, the combination of a cylinder and piston for operating the switch or semaphore, a relay valve controlling the inlet and exhaust to said cylinder, an operating valve for controlling the relay valve, pneumatic connection between said valves, an indicator mechanism adapted to stop the movement of said operating valve at a part-stroke position and to cause automatic movement thereof from said part-stroke position, a relay valve for controlling the indicator mechanism, an indicator valve controlled by the movement of the piston and adapted to control said last mentioned relay valve, a pawl mechanism for holding the operating valve when in a stopped position from reversal of its motion, and air supply to said operating valve, said indicator mechanism and said relay valve. 21st. In a pneumatic switch mechanism, the combination of a cylinder and piston for operating the switch, relay valves controlling the inlet and exhaust to the ends of said cylinder, an indicator valve having inlet thereto from a relay valve, an operating valve for controlling said relay valve, indicator mechanism controlled by the movement of the indicator valve for controlling the motion of said operating valve, and operating connection from said indicator valve to said indicator mechanism for operating the latter. 22nd. The combination in a pneumatic switch or semaphore mechanism, of a cylinder and piston for operating the switch or semaphore, an indicator valve, a relay valve having an outlet, connections from said outlet to said cylinder and to said

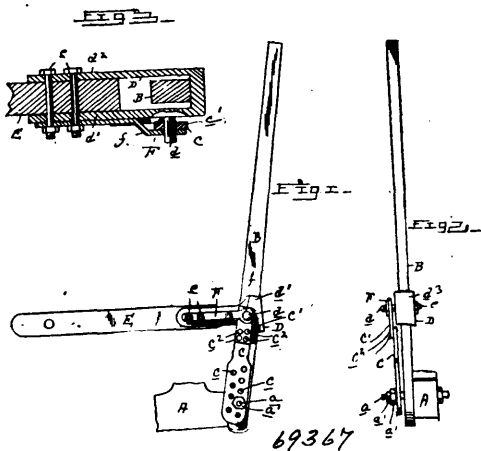
indicator valve, an operating valve for controlling said relay valve, indicator mechanism for controlling the movement of said operating valve, and operating connection between said relay valve and said indicator mechanism. 23rd. The combination of a switch, a motor therefor, locking mechanism for said switch actuated by said motor, an operating device for said motor, and means controlled by the movement of the switch for moving said operating device automatically after the switch is locked. 24th. The combination of a switch, a motor therefor, locking mechanism for said switch actuated by said motor, an operating device adapted to connect and to cut off the power supply for said motor, and means controlled by the movement of the switch for moving said operating device automatically after the switch is locked from the position adapted to connect the power supply to a cut-off position. 25th. The combination of a switch, a motor therefor, locking mechanism for said switch actuated by said motor, an operating device adapted to connect and to cut off the power supply for said motor, and means controlled by the movement of the switch for stopping said operating device at the position adapted to connect the power supply and also for moving said device automatically after the switch is locked from said position to a cut-off position. 26th. The combination of a switch, a motor therefor, locking mechanism for said switch actuated by said motor, an operating device adapted to connect and to cut off the power supply for said motor, means controlled by the movement of the switch for stopping said operating device at the position adapted to connect the power supply and also for moving said device automatically after the switch is locked from said position to a cut-off position, and means for holding said operating device in said stopped position against reversal of its movement. 27th. The combination of a pneumatically operated switch, a motor therefor, locking mechanism for said switch actuated by said motor, an operating valve for said motor, and means controlled by the movement of the switch for moving said valve automatically after the switch is locked. 28th. The combination of a pneumatically operated switch, a motor therefor, locking mechanism for said switch actuated by said motor, an operating valve for said motor, and means controlled by the movement of the switch for moving said valve automatically after the switch is locked from a position adapted to operate the switch to a position inoperative upon said switch. 29th. The combination of a pneumatically operated switch, a motor therefor, locking mechanism for said switch actuated by said motor, an operating valve for said motor, and means controlled by the movement of the switch for stopping the valve at a definite position in its full stroke and also for moving said valve automatically after the switch is locked from said position to the limit of its movement. 30th. The combination of a pneumatically operated switch, a motor therefor, locking mechanism for said switch actuated by said motor, an operating valve for said motor, means controlled by the movement of the switch for stopping the valve at a definite position in its full stroke and also for automatically moving said valve after the switch is locked from said position to the limit of its movement, and a pawl mechanism for holding the operating valve in said stopped position against reversal of its movement. 31st. The combination of a pneumatically operated switch, a motor therefor, locking mechanism for said switch actuated by said motor, an operating valve for said motor, means controlled by the movement of the switch for moving said valve automatically after the switch is locked from an inlet connection for actuating the said switch to a cut-off and exhaust position at which the switch is not operated. 32nd. The combination of a pneumatic switch, a motor therefor, locking mechanism for said switch actuated by said motor, an operating valve for said motor, an interlocking board an operating bar and connections therefrom to said valve and to a tappet in said board, and means controlled by the movement of the switch for moving said bar automatically after the switch is locked from a part stroke position whereby the movement of the valve and of the tappet it completed automatically. 33rd. The combination of a pneumatic switch, a motor therefor, locking mechanism for said switch actuated by said motor, an operating valve for said motor, an interlocking board, an operating bar and connections therefrom to said valve and to a tappet in said board, and means controlled by the movement of the switch for stopping said bar at a part-stroke position and also for moving said bar automatically after the switch is locked from said position, whereby the valve is held in a position for operating the switch and the tappet is held in a position for locking out its related mechanism and the movement of the valve and of the tappet are automatically continued to a position of the tappet permitting the movement of the related mechanism and a position of the valve at which the switch is at normal. 34th. The combination of a pneumatically operated switch, a motor therefor, locking mechanism for said switch actuated by said motor at the same time with the movement of the switch for automatically moving said valve after the switch is locked from a part-stroke position to the limit of its movement and for stopping said valve at said part-stroke position, while the motor, switch and locking mechanism are in motion and for retaining the valve at said part-stroke position against movement in either direction. 35th. In a pneumatic switch or semaphore mechanism, the combination of a cylinder and piston for operating the switch or semaphore, an operating valve for controlling the supply and exhaust of said cylinder, an operating bar for said operating valve having a slot provided with a diagonally arranged portion, an indicator cylinder and a piston therein connected to the slot

in said bar and adapted to control the movement of said operating valve and to cause automatic movement thereof, an indicator valve controlled by the movement of the switch or semaphore and adapted to control the action of said indicator cylinder and piston, and air supply to said operating valve, and to said cylinders. 36th. In a pneumatic switch or semaphore mechanism, the combination of a cylinder and piston for operating a switch or semaphore, a relay valve controlling the inlet and exhaust to said cylinder, an operating valve for controlling the relay valve, pneumatic connection between said valves, an operating bar for said operating valve having a slot provided with a diagonally arranged portion and a stop face between its ends, an indicator cylinder and a piston therein connected to the slot in said bar and adapted to stop said operating bar at a part stroke position and to cause automatic movement thereof from said part-stroke position, an indicator valve controlled by the movement of the switch or semaphore and adapted to control said indicator cylinder, and air supply to said operating valve, said cylinders and said relay valve. 37th. In a pneumatic switch or semaphore mechanism, the combination of a cylinder and piston for operating the switch or semaphore, a relay valve controlling the inlet and exhaust to said cylinder, an operating valve for controlling the relay valve, pneumatic connection between said valves, an operating bar for said operating valve having a slot provided with a diagonally arranged portion and a stop face between its ends, an indicator cylinder and a piston therein connected to the slot in said bar and adapted to stop the movement of said operating valve at a part-stroke position and to cause automatic movement thereof from said part-stroke position, a relay valve for controlling the indicator cylinder, an indicator valve controlled by the movement of the switch or semaphore and adapted to control said last-mentioned relay valve, and air supply to said operating valve, said cylinders and said relay valves. 38th. In a pneumatic switch mechanism, the combination of a cylinder and piston for operating the switch, an operating valve for controlling the inlet and exhaust to said cylinder, pneumatic connection between said valves, an operating bar for said operating valve having a slot provided with diagonally arranged end portions and a stop face at the inner end of each of said end portions, two indicator cylinders and pistons therein connected to the slot in said bar and adapted to stop said operating valve at part-stroke positions and to cause automatic movement thereof in opposite directions from said part-stroke positions, an indicator valve controlled by the movement of the switch and adapted to control said indicator cylinders, and air supply to said operating valve and to said cylinders. 39th. In a pneumatic switch mechanism, the combination of a cylinder and piston for operating the switch, a relay valve controlling the inlet and exhaust to said cylinder, an operating valve for controlling the relay valve, pneumatic connection between said valves, an operating bar for said operating valve having a slot provided with diagonally arranged end portions and a stop face at the inner end of each of said end portions, two indicator cylinders and pistons therein connected to said slot in said bar and adapted to stop said operating valve at part-stroke positions and to cause automatic movement thereof in opposite directions from said part-stroke positions, an indicator valve controlled by the movement of the switch and adapted to control said indicator cylinders, mechanism for holding the operating valve when in the stopped position from reversal of its motion, and air supply to said operating valves, said cylinders and said relay valve. 40th. A pneumatic switch or semaphore apparatus, comprising a pneumatic motor for actuating the switch or semaphore, a pneumatic indicator mechanism controlled by the movement of the switch or semaphore, an air supply, suitable operating pipes and operating mechanism, in which at normal all operating pipes are exhausted. 41st. A pneumatic switch apparatus, comprising a pneumatic motor for actuating the switch, a pneumatic indicator mechanism controlled by the movement of the switch, an air supply, suitable operating pipes and operating mechanism, in which normal and at reverse all operating pipes are exhausted. 42nd. A pneumatic switch or semaphore apparatus, comprising a pneumatic motor for actuating the switch or semaphore, an operating valve, a pneumatic indicator mechanism controlled by the movement of the switch or semaphore and adapted to control the movement of the operating valve, an air supply, and suitable operating pipes which at normal are all exhausted. 43rd. A pneumatic switch apparatus, comprising a pneumatic motor for actuating the switch, an operating valve, a pneumatic indicator mechanism controlled by the movement of the switch and adapted to control the movement of the operating valve, an air supply, and suitable operating pipes which at normal and at reverse are all exhausted. 44th. In a semaphore apparatus a semaphore blade provided with means for causing it to tend to return to the danger position, a double acting cylinder having a piston connected to said blade, an air reservoir and connections therefrom to each end of the cylinder, a valve controlling the connection to each end of the cylinder, each valve being adapted to operate more rapidly for inlet than for exhaust, whereby the semaphore blade is adapted to return to danger while air pressure is on both sides of the piston. 45th. In a semaphore apparatus, a semaphore blade provided with means for causing it to tend to return to the danger position, a double acting cylinder having a piston connected to said blade, an air reservoir and connections therefrom to each end of the cylinder, a valve controlling the connection to each end of the cylinder, means for connecting both valves simultaneously with the air supply from the reservoir, whereby the

semaphore blade is adapted to return to danger while air pressure is on both sides of the piston. 46th. In a semaphore apparatus a semaphore blade provided with means for causing it to tend to return to the danger position, a double acting cylinder having a piston connected to said blade, an air reservoir and connections therefrom to each end of the cylinder, a valve controlling the connection to each end of the cylinder, means for connecting both valves simultaneously with the air supply from the reservoir, and with each other, whereby the semaphore blade is adapted to return to danger while air pressure is on both sides of the piston. 47th. In a semaphore apparatus, a semaphore blade provided with means for causing it to tend to return to the danger position, a double acting cylinder having a piston connected to said blade, an air reservoir and connections therefrom to each end of the cylinder, a relay valve controlling the connection to each end of the cylinder, an operating valve adapted to set one of said relay valves to exhaust while the other is set to pressure, means controlled by the movement of the semaphore blade for holding said operating valve in position to hold open the relay valve adapted to return the semaphore to danger until the semaphore blade has returned to danger.

No. 69,367. Sweep Strap for Looms.

(Tablier pour métiers.)



Charles F. Thompson, Oswego Falls, New York, U.S.A. 16th November, 1900; 6 years. (Filed 29th May, 1900.)

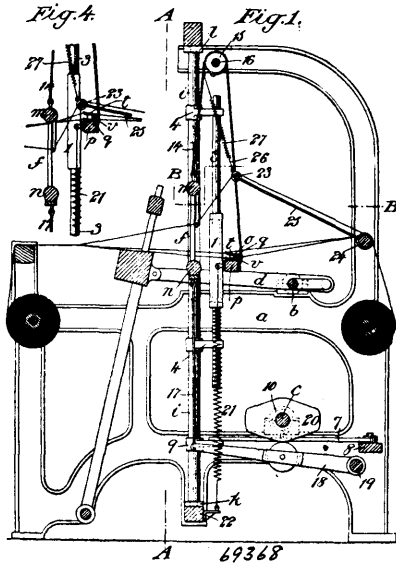
Claim.—In a sweep strap for looms, the combination of the sweep stick E, the metal sweep strap D, the plate F having its body portion provided with an off-set f, of the rawhide support comprising the body portion C, having its lower end enlarged and formed with two parallel rows of alternating holes c c, the bolt a and its securing nuts forming the pivot for said support, and the rawhide extension C' riveted to the outer face of the body portion C at its upper end and engaging the stud d at a point between the sweep strap D and the off-set plate F, substantially as specified.

No. 69,368. Loom for Cross Weaving. (Métier à tisser.)

Isaac Emerson Palmer, Middletown, Connecticut, U.S.A., 16th November, 1900; 6 years. (Filed 12th January, 1900.)

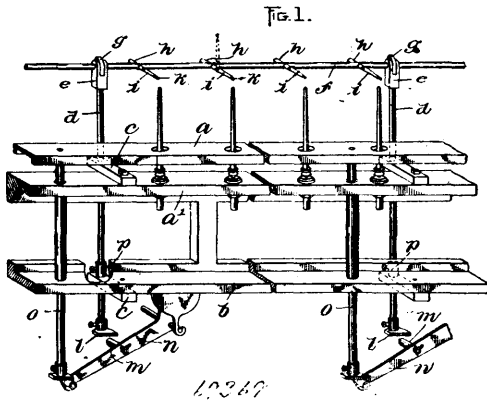
Claim.—1st. In a loom, a main heddle, a plurality of auxiliary heddles arranged one above another at an angle to the main heddle, means for imparting vertical reciprocating movements to the main and auxiliary heddles and means for imparting independent lateral reciprocating movements to the auxiliary heddles, substantially as set forth. 2nd. In a loom, a vertically reciprocating main heddle and a plurality of vertically and laterally reciprocating auxiliary heddles, the said auxiliary heddles comprising a plurality of superposed bars or plates, each bar or plate having a plurality of eyes therein arranged to receive certain of the auxiliary warp threads, substantially as set forth. 3rd. In a loom, a main heddle, an auxiliary heddle comprising a bar or plate arranged at an angle to the main heddle, the said bar or plate having one of its edges bent at an angle to the body of the plate and provided with eyes for the passage therethrough of the auxiliary warp threads and means for operating the heddles, substantially as set forth. 4th. In a loom, a main heddle, one or more auxiliary heddles, means for operating the heddles, and a yielding lifter bar engaging the main warp threads for keeping them at all times out of contact with the auxiliary heddle or heddles, substantially as set forth. 5th. In a loom, a vertically reciprocating main heddle a pair of vertically reciprocating carriages, a lower auxiliary heddle secured at one end to one of the carriages and an upper auxiliary heddle secured at the opposite end to the other carriage, the lower auxiliary heddle have

ing a sliding engagement with the carriage to which the upper auxiliary heddle is secured and the upper auxiliary heddle having a slid-



ing engagement with the lower auxiliary heddle and means for moving the carriages laterally independently of each other, substantially as set forth.

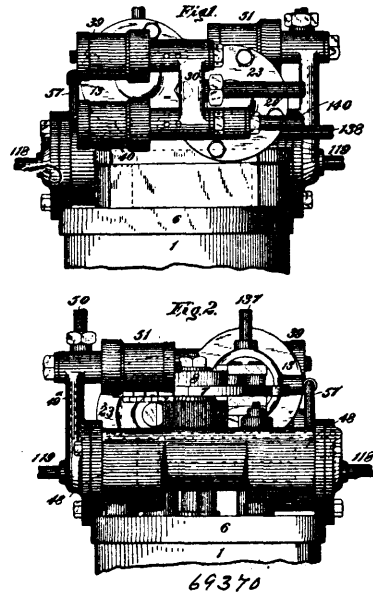
No. 69,369. Spinning Frame. (Machine à filer.)



Andrew Cowles Allgood, Henderson, North Carolina, U.S.A., 16th November, 1900; 6 years. (Filed 6th April, 1900.)

Claim.—1st. A spinning machine attachment comprising in its construction a plurality of rods adapted to reciprocate vertically and having adjustable stops for limiting their downward movement a guide-wire rod supported by said vertically movable rods and carrying a plurality of guide-wire studs, means for reciprocating the vertical rods simultaneously with and during the upper portion of the wave of the ring-rail, and means for adjusting the amount of elevation and speed of movement of the said vertical rods. 2nd. A spinning machine attachment comprising in its construction a plurality of rods adapted to reciprocate vertically and having adjustable stops for limiting their downward movement, a guide-wire rod supported by said vertically movable rods and carrying a plurality of guide-wire studs, each of said vertically movable rods having a foot at its lower end, means including levers for vertically reciprocating the ring-rail, said levers being provided with slots, and projections adjustable in the slots of said levers for engaging the feet carried at the lower ends of the said vertically movable rods. 3rd. The combination with the rods *d* having slotted bearings at their upper ends of the guide-wire rod *f* fitted to said bearings, a cam located in one of the slots of the bearings and secured to said rod *f*, said cam having steps shoulders 1 and 2, and a plurality of jointed guide-wire studs *h* passing through said rod *f*, substantially as and for the purpose specified. 4th. In a spinning machine, the combination with the ring-rail and vertically movable thread-eyes, of ring-rail lifting-levers, are connections whereby the same levers operate the thread-eyes vertically. 5th. The combination with the ring-rail, of levers and connections for lifting the rail, vertically movable rods, thread-eyes supported and moved by said rods, and means carried by the ring-rail lifting levers for raising the thread-eye rods.

No. 69,370. Electro-pneumatic Controlling Systems. (Système de contrôle électro-pneumatique.)



George Westinghouse, Pittsburg, Pennsylvania, U.S.A., 16th November, 1900; 6 years. (Filed 14th April, 1900.)

Claim.—1st. In a car propelled by one or more electric motors and provided with air-brake mechanism, the combination with a motor-controller, of mechanism for operating said controller connected to a source of fluid pressure, electro-magnetic means for controlling the application of fluid-pressure to said operating mechanism, and means for automatically returning the controlling-switch to the off position, depending directly upon the application of the air-brake. 2nd. In a train of cars, each of a plurality of which is provided with one or more propelling-motors and a controller therefor, the combination with fluid pressure-actuated mechanism for operating each controller, of electro-magnetic means for governing and controlling the application of fluid pressure to each of said operating mechanisms, and electric circuits and manually-operated circuit-making and breaking devices by means of which said electro-magnetic means may be energized and de-energized at will to insure a synchronous movement of all the controllers in the system. 3rd. In a train of cars, each of a plurality of which is provided with one or more propelling motors and a controller, the combination with fluid pressure-actuated mechanism for operating each controller, of electro-magnetic means for governing and controlling the application of fluid pressure to said operating mechanisms, and electric circuits and circuit making and breaking devices by means of which the electro-magnets may be energized and de-energized at will to insure a synchronous movement of all the controllers in the system and a reversal of the motor circuits. 4th. A reversing-switch-actuating mechanism comprising a cylinder, a piston geared to the movable member of the reversing switch, valves and electro-magnets for actuating said valves positively so as to apply fluid pressure and thereby effect the operation of the switch in either direction. 5th. A controller-operating device comprising a cylinder and its piston, means intermediate the piston and the movable member of the controller and serving to move the latter one step for each full stroke of the piston, electro-magnetically-actuated means for admitting fluid pressure to said cylinder to move said piston, means actuated by fluid pressure to return the controller to its zero or off position and electro-magnetically-actuated means for applying said fluid pressure. 6th. A controller for electric motors, in combination with fluid-pressure-actuated means for operating it step by step from the position corresponding to zero speed to the position of maximum speed of the motor or motors, means actuated by fluid pressure for effecting the return of the controlled to the off position in a single movement, and electro-magnetic mechanism for controlling the application of fluid pressure for both operations. 7th. A reversing switch actuating mechanism comprising two rigidly connected pistons, a cylinder for each piston normally in communication with the atmosphere, valves for cutting off such communication and for admitting fluid pressure and an electro-magnet for actuating said valves. 8th. In a reversing mechanism, the combination with two pistons connected by a rod or stem, a cylinder for each piston normally in communication with the atmosphere and means actuated at will to cut off such communication and admit fluid pressure to either cylinder. 9th. In a controlling system for a train of electrically propelled cars, the combination with a plurality of controllers and mechanism actuated by fluid

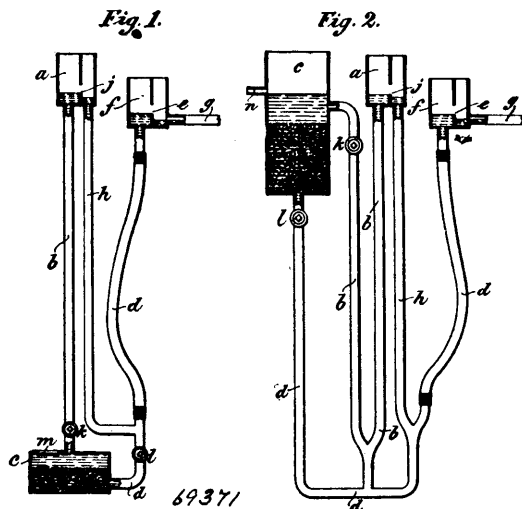
pressure for operating each controller, of governing means for so directing and applying the fluid pressure as to synchronously operate all controllers in the system step by step, and means for indicating the successive steps in such operation. 10th. In a controlling system for a train of electrically propelled cars, the combination with a plurality of controllers and mechanism actuated by fluid pressure for operating each controller, of manually governed electro-magnetic means for so directing and applying the fluid pressure as to operate said controllers synchronously step by step, and means for indicating the successive steps in such operation. 11th. A controller for electric motors, in combination with operating mechanism actuated by fluid pressure, to effect an intermittent or step by step movement of said controller, and manually governed electro-magnetic means for controlling the application of the fluid pressure. 12th. An controller for electric motors, in combination with operating mechanism actuated by fluid pressure, to effect a step by step movement of the controlled drum in one direction, electro-magnetic means for controlling and directing the application of fluid pressure to said mechanism, and means actuated by fluid pressure to return the controller drum to its zero or off position. 13th. The combination with a cylinder and piston and electro-magnetically actuated valves for admitting fluid pressure to said cylinder and withdrawing it therefrom, a pawl pivotally attached to the stem of said piston and a rotatable disc having teeth to be engaged by said pawl when the piston is actuated by fluid pressure. 14th. The combination with a shaft provided with a toothed disc, of an actuating pawl therefor, a fluid pressure actuated piston to the stem of which said pawl is pivoted, electro-magnetically actuated means for imparting fluid pressure to said piston and withdrawing it therefrom, and means for moving the pawl into engagement with the disc simultaneously with the initial movement of the piston. 15th. The combination with a rotatable shaft having two toothed discs of different diameter, a cylinder, a piston movable longitudinally therein, two pawls pivoted to the stem of said piston, means for admitting fluid pressure to the cylinder behind the piston and springs for throwing the pawls into engagement with the corresponding toothed discs as soon as the positive movement of the piston is begun. 16th. The combination with a shaft provided with a toothed disc, of a pawl, a piston actuated by fluid pressure to reciprocate the pawl and thus effect a step by step rotary movement of the shaft, a pinion on the shaft, and a rack bar actuated by fluid pressure to effect a reverse movement of the shaft. 17th. The combination with a shaft provided with a toothed disc, of a pawl, a piston actuated by fluid pressure to reciprocate the pawl and thus effect a step by step rotary movement of the shaft, a reciprocating piston provided with a rack bar, a pinion on the shaft with which said rack bar meshes and electro-magnetically actuated valves for admitting fluid pressure to the cylinders and exhausting it therefrom. 18th. In a controller for electric motors, the combination with the controller drum, of two toothed discs of different diameter geared, or otherwise connected, to said drum, a fluid pressure cylinder and piston, two pawls pivoted to the stem of the piston and normally held out of engagement with the teeth of the discs, electro-magnetically actuated valves for admitting fluid pressure to the cylinder and exhausting it therefrom, and springs for throwing the pawls into engagement with the corresponding discs, when the piston is positively actuated by fluid pressure. 19th. In a controller for electric motors, the combination with the controller drum and its shaft, of a disc of relatively large diameter having teeth corresponding to movement steps of one length, a second disc of relatively small diameter having teeth corresponding to movement steps of another length, actuating pawls for the respective discs, a piston to the stem of which said pawls are pivoted, means for holding the pawls out of engagement with the discs when retracted, means for throwing the pawls into engagement with the disc when positively moved, electro-magnetically actuated means for imparting fluid pressure to the piston and withdrawing it therefrom and a spring for restoring the piston and pawls to their initial position. 20th. In a controller for electric motors, the combination with a controller drum and shaft, of two toothed discs of different diameter connected to said shaft, pawls actuated by fluid pressure to rotate said discs step by step, a pinion on said shaft and a co-operating rack actuated by fluid pressure to effect a reversal of the controller drum at a single stroke. 21st. In a controller for electric motors, the combination with the drum and its shaft, of two discs of different diameter having teeth arranged in sets or groups, the sets of teeth on one disc alternating in position with those on the other, of actuating pawls for said discs and means for reciprocating said pawls, whereby an irregular step by step movement of the controller drum is effected. 22nd. The combination with a plurality of controllers for electric motors, each of which is provided with a notched disc, a reciprocating pawl and fluid pressure device for actuating such pawl, of means for electro-magnetically controlling the application of fluid pressure to all of the pawl actuating devices simultaneously, whereby the controllers will all be actuated step by step in synchronism. 23rd. A controlling system for a car or train of cars propelled by one or more electric motors, comprising one or more controllers for each motor car, a pawl and ratchet actuating mechanism for each controller, a fluid pressure cylinder and piston for each pawl and ratchet mechanism, and electro-magnetic devices and circuits under control from any desired point, whereby the controller may be actuated step by step in synchronism. 24th. A controlling system for a car or train of cars operated by electric motors

comprising one or more controllers for each motor car, a pawl and ratchet mechanism for each controller, a fluid pressure cylinder and a piston and valves for each pawl and ratchet mechanism, an electro-magnetic means controlled from any point or any one of several points for admitting fluid pressure to all of said cylinders and exhausting the same therefrom, whereby the controller will be synchronously actuated step by step in one direction. 25th. The combination with a movable member, of an actuating handle, a ratchet and pawl mechanism for moving said movable member one step for each positive stroke of the actuating handle, electro-pneumatic means for imparting a like step by step movement to one or more other devices, and means for indicating the successive corresponding steps of the several devices or members. 26th. In a system of control for electric railway motors, the combination with a controller and fluid pressure actuated means for operating the same step by step in one direction, of electro-magnetic means for controlling the application of fluid pressure to said operating means, and a synchronizing and indicating device comprising ratchet and pawl and circuit making and breaking mechanism, an actuating handle for imparting one impulse to the ratchet and pawl mechanism and effecting one make and break of the circuit of said electro-magnetic means by each positive stroke from and return to its zero or initial position. 27th. In a controlling system of electric railway motors, the combination with a controller and ratchet and pawl mechanism for operating the same, of a fluid pressure apparatus for actuating the pawl and ratchet mechanism to move the controller drum step by step in one direction, electro-magnetic means for controlling the application of the fluid pressure and a synchronizing and indicating device comprising a ratchet wheel, means for indicating the successive positions of the controller drum, a pawl and an operating handle therefor, the pawl being given one actuating impulse by each positive stroke of the operating handle. 28th. In a controlling system for railway motors, the combination with a controller having a drum actuated step by step in one direction and continuously in the opposite direction by fluid pressure, of means located at a more or less distant point therefrom for controlling the application of the fluid pressure, and indicating the successive positions of the controller drum. 29th. The combination with a controller and means actuated by fluid pressure to operate the same step by step in one direction and continuously in the opposite direction, of governing and indicating means located at a more or less distant point from the controller and comprising a scale and pointer and an actuating handle, each positive stroke of the handle serving to effect the movement of the controller drum and the movable member of the indicator each one step. 30th. In an operating and controlling system for a train of cars, a controller and one or more motors for each of a plurality of cars in the train, in combination with mechanism actuated by fluid pressure for operating each controller positively step by step, an electro-magnetic system for controlling all of the fluid pressure actuated mechanisms, and a manually operated synchronizing and indicating governor, capable of a step by step movement only, and serving to insure the synchronous operation of all the controllers of the system and to indicate the successive steps in such operation. 31st. In an operating and controlling system for a train of cars, a controller and one or more motors for each of a plurality of cars of a train, in combination with a pawl and ratchet mechanism actuated by fluid pressure for positively operating each controller, a rack and pinion actuated by fluid pressure for returning the controller to its initial or off position, an electro-magnetic system for controlling the application of fluid pressure to the several operating mechanisms, a manually operated synchronizing and indicating governor for said system, each positive stroke of which serves to apply fluid pressure to the pawl and ratchet mechanisms, and the reverse movement of which serves to apply fluid pressure to the rack and pinion mechanisms, and means for automatically returning the indicating device to zero when the controller drums are returned to zero. 32nd. In a controlling system for railway motors, the combination with a controller, of fluid pressure actuated devices for operating the same step by step positively, fluid pressure actuated means for returning the same to zero by a single continuous movement, a reversing switch and fluid pressure actuated means for throwing the same in either direction, a circuit breaker for automatically opening the motor circuit by means of an excessive current flowing therein, means for opening the circuit breaker by fluid pressure when desired, fluid pressure actuated means for automatically closing the circuit breaker when the reversing switch is thrown in either direction, and a manually operated governor and indicator for controlling the application of fluid pressure to the controller drum and reversing switch, and indicating the successive steps in the positive movement of the controller drum. 33rd. An indicating and synchronizing device for electro-pneumatic controlling systems, comprising two circuit making and breaking devices, an indicator, a ratchet wheel carried thereby, a pawl for operating said ratchet wheel, and connected to one of said circuit closing devices, a reciprocating handle provided with means for actuating one of said circuit closing devices and said pawl, when moved in one direction, and for actuating the other circuit closing device when moved in the other direction, and means for moving the circuit closing devices to and maintaining them in open circuit position when the handle is in its middle or zero position. 34th. A synchronizing device for electro-pneumatic controlling systems, comprising a circuit closing device for each electro-

magnet or for each set of corresponding magnets in the system, and means for including certain actuating magnets in the governing circuits or excluding the same therefrom. 35th. An indicating and synchronizing device for electro-pneumatic controlling systems, comprising a circuit closing device for each electro-magnet or for each set of corresponding magnets in the system, means for indicating the successive movement steps of the controller or controllers, and means for moving the indicator and one of the circuit closing devices simultaneously. 36th. An indicating and synchronizing device for electro-pneumatic controlling systems, comprising a circuit closing device for each magnet or set of corresponding magnets of the system, means for indicating the successive movement steps of the controller or controllers, means for moving the indicator and one of the circuit closing devices simultaneously, and means for including certain of the magnets in the system or excluding the same therefrom. 37th. In an electro-pneumatic controlling system for railway vehicles, fluid pressure actuated means for operating the controllers synchronously step by step in one direction and by a single uniform movement in the opposite direction, of an electrical system containing magnets for controlling the application of fluid pressure, and governing devices operated manually to close the electric circuits and pneumatically to open the same, the pneumatic pressure being transmitted thereto from the controller operating cylinders as soon as the operation of the controllers is completed. 38th. In an electro-pneumatic controlling system for electric motors, the combination with fluid pressure actuated mechanisms for operating the motor controller or controllers, of electric circuits under manual control for governing the application of fluid pressure, and means for indicating to the operator that the controller operating mechanism has completed its stroke. 39th. In an electro-pneumatic controlling system for electric motors, the combination with fluid pressure actuated mechanism for operating the motor controller or controllers, of electro-magnetically actuated valves for directing the application of fluid pressure, controlling electric circuits, and a removable operating handle, the removal of which cuts off the source of current from the controlling circuits. 40th. In an electro-pneumatic operating and controlling system for railway vehicles, the combination with the controller operating mechanism, of brake setting means and a connection between said means and said operating mechanism, whereby the application of the brakes will serve to return the controller drum to its zero or off position. 41st. The combination with a cylinder and its piston and electro-magnetically actuated valves for admitting fluid pressure to said cylinder and withdrawing it therefrom, of a rotatable toothed disc, and an actuating pawl for said disc normally held out of engagement therewith but moved into engagement and forward as the operating piston is moved forward. 42nd. In a train of electrically propelled cars, comprising two motor cars, each of which has a controller and operating mechanism, the combination with an electric circuit and a manually operated circuit making and breaking device for controlling both operating mechanisms in synchronism, of means for breaking the circuit connection to either of the mechanisms for operating its controller positively, whereby a motorman at the front of the train may operate the motor upon his own vehicle or that upon the rear vehicle, or both, at will. 43rd. In an electro-pneumatic operating and controlling system for railway vehicles, the combination with the power circuit and the air brake system, of means actuated by fluid pressure derived from the brake cylinder to automatically break the power circuit as the brakes are applied.

No. 69,371. Apparatus for Making Solutions.

(Appareil pour faire des solutions.)

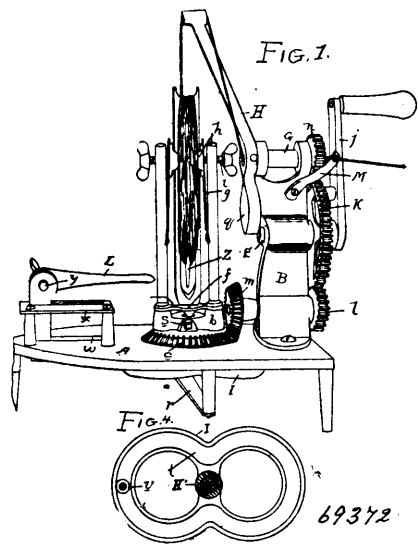


Frederick Alfred Anderson, 65 Palace Gardens Terrace, Middlesex, England, 16th November, 1900; 6 years. (Filed 6th December, 1899.)

Claim.—1st. The combination of a tank to receive the solid to be dissolved, a solvent supply pipe leading to the tank, a solution delivery pipe leading from the tank and a pipe leading downwards from an overflow in the supply pipe to the delivery pipe. 2nd. The combination of a tank to receive the solid to be dissolved, a solvent supply tank, a solution delivery tank similar to the supply tank, similar overflow weirs in the supply and delivery tanks, pipes connecting the solid tank to the supply and delivery tanks, and a pipe leading downwards from the weir in the supply tank to the pipe connecting the solid and delivery tanks. 3rd. The combination of a tank to receive the solid to be dissolved, a solvent supply pipe leading to the tank, a solution delivery pipe leading from the tank, a pipe leading downwards from an overflow in the supply pipe to the delivery pipe, and means for adjusting the levels of the overflow from the supply and of the delivery relatively to each other. 4th. The combination of a tank to receive the solid to be dissolved, a solvent supply tank, a solution delivery tank similar to the supply tank, similar overflow weirs in the supply and delivery tanks, pipes connecting the solid tank to the supply and delivery tanks, a pipe leading downwards from the weir in the supply tank to the pipe connecting the solid and delivery tanks, and means for adjusting the levels of the supply and delivery weirs relatively to each other.

No. 69,372. Needle Filling Machine.

(Machine à remplir les bobines.)

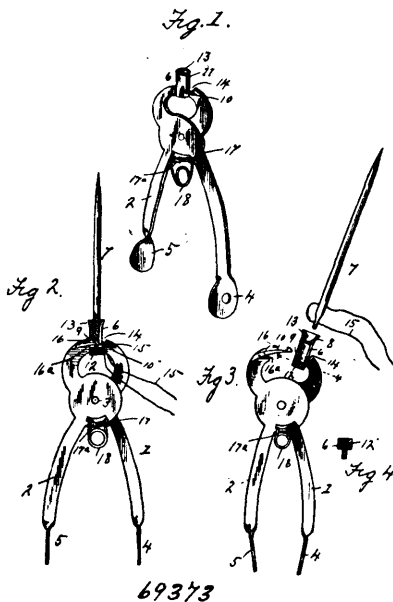


John E. Inman, Kalama, Washington, U.S.A., 19th November, 1900; 6 years. (Filed 17th October, 1900.)

Claim.—1st. In a needle filling machine, the combination of a rotary needle holder, a winder, and means for moving a portion of a needle, in the holder, with respect to the remainder thereof, incident to the rotation of the holder, so as to enable said portion of the needle to receive a bight of twine from the winder, substantially as specified. 2nd. In a needle filling machine, the combination of a rotary needle holder, a rotary winder for placing twine on a needle held by the holder, and means for moving a portion of the needle with respect to the remainder thereof, incident to the rotation of the holder, so as to enable said portion of the needle to receive a bight of twine from the winder. 3rd. In a needle filling machine, the combination of a needle holder, a winder, and a presser for moving a portion of the needle into a position to receive a bight of twine from the winder, substantially as specified. 4th. In a needle filling machine, the combination of a rotary needle holder, a rotary winder, and a reciprocating presser for moving a portion of the needle in the holder into a position to receive a bight of twine from the winder, substantially as specified. 5th. In a needle filling machine, the combination of a main frame, a primary shaft, a rotary needle holder, a rotary winder, a reciprocating presser, mechanism intermediate of the primary shaft and the holder and winder for rotating said holder and winder, and mechanism intermediate of the holder and the presser for reciprocating the latter. 6th. In a needle filling machine, the combination of a needle holder, a rotary winder for placing twine on a needle held by the holder and means for moving a portion of a needle in the holder, with respect to the remainder thereof, incident to the rotation of the winder, so as to enable said portion of the needle to receive a bight of twine from the winder. 7th. In a needle filling machine, the combination of a needle holder, a rotary winder for placing twine on a needle held by the holder and a presser for moving a portion of the needle into a position to receive a bight of twine from the winder. 8th. In a needle filling machine, the combination of a needle holder, a rotary winder for placing twine on a needle held by the holder, and a

reciprocatory presser for moving a portion of the needle into a position to receive a bight of twine from the winder, substantially as specified. 9th. In a needle filling machine, the combination of a rotary needle holder, a rotary winder, a reciprocatory presser, a cam fixed with respect to the rotary needle holder, and a driving connection between the cam and presser, substantially as specified. 10th. In a needle filling machine, the combination of a main frame, a primary shaft, a rotary needle holder, a rotary winder gearing intermediate the primary shaft and the holder and winder, a cam fixed with respect to the needle holder, a reciprocatory presser for moving a portion of the needle in the holder into a position to receive a bight of twine from the winder, and a driving connection between the cam and presser, substantially as specified. 11th. In a needle filling machine, the combination of a main frame, a primary shaft, a rotary needle holder, a rotary winder gearing intermediate of the primary shaft and the holder and winder, a cam fixed with respect to the needle holder and having an 8-shaped groove, a slide rod engaging the groove of the cam and having an upright arm, and a presser adjustably connected to said arm of the rod, substantially as specified. 12th. In a needle filling machine, a needle holder comprising a base, uprights rising therefrom, a cross bar interposed between the uprights adjacent to the base and having an opening, spring strips connected at one end to the uprights and having recessed enlargements at their opposite ends, and screws mounted in the uprights and arranged to bear against said strips, substantially as described.

No. 69,373. Needle Threader. (*Enfile aiguille.*)



69373

Arthur M. Felson, Gouverneur, New York, U.S.A., 19th November, 1900; 6 years. (Filed 17th October, 1900.)

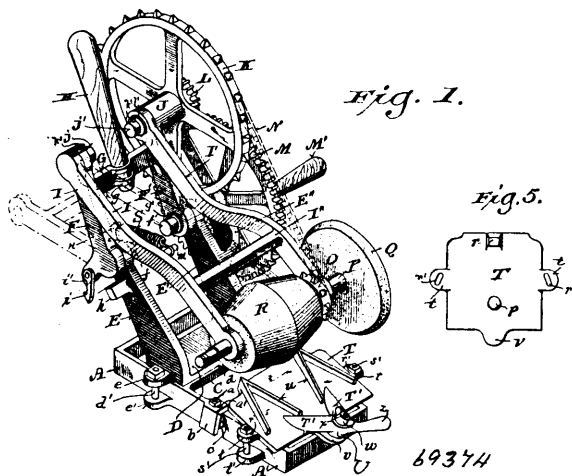
Claim.—1st. In a needle threading device, the combination of pivoted arms, a spring attached to said arms intermediate the same, a needle tube longitudinally slotted and transversely apertured with a needle seat therein and a funnel shaped portion formed thereon, attached to one of said arms, a thread guide on the same arm and a threading hook mounted on the other of said arms. 2nd. A needle threading device, consisting of pivoted arms a needle tube transversely apertured attached one of the jaws formed on the said arms, a threading hook attached to the other jaw, an expanding spring placed intermediate the handles formed on said arms whereby the threading hook is normally held in said transverse aperture, and attachment for said spring, substantially as described.

No. 69,374. Grinding Machine. (*Machine à aiguiser.*)

Harry Wilbur Bolens, Port Washington, Wisconsin, U.S.A., 19th November, 1900; 6 years. (Filed 3rd October, 1900.)

Claim.—1st. The horizontal rectangular base frame in two sections one section having the ends of its side bars thickened and of pyramidal contour, the opposing ends of the other frame sections being in the form of housings in straddle fit upon said side bar of the former frame section, and means for maintaining the union of said frame sections. 2nd. The rocker bearing standard yoke, the adjustable sickle bar clamp, the rocker yoke in connection with said standard yoke, the carrier in pivotal connection with the rocker yoke, the grinding device rotative between side bars of said carrier, driving mechanism for said grinding device, and the tension spring for the the aforesaid carrier. 3rd. The horizontal base comprising sections

in longitudinally adjustable connection, the rocker bearing standard yoke, the adjustable sickle bar clamp, a rocker yoke in connection



69374

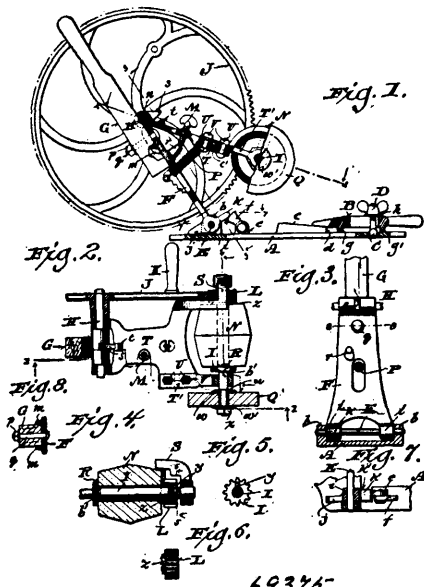
with said standard yoke, the carrier in pivotal connection with the rocker yoke, the grinding device rotative between side bars of said carrier, driving mechanism for said grinding device, and the tension spring for the aforesaid carrier. 4th. The rocker yoke in connection with standards, the carrier in pivotal connection with said rocker yoke to be swung forward or back of the standards, means for holding the rocker yoke stationary in approximately horizontal position back of said standards, the grinder arbour mounted in said carrier, and the drive gear for said arbour. 5th. The standard yoke in rocker bearing on the base, the rocker yoke in connection with said standard yoke, the carrier in pivotal connection with said rocker yoke to be swung forward or back of the standard yoke, means for holding the rocker yoke stationary in approximately horizontal position back of the aforesaid standard yoke, the grinder arbour mounted in said carrier, and the drive gear for said arbour. 6th. The standards, one of which is provided with a branch that therewith constitutes a yoke, the rocker yoke, in connection with said standards, a carrier in pivotal connection with the rocker yoke, the sprocket wheel carried by said rocker yoke, the pinion integral with the sprocket wheel, the driving spur wheel mounted on an outer stud of said standard branch and in mesh with said pinion, the grinder arbour mounted in the carrier and provided with the sprocket pinion, the link belt arranged on said sprocket wheel and sprocket pinion to run in the yoke of which the aforesaid standard branch forms a part, and means for holding the aforesaid rocker yoke in approximately horizontal position back of the aforesaid standards. 7th. The rocker yoke in connection with standards, the carrier in pivotal connection with the rocker yoke to be swung forward or back of said standards, means for holding said rocker yoke in approximately horizontal position back of the standards, the arbour mounted in the carrier and extended therefrom for attachment of a grinding wheel, the grinding device for sickle bar knife sections permanent on said arbour between side bars of said carrier, the drive gear for the arbour, the sickle bar clamp arranged forward of said standards, and the tension spring attachable to the aforesaid carrier.

No. 69,375. Grinding Machine. (*Machine à aiguiser.*)

John Gibson, Port Washington, Wisconsin, U.S.A., 19th November, 1900; 6 years. (Filed 24th March, 1900.)

Claim.—1st. The sickle bar clamp plate provided with a forwardly extended longitudinally slotted central handle, lugs depending from said plate and handle to rest upon the machine base, the handle lug constituting a fulcrum upon which to tilt the aforesaid plate, a bolt engaging the machine base and handle slot, and a nut on the bolt in opposition to the aforesaid handle. 2nd. The tilt plate provided with a front lower lug, a pivotal dog arranged to be brought into opposition to said lug when the tilt plate has full rear throw, and means for limiting this rear throw of said tilt plate. 3rd. The tilt plate provided with rearwardly extending flanges and a transverse rear seat, the pivot rod for the grinding wheel frame engaging said seat to project rearward therefrom, and a handle bolted to the tilt plate between the flanges thereof against said pivot rod, the latter being held fast in its seat by the pressure of the handle. 4th. The tilt plate having its upper end in the form of an elongated hook, and provided with rearwardly extended flanges, the pivot rod engaging the hook, the handle arranged between the flanges and clamped to said tilt plate against said pivot rod and the grinding wheel frame in loose engagement with the aforesaid pivot rod. 5th. The tilt plate provided with the upper forwardly extending stop lug in position to limit forward travel of said plate and grinding wheel

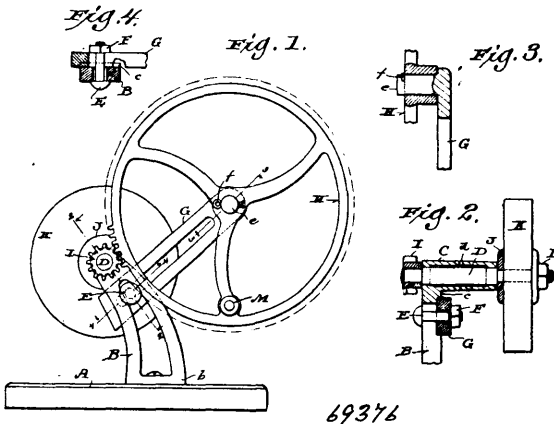
frame in pivotal connection therewith. 6th. The pinion provided with a hub extension having an annular irregular surface opposed to



69376

the adjacent one of the grinding wheel on the pinion carrying arbour, and a clamp nut run on said arbour against the outer end of said grinding wheel. 7th. The two part pivotal frame having one section thereof provided with a fulcrum for the other section, the latter section being held in adjusted position on said fulcrum by suitably arranged bolts and set nuts. 8th. The two part pivotal frame having one section thereof provided with a transverse rib constituting a fulcrum, the other section provided with transverse grooves any one of which may be engaged by said fulcrum, one of said sections being also provided with elongated openings for engagement of bolts fitting apertures in the other section and having set nut run thereon.

No. 69,376. Grinding Machine. (*Machine à aiguiser.*)



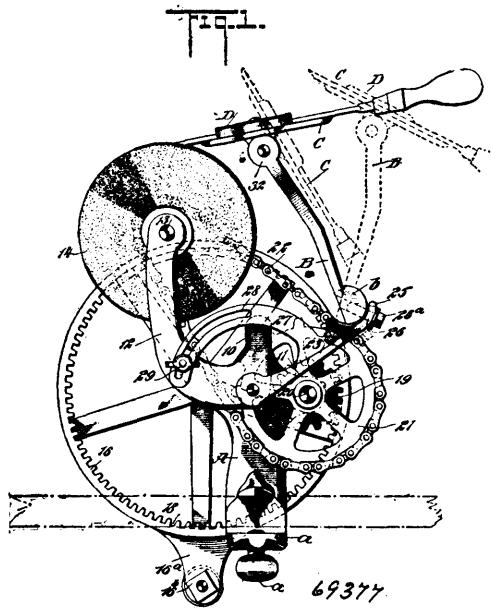
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John Gibson, Port Washington, Wisconsin, U.S.A., 19th November, 1900; 6 years. (Filed 4th July, 1900.)

Claim.—1st. A grinding machine comprising a standard in one piece with a horizontal bearing sleeve, an arm extending from the standard at an angle thereto and provided with a lateral boss, a spur wheel loose on the boss and provided with a handle, an arbour loose in the aforesaid sleeve, a pinion fast on one end of the arbour in mesh with the spur wheel, and an emery wheel fast on the other end of said arbour. 2nd. A grinding machine comprising a base, a standard in detachable connection with the base and provided with a horizontal bearing sleeve, an arm extending from the standard at an angle thereto and provided with a lateral boss, a spur wheel loose on the boss and provided with a handle, an arbour loose in the aforesaid sleeve, a pinion fast on one end of the arbour in mesh with the spur wheel, and an emery wheel fast on the other end of said arbour. 3rd. A grinding machine comprising a standard provided with a bearing sleeve and an acute angle recess, an arm bolted to the standard in said recess, a spur wheel loose on a boss extending

laterally from the arm, an arbour loose in the aforesaid sleeve, a pinion fast on one end of the arbour in mesh with the spur wheel, and an emery wheel fast on the other end of said arbour. 4th. A grinding machine comprising a standard provided with a bearing sleeve, an arm in longitudinally adjustable connection with the standard and provided with a lateral boss, a spur wheel loose on the boss and provided with a handle, an arbour loose in the aforesaid sleeve, a pinion fast on one end of the arbour in mesh with the spur wheel, and an emery wheel fast on the other end of said arbour. 5th. A knockdown grinding machine comprising a standard attachable to a support and provided with a horizontal bearing sleeve, an arm in longitudinally adjustable and detachable connection with the standard, a spur wheel loose on a boss extending laterally from the arm, an arbour loose in the aforesaid sleeve, a pinion fast on one end of the arbour in mesh with the spur wheel, a disc on the other end of the arbour against a shoulder of the same, an emery wheel abutting the disc, and a clamp nut for the emery wheel run on a threaded extremity of said arbour.

No. 69,377. Machine for Grinding Tools.
(*Machine à aiguiser les outils.*)



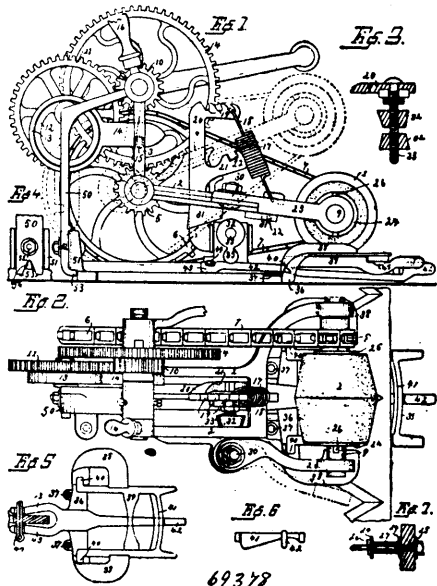
69377

Arie Van Dillenbeck, Buffalo, New York, U.S.A., 19th November, 1900; 6 years. (Filed 19th October, 1900.)

Claim.—1st. In a machine for grinding tools, the combination of a pivoted bar, means for adjusting the said bar to raise or lower its outer end, an arm having its lower end adjustably secured to the outer end of the bar, and a pivoted table on the upper end of the said arm, and mounted to slide transversely of the stone, substantially as described. 2nd. In a machine for grinding tools, the combination of a pivoted bar, means for adjusting said bar to raise or lower its outer end, an arm having its lower end adjustably secured to the outer end of the bar and its upper end forked and carrying a shaft, and a table pivotally and slidably mounted on the said shaft, substantially as described. 3rd. In a machine for grinding tools, the combination of a pivoted bar having a shoe at its outer end and provided with a forwardly projecting slotted arm, a set screw for binding the arm in position, an arm having its upper end forked and provided with a foot at its lower end adjustably secured to the shoe of the bar, a shaft mounted in the forks of the arm and a table provided on its underside with apertured lugs through which the said shaft loosely passes, substantially as described. 4th. In a machine for grinding tools, the combination with a support, and a stone mounted therein, of a sprocket wheel on the shaft of the stone, a shaft provided with a pinion and sprocket wheel, a chain passing over the said sprocket wheel, and a driving wheel provided with an internal gear meshing with the said pinion, substantially as described. 5th. In a machine for grinding tools, the combination with a table, of clamps having their bodies undercut and provided with slotted shanks, and screws passing through the slots of the clamps into the table, substantially as described. 6th. In a machine for grinding tools, the combination with a base, a stone carried by the base, and means for revolving the stone, of a support capable of vertical adjustment on the base, a locking device for said support, a lateral adjusting arm carried by said support, a table provided with means for holding a tool, having sliding and pivoted movement upon the said support, and means for controlling the sliding movement of the table, as described. 7th.

In a machine for grinding tools, the combination of a standard having an arch at its upper end and provided with a rearwardly extending horizontal arm at one side, and with forwardly and upwardly projecting arms on the other side, a stone mounted in the forwardly projecting arms, a driving wheel mounted in the horizontal arm at the base of the fork, a shaft journaled in the outer end of the horizontal arm, a pinion on the shaft and meshing with the driving wheel, and gearing between the shaft of the pinion and the shaft of the stone, substantially as described.

No. 69,378. Grinding Machine. (Machine à aiguiser.)



Michael W. Neuens, Milwaukee, Wisconsin, U.S.A., 19th November, 1900; 6 years. (Filed 20th February, 1900.)

Claim.—1st. In a grinding machine, the combination of a grinding roller supported by a carrier from a swinging support hung from a stationary frame or standard, suitable actuating mechanism for rotating the roller, and automatic mechanism co-operative with the roller rotating mechanism for reciprocating the carrier and the roller. 2nd. In a grinding machine, the combination of a grinding roller supported by a carrier from a swinging support, suitable actuating mechanism supported in stationary journal bearings and provided with connections for rotating the roller, and automatic mechanism co-operative with the roller rotating mechanism for reciprocating the carrier and the roller, together with means for lifting the carrier and roller from the work at the extremities of the surface to be ground. 3rd. In a grinding machine, the combination of a grinding roller supported by a carrier from a swinging support, suitable actuating mechanism supported in stationary journal bearings and provided with connections for rotating the roller, and automatic mechanism co-operative with the roller rotating mechanism for reciprocating the carriage and the roller, together with means for supporting the carriage and roller elastically from a fixed point on the machine frame. 4th. In a grinding machine, the combination of a grinding roller supported by a carrier from a swinging support, suitable actuating mechanism located in suitable bearings on a fixed support for rotating the roller, and automatic mechanism co-operative with the the roller rotating mechanism for reciprocating the carriage and roller, together with a yielding connection adjustably secured to the machine frame, and adapted to support part of the weight of the carrier and roller. 5th. In a grinding machine, the combination of a grinding roller supported by a carrier from a swinging support, suitable actuating mechanism for rotating the roller, mechanism co-operative with the roller rotating mechanism for reciprocating the carrier and the roller, together with means for disengaging the reciprocating mechanism. 6th. In a grinding machine, the combination of a grinding roller supported by a carrier from a swinging support suitable actuating mechanism for rotating the roller, automatic mechanism co-operative with the roller rotating mechanism for reciprocating the carrier and the roller, together with means for disengaging the reciprocating mechanism, and means for supporting the carrier and roller in a raised position, said carrier being provided with a laterally swinging bearing arm adapted to be adjusted to release the shaft of the grinding roller. 7th. In a grinding machine, the combination of a grinding roller supported by a carrier from a swinging support, suitable actuating mechanism for rotating the roller, automatic mechanism co-operative with the roller rotating

mechanism for reciprocating the carrier and the roller, together with means for disengaging the reciprocating mechanism, and means for supporting the carrier and roller in a raised position, said carrier being provided with a laterally swinging bearing arm adapted to be adjusted to release the shaft of grinding roller, said grinding roller being clamped upon the shaft by end binding plates, and a wedge shaped key co-operative therewith. 8th. In a grinding machine, the combination of a grinding roller supported by a carrier from a swinging support, suitable actuating mechanism for rotating the roller, and automatic mechanism co-operative with the roller rotating mechanism for reciprocating the carrier and the roller, the roller and carrier being supported by a single standard adapted to be swung laterally, and adjusted to regulate the grinding level of the roller. 9th. In a grinding machine, the combination of a grinding roller supported by a carrier from a swinging support, suitable actuating mechanism for rotating the roller, and automatic mechanism co-operative with the roller rotating mechanism for reciprocating the carrier and the roller, together with means for securing grinding rollers of various linear dimensions in position with a single binding key. 10th. In a grinding machine, the combination with the base frame, of a stationary bracket provided with the rigid arms, a clamping frame pivotally secured to the bracket, and having one of its elements diagonally faced laterally, and a clamping lever hinged to the base frame and extended under the diagonally faced element of the clamping frame, said lever being arranged to swing laterally and push the clamping frame toward the arms of the stationary bracket, when the lever passes under the lower portion of the diagonally faced element. 11th. In a grinding machine, the combination with the base frame, of a stationary bracket provided with rigid arms, a clamping frame pivotally secured to the bracket, with the side bars extending under the arms of the stationary bracket, and having one of its elements diagonally faced laterally, and a clamping lever hinged to the base frame and extended under the diagonally faced element of the clamping frame, said lever being arranged to swing laterally and push the clamping frame toward the arms of the stationary bracket, when the lever passes under the lower portion of the diagonally faced element. 12th. In a grinding machine, the combination with the base frame, of a stationary bracket provided with rigid arms, a clamping frame arranged with its side bars extending under said arms, and adapted to receive a sickle bar with the sickle sections interposed between the frame and said rigid arms, a diagonally faced element in said frame, and a swinging lever, co-operative with said element, to move the frame into clamping engagement with the arms of the stationary bracket. 13th. In a grinding machine, the combination with the base frame, of a stationary bracket provided with rigid arms, a clamping frame arranged with its said bars extending under said arms, and adapted to receive a sickle bar with the sickle sections interposed between the frame and said rigid arms, a diagonally faced element in said frame, and a swinging lever, co-operative with said element, to move the frame into clamping engagement with the arms of the stationary bracket, together with means for reciprocating a rotary grinding roller over the cutting edges of the knife sections engaged by said frame. 14th. In a grinding machine, having a reciprocating grinding roller, the combination with the roller supporting carrier, of one or more guides carried thereby, and adjustable conical nuts adapted to engage the guides and support the carrier at the completion of its movement. 15th. In a grinding machine, having a reciprocating grinding roller, the combination with the roller supporting carrier, of one or more diagonally faced guides carried thereby, and adjustable conical nuts adapted to engage the guides and support the carrier, at the completion of its movement. 16th. In a grinding machine, having a reciprocating grinding roller, the combination with the roller supporting carrier, of one or more diagonally faced guides carried thereby, and conical nuts supported on screw threaded bearing, and adapted to be adjusted thereon across the path of the guides. 17th. In a grinding machine, having a reciprocating grinding roller, the combination with the roller supporting carrier, of one or more diagonally faced guides carried thereby, and conical nuts supported on screw threaded bearings, and adapted to be adjusted thereon across the path of the guides, said nuts being provided with depending weights, adapted to prevent their accidental rotation.

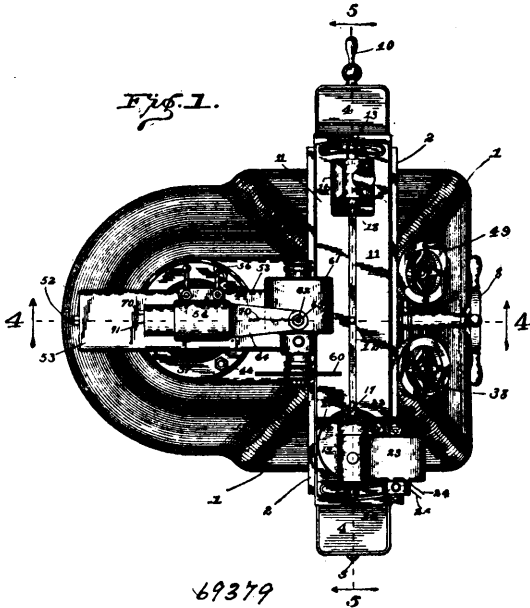
No. 69,379. Grinding Machine. (Machine à aiguiser.)

Edward Samuel Lea, Anderson, Indiana, U.S.A., 19th November, 1900; 6 years. (Filed 19th September, 1900.)

Claim.—1st. The combination, in grinding machine, of a suitable frame, an adjustable work holding mechanism carried thereon, an independent motor for actuating said work holding mechanism mounted on the same frame and an adjustable with said work holding mechanism, an adjustable operating mechanism, and an independent motor for driving said operating mechanism. 2nd. The combination, in a grinding machine, with the operating tool, of a work carrying apparatus including a longitudinally movable table, a carriage driving screw mounted in bearings in said carriage, a shaft arranged transversely to said carriage driving screw and bearing a worm pinion, suitable handles on said carriage driving screw and said shaft, and a locking pin mounted in the frame and adapted to engage with said pinion, whereby, by means of the same apparatus, either a fast or a slow movement of said carriage may be secured, substantially as shown and described. 3rd. The combination, in a

grinding machine, with the work holding mechanism, of a grinder mounted on the shaft of an independent motor, and said motor

with a screw threaded portion mounted in the said tapped opening of the steam chest and having its inner end fitted close to the open-



69379

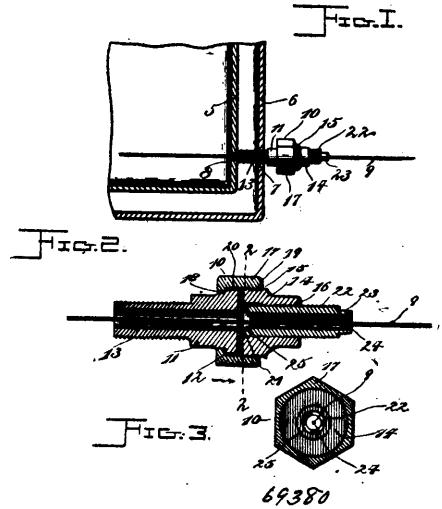
carrying said grinder mounted to be adjusted on the grinder supporting frame, substantially as set forth. 4th. The combination, in a grinding machine, with the work holding mechanism, of a grinding mechanism, an independent electric motor mounted and capable of being adjustably moved on trunnions, and a grinder mounted upon and driven by the armature shaft of said motor. 5th. The combination, in a grinding machine, with the work holding mechanism, of a grinding mechanism comprising a carriage, a fork shaped frame adjustably mounted in said carriage, an electric motor adjustably mounted in said fork shaped frame, and a grinder driven from the armature shaft of said motor. 6th. The combination, in a grinding machine with adjustable work holding mechanism, of adjustable grinding mechanism comprising a carriage, means for adjusting said carriage horizontally, means for adjusting said carriage vertically, a fork shaped motor carrying frame horizontally and revolubly mounted on said carriage, a motor pivotally mounted in said fork shaped frame, and a grinder driven from the shaft of said motor. 7th. The combination, in a grinder, of a grinding mechanism carriage, and means for elevating and lowering the same comprising a hollow standard, a hollow sleeve vertically adjustable in said standard, a hollow screw shaft for adjusting said sleeve vertically, a gear wheel on the lower end of said hollow screw shaft, a pinion engaging with said wheel, a shaft to said pinion running to the front of the machine where it is provided with a handle, a central shaft passing up through said hollow screw shaft, means for revolving the same, and a connection between said central shaft and the grinder carrier table whereby the same may be adjusted. 8th. The combination in a grinding machine, of the main frame, a grinder carrying frame mounted thereon, adjustable connections between said main frame and the standard on said grinder carrying frame, and means for rotatably adjusting said standard on said main frame whereby the direction of the grinder may be shifted on a vertical axis, substantially as set forth. 9th. The combination in a grinder, of a main frame, a grinder table carrying frame adjustably mounted thereon, means for elevating and lowering the same, and a central shaft passing up through the structure of said grinder table carrying frame, a pinion on the upper end of said shaft, a screw nut mounted in the table and having a toothed face engaging with said pinion, a carriage driving screw operated by said nut, a gear wheel near the lower end of the vertical shaft and connected thereto by a spline entering a long key way in said shaft, a pinion engaging with said wheel, and shaft running thence to the front of the machine where it is provided with a handle, whereby the grinder carrier table may be adjusted horizontally by the same mechanism irrespective of the vertical adjustment, substantially as set forth.

No. 69,380. Thread Waxing Machine.

(Machine à cirer le fil.)

Walter K. Shultz, Poncas City, Oklahoma, U.S.A., 19th November, 1900; 6 years. (Filed 28th June, 1900.)

Claim.—1st. An attachment for thread waxing devices comprising a wax pot having an opening through a vertical wall thereof, a steam chest surrounding the said pot and having a tapped opening in line with the opening in the wax pot, a double flanged member

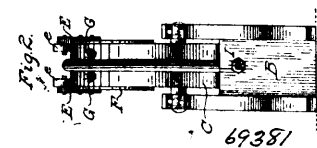
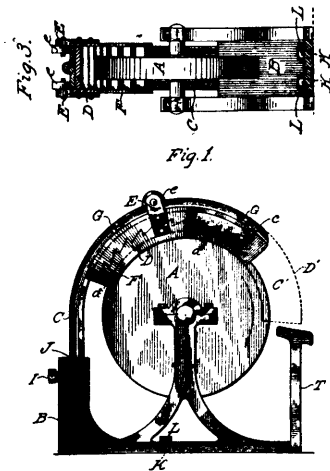


69380

ing in the wax pot, a threaded tube having an opening therethrough flared at its inner extremity, a wiper disc interposed between the outer and inner extremities of the flanged member and the said threaded tube respectively, a threaded member in which said tube is mounted and a coupling member for connecting the said threaded member and the flanged member, the wiper disc being clamped near its peripheral edge between the said members and provided with a transverse thread opening surrounded by the inner flared end of the opening through the tube. 2nd. A thread waxing device consisting of a sectional thread guide having its members separably coupled together in substantially longitudinal alignment and comprising an adjustable tube with one extremity of the opening therein flared, and a wiper disc clamped near its peripheral edge between certain of the said members and provided with a transverse thread opening, the said wiper disc being in a plane at right angles to the members of the guide, the end of the tube at the flared portion of the opening being arranged to press forcibly against said disc around the threaded opening therein and against a bearing surface afforded by another member of the guide.

No. 69,381. Hood for Emery Wheels.

(Capot de roue à émeri.)



69381

Otto Konrad, Oshkosh, Wisconsin, U.S.A., 19th November 1900 6 years. (Filed 25th May, 1900.)

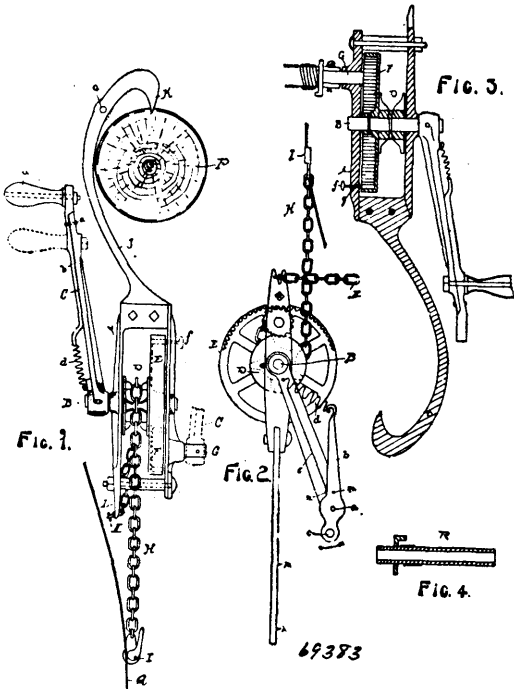
Claim.—1st. In an emery wheel guard, the combination with a rigid casing having an opening through which the grinder operates, of a hood which slides on the rigid casing, said hood being provided with interior teeth or projections, which projections are adapted to be struck by pieces flying from the wheel, whereby the hood is automatically slid forward to close the opening through which the grinder operates, substantially as described. 2nd. In an emery wheel guard, the combination with a suitably supported casing having an opening through which the grinder operates, of a hood which slides on the casing, said hood being provided with interior teeth or projections, which latter are adapted to be struck by pieces flying from the wheel and thereby automatically force the hood forward to close the space through which the grinder operates and anti-friction rollers for the sliding hood, substantially as described. 3rd. In an emery wheel guard, the combination with a suitably supported casing having an opening through which the grinder operates, of an exterior sliding casing, provided with an inwardly extending teeth and adapted in its movement to close the opening in the said casing, rollers interposed between the rigid casing and the sliding hood, upwardly extending ears attached to the sliding hood and carrying wheels adapted to travel on top of the casing, substantially as described. 4th. In an emery wheel guard, the combination of an arched inclosing casing, which is open at front, means for adjusting the casing upward, means for supporting an emery wheel beneath said casing, and a sliding hood movable on said casing and provided with projections on its inner surface, which are adapted to be struck by pieces flying from the emery wheel and thereby to automatically move the hood forward and close the space through which the grinder operates, substantially as described. 5th. In an emery wheel guard, the combination of an arched inclosing casing, which is open at front, means for adjusting the casing vertically, a bracket for supporting the casing which latter is capable of being adjusted backward and forward and a sliding hood movable on said casing and provided with projections on its inner surface, which are adapted to be struck by pieces flying from the emery wheel and thereby automatically to slide the hood forward and close the space through which the grinder operates, substantially as described.

No. 69,382. Medicinal Compound.
(Composition médicinale.)

Antoine Racicot, Montreal, Quebec, Canada, 19th November, 1900; 6 years. (Filed 20th September, 1900.)

Claim.—A medical compound composed of sulphate of magnesia, precipitated carbonate of iron, powdered liquorice root, powdered gentian root and powdered ginger root in the proportion, and for the purpose set forth.

No. 69,383. Wire Stretcher Device. (Tendeur de fil de fer.)

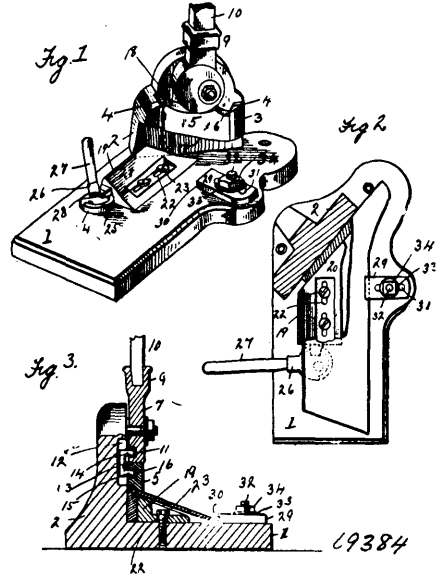


William McCloskey, Essex, Ontario, Canada, 19th November, 1900; 6 years. (Filed 11th September, 1900.)

Claim.—1st. In a wire stretcher, the combination with the supporting frame having means at the rear end for attaching it to a fence post and a shaft journalled transversely of said frame carry-

ing a chain pulley, a loose chain adapted to form a chain gear with said chain pulley and provided with wire grips at both ends, of an internally geared wheel on said shaft, a gear pinion engaging with said gear wheel, and a crank handle adapted to be interchangably secured to the shaft of the chain pulley or to the shaft of the gear pinion for imparting motion thereto in either direction, substantially as described. 2nd. In a wire stretcher of the character described, an actuating crank having the lever *b* pivotally secured to the arm of the crank, the spring *d* connecting the inner ends of the said arm and lever, and the graduations arranged to form a tension indicator for the stretcher, substantially as specified.

No. 69,384. Machine for Making Ploughshares.
(Machine à faire les soc de charrue.)



Gilbert S. Strom, White Rock, Minnesota, U.S.A., 19th November, 1900; 6 years. (Filed 26th September, 1900.)

Claim.—1st. In a machine for forming ploughshares, the combination with a bed having an upright standard provided with a vertical face diagonal to the length of the bed, of an anvil adjustably arranged on the bed and adapted to be moved toward and from the standard and having a straight edge substantially parallel to the diagonal face of the standard, means for forcing said anvil toward the standard to press landside between the adjacent faces of the anvil and standard, a platen arranged to move vertically in ways on the standard and having its lower edge formed to correspond to the configuration of the ploughshare, and a cam for forcing said platen downward to press the edges of the ploughshare and landside together, substantially as described. 2nd. In a machine for forming ploughshares, the combination with a bed having an upright standard provided with a vertical face diagonal to the length of the bed, of an anvil adjustably arranged on the bed and adapted to be moved toward and from the standard and having a straight edge substantially parallel to the diagonal face of the standard, a platen arranged to move vertically in ways on the standard, a cam pivoted to the standard above the platen and engaging the upper side of the latter, said cam having an eccentric groove formed on its inner face, and a U-shaped link vertically movable in a groove formed in the standard and having one of its ends fitted in a recess in the inner face of the platen, substantially as described. 3rd. In a machine for forming ploughshares, the combination with a bed having an upright standard provided with a vertical face diagonal to the length of the bed, of an anvil adjustably arranged on the bed and adapted to be moved toward and from the standard and having a straight edge substantially parallel to the diagonal face of the standard, said anvil having its upper side shaped to correspond to the configuration of the ploughshare, means for moving the anvil toward the standard, a platen arranged to move vertically in ways on the standard, means for forcing the platen downward and a laterally adjustable clamp on the bed opposite the anvil, substantially as described.

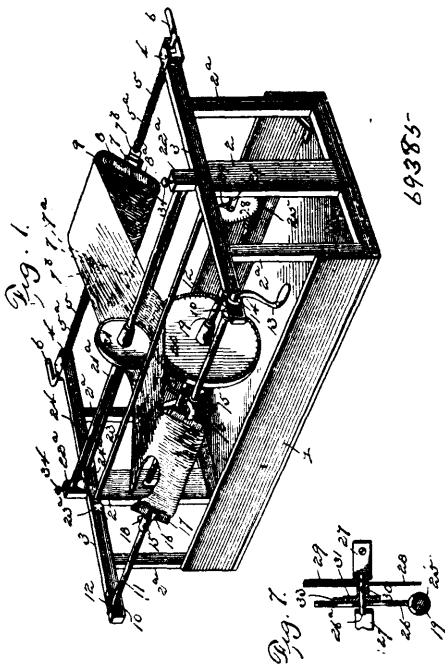
No. 69,385. Cloth Measuring Device.
(Appareil à mesurer le drap.)

Burdie Anderson, Boardman, assignee of Oliver E. Webber, Manning, both in North Carolina, U.S.A., 19th November, 1900; 6 years. (Filed 27th August, 1900.)

Claim.—1st. A machine of the class described, comprising a frame, a lowering measuring wheel located at the centre of the frame, an upper friction wheel, a pair of transverse shafts supporting the said

wheels and journaled in suitable bearings of the frame, the transverse guide rollers located in advance and in rear of the said

instrumentalities operative to automatically replenish the working weft supply while the weaving instrumentalities are at rest and then

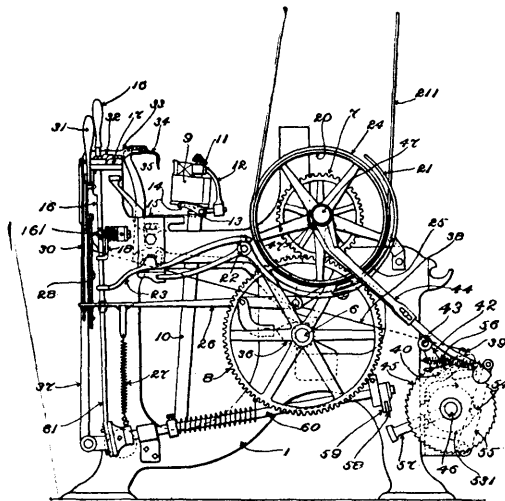


wheels and arranged to engage the fabric at the lower and upper faces thereof, short transverse shafts arranged at one end of the machine and adapted to receive the bolt to be measured, an operating shaft detachably mounted at the other end of the frame and arranged to receive the material as it is measured, a bracket arranged at one side of the machine and composed of two L-shaped members, a transverse shaft mounted on the outwardly extending arms of the L-shaped members, a worm carried by the shaft upon which the measuring wheel is mounted, a gear wheel mounted on the short transverse shaft, adjacent to one of the members of the bracket and meshing with the said worm, a sleeve also mounted on the short shaft and interposed between the members of the bracket, a ratchet wheel mounted on the sleeve at the rear end thereof, a graduated disc frictionally engaging the sleeve at the front end thereof, carried by the same and adapted to be rotated independently thereof by hand, a spring actuated pawl mounted on the gear wheel and engaging the ratchet wheel, and a fixed pointer located adjacent to the front end of the short shaft, substantially as and for the purpose described. 2nd. In a machine of the class described, the combination of a transverse shaft provided at one end with a worm, a measuring wheel mounted on the shaft, a bracket composed of a pair of L-shaped members, a short shaft secured to the outwardly extending arms of the L-shaped members, a sleeve mounted on the short shaft, a gear wheel also mounted on the short shaft and interposed between the rear end of the sleeve and the adjacent L-shaped member and meshing with the worm, a ratchet wheel carried by the sleeve and arranged at the rear end thereof, a spring actuated pawl pivoted to the gear wheel and engaging the ratchet wheel, a graduated disc frictionally engaging the front end of the sleeve and carried by the latter and adapted to be rotated independently thereof, by hand, and a fixed pointer supported by the shaft and interposed between the front member of the bracket and the graduated disc, substantially as described.

No. 69,386. Loom. (Metric.)

The American Loom Company, Readville, Massachusetts, assignees of Henry Ingraham Harriman, Brooklyn, New York, U.S.A., 19th November, 1900; 6 years. (Filed 4th June, 1900.)

Claim.—1st. In a loom, in combination, power appliances for driving the weaving instrumentalities, devices to indicate when the condition of the working weft supply necessitates replenishment thereof, instrumentalities under the control of such devices operative to bring the weaving instrumentalities to rest to permit of replenishment, and instrumentalities also under the control of such devices and operative while the weaving instrumentalities are thus at rest, to automatically replenish the working weft supply in all positions of the lay and then re start the weaving instrumentalities. 2nd. In a loom, in combination, power appliances for driving the weaving instrumentalities, devices to indicate when the condition of the working weft supply necessitates replenishment thereof, instrumentalities under the control of such devices operative to bring the weaving instrumentalities to rest to permit of replenishment,



re start the latter, and power appliances for said weft replenishing instrumentalities also under the control of said devices and adapted to continue in action after the weaving instrumentalities have been re started. 3rd. In a loom, in combination, power appliances for said weft replenishing instrumentalities, devices to indicate when the condition of the working weft supply necessitates replenishment thereof, instrumentalities under the control of such devices operative to bring the weaving instrumentalities to rest to permit of replenishment, instrumentalities operative to automatically replenish the working weft supply while the weaving instrumentalities are at rest and then re start the latter, and power appliances for said weft replenishing instrumentalities, also under the control of said devices, and embracing a continuously operating driving member. 4th. In a loom, in combination, power appliances for driving the weaving instrumentalities, and in connection therewith a continuously driven member, a change shaft, instrumentalities under the control thereof for automatically replenishing the working weft supply, power appliances for the said change shaft operated from the said continuously driven member, devices to indicate when the condition of the working weft supply necessitates replenishment thereof, instrumentalities under the control of such devices for bringing the weaving instrumentalities to rest, instrumentalities also under the control of such devices for rendering the latter power appliances operative to rotate the change shaft and occasion the weft replenishment while the weaving instrumentalities are at rest, and means for restarting the weaving instrumentalities after the weft replenishment has been effected and then discontinuing the application of power to the change shaft. 5th. In a loom, in combination, power appliances for driving the weaving instrumentalities, and in connection therewith a continuously rotating wheel or pulley, a change shaft, instrumentalities under the control thereof for automatically replenishing the working weft supply, a wheel connected with the change shaft, a driver to engage the said wheel, an eccentric rotating with the said wheel or pulley and operating the said driver, devices to indicate when the condition of the working weft supply necessitates replenishment thereof, instrumentalities under the control of such devices for bringing the weaving instrumentalities to rest, instrumentalities under the control of such devices for establishing driving relations in the train of devices intermediate the said eccentric and the change shaft, and means under the control of the change shaft for re-starting the weaving instrumentalities after the weft replenishment has been effected and then discontinuing the driving relations of the said train. 6th. In a loom, in combination, power appliances for driving the weaving instrumentalities, and in connection therewith a continuously rotating wheel or pulley, a change shaft, instrumentalities under the control thereof for automatically replenishing the working weft supply, a wheel or wheels connected with the change shaft, a plurality of drivers to engage the said wheel or wheels, eccentrics operated by the said wheel or pulley and serving to operate the said drivers, devices to indicate when the condition of the working weft supply necessitates replenishment thereof, instrumentalities under the control of such devices for bringing the weaving instrumentalities to rest, instrumentalities under the control of such devices for establishing driving relations in the train of devices intermediate the said eccentrics and the change shaft, and means under the control of the change shaft for re-starting the weaving instrumentalities after the weft replenishment has been effected and then discontinuing the driving relations of the said train. 7th. In a loom, in combination, weft indicating device operative

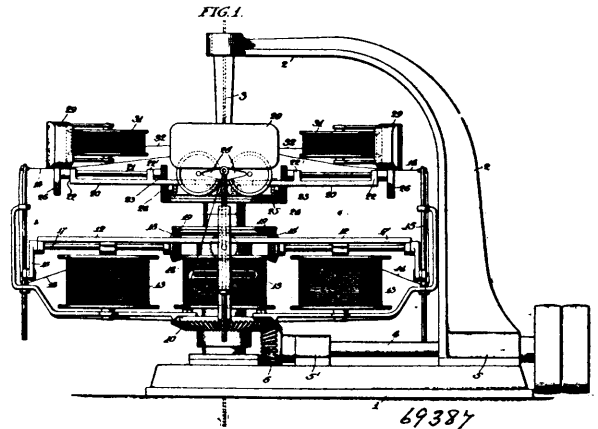
when the condition of the working weft supply necessitates replenishment, weft replenishing devices, a wheel or wheels in operative connection with the said weft replenishing devices, a plurality of drivers for engaging with the said wheel or wheels to operate the replenishing devices, a rotating wheel or pulley, eccentrics operated by the said wheel or pulley and serving to operate the said drivers, instrumentalities under the control of the weft indicating devices for causing the said drivers to engage with the said wheel or wheels to rotate the latter and operate the weft replenishing devices, and means to terminate the driving action of the said drivers after the weft replenishment has been effected. 8th. In a loom, in combination, weft indicating devices operative when the condition of the working weft supply necessitates replenishment, weft replenishing devices, a wheel or wheels in operative connection with the said weft replenishing devices, one or more drivers for engaging with the said wheel or wheels to operate the replenishing devices, a trip shaft having a driver controller and operatively connected with the weft indicating devices to cause the said drivers to become engaged with the said wheel or wheels when the condition of the working weft supply necessitates replenishment, a catch for holding the trip shaft in the position to which it is moved from the indicating devices, and means for disengaging the said catch after the completion of the weft replenishment. 9th. In a loom, in combination, weft indicating devices operative when the condition of the working weft supply necessitates replenishment, a change shaft, weft replenishing devices under the control of the said change shaft, a wheel or wheels connected to the said change shaft, one or more drivers for engaging with the said wheel or wheels to operate the change shaft, means for actuating the said drivers, a trip shaft having a driver controller and connected with the weft indicating devices to cause the driver or drivers to rotate the change shaft when the condition of the working weft supply necessitates replenishment, a catch for engagement with the said trip shaft, and means for disengaging the said catch when the change shaft has completed the required rotation. 10th. In a loom, in combination, the weft fork, the change shaft, weft replenishing devices under the control of the said change shaft, a wheel or wheels connected with the change shaft, one or more drivers for engaging with the said wheel or wheels to operate the change shaft, means for actuating the said drivers, a trip shaft in control of the driving relations of the train of devices for operating the change shaft, means intermediate the weft fork and the trip shaft for operating the latter to establish driving relations of the said train, a catch for maintaining the parts in operative relationship while the weft replenishment is being effected, and means for discontinuing the driving relations of the said train when the change shaft has completed the required rotation. 11th. The injector having the shuttle supporting arms provided with the frictional pads to make contact with the shuttle resting on said arms and hold it from displacement. 12th. The injector having the shuttle supporting arms, and having the yielding spring actuated finger or fingers to engage with the shuttle which is to be fed by the said injector. 13th. In a loom, in combination, weft indicating devices operative when the condition of the working weft supply necessitates replenishment, weft replenishing devices, means under the control of the weft indicating devices for actuating the replenishing devices when the condition of the working weft supply necessitates replenishment, a controller for the actuating connections of the replenishing devices, and a protector cam rotating in predetermined relation with the weaving instrumentalities and serving to control the position of the said controller device. 14th. In a loom, in combination, weft indicating devices operative when the condition of the working weft supply necessitates replenishment, weft replenishing devices, a wheel or wheels in operative connection with the said weft replenishing devices, driving devices for engaging with the said wheel or wheels to operate the replenishing devices, a trip shaft provided with means for controlling the action of the said driving devices, a catch for engagement with the said trip shaft to hold it in the working position, the rotating protector cam, and devices intermediate the same and the said catch to determine the engagement of the catch with the trip shaft.

No. 69,387. Braiding Machine. (Machine à tresser.)

C. Schutz, T. K. Ober, E. M. Cooper and H. D. Beaton, all of Philadelphia, Pennsylvania, U.S.A., 19th November, 1900; 6 years. (Filed 25th May, 1900.)

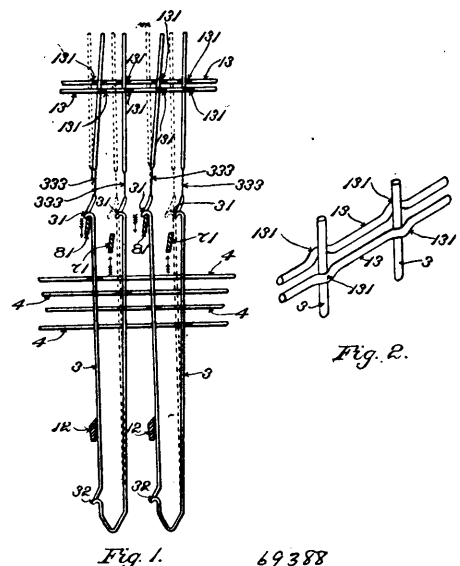
Claim.—1st. In a braiding machine, a revoluble frame, a revoluble notched disc journaled on said frame, a carrier, and mechanism revoluble with said frame and co-acting with said disc for supporting and actuating said carrier, substantially as specified. 2nd. In a braiding machine, a revoluble frame, a pair of revoluble notched discs journaled on said frame, and a carrier constantly supported on said discs and actuated thereby, substantially as specified. 3rd. In a braiding machine, a carrier, a pair of revoluble notched discs wholly supporting said carrier, a frame upon which said discs are journaled, and mechanism for revolving said discs so that their respective notches revolve in synchronous relation, substantially as specified. 4th. In a braiding machine, a revoluble spider, a series of discs arranged in pairs revolubly mounted upon said spider, a series of carriers, each supported by a pair of said discs, a fixed gear track, gearing connected with said gear track and discs for revolving said discs, and means for passing a thread between each carrier and its supporting discs, for the purpose set forth. 5th. In a braiding

machine, a spider, a series of notched discs arranged in pairs revolubly mounted upon said spider, a series of bobbin carriers, each sup-



ported by a pair of said discs, mechanism for revolving said discs so that the notches of each pair revolve in synchronous relation, in combination with a series of reciprocating thread guides, substantially as specified. 6th. In a braiding machine, a revoluble spider, a series of discs arranged in pairs journaled upon said spider, a gear wheel fixed to each of said discs, a fixed circular gear track, an intermediate gear operated by said gear track for engagement with each of said first gears, and a bobbin carrier supported and actuated by each pair of said discs, substantially as specified. 7th. In a braiding machine, a revoluble spider, a series of notched discs arranged in pairs journaled upon said spider, a gear wheel fixed to each of said discs, a fixed circular gear track, an intermediate gear operated by said gear track for engagement with each of said first gears, a bobbin carrier supported and actuated by each pair of said revoluble discs, the peripheries of said discs engaging and revolving within said carriers, in combination with a series of reciprocating thread guides, substantially as shown and described. 8th. In a braiding machine, a carrier having a pair of circular grooves within the body thereof, in combination with a pair of notched discs having peripheral flanges which revolve within the respective grooves in said carrier, and means for revolving said discs in synchronous relation, substantially as specified.

No. 69,388. Jacquard Machine. (Machine à la jacquart.)

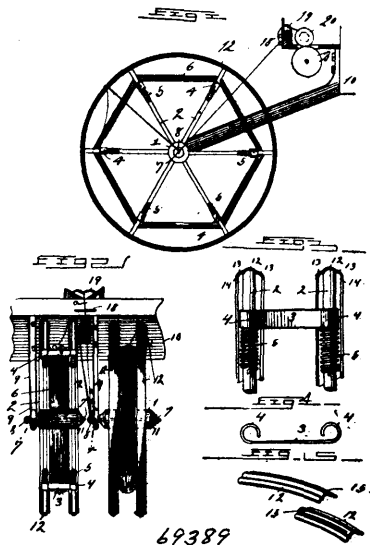


The Crompton & Knowles' Loom Works, assignee of George W. Stafford and Albert E. Kelmer, all of Providence, Rhode Island, U.S.A., 19th November, 1900; 6 years. (Filed 21st May, 1900.)

Claim.—1st. The upright having a hook for engagement with an actuating griff, and having the stem thereof adjacent to the said hook constructed with an elastic portion of increased flexibility to promote the bending of the stem, substantially as described. 2nd.

The improved double upright having a hook on each limb thereof for engagement with an actuating griff, and also having the stem of each limb adjacent to the said hook constructed with an elastic portion of increased flexibility to promote the bending of the said stem, substantially as described.

No. 69,389. Swift. (Devidoir.)



69389

Eliza Chalmers, Salt Lake City, Utah, U.S.A., assignee of James L. Chalmers, in his lifetime of the same place, 19th November, 1900; 6 years. (Filed 9th May, 1900.)

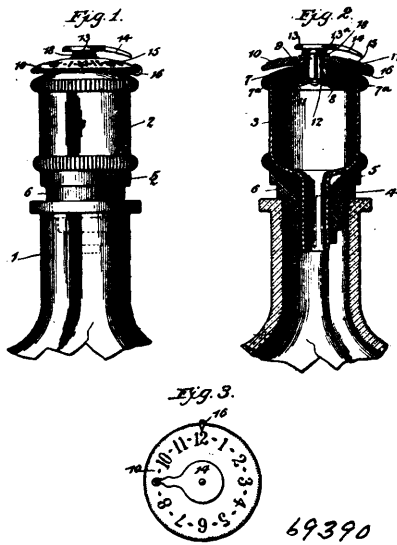
Claim.—1st. A stationary swift provided with radiating spokes and a rim of greater diameter than the body of the swift, made concavo-convex, in from in cross section with its convex face outward, said rim engaging the outer ends of the spokes and being held in place thereon by its own resiliency, substantially as described. 2nd. The combination with a stationary swift, provided at one end with radiating spokes extending beyond the body of the swift, in combination with a concavo-convex rim engaging the outer ends of the spoke and held in place thereon only by its own resiliency, substantially as described. 3rd. A swift provided with radiating spokes, in combination with a movable rim having a concave-inner face fitting and engaging the ends of the spokes and provided with over lapping ends, said rim being retained in place by its engagement with the spokes and its own resiliency, substantially as described. 4th. A swift comprising radiating spokes in combination with a rim fitting upon the ends of said spokes and having a semi-circular cross sectional shaped with laterally extending flanges on both sides, substantially as described. 5th. A swift comprising radiating spokes in combination with a rim mounted upon the ends of said spokes and having a semi-circular cross sectional shape with laterally extending flanges, the edges of which are deflected inward, substantially as and for the purpose specified. 6th. A stationary swift, comprising two sets of radiating spokes, located in oppositely arranged parts, in combination with yokes connecting the pairs of spokes and mounted slidingly thereon, and an outer rim made concavo-convex in form, one for each set of spokes, said rims engaging the ends of the spokes and being held in place thereon by their own resiliency, substantially as described.

No. 69,390. Dropper and Liquid Measure. (Pipette et mesure de liquide.)

George W. Evans, Erie, Pennsylvania, U.S.A., assignee of Fernand Solomon, Philadelphia, Pennsylvania, U.S.A., 19th November, 1900; 6 years. (Filed 17th April, 1900.)

Claim.—1st. A device of the character described, comprising a reservoir adapted to the neck of a bottle, a flexible diaphragm or enclosure for said reservoir having an air inlet therein and means for keeping said air inlet normally closed and for opening said air inlet when desired. 2nd. A device of the character described, comprising the reservoir attached to the neck of a bottle, said reservoir having a flexible diaphragm or enclosure, a cap adjacent said diaphragm and having an air inlet leading into said reservoir, a closure for said inlet, and a dial for indicating the hour or fraction thereof at which the medicine is to be administered, and for indicating the number of drops to be used. 3rd. A device of the character described, comprising a reservoir adapted to the neck of the bottle, said reservoir having a flexible diaphragm or enclosure, a cap adjacent said diaphragm having an air inlet leading into said reservoir, a valve adapted to keep said air inlet normally closed, a dial for indicating the hour or fraction thereof at which the next dose is

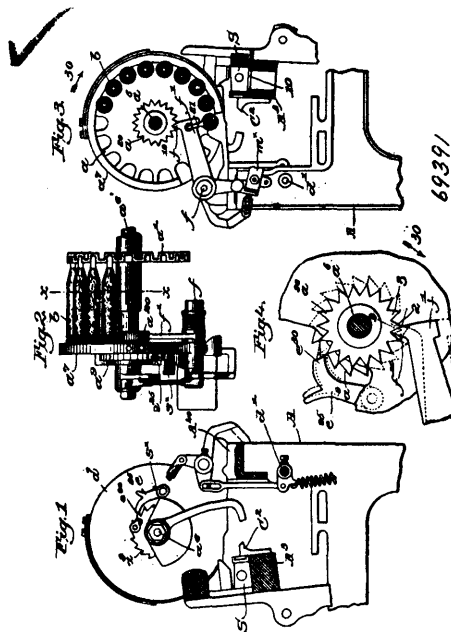
to be administered, and for indicating the number of drops to be used. 4th. A device of the character described, comprising a reser-



69390

voir, adapted to the neck of a bottle, a flexible diaphragm forming a closure for said reservoir, said diaphragm having a central opening, a cap having numerals thereon to designate the hour or fraction thereof at which the medicine is to be administered, and for indicating the number of drops to be taken, said cap having a flange adapted to the opening of said flexible diaphragm, and forming an air inlet to said reservoir, a valve for said air inlet, and means for keeping said valve normally seated, a plurality of fingers adapted to register the figures on the cap. 5th. A device of the character described, comprising a reservoir having a neck or extension thereon, a cork adapted to said neck or extension and provided with external annular steps of gradually decreasing diameter adaptable to the neck of bottles of varying sizes, a flexible diaphragm forming a closure for said reservoir, a cap adjacent said diaphragm, said diaphragm having an air inlet leading into said reservoir, a valve adapted to keep, said air inlet normally closed, and a dial for indicating the hour or fraction thereof at which the medicine is to be administered, and for indicating the number of drops to be taken.

No. 69,391. Loom. (Métier.)



69391

The Draper Company, Portland, Maine, assignee of Belonie Janelle, Manchester, New Hampshire, both in the U.S.A., 19th November, 1900; 6 years. (Filed 28th August, 1900.)

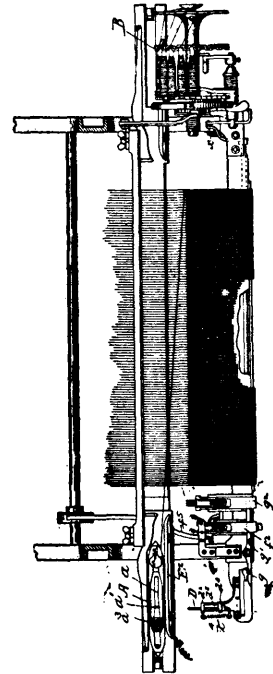
Claim.—1st. A movable filling feeder to hold a series of filling carriers, a transferrer, and means controlled by the transferrer to move the feeder positively and intermittently and place the filling carriers one by one in the path of the transferrer. 2nd. A rotatable filling feeder to hold a circularly arranged series of filling carriers, a transferrer, and means controlled by the transferrer to move the feeder positively and intermittently to place the filling carriers one by one in the path of the transferrer, said means also locking the feeder from movement between successive operations of the transferrer. 3rd. A rotatable filling carrier to hold a circularly arranged series of filling carriers, a transferrer, and means, including a member movable with the transferrer, to move the feeder positively and intermittently and place the filling carriers one by one in position to be transferred. 4th. A rotatable filling feeder to hold a circularly arranged series of filling carriers, a transferrer, means to move the feeder positively and intermittently and place the filling carriers one by one in position to be transferred, and to lock the feeder between such movements, and a starting device to overcome the inertia of the feeder when it is unlocked. 5th. A rotatable filling feeder to hold a circularly arranged series of filling carriers, a transferrer, a dog mounted thereon, a toothed wheel rotatable with the feeder and engaged by the dog when the transferrer is inoperative, and means to overcome the inertia of the feeder when unlocked by operation of the transferrer, return of the latter to normal position acting through the dog and toothed wheel, to positively move the feeder to bring into operative position the next filling carrier to be transferred. 6th. A rotatable filling feeder, means independent of the filling carriers held thereby to normally lock it from movement, and a transferrer to remove the filling carriers one by one from the feeder, operative movement of the transferrer releasing the feeder from the locking means. 7th. A movable filling feeder adapted to hold a series of filling carriers, a transferrer to remove the latter one by one, and means operative on the return movement of the transferrer to positively position the feeder with the filling carrier next to be removed in the path of the transferrer. 8th. A rotatable filling feeder adapted to hold a series of filling carriers, a ratchet and a toothed disc rotatable with the feeder, a transferrer, a dog thereupon to engage the toothed disc when the transferrer is retracted, and a spring-actuated pawl to co-operate with the ratchet, said pawl imparting initial rotation to the feeder when operation of the transferrer withdraws the dog from the toothed disc, the subsequent engagement of said dog and the next tooth of the disc completing the movement of the feeder and locking it with the filling carrier next to be transferred in the path of the transferrer. 9th. A rotatable filling feeder adapted to hold a series of filling carriers, a disc notched to correspond to the position of the filling carriers, a transferrer, a dog thereupon to enter a notch of the disc when the transferrer is retracted, and independent means to impart initial movement to the feeder when the dog is withdrawn, return of the transferrer after removal of a filling carrier causing the dog to engage and advance the disc and feeder one step to bring the filling carrier next to be transferred into the path of the transferrer. 10th. A movable filling feeder to hold a series of filling carriers, a transferrer to engage and remove the latter one by one, means controlled by the transferrer to normally prevent movement of the feeder, and independent means to overcome the inertia of the feeder when free to move. 11th. A step-by-step rotatable holder adapted to contain a plurality of filling supplies, a transferrer to remove the filling supplies one after another, and means controlled by the movement of the transferrer to effect the rotation of the holder. 12th. A rotatable holder to support a series of filling supplies, a transferrer, and means including a member movable with the transferrer to effect a step-by-step rotation of the holder and thereby present the filling supplies one after another to the action of the transferrer. 13th. A rotatable filling supply holder, a transferrer to remove the filling supplies singly from the holder, means controlled by the transferrer to effect step-by-step movement of the holder, and a device to prevent retrograde movement of the latter. 14th. A movable filling supply holder, means to move the same, and a transferrer arranged also to control the movement of the holder to bring the filling supplies singly into operative position relative to the transferrer.

No. 69,392. Loom. (Métier.)

Malcolm Greene Chace and William Henry Baker, both of Central Falls, Rhode Island, and Frederic Ellsworth Kip, Montclair, New Jersey, all in the U.S.A., 19th November, 1900; 6 years. (Filed 24th September, 1900.)

Claim.—1st. In a loom having an automatic filling, changing or supplying mechanism, the combination of the said automatic filling, changing or supplying mechanism and means for controlling the time of its operation, said means comprising an electrically actuated device having its circuit extending through the shuttle and weft or filling carrier therein and a circuit maker and breaker operated by the filling or yarn of the weft carrier, the said circuit being also made and broken by the throw of the shuttle. 2nd. In a loom having an automatic filling, changing or supplying mechanism, the combination of the said automatic filling, changing or supplying mechanism and means for controlling the time of its operation, said means comprising an electrically actuated device having a

circuit extending through the shuttle and weft carrier, a circuit maker and breaker in the shuttle controlled by the yarn, separable



contact points forming a part of the circuit carried by the shuttle, and by a part of the loom with which the shuttle is brought into contact at or near the end of its movement, one pair of which contact points is yielding with respect to the other pair, as and for the purposes described. 3rd. In a loom having an automatic filling mechanism as a means of controlling the time of the operation of said automatic filling mechanism, an electrically actuated device having a circuit extending through the shuttle and bobbin, and a circuit maker and breaker carried by the shuttle and controlled by the yarn with contact plates upon the shuttle forming a part of the circuit, and the box plate having extending from its face yielding points or projections also forming a part of the electric circuit. 4th. In a loom having an automatic filling mechanism as a means of controlling the time of the operation of said automatic filling mechanism, an electrically actuated device having a circuit extending through the shuttle and bobbin, and a circuit maker and breaker controlled by the yarn or filling of the shuttle and also having two contact plates forming a part of the circuit with the box plate, having springs forming a part of the circuit, fastened thereto and points or projections upon the ends of said spring extending through holes in the box plate and projecting from the surface of said box plate to make yielding connection with the contact plates of the shuttle as the shuttle is moved against the same. 5th. In a loom having an automatic filling mechanism as a means of controlling the time of the operation of said automatic filling mechanism, an electrically actuated device having a circuit extending through the shuttle and weft carrier, a circuit maker and breaker carried by the shuttle and comprising a spring plate normally held from the yarn by the spring of the plate and intermittently moved toward the yarn and a contact point or ring by an extraneous means with which the spring plate is intermittently brought into contact as the shuttle approaches the end of its movement. 6th. The combination with an automatic filling mechanism, of a shuttle having a portion of an electric circuit provided with a contact maker and breaker, which circuit is adapted to be brought into connection with the remainder of a circuit, including in its line a device for controlling the time of the operation of said automatic filling mechanism during the movement of the shuttle as the shuttle approaches one end of its movement, and a yielding push rod with which the said contact maker and breaker comes into contact substantially simultaneously with the establishment of the full circuit by the shuttle. 7th. In a loom having an automatic filling, changing or supplying mechanism, the combination of said automatic filling, changing or supplying mechanism, electrically actuated means for controlling the time of its operation, a shuttle having two branches of an electric circuit, the outer ends of which branches are exposed and the inner end of one branch of which is connected with metal jaws for receiving and holding a bobbin or yarn holder, and the inner end of the other of which branches is connected with a contact maker and breaker, and a bobbin or yarn holder having two contact rings or plates electrically connected, one of which makes contact with the said metal jaws, and the other of which makes contact with

the contact maker and breaker upon the removal of yarn or filling from the bobbin. 8th. In a loom having an automatic filling changing or supplying mechanism, the combination of said automatic filling changing or supplying mechanism and means of controlling the time of its operation, said means consisting of a magnet connected with said filling changing or supplying mechanism, and an electric circuit extending from the magnet adapted to be opened or closed by the presence or absence of yarn in the shuttle. 9th. The combination in a loom, of a magnet, an electric circuit extending into the shuttle opened or broken by the yarn or filling, an armature mounted upon a slide, and having a slotted end, a lever to move said slide when the armature makes an engagement therewith, and a second lever connected with the automatic filling mechanism adapted to be moved by said slide, as and for the purposes set forth. 10th. In a loom, the combination of the oscillator f^5 having the forked ends f^2 , g^5 , the slides g^2 and f^2 connected respectively with the loom stop motion and with the automatic filling feeding mechanism, a movable yarn feeding finger k making connection between the said end g^5 and the slide g^2 , an armature making connection with the fork f^2 and the slide f^2 , a magnet and an electric circuit connecting the magnet with the shuttle and controlled by the shuttle yarn or filling. 11th. In a loom, the combination of a reciprocating shuttle, a section of an electric circuit carried thereby, a spindle or bobbin having also a section of an electric circuit, means for automatically feeding it to the shuttle and for automatically connecting its section of the electric circuit with a section of the circuit carried by the shuttle, and means comprising yarn or filling upon the shuttle for covering the end of the bobbin holding section of said electric circuit, a device for controlling the time of the operation of the shuttle feeding mechanism and an electric circuit automatically established between said device and said shuttle and bobbin upon the partial or entire feeding of the yarn or filling from the bobbin. 12th. In a loom, the combination of a reciprocating bobbin or filling holder, an electric circuit a portion of which is attached to the bobbin or filling holder to be reciprocated therewith, means for opening and closing the circuit comprising a bobbin or filling holder and the yarn or filling thereon, automatic means for permitting the closing of the circuit by the removal of the yarn or filling from the bobbin or yarn holder and for automatically opening said circuit and maintaining it open by the automatic substitution of a filled bobbin or yarn holder for an unfilled one, an electric device upon the loom connected with devices for automatically feeding the said automatic circuit changing bobbin or yarn holder and a circuit maker electrically connected with said controlling devices and arranged to make contact when permitted by the yarn with the part of the circuit carried by the bobbin or yarn holder. 13th. The combination with weft supply mechanism, comprising mechanism for supplying filled weft carriers, as required, to the loom, of an electric circuit and mechanism controlling said supply mechanism, said circuit including a generator and having a break which is closed by the entry of the shuttle into the shuttle box, and each of the shuttles having in it an electric circuit which closes electrically with the exterior circuit when the shuttle is in place in the shuttle box, said circuit in the shuttle having in it a break which closes automatically when the weft carried by the shuttle is nearly or wholly exhausted, substantially as set forth. 14th. A weft supply mechanism for looms, comprising mechanism for supplying filled bobbins, or weft carriers, to the shuttle as required, and means for controlling the time of the operation thereof, consisting of an open electric circuit including a magnet, said circuit having in it a break adapted to be closed by the substantial exhaustion of the weft.

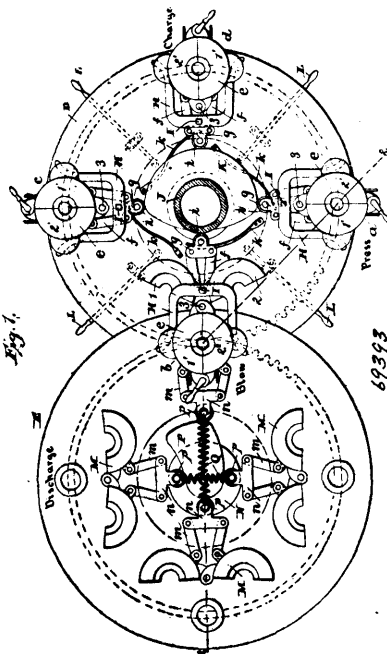
No. 69,393. Machine for Manufacturing Glassware.

(Machine pour la fabrication de verrerie.)

Charles Edwin Blue, Wheeling, West Virginia, U.S.A., 20th November, 1900; 6 years. (Filed 8th January, 1900.)

Claim.—1st. A machine for the manufacture of glassware, comprising a press mould, a separate blow mould, separate carriers for the said moulds, and mechanism actuated by the movement of the carriers for discharging the blank from the press mould and delivering it to and within the blow hole. 2nd. A machine of the character described, comprising separate and independent vertically separable press and blow moulds, independent members adapted to open and close the press and blow moulds respectively, and an operating mechanism common to said independent members, substantially as described. 3rd. A machine of the character described comprising separate press and blow moulds, members for opening and closing the said moulds, a mouth ring adapted to cooperate with said moulds, a movable carrier for said mouth ring, and an operating mechanism common to the mould, opening and closing members and the ring carrier, whereby the pressed blank is removed from the press mould, carried to the blow mould and the blow mould closed therearound, substantially as described. 4th. A machine for the manufacture of glassware, comprising separable press and blow moulds, a presser head, a mouth ring independent of said presser head, and a movable carrier for said separate mouth ring adapted to carry the pressed blank to and within the blow mould. 5th. A machine for the manufacture of glassware, comprising a vertically separable press mould, a horizontally moving carrier therefor, a vertically separable blow mould, a horizontally movable carrier therefor, a mouth ring for and separate from the press mould, the press mould carrier having a support for the ring,

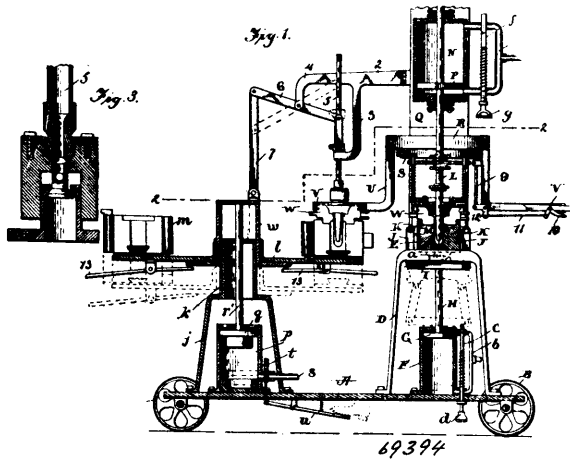
and mechanism for moving the carrier and discharging the blank laterally from the press mould and delivering it laterally to the



blow mould. 6th. A machine for the manufacture of glassware comprising a separable press mould, a carrier therefor, a separable blow mould, a carrier therefor, the carriers operatively connected, the press mould carrier having a mouth ring support and a mouth ring separate and removable from its said support by the movement of the mould carriers. 7th. A machine for press the manufacture of glassware, comprising a horizontally movable mould carrier, a vertically separable press mould thereon a blow mould carrier, a vertically separable blow mould thereon, in practically the same horizontal plane as the press mould, the press mould carrier having a support for a mouth ring, a mouth ring for and separate from the press mould and its carrier, whereby the movement of the carriers will laterally discharge the blank from the press mould and laterally deliver it to the blow mould. 8th. A machine for the manufacture of glassware, comprising a press mould carrier, a separable press mould carried thereby, a blow mould carrier, a separable blow mould carried thereby, a member connected with and adapted to open the press mould, said member actuated through the medium of the press mould carrier, a member for closing the blow mould and actuated through the medium of the blow mould carrier, the parts adapted to operate as described. 9th. A machine for the manufacture of glassware, comprising a press mould carrier, a separable press mould carried thereby, a cam stationary in respect to the carrier, a member connected with and adapted to open the press mould, said member actuated by the cam, a blow mould carrier, a separable blow mould carried thereby, a member adapted to close the blow mould, a cam stationary in respect to the mould carrier, adapted to actuate the said mould closing member. 10th. A machine for the manufacture of glassware, comprising a press mould carrier, a separable press mould carried thereby, a blow mould carrier, a separable blow mould carried thereby, a member for opening the press mould, a member for opening the blow mould, an actuating member for the said opening and closing member, the said actuating member situated and constructed to open the press mould and to close the blow mould after the press mould is opened. 11th. A machine for the manufacture of glassware, comprising a rotating press mould carrier, a separable press mould carried thereby, a rotating blow mould carrier, a separable blow mould carried thereby, operating connections between the said carriers for moving them uniformly, a member for opening the press mould, a stationary cam for actuating the press member as the carrier is rotated, a member for opening the press mould, a stationary cam for actuating the members of the press, and moulds extending to opposite sides of the axes of the said carriers. 12th. A machine for the manufacture of glassware, comprising a rotating press mould carrier, a press mould carried thereby, a rotating blow mould carrier, a blow mould carried thereby, an operating connection between the said carriers for moving them uniformly, blocks, links connecting the blocks and the parts of the moulds, and cams for actuating the blocks, the cams situated at opposite sides of the axes of the rotating carriers. 13th. A machine for the manufacture of glassware, comprising a press moulds carrier, a plurality of independent separable press mould carried thereby, a separate blow mould carrier, a plurality of independent separable blow moulds carried thereby, and an actuating mechanism constructed and adapted to alternately

open and close the said independent press and blow mould respectively. 14th. A machine for the manufacture of glassware, comprising a press mould carrier, a vertically separable press mould carried thereby, a blow mould carrier, a separable blow mould carried thereby and in the path traveled by the press mould, and mechanism constructed and adapted to open the press mould when it is in the path of the blow mould and to close the blow mould when in the path traversed by the press mould, the parts thus adapted to deliver the blank from the press to the blow mould. 15th. A machine for the manufacture of glassware, comprising a horizontally movable vertically separable blow mould, a horizontally movable vertically separable press mould, said press and blow mould moving in the intersecting horizontal paths, and a mechanism constructed and adapted to open the press mould and close the blow mould when they are at the intersecting point.

No. 69,394. Machine for the Manufacture of Glassware. (*Machine pour la fabrication de verrerie.*)

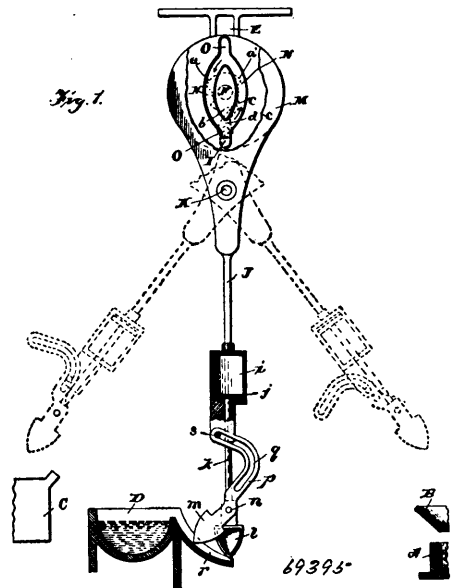


Charles Edwin Blue, Wheeling, West Virginia, U.S.A., 20th November, 1900; 6 years. (Filed 8th January, 1900.)

Claim.—1st. A machine for the manufacture of glassware, comprising a press mould adapted to disengage the pressed blank, a laterally movable blow mould supported adjacent the press mould, a neck ring adapted to co-operate with the press mould and to support the pressed blank, and a neck ring support movable in the path intersecting both of said moulds, substantially as described. 2nd. A machine for the manufacture of glassware, comprising a press mould adapted to disengage the pressed blank, a laterally movable blow mould supported out of vertical alignment with the press mould, a neck ring, and a neck ring support laterally movable in a different path from that of the blow mould but intersecting the press and blow moulds, substantially as described. 3rd. A machine for the manufacture of glassware, comprising a press mould adapted to disengage the pressed blank, a movable blow mould support, a plurality of blow moulds supported thereby, and a press blank support movable in a path intersecting the press mould, and the path travelled by the blow mould, substantially as described. 4th. A machine for the manufacture of glassware, comprising a press mould adapted to disengage the pressed blank, a laterally and vertically movable blow mould support, a plurality of blow moulds carried thereby, a laterally movable press blank support movable in a path intersecting the press mould, and the path travelled by the vertically and laterally movable blow mould, substantially as described. 5th. A machine for the manufacture of glassware, comprising a press mould adapted to be disengaged from the pressed blank, a separate ring therefor, a rotatable support for the said ring, a rotatable and vertically movable blow mould support, and a blow mould supported thereon, the parts adapted to co-operate, substantially as described. 6th. A machine for the manufacture of glassware, comprising a press mould adapted to be disengaged from the pressed blank, a neck ring independent of and adapted to co-operate with the press mould, a movable support for the neck ring, a blow mould adapted to embrace the pressed article, the neck ring and its support constructed to disengage each other by the movement of the support when the neck ring is engaged upon the blow mould, substantially as described. 7th. A machine for the manufacture of glassware, comprising a single vertically movable press mould, a plurality of horizontally movable neck ring supports moving over the said press mould, a neck ring or rings adapted to be supported by the said supports, and a plurality of vertically and horizontally movable blow moulds, the neck ring supports and blow moulds adapted to move in a common path whereby the parts are capable of co-operation, substantially as described. 8th. A machine for the manufacture of glassware, comprising a stationary press mould support, a press mould consisting of vertically separable portions

hinged at their lower inner edges to the said supports, a vertically movable actuating member connected with the parts of the press mould outside of their pivotal points, a neck ring separate from the press mould, a movable support for the press ring, and a vertically and horizontally movable blow mould, the parts adapted to co-operate, substantially as described. 9th. A machine for the manufacture of glassware, comprising a press mould, a blow mould, a plunger adapted to co-act with the press mould, a blow head adapted to co-operate with the blow mould, the blow mould having a vertical movement, and a connection between the blow head and the blow mould whereby when the blow mould is moved upward the blow head is moved downward to co-act therewith, substantially as described. 10th. A machine for the manufacture of glassware, comprising a press mould, a plunger adapted to co-act therewith, a vertically movable blow mould, a vertically movable blow head, an intermediately pivoted lever, one end of the lever connected with the blow head and the other with the blow mould support, whereby the parts are adapted to co-operate, substantially as described.

No. 69,395. Method of Measuring and Delivering Molten Glass. (*Methode de mesurer et transferer le verre fondu.*)



Charles Edwin Blue, Wheeling, West Virginia, U.S.A., 20th November, 1900; 6 years. (Filed 27th July, 1900.)

Claim.—1st. The method of working glass which consists in dipping and forming a pre-determined quantity of molten glass into a compact form, cutting off and transferring the same from the mass of glass, then further forming the glass while still plastic into a finished glass article. 2nd. The method of working glass which consists in dipping and cutting off from a molten mass of glass a pre-determined measured quantity thereof, transferring the same from the mass then further forming the separated measured mass into a finished glass article while still plastic. 3rd. The method of working glass which consists in dipping and cutting off a pre-determined measured quantity of glass from a molten mass thereof, transferring the same therefrom, then forming the same into a finished glass article while still plastic by pressing and blowing. 4th. The method of dipping and delivering a pre-determined quantity of glass and forming the measured mass into a finished article, which consists in simultaneously dipping, forming, and chilling the surface of a pre-determined quantity of glass into a compact form, cutting off and transferring the same from the mass of glass, then further forming the compact measured mass of glass while plastic into a finished glass article. 5th. The method of dipping and delivering a pre-determined quantity of glass and forming the measured mass into a finished article, which consists in forming a pre-determined quantity of glass into a compact form and simultaneously producing a non-adhering film surrounding the compact mass, cutting off and transferring the same from the mass of glass, then further forming the compact measured mass of glass while plastic into a finished glass article.

No. 69,396. Glass Dipping Machine. (*Machine à immerger le verre.*)

Charles Edwin Blue, Wheeling, West Virginia, U.S.A., 20th November, 1900; 6 years. (Filed 27th July, 1900.)

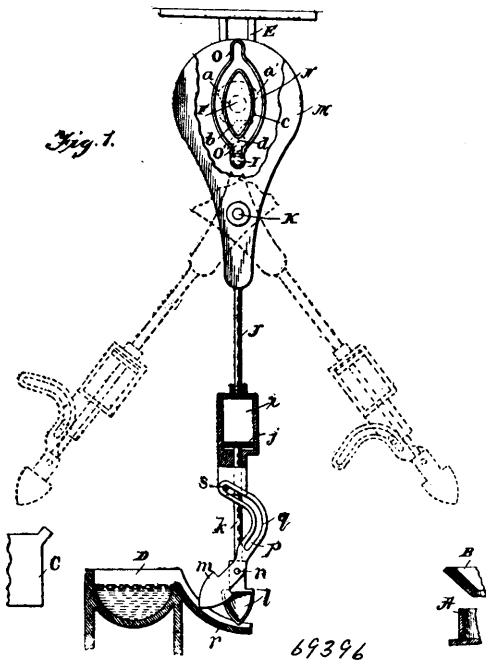
Claim.—1st. A machine of the character described, comprising a supply vessel, a receiving vessel, a ladle carrier, a ladle carried

hereby, a driving member for said carrier, and means controlled and actuated by said driving member and constructed and arranged

ected by laterally extending recesses, a rotating member movable within the said arc shaped grooves and recesses, whereby the lever is moved laterally and held for a time at its limit of movement, substantially as described. 10th. A mechanism of the character described, comprising a supply or glass vessel, a receiving vessel or mould, a dipping receptacle having an inlet and exit opening, means constructed and arranged to dip said dipping receptacle in the supply vessel, remove it therefrom and carry it to the receiving vessel, and means constructed and arranged to close said inlet when the receptacle is dipped and to open said exit when the receptacle is at the receiving vessel. 11th. A machine of the character described, comprising a vibrating lever intermediately pivoted, a movable receptacle carried at one end thereof, the opposite end of the lever having a disc with arc shaped grooves and laterally extending recesses, a crank carrying a wrist pin or roller engaging the said grooves and recesses, substantially as described. 12th. A machine of the character described, comprising a vibrating lever having at one end a cylinder, a piston therein carrying a piston rod, a receptacle carried by the said piston rod, means for vibrating the lever, a fluid or air pressure supply arranged in communication with opposite ends of the cylinder, a controller for said communication, substantially as described. 13th. A machine of the character described, comprising a vibrating lever, a cylinder carried at one end thereof, a piston head within the cylinder, a piston rod, a receptacle carried by the piston rod, means for vibrating the lever and holding it at its limit of movement, an air or fluid pressure supply arranged in communication with the opposite ends of said cylinder, a controller for said communication, and a cam constructed and arranged to actuate said controller for admitting pressure from said supply to opposite ends of the cylinder when the lever is at its limit of movement, substantially as described. 14th. A machine of the character described, comprising a receptacle carrier, a receptacle movable thereon, an operating element for said carrier, and a movable actuating member for said receptacle which is controlled by the carrier actuating element, substantially as described. 15th. A machine of the character described, comprising a receptacle carrier, an operating shaft therefor, a cam carried by said shaft, a receptacle carried by and movable in respect to said carrier, and an actuating member for said receptacle controlled by said cam, substantially as described. 16th. A machine of the character described, comprising a vibrating receptacle carrier, an actuating member for vibrating said carrier, a receptacle carried by and movable in respect to said carrier, and a movable cam having two cam surfaces arranged and constructed to control the movements of said receptacle, substantially as described. 17th. A machine of the character described, comprising a vibrating receptacle carrier, an actuating member therefor, a receptacle carried by and movable in respect thereto, and a movable cam having a long and a short cam surface arranged and constructed to control the movements of said receptacle, substantially as described. 18th. In an apparatus of the character described, a supply vessel, a receiving vessel, a ladle, means for moving the ladle from one vessel to the other, a ladle cooling means and means controlled by the ladle moving means for bringing the ladle into operative contact with the cooling means during its movement from one vessel to the other, substantially as described.

No. 69,397. Thimble. (De.)

to move the ladle carrier from one vessel to the other, and to dip and discharge said ladle respectively in respect to said vessels. 2nd. A machine of the character described, comprising a supply vessel, a receiving vessel, a laterally movable ladle carrier, a ladle carried thereby and longitudinally movable in respect thereto, a driving member for said carrier, and means actuated and controlled by the driving member and constructed and arranged to move said carrier from one vessel to the other, and to lower and raise said ladle in respect to the carrier and vessels when adjacent the latter. 3rd. A mechanism of the character described comprising a supply and a receiving vessel, a vertical pendulum lever pivotally supported at a point between and above said vessels, a mechanism situated at the upper end of said lever, and constructed to vibrate it, a ladle carried by the lower end of the lever and longitudinally movable in respect thereto, and means constructed and arranged to raise and lower said ladle when it is over said vessels. 4th. A mechanism of the character described comprising a supply and a receiving vessel, a vertical pendulum lever intermediately pivoted at a point between and above said vessels, a mechanism engaging said lever above its pivotal point, and constructed to vibrate said lever, a ladle carried by and longitudinally movable in respect to said lever, and means constructed and arranged to raise and lower said ladle when said lever is at the limit of its movement in either direction. 5th. A mechanism of the character described comprising a glass pot or receptacle, a receiver for the glass, a receiver for the glass, a water tank situated between the said glass receptacle, and the receiver, a laterally and longitudinally movable glass carrier or receptacle, and actuating members arranged and constructed to carry said receptacle over within and without the glass pot, over the receiver, and downward in respect thereto, and thence within the water tank, substantially as described. 6th. A mechanism of the character described comprising a glass receptacle or holder, a receiver a water tank situated therebetween, a laterally and longitudinally movable glass carrying receptacle, means for moving the glass receptacle laterally and longitudinally for the purpose described, said water tank having an incline for elevating the glass carrier above its wall, the parts combined substantially as described. 7th. A machine of the character described comprising a laterally movable receptacle carrier, a member for moving the said carrier laterally, a glass carrier carried by the said carrier and movable longitudinally in respect thereto, means for moving said glass carrier, a cover for said glass carrier, and means arranged and constructed to actuate the said cover through the movements of the said carrier, substantially as described. 8th. A machine of the character described, comprising a glass carrier, means constructed and arranged to move the carrier vertically and laterally, a dipping receptacle carried thereby and having a filling opening, a cover for said filling opening, a supply vessel, and means constructed and arranged to open and close the filling opening respectively when the receptacle is dipped and removed from the supply vessel for discharging, substantially as described. 9th. A machine of the character described, comprising a vibrating lever or pendulum intermediately pivoted, a receptacle carried at one end of the pendulum, the opposite end having arc shaped grooves con-



69396

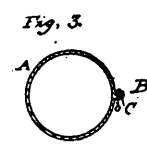
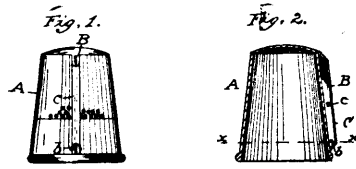
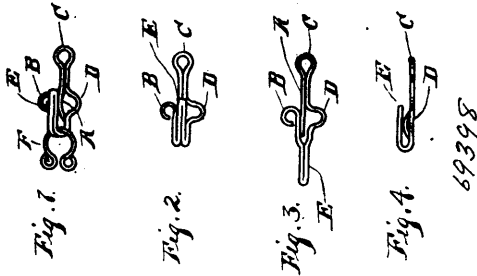


Fig. 4. 69397

Claim.—As a new article of manufacture, the thimble described, consisting of the body A, having on one side the double flange B, forming a groove and having a notch c, centrally located therein, the knife C, having slots d, located at each end thereof, adapted to secure and adjust said knife by means of the screws b, that pass through said slots in the knife, all constructed and arranged as shown and for the purpose specified.

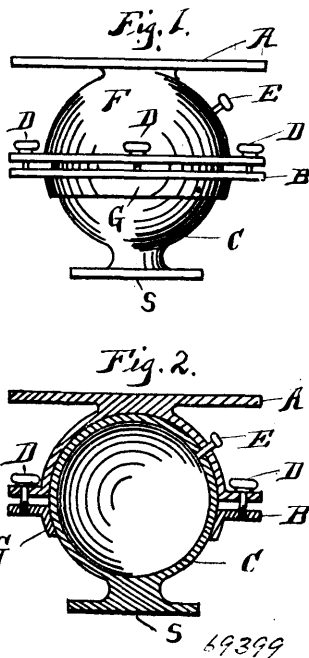
No. 69,398. Garment Hook. (*Crochet de vctement.*)



Fred Macey, Grand Rapids, Michigan, U.S.A., 20th November, 1900; 6 years. (Filed 2nd November, 1900.)

Claim.—1st. A garment hook comprising a bill, attaching loops on opposite sides thereof, and a curved elastic tongue beneath the bill forming a hump which lies in line with the loops. 2nd. A garment hook made in a single piece from wire, and comprising a bill, a pair of attaching loops on opposite sides thereof, a third attaching loop in line with said bill, and a curved elastic tongue formed by one terminal of the wire forming a hump which is located beneath said bill and in line with said pair of attaching loops. 3rd. A garment hook made in a single piece from wire, the said wire being bent at one end to form a side attaching loop, extended from said loop and bent back upon itself to form a bill, bent laterally from said bill to form a second side attaching loop, extending rearwardly and recurved to form an end attaching loop, and extended from said attaching loop, terminating at a point beneath said bill, and curved at a point between said side attaching loops to form an elastic retaining tongue.

No. 69,399. Table. (*Table.*)

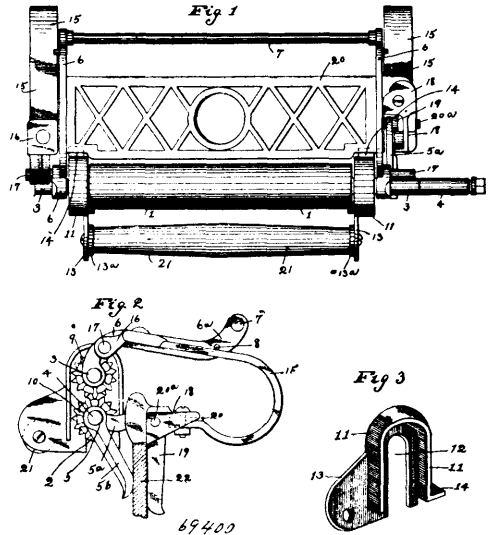


Henry S. Jordan, Grand Rapids, Michigan, U.S.A., 20th November, 1900; 6 years. (Filed 2nd November, 1900.)

Claim.—In an adjustable table, a standard, a ball formed integral therewith, a ring surrounding said ball below the horizontal centre thereof, an outwardly extending outer flange formed integral with said ring, a table, a hollow segment secured thereto and mounted upon the top of said ball, an outwardly extending annular flange formed integral with the lower part of said segment and parallel with the flange upon the ring, a series of bolts extending through

said flanges for causing the frictional engagement of the segment and ball for retaining the table in the desired position, and separate means for securing the said table in a horizontal position, substantially as described.

No. 69,400. Clothes Wringer. (*Essoreuse à linge.*)

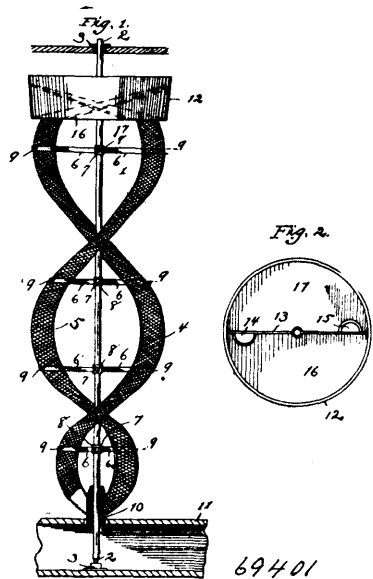


Charles Philander Searles, Columbus, Ohio, U.S.A., 20th November, 1900; 6 years. (Filed 2nd November, 1900.)

Claim.—In a wringer, the combination with the upper and lower rolls 1 and 2, roll shafts 3 and 4, and angular clamping levers 5 on said shaft 4, of an operating lever 6 pivoted on the spindle portions of the shafts 3, clamping arms 19, pivotally connected with the upper arms of the clamping levers 5, and springs having their upper and forward ends pivoted on said operating lever at points above the shaft 3, and having their rear and lower ends rigidly connected with said clamping arm 19, substantially as specified.

No. 69,401. Grain Cleaner and Scourer.

(*Appareil à écurer et nettoyer le grain.*)

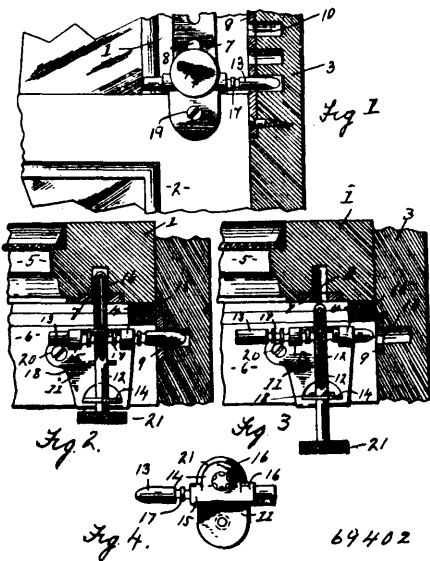


William W. Salisbury, Berea, Ohio, U.S.A., 20th November, 1900; 6 years. (Filed 30th October, 1900.)

Claim.—1st. A grain scourer and cleaner comprising a revoluble vertical shaft, spirally disposed troughs secured to said shaft to revolve therewith, and a revolving hopper secured to said shaft and troughs. 2nd. A grain scourer and cleaner, comprising a revoluble vertical shaft, spirally disposed troughs consisting of wire netting or equivalent screen material secured to said shaft, a hopper secured

to the upper ends of the troughs, and a receiving receptacle at the lower ends of the troughs, said troughs being adapted to revolve by the weight of the grain fed to them through the hopper. 3rd. In a grain scourer and cleaner, the combination with a revoluble vertical shaft, of a hopper secured thereto, spirally disposed troughs secured to the shaft, and communicating with the hopper, and a discharge spout secured to the lower ends of the troughs. 4th. In a grain scourer and cleaner, the combination with a revoluble vertical shaft, of a hopper secured thereto, and provided with oppositely arranged feed openings, spirally disposed troughs communicating with the openings in the hopper, a series of transverse rods securing the troughs to the shaft, a discharge spout or sleeve connecting the lower ends of the troughs, and a bin or receptacle below said discharge spout.

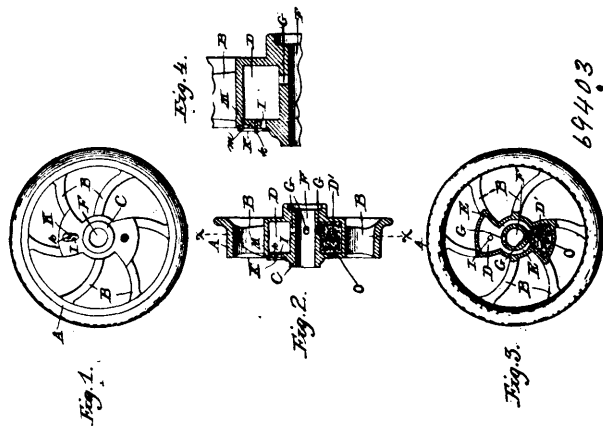
No. 69,402. Sash Lock. (*Arrête-croisé.*)



Henry E. Doren, Toledo, Ohio, U.S.A., 20th November, 1900; 6 years. (Filed 30th October, 1900.)

Claim.—1st. In a sash lock, the base constructed of sheet metal, having the upwardly turned ears forming bearings for a sliding bolt, and circular members forming bearings for a bolt extending in transverse direction to the sliding bolt, a sliding bolt formed with longitudinal grooves, adapted to enter recess in the shaft, and a bolt arranged transverse in direction to the sliding bolt, and formed with annular grooves constituting a rack, to be engaged by the sliding bolt, substantially as set forth. 2nd. In a sash lock, the base formed with guides for a sliding bolt, and with guides for bolts extending in a transverse direction to the sliding bolt, a sliding bolt formed with longitudinal grooves and adapted to enter recesses in the shaft and a bolt formed with annular grooves, adapted to be actuated by rotating the sliding bolt and a pin inserted transversely in the sliding bolt to prevent its withdrawal from the base, substantially as set forth.

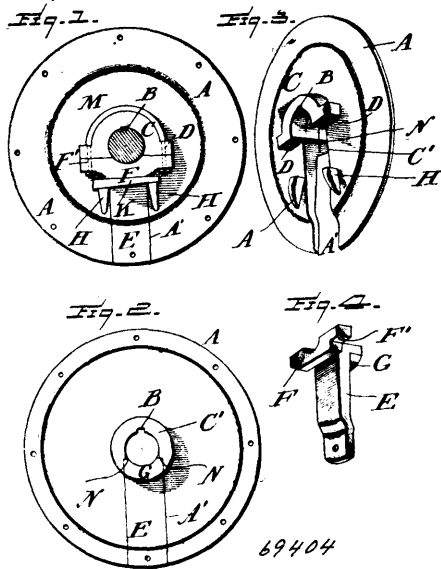
No. 69,403. Car Wheel. (*Roue de chars.*)



John McFarland Phillips, Pittsburg, Pennsylvania, U.S.A., 20th November, 1900; 6 years. (Filed 30th October, 1900.)

Claim.—In a car wheel, the combination with the rim A¹ the spokes B, B, and the hub F, of the lubricant reservoirs D, D¹, formed integral with the spokes and located on opposite sides of the hub, and having concentric communicating channels, the reservoir D being provided with an opening for the reception of lubricating material and a revolving plate K, for closing and opening after the lubricating material has been introduced and the other reservoir having an opening for the introduction of packing material and a screw plug P, for closing the same, substantially as described.

No. 69,404. Pulley Disc. (*Disque de poulie.*)



William H. F. Raifsnnyder, Sackett, Pennsylvania, U.S.A., 26th November, 1900; 6 years. (Filed 2nd November, 1900.)

Claim.—1st. A device for holding a pulley to rotate with a shaft, comprising a disc, recessed in from its circumference, a segment block which is concave at its inner end, and adapted with the inner curved end of said recess to embrace a shaft, a U-shaped bolt and tightening nuts for holding said segment to the disc, projections on the face of said disc, and a wedge-shaped block interposed between a shoulder on said segment, and said projections, as set forth. 2nd. A device for holding pulley wheels to rotate with the shaft, comprising a disc recessed in from its circumference and terminating in a curved shoulder or flange on the opposite faces of said disc, a segment block having flanges projecting from its opposite faces, and recessed at its inner end, a U-shaped bolt passing about one of the flanges of the disc, and passing through registering apertures in the flanges of the disc and segment, threaded nuts mounted on said bolt, lugs on the face of the disc, and a wedge-shaped member interposed between said lugs and the flat face of the flanged portion of the segment, and a key for holding the disc to the shaft. 3rd. A device for holding a pulley to rotate with the shaft, comprising the disc recessed in from its circumference, flanges on opposite faces of said disc, which are concave, a segment block having flanges on its opposite faces, and concave on its inner end, the flanges of said segment block adapted to be held flat against the faces of the flanges of said disc, the lower end of the segment adapted to rest on shoulders on opposite walls of the recessed portion of the disc, lugs on the face of the disc on opposite sides of said recess, the wedge-shaped member interposed between the ends of said lugs and the flattened portion of one of the flanges of said segment, and the U-shaped bolt for holding the segment to the disc, as shown and described.

No. 69,405. Carbonic Sludge Treatment.

(*Traitement de précipité de carbonate.*)

The Pittsburg Testing Laboratory, assignee of James Otis Handy, all of Pittsburg, Pennsylvania, U.S.A., 20th November, 1900; 18 years. (Filed 28th March, 1900.)

Claim.—1st. As an improvement in the art of treating sludge obtained in the purification of water, the method herein described, which consists in impregnating the sludge with carbonic acid, whereby the carbonate of magnesia is rendered soluble, separating the solution so formed from the sludge, and then reburning or calcining the sludge, substantially as set forth. 2nd. As an improvement in the art of treating sludge obtained in the purification of water, the method herein described, which consists in impregnating the sludge with carbonic acid, whereby the carbonate of magnesia is rendered soluble, separating the solution so formed

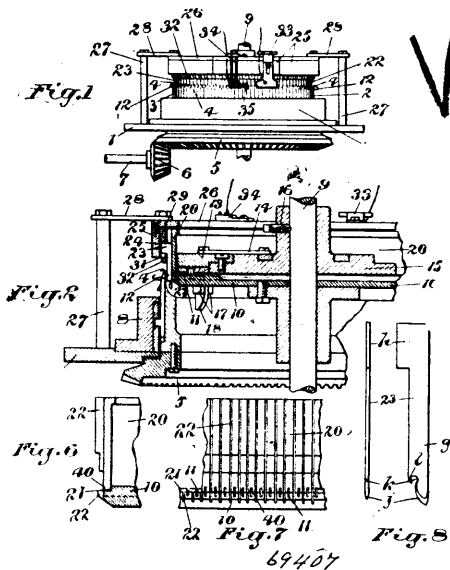
from the sludge, and finally precipitating the carbonate of magnesia in the solution and removing the water therefrom, substantially as set forth.

No. 69,406. Soap. (Savon.)

Joseph Libonati, East Orange, New Jersey, U.S.A., 20th November, 1900; 6 years. (Filed 3rd February, 1900.)

Claim.—1st. The process herein described of manufacturing soap, consisting in dissolving caustic soda or potash in water, mixing sweet oil therewith, stirring the same to make the mixture a thick liquid, and allowing the mixture to stand, then stirring into the mixture a number of well beaten eggs and permitting the mixture to harden, then dissolving the same with water by boiling and adding carbonate of potash, and finally adding to the mixture, benzine, alcohol, camphor, glycerine and muriatic acid, substantially as set forth. 2nd. The herein described soap composition resulting from the mixing of caustic soda (or potash), sweet oil, eggs, carbonate of potash, benzine, alcohol, glycerine and muriatic acid, combined in the manner and proportion, substantially as set forth.

No. 69,407. Knitting Machine. (Machine à tricoter.)

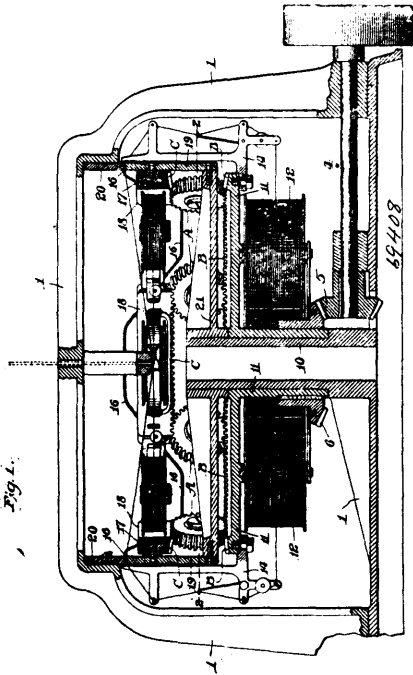


Michael J. Fisher, Utica, New York, U.S.A., 20th November, 1900; 6 years. (Filed 6th October, 1900.)

Claim.—1st. The combination with a circular knitting machine of the ordinary construction, having two sets of separating-needles of a supplementary cylinder of smaller diameter than the main cylinder mounted above the dial and arranged to move therewith said supplementary cylinder having peripheral grooves, sinkers arranged in said grooves, and means for elevating and depressing said sinkers so as to engage and press down a supplementary thread to form loops on one surface of the fabric. 2nd. The combination with a circular knitting machine, of the ordinary construction, having two sets of operating needles, of a supplementary cylinder arranged above and connected to move with the dial, said supplementary cylinder being provided with peripheral grooves, individual sinkers arranged one in each of said grooves, and means for elevating and depressing said sinkers, so as to engage and press down a supplementary thread to form loops on the surface of the fabric. 3rd. The combination with a circular knitting machine, of the ordinary construction, having two sets of operating needles, of a supplementary cylinder arranged above the dial and connected thereto, said cylinder having substantially vertical grooves, and sinkers operating in said grooves, between the dial needles, to press an additional thread down between said dial needles, so as to form loops protruding from the inner surface of the garment being knitted. 4th. The combination with a circular knitting machine of ordinary construction, of a supplementary cylinder arranged above the dial and connected thereto, said cylinder provided with peripheral grooves, sinkers arranged to operate in said grooves and a supplementary cam cylinder formed with a cam groove for engaging the heels of said sinkers, so as to cause them to press down an additional thread between the dial needles, whereby protruding loops are formed upon the inner face of the fabric. 5th. The combination with a circular knitting machine of ordinary construction, of a supplementary cylinder of smaller diameter than the main cylinder, said supplementary cylinder arranged above the dial and connected to move therewith, grooves in the outer periphery of the supplementary cylinder, sinkers arranged in said grooves and adapted to operate in the spaces between the dial needles and directly behind the main cylinder needles, and a supplementary cam cylinder

provided with a cam groove adapted to engage the heels of said sinkers and depress them, so as to engage and press down an additional thread between the dial needles. 6th. In combination with a rotary knitting machine provided with a dial and cylinder carrying their respective sets of needles and means for supporting and operating the parts in co-operation to knit the fabric, all of ordinary construction, a supplementary cylinder, smaller than the main cylinder, equal in diameter to the dial and set in a groove cut in the outer edge of said dial, in which said supplementary cylinder fits snugly securing it to the dial, grooves cut in the lower edge of said supplementary cylinder for the passages of the dial needles, substantially vertical grooves cut in the outer face of said supplementary cylinder alternately with said edge grooves, sinkers arranged in the latter grooves, a supporting ring or annular plate supported on the frame of the machine above said supplementary cylinder, a smaller cam cylinder made in sections secured to said annular plate, and cams arranged on the inner face of said small cam cylinder forming a cam groove to engage with the sinker heels, adapted to press down said sinkers to engage with the extra thread and force it downwardly between the alternate dial needles. 7th. In combination with a rotary knitting machine provided with a dial and cylinder carrying their respective sets of needles, and means for supporting and operating the parts in co-operation to knit the fabric, all of ordinary construction, a supplementary cylinder equal in diameter to the dial and set in a groove cut in the outer edge of said dial, grooves cut in the lower edge of said supplementary cylinder for the passage of the dial needles, substantially vertical grooves cut in the outer face of said supplementary cylinder alternately with said edge grooves, sinkers arranged in the latter grooves, a supporting ring or annular plate supported on the frame of the machine above said supplementary cylinder, a smaller cam cylinder made in sections secured to said annular plate, cams arranged on the inner face of said small cam cylinder forming a cam groove to engage with the sinker heels, adapted to press down said sinkers to engage with the extra thread and force it downwardly between the alternate dial needles, said cams being so arranged with reference to the cams operating the main cylinder and dial needles that the sinkers are depressed when the dial needles are moving out pressing the extra thread down over the open latches of said dial needles and said cams formed with a horizontal portion to hold the sinkers at that level until the dial needles have completed their outward movement and also their return movement, and a small incline to further depress the sinkers after the extra thread has been cast-off over the needle hooks to take up the slack and tighten said thread. 8th. In a circular knitting machine, the combination of a supplementary cylinder provided with sinkers for pressing down an additional thread, sinkers having a straight inner edge, an outwardly extending heel formed near their upper end, a point rounded on its inner edge and ground down on each side thereof to form a substantially thin edge to the point, a shoulder formed a short distance above the point, and a downwardly open curved notch formed in the upper wall of said shoulder, as set forth. 9th. In a circular knitting machine, a cylinder and dial of usual construction suitably supported and carrying respectively vertical and horizontal latch needles, means for rotating the cylinder and dial, fixed cam cylinder and cam plate for operating said respective sets of needles, and, in combination therewith a smaller, supplementary cylinder arranged above the main cylinder on said shaft and fitted snugly to an annular groove cut in the edge of the dial, vertical grooves in said smaller cylinder arranged alternately with the horizontal grooves in the dial, said smaller cylinder grooves being deeper above, the diameter of said cylinder diminishing toward its lower edges, sinkers arranged in said vertical grooves having on their outer edge, near their upper end heels, to engage with the cam groove, and notches near their lower ends, and adapted to move down within the circle of the needles of the main cylinder and between the dial needles to engage with a supplementary thread when they are depressed, forcing it over the dial needle loops, forming slightly loose loops therebetween, a fixed cam cylinder having a cam groove and adjustable cams for engaging the heels of said sinkers, an elastic steel band arranged around said sinkers and engaging with them beneath their heels, and an annular plate supported on the frame by arms and posts, to which plate the sections of said cam cylinder are secured. 10th. The combination with a rotary knitting machine of ordinary construction, of a supplementary cylinder, mounted on the central shaft of the machine and connected to the dial, said supplementary cylinder having its lower edge grooved correspondingly with the dial for the free operation of the dial needles, and its outer periphery provided with vertical grooves, sinkers arranged to operate in said vertical grooves, and a supplementary cam cylinder provided with a cam groove, adapted to engage and depress the sinkers, so as to cause sinkers to engage and press down an additional thread between the dial needles. 11th. The combination with a rotary knitting machine, of a supplementary cylinder, mounted on the central shaft of the machine and connected to the dial, said supplementary cylinder having its lower edge grooved correspondingly with the dial for the passage of the dial needles, and its outer periphery provided with vertical grooves, sinkers arranged to operate in said vertical grooves, a supporting ring or annulus mounted upon the machine frame, and a supplementary cam cylinder, supported by the ring or annulus, provided with a cam groove adapted to engage and depress the sinkers, as and for the purpose specified.

No. 69,408. Braiding Machine. (Machine à braider.)



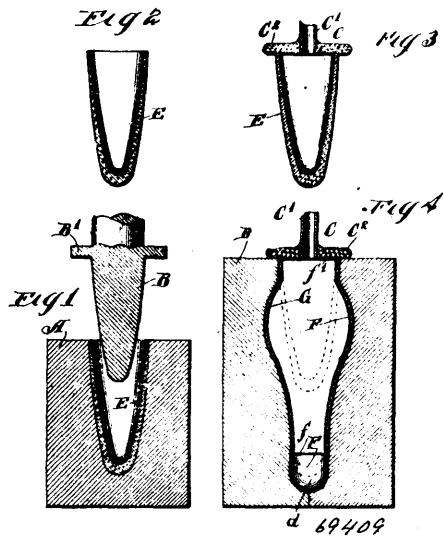
Andrew Vincent Groupe, Philadelphia, Pennsylvania, U.S.A., 20th November, 1900; 6 years. (Filed 27th August, 1900.)

Claim.—1st. In a braiding machine, the combination with a sectional trackway, provided with threadways between adjacent sections, and under and over alternate sections, carriers on said trackway, bobbins on said carriers, a second set of bobbins, a carrier therefor, actuating means for said carrier, a series of rotatable propelling means interposed between and directly engaged with the latter carrier and the carriers first named, and means whereby the threads from the last-named bobbins are directed between, under and over sections of the trackway in prescribed order, substantially as described. 2nd. In a braiding machine, the combination of a sectional trackway provided with thread ways between adjacent sections, and under and over alternate sections, carriers on said trackway provided with gear teeth, bobbins on said carriers, a second set of bobbins, a carrier therefor provided with gear teeth, a series of pinions interposed between and geared with latter carrier and the carriers first named, and means whereby the threads from the last named bobbins are directed between, under and over sections of the trackway in prescribed order, substantially as described. 3rd. In a braiding machine, the combination of a sectional trackway provided with threadways between adjacent sections, and under and over alternate sections, carriers on said trackway provided with gear teeth, bobbins on said carriers, a second set of bobbins, together with means whereby the threads from the latter bobbins are directed between, under and over sections of the trackway in prescribed order, substantially as described. 4th. In a braiding machine, the combination of stationary members constituting a thread guiding course, a sectional trackway, a set of bobbin carriers on said trackway, their bobbins, a series of propelling devices rotatable each about its own axis and adapted to co-act with said carriers, a second set of bobbins, supporting and actuating means therefor, and means for actuating said devices, together with means whereby the threads from said second set of bobbins are directed to the said course, substantially as described. 5th. In a braiding machine, the combination of two rings between which is formed a sinuous course, an annular trackway between the highest and lowest planes of, and intersected by the course, thread supplying devices, mechanism for rotating the latter, a series of propelling devices rotatable each about its own axis and adapted to impel the first-named thread supplying devices, and means for actuating said propelling devices, substantially as described. 6th. In a braiding machine, the combination of stationary members constituting a sinuous course, an annular trackway between the highest and lowest planes of, and intersected by the course, thread supplying devices on said trackway, pinions journaled on one of said members and engaged with said devices, a common gear co-acting with said pinions, supporting and actuating means for said gear, bobbins connected with said gear, and thread guiding means on said gear, sub-

stantially as described. 7th. In a braiding machine, the combination of two rings between which is formed a sinuous course, an annular trackway between the highest and lowest planes of and intersected by the course, thread supplying devices on said trackway, other thread supplying devices, mechanism for rotating the latter, pinions journaled on the lower ring at points adjacent to the respective inclines of said course, and operatively engaged with the first-named thread supplying devices, and with the mechanism for rotating the other thread supplying devices, substantially as described. 8th. In a braiding machine, the combination of two rings between which is formed a sinuous course, a supporting frame for the upper ring, a plate or spider for the lower ring, a fixed central post for said plate or spider, an annular sectional trackway between the highest and lowest planes of, and intersected by said course, a series of bobbin carriers provided with gear teeth, a lower bobbin provided with gear teeth, and arranged below the said plate or spider, a rotary support for said latter carrier, and pinions journaled on the lower ring adjacent to the respective inclines of said course and adapted to co-act with the successive carriers of the series and with the lower carriers, the said pinions extending through openings in the plate or spider, substantially as described.

No. 69,409. Lamp Chimney Manufacture.

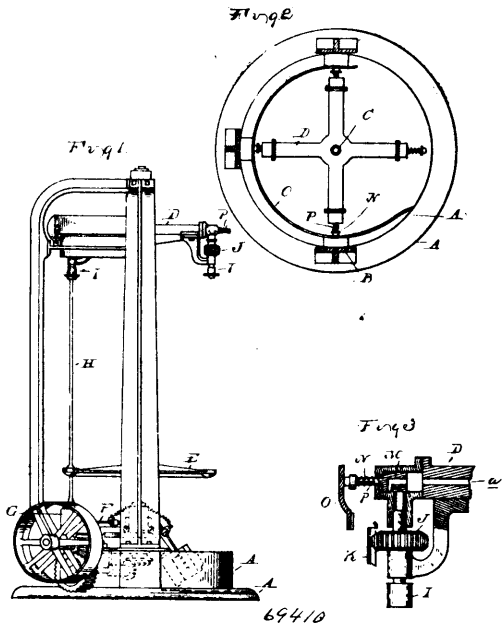
(Fabrication de cheminée de lampe.)



John Pearce, Ottawa, Illinois, U.S.A., 20th November, 1900; 6 years. (Filed 12th May, 1900.)

Claim—1st. The process of making polished glass lamp chimneys, which consists in first forming a hollow blank from a mass of molten glass, said blank being closed at one end and open at the other, and the edge of the open end constituting the finished edge of the base of the chimney, then expanding the blank longitudinally and circumferentially into contact with paste lined surface and rotating the blank with its entire surface in contact with the paste lined surface to polish the same, removing the surplus glass from the top of the expanded blank and finally finishing the top. 2nd. The process of making polished glass lamp chimneys, which consists in first forming a hollow blank from a mass of molten glass by pressing it into the entire outer surface of the blank, said blank being closed at one end and open at the other and the edge of its open end constituting the finished edge of the base of the chimney, then expanding the blank longitudinally and circumferentially into contact with a paste lined surface and rotating the blank with its entire surface in contact with said paste lined surface to polish the same, then removing the surplus glass from the top of the expanded blank and finally finishing the top. 3rd. The process of making polished glass lamp chimneys, which consist in first forming a hollow blank of tapered form from a mass of molten glass by pressing it into contact with a surface which gives form to the entire outer surface of the blank, said blank being closed at one end and open at the other and the edge of its open end constituting the finished edge of the base of the chimney, then expanding the blank longitudinally and circumferentially against a surface which reaches to the edge of the blank and gives form to its entire outer surface, except at such finished edge, while simultaneously rotating the blank in contact with said surface, then removing the surplus glass from the top of the expanded blank and finally finishing the top.

No. 69,410. Glass Blowing Machine.
(Machine à souffler le verre.)



The Diamond Glass Company, Montreal, Quebec, Canada, assignee of Michael J. Owens, Toledo, Ohio, U.S.A., 20th November, 1900; 6 years. (Filed 2nd January, 1900.)

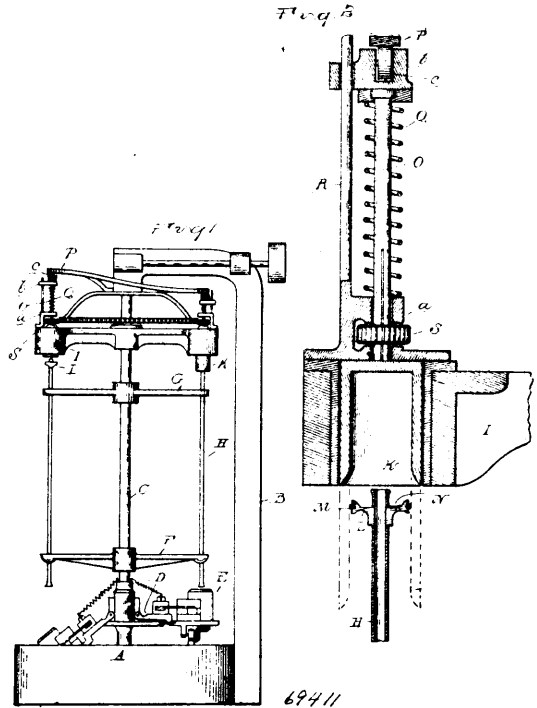
Claim.—1st. In a glass blowing machine, the combination with a sectional shaping device, adapted to be opened and closed, of an air supply device for the blowing, a blow pipe, a support to hold the blow pipe in operative relation to the shaping device, and air supply device, and a controlling means for the air supply by which the air supply during each successive blowing period may be uniformly varied. 2nd. In a glass blowing machine, the combination with a sectional shaping device adapted to be opened and closed, of an air supply device for the blowing, a blow pipe, a support to hold the blow pipe in operative relation to the shaping device and air supply device, and an automatic controlling means for the air supply by which the air supply during each successive blowing may be uniformly varied. 3rd. In a glass blowing machine, the combination with a sectional shaping device adapted to be opened and closed, of an air supply device for the blowing, means for effecting a relative rotation between the article being blown and its shaping device, a support to hold the blow pipe in operative relation to the mould and air supply device, and a controlling means for the air supply device by which the air supply during each successive blowing period may be uniformly varied. 4th. In a glass blowing machine, the combination with a sectional shaping device adapted to be opened and closed, of an air supply device for the blowing, a blow pipe, a support to hold the blow pipe in operative relation to the shaping device and air supply device, a controlling means for the air supply by which the air supply during each successive blowing period may be varied, and means for causing these parts to travel in unison during the blowing period. 5th. In a glass blowing machine, an air supply device, an air duct leading from said air supply device to an article in process of formation in a shaping device, and controlling means for the air supply by which the pressure during each successive blowing period may be varied uniformly.

No. 69,411. Glass Blowing Machine.
(Machine à souffler le verre.)

The Diamond Glass Company, Montreal, Quebec, Canada, assignee of Michael J. Owens, Toledo, Ohio, U.S.A., 20th November 1900; 6 years. (Filed 2nd January, 1900.)

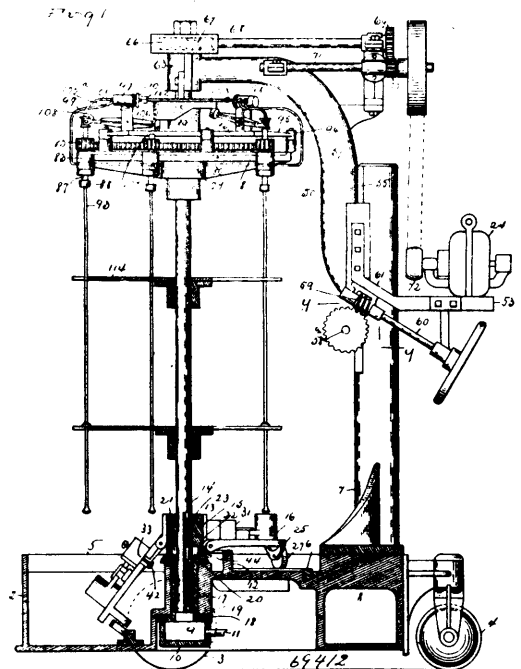
Claim.—1st. In a glass blowing machine, a movable mould, a support for the blow pipe movable in unison with the mould, a blow pipe, an air supply device and an air compressing device, said blow pipe detachably supported in operative relation to the mould, the air supply device, and the air compressing device movable with the blow pipe. 2nd. In a glass blowing machine, a travelling support for the blow pipe and mould, the blow pipe and air compressing means moving with the travelling support and means for connecting and disconnecting the blow pipe with the air compressing means. 3rd. In a glass blowing machine, a mould, a support for a blow pipe and an air connection for the blow pipe adapted to be moved

in unison, a blow pipe adapted to be supported in operative relation to the air connection and mould, and an air com-



pressing device carried with the air connection and adapted to produce and supply to the blow pipe air at varying pressure. 4th. In a glass blowing machine, a support for the blow pipe, a coupler having a closed top adapted to connect with the blow pipe, and means for moving it up upon the blow pipe after the coupling to compress the air for blowing.

No. 69,412. Glass Blowing Machine.
(Machine à souffler le verre.)



The Diamond Glass Company, Quebec, Canada, assignee of William Emil Bock, Toledo, Ohio, U.S.A., 20th November, 1900; 6 years. (Filed 28th September, 1900.)

Claim.—1st. In a glass blowing machine, the combination of a rotatable mould carrier, a motor for rotating said carrier, a series of sectional moulds on said carrier, a separate motor for operating each mould, and means, controlled by the rotary movement of the carrier, for actuating the motors to open and close the moulds. 2nd. In a glass blowing machine, the combination of a series of travelling mould carriages, and a motor therefor, a sectional mould upon each carriage, a motor for each mould fixedly secured to the carriage, and means for controlling the operation of the motors to open and close the moulds. 3rd. In a glass blowing machine, the combination of a rotatable mould carrier having a storage chamber formed therein, a motor for rotating the carrier, a series of sectional moulds on said carrier, a separate fluid motor for operating each mould, a fluid supply connection between each motor and the storage chamber, and means for automatically controlling the fluid supply to the motors to open and close the moulds. 4th. In a glass blowing machine, the combination of the main operating shaft and a motor for rotating the same, a head upon the shaft having a storage chamber formed therein, a series of mould carriages hinged to the head, a sectional mould and a motor connected to the mould sections upon each carriage, a flexible pipe connection between each motor and the storage chamber, and means for controlling the discharge of air from the chamber to the motors. 5th. In a glass blowing machine, the combination of the sectional mould adapted to receive the article to be blown, an air supply device communicating with the mould and adapted to supply air to the article therein, means for controlling the admission of air within the mould, a motor connected to the mould sections, and means for controlling the operation of the motor to open and close the mould. 6th. In a glass blowing machine, the combination of the sectional mould, adapted to receive the article to be blown, an air supply device communicating with the mould and adapted to supply air to the article therein, means for controlling the admission of air within the mould, a pneumatic piston motor for opening and closing the mould, the piston being directly connected to the mould sections, an independent air supply mechanism for the motor, and means for controlling the said air supply at stated periods to thereby control the opening and closing of the mould section. 7th. In a glass blowing machine, the combination of a mould carrier and a motor therefor, a series of sectional moulds on said carrier adapted to receive the articles to be blown, an air supply device communicating with each mould and adapted to supply air to the article therein, means for controlling the admission of air within the moulds, a series of independent motors upon the carrier, one for each mould and connected to the mould sections, and means for controlling the actuating agent of the motors to thereby control the opening and closing of the moulds. 8th. In a glass blowing machine, the combination of a mould carrier and a motor therefor, a series of sectional moulds on said carrier adapted to receive the articles to be blown, an air supply device communicating with each mould and adapted to supply air to the article therein, means for controlling the admission of air within the moulds, a series of independent pneumatic piston motors upon the carrier, one for each mould, and having its piston connected to the mould sections, an independent air supply mechanism for the motors, and means for controlling the air supply to thereby control the opening and closing of the moulds. 9th. In a glass blowing machine, the combination of a standard, a movable section mounted thereon for vertical adjustment, and the blow pipe couplers and motor for rotating said couplers, carried by said movable section. 10th. In a glass blowing machine, the combination of a standard, a movable section mounted thereon for vertical adjustment, the blow pipe couplers carried by the section, a supporting bracket carried by and extending laterally from said section, a motor for rotating the couplers arranged on said bracket, and a drive connection between the motor and couplers also carried by the section. 11th. In a glass blowing machine, the combination of a standard, a movable section arranged thereon for vertical adjustment, an air supply, a coupling pipe and a valve controlling the air supply thereto carried by said section, and means for maintaining the air supply through the standard and movable section to the valve. 12th. In a glass blowing machine, the combination of base having a storage chamber for the air formed therein, a hollow standard upon the base communicating with the air chamber, a hollow movable section adjustably arranged upon the standard, means for maintaining communication between the standard and the section in its various positions of adjustment, a coupling pipe carried by the sections, a valve controlling the air supply to said pipe, and connections between the movable section and the valve.

No. 69,413. Brake and Coaster. (Frein et coasteur.)

Frederick Perry Hinckley and Miar McLaughlin, both of Jackson, Michigan, U.S.A., 20th November, 1900; 6 years. (Filed 30th July, 1900.)

Claim.—1st. The combination of a rotative tube, a hub, having a direct longitudinal movement on the tube, a spring attached at its respective ends to the tube and hub, means for moving the hub longitudinally on the tube when back pedaling, and a brake applied by said longitudinal movement of the hub, substantially as described. 2nd. The combination of a rotative tube, a hub longitudinally movable on the tube, and having a friction surface at one end, a fixed friction surface engaging the same, a sprocket wheel independently rotative, a clutch connecting the hub and wheel, and means for moving the hub longitudinally on the sleeve when the sprocket

wheel is turned backward, substantially as described. 3rd. The combination of a rotative tube, a hub having a direct longitudinal

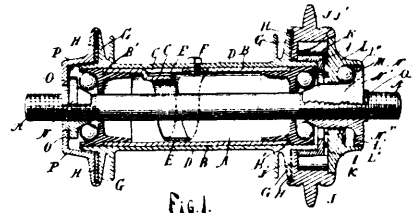


Fig. 1.

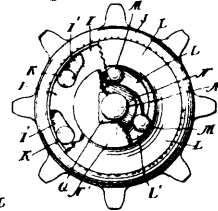


Fig. 2.

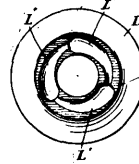


Fig. 3.

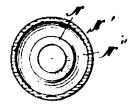


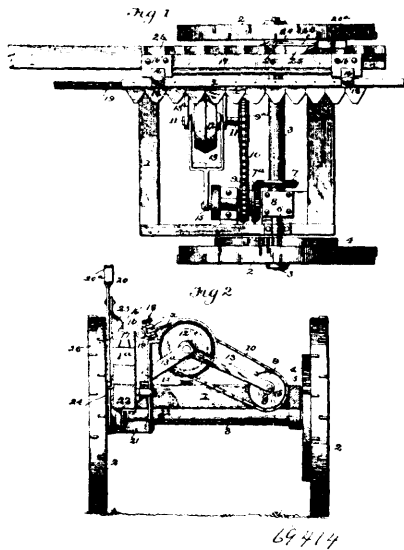
Fig. 4.

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movement on the tube, and having friction flanges at each end, a fixed friction engaging one of the flanges on the hub, a sprocket wheel independently rotative and longitudinally movable and having a friction surface engaging the other of said flanges, a clutch connecting the hub and sprocket wheel, and means for moving the hub, and sprocket wheel longitudinally of their axis when the sprocket wheel is turned backward, substantially as described. 4th. The combination of a rotative tube, a hub longitudinally movable on the tube, and having a friction surface at one end, a fixed friction surface engaging the same, a spring connected at its respective ends to the tube and hub, a sprocket wheel rotative on the hub, a clutch connecting the wheel and hub, and means for moving the hub longitudinally on the sleeve when the wheel is turned backward, substantially as described. 5th. The combination of a tube, having a bearing at each end and an opening in its side, and an inwardly pressed portion forming a clip, a spring in the tube, having one end engaging the clip and the other end engaging the end of the opening in the tube, a hub attached to the spring and longitudinally movable on the tube, and also having a friction surface, a fixed friction surface to engage the same on the hub, a sprocket wheel independently rotative on the hub, a clutch to connect the wheel and hub when the wheel is turned forward, and means for moving the hub longitudinally and compressing said spring when the wheel is turned backward, substantially as described. 6th. The combination of a tube, bell cups having inward tubular extensions within the tube and shoulders abutting against the end of the tube, a hub surrounding the tube and cups, and longitudinally movable thereon and also directly and slidably engaging the said cups, a brake, and means for longitudinally moving the hub to set the brake, substantially as described. 7th. The combination of a hub, a ring attached to the hub and having inclined recesses, rolls in said recesses, a sprocket wheel internally engaging the rolls and having an inwardly projecting flange engaging the composite ends of the rolls, and a cap attached to the wheel and engaging the opposite ends of the rolls, substantially as described. 8th. The combination of a hub, having a friction flange and inclined recesses, and both laterally and longitudinally movable therein, a sprocket wheel internally engaging the sides of the rolls and having a friction flange engaging the flange on the hub at the one side and the rolls at the other side, a cap attached to the sprocket wheel and engaging the ends of the rolls at one side, and having tapered segmental chambers at the other side, bells in said chambers and a fixed flange engaging the bells, substantially as described. 9th. The combination of a longitudinally movable hub, a brake operated by the longitudinal movement of the hub, a sprocket wheel independently rotative on the hub, a clutch connecting the wheel and hub, an annular cap attached to the wheel, and having tapered segmental chambers, a cone surrounded by the cap, and having an outwardly projecting flange, having a channel opposite the chambers in the cap and balls in said chambers, substantially as described. 10th. The combination of a longitudinally movable hub, friction flanges on the hub, a fixed friction surface engaging one of the flanges, a sprocket wheel independently rotative and longitudinally movable, and having a friction surface engaging the other flange on the hub, a clutch connecting the wheel and hub when the wheel is turned forward, a cap fixed on the sprocket wheel and having tapered segmental chambers, a

cone surrounded by the cap and having an outwardly projecting flange, having an annular groove, and balls in the chambers of the cap and engaging the groove, substantially as described. 11th. The combination of a longitudinally movable hub, having a radial friction flange at each end, a fixed friction surface engaging one of said flanges, a ring on the hub having inclined recesses, rolls in the recesses, a sprocket wheel surrounding the ring and both rotative and longitudinally movable thereon, a cap attached to the wheel and having segmental inclined chambers, a fixed flange surrounded by the cap, and balls in the chambers of the cap and engaging the flange, substantially as described. 12th. The combination of a rotative tube, a hub longitudinally movable on the tube, friction flanges near the respective ends of the hub, a spring connecting the hub and tube, a fixed friction surface engaging one of the flanges on the hub, a ring on the hub having inclined recesses, rolls in the recesses, a sprocket wheel surrounding the ring and rolls, and both rotative and longitudinally movable thereon, a cap attached to the wheel and having segmental and tapered chambers, a fixed flange having an annular channel, and balls in the chambers of the cap and engaging the channel in the flange, substantially as described.

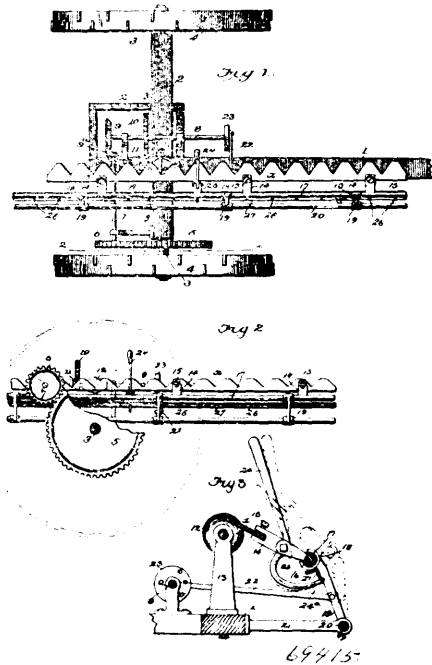
No. 69,414. Sickle Grinder. (Renouleur des lames).



Eddie Vilas Green, Albert C. Markley, George W. Markley, Charles H. Markley, and John C. Rubow, all of Topeka, Kansas, U.S.A., 20th November, 1900; 6 years. (Filed 21st July, 1900.)

Claim—1st. The combination with motor mechanism, of sickle grinding mechanism, comprising a grinding disc, and means for rotating and oscillating the same in a vertical plane, substantially as shown and described. 2nd. The combination with a motor mechanism of a grinding disc, a pivotal support therefor, means for oscillating said pivotal support and imparting rotation to the disc, simultaneously, a slidable carrier for the sickle bar, and lever mechanism for imparting an intermittent sliding movement to such carrier, substantially as shown and described. 3rd. The combination, with a driven shaft and sprocket wheel mounted thereon, of a hanger which is eccentrically connected with such wheel, a second hanger or support which is pivoted to a fixed support, a grinding disc whose shaft has its bearings in the connected ends of such supports, a sprocket wheel mounted on said shaft, a chain connecting the sprocket wheels, and pivoted oscillating holder or clamp for the sickle bar, substantially as shown and described. 4th. The combination, with the transporting wheel of a moving or reaping machine, having a gear affixed thereto, of supplemental gearing driven by each gear, a grinding disc having its bearings in oscillating supports, as specified, one of which supports has an eccentric connection with the supplemental gearing, means for rotating the said discs, and a sickle bar clamp or holder, which is adapted to oscillate corresponding to the vertical movement of the disc, substantially as shown and described. 5th. The combination, with the frame having a guideway arranged longitudinally thereon, a carrier slidable in such guideway, and the sickle bar clamp hinged on the carrier, of the foot lever pivoted to swing in a vertical plane, the pawl on said lever engaging the slide, the pivoted foot lever adapted to oscillate vertically, and a push bar pivoted to lever 21 and arranged vertically in the guideway for bearing against the clamp, and raising it and the sickle, as and for the purpose specified.

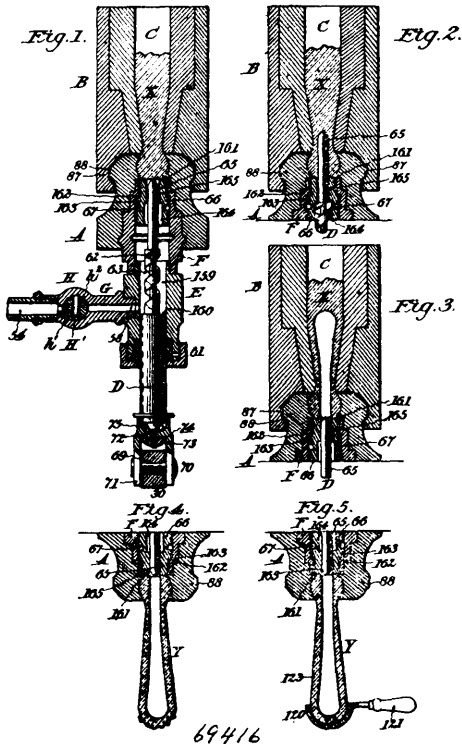
No. 69,415. Sickle Grinding Machine. (Renouleur des lames.)



Eddie Vilas Greene, C. Markley, George W. Markley, Charles H. Markly and John C. Rubow, all of Topeka, Kansas, U.S.A., 20th November, 1900; 6 years. (Filed 23rd July, 1900.)

Claim—1st. The combination, with the axle, tongue and transporting wheels, of gearing connected with and operated from one of said wheels, the grinding disc arranged above the axle and with its axle parallel to the tongue, a series of sickle holders, a fixed part arranged parallel to the tongue and upon which the said holders oscillate at right angles to the tongue, to carry the sickle above and parallel to the latter, and means for operating such holders simultaneously with the grinding disc, as shown and described. 2nd. The combination, with the axle and transporting wheel, gearing connected with the latter, and a grinding disc operated thereby, of a series of swinging arms, a rod connecting them with the gearing whereby they are oscillated as specified, a series of sickle holding devices adapted for adjustment in the said arms longitudinally of the machine, and a lever connected with said device for adjusting them as required to shift the sickle bar on the grinding disc, substantially as shown and described. 3rd. The combination, with a grinding disc and driving gearing connected therewith, of a series of arms adapted to oscillate towards and from the said disc, a slotted tube held in the jaws of said arms, and one or more sickle holders which are held in said tube and adapted for adjustment for carrying the sickle bar longitudinally, as and for the purposes specified. 4th. The combination, with the grinding disc and driving gearing connected therewith, of a series of arms pivoted on a fixed point and adapted to operate as specified, means for connecting said arms with the aforesaid gearing, sickle holding devices which are adapted for adjustment on the free ends of said arms, a pivoted lever connected with the arms and having locking engagement with a bar attached to the latter, substantially as shown and described, whereby said lever may be operated to release the lock and adjust the sickle bar as specified. 5th. The combination, with the grinding disc and driving gearing connected therewith, of a series of arms pivoted end adapted to operate in vertical planes, a rod connection connecting them with an eccentric forming an attachment of said gearing, a series of sickle holding devices having an adjustable connection with the said arms, a lever which is pivotally connected with said devices, and having a locking engagement with the arms, which is maintained by gravity when the lever is in normal position, substantially as shown and described. 6th. The combination, with an axle and transporting wheels, a grinding disc mounted on the latter, gearing for driving the same, sickle holding devices arranged in planes parallel to the axle, a series of swinging supports for said devices, which are adapted to oscillate in planes parallel thereto, a gravity lever, having pivotal connection with the sickle holding devices and its curved lower end having locking engagement with said supports and adapted for use in raising and lowering the sickle bar and otherwise adjusting the same as required, substantially as shown and described.

No. 69,416. Glass Bottle Blowing Machine.
(Machine à souffler les bouteilles de verre.)

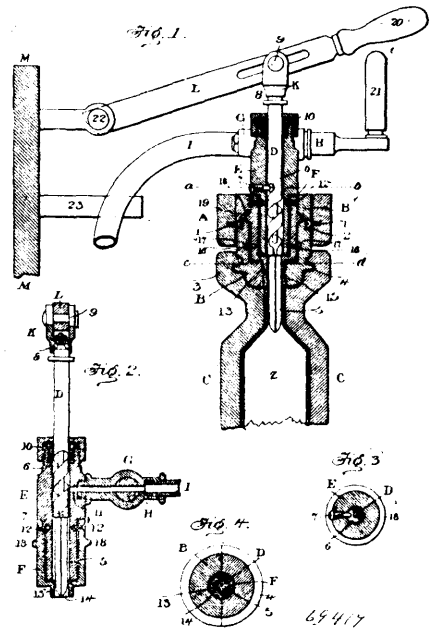


The Grote Bottle Machine Company, Jersey City, New Jersey, assignee of Ludwig Grote, 84 B. East India Dock Road, Poplar, London, England, 20th November, 1900; 6 years. (Filed 21st September, 1900.)

Claims.—1st. A glass bottle blowing machine having, in combination, a mould in which the head of the bottle is cast, a plunger having a flattened mouth forming portion, and means for simultaneously rotating and thrusting the same into the molten glass while within said mould. 2nd. A glass bottle blowing machine having, in combination, a mould in which the head of the bottle is cast, a plunger having a flattened mouth forming portion, and means for thrusting the same into the molten glass while within said mould, and for retracting the same, and for rotating the same during the longitudinal movement. 3rd. A glass bottle blowing machine having, in combination, a mould in which the head of the bottle is cast, an imperforate plunger having a flattened mouth forming portion, and means for thrusting the same into the molten glass while within said mould, for retracting the same and for rotating the same during its longitudinal movement. 4th. A glass bottle blowing machine having, in combination, a mould in which the head of the bottle is cast, a centrifugal mouth forming plunger, and means for simultaneously rotating and thrusting the same into the molten glass while within said mould, thereby solidifying the head of the bottle, and shaping its mouth to receive a cork. 5th. A glass bottle blowing machine having, in combination, a mould in which the head of the bottle is cast, a plunger having a flattened mouth forming portion, a casing surrounding the plunger in which the plunger may rotate freely, and which admits air around the plunger, and means for thrusting the mouth forming portion of the plunger into the molten glass in the mould and for rotating the same to form the mouth with a smooth inner cylindrical surface. 6th. A glass bottle blowing machine having, in combination, a mould in which the head of the bottle is cast, an imperforate plunger having a flattened mouth forming portion, a casing surrounding the plunger in which the plunger may rotate freely, and which admits air around the plunger, and means for supplying air under pressure to the casing and for thrusting the mouth forming portion of the plunger into the molten glass in the mould and for rotating the same to form the mouth with a smooth inner cylindrical surface. 7th. A glass bottle blowing machine having, in combination, a mould in which the head of the bottle is cast in inverted position, a plunger having a flattened mouth forming portion, means for thrusting the same upward into the molten glass and retracting the same and for simultaneously rotating the same, a casing for said plunger, and a swivelled bushing within said casing having a bore corresponding in cross-section with said mouth forming portion. 8th. A glass bottle blowing machine having, in combination, a mould in which the head of the bottle is

cast in inverted position, an imperforate plunger having a flattened mouth forming portion, means for thrusting the same upward into the molten glass and for retracting and for simultaneously rotating the same, a casing for said plunger, and means for forcing air into the glass simultaneously with and around said mouth forming portion. 9th. A glass bottle blowing machine having, in combination, a mould in which the head of the bottle is cast in inverted position, an imperforate plunger having a flattened mouth forming portion and an air propelling shoulder, a casing for said plunger having an air chamber discharging around said mouth forming portion, and means for reciprocating and rotating said plunger. 10th. A glass bottle blowing machine having, in combination, a mould, a rotatable plunger having a spiral groove therein and an imperforate flattened mouth forming portion adapted to enter the molten glass, and a casing for said plunger, said spiral groove forming a vent for the escape by way of said casing of heated air of excessive pressure. 11th. A glass bottle blowing machine having, in combination, a casing, a neck mould clasped upon said casing and other moulds adapted to be aligned with said neck mould, a rotatable plunger reciprocating through said casing and having a spiral groove therein, a stud in said casing engaging said spiral groove, an air conduit communicating with said casing, and means for reciprocating said plunger. 12th. In a glass bottle blowing machine, the combination with a disc having a hub thereon, moulds carried by said disc, and a toothed pinion on the hub of said disc, of a toothed segment engaging said pinion, lever arms pivoted to the ends of said segment and to the frame of the machine, a spring connected with one end of the segment and a treadle connected with the other end of said segment to turn said disc, and stops on the disc and on the frame of the machine to limit the rotation of said disc. 13th. In a glass bottle blowing machine, the combination with a shaft, a disc mounted on said shaft, moulds carried by said disc, and means for rotating said disc through one half a revolution, of an air pump connected with said shaft to be operated by the rotation of said disc. 14th. In a glass bottle blowing machine, the combination with a shaft, a disc mounted on said shaft, moulds carried by said disc, and means for rotating said disc through one half a revolution, of an air reservoir, and air duct leading from the reservoir through said shaft and discs to the moulds, and an air pump, communicating with said reservoir and connected with the shaft, to be operated by the rotation of the disc, substantially as described.

No. 69,417. Glass Bottle Blowing Machine.
(Machine pour souffler les bouteilles de verre.)

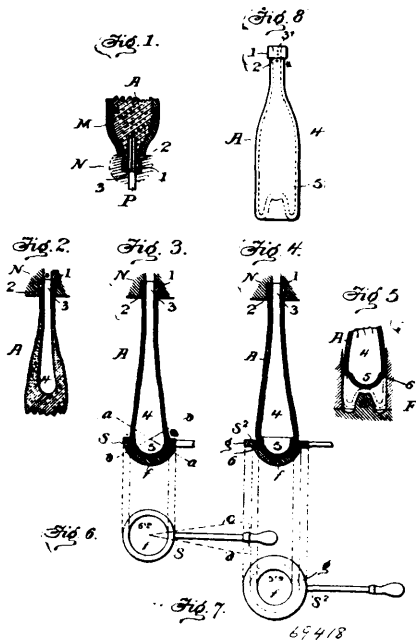


The Grote Bottle Machine Company, Jersey City, New Jersey, U.S.A., 20th November, 1900; 6 years. (Filed 21st September, 1900.)

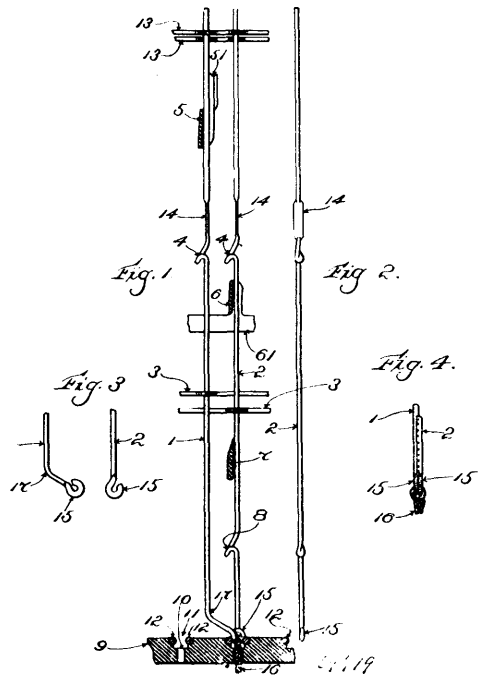
Claim.—1st. In a glass bottle blowing machine, the combination of a plunger having a flattened point, means for reciprocating and rotating the same, a plunger casing, a ferrule shaped attachment to said casing, through which said point reciprocates and which is rotatable therewith and turned thereby, a rotatable neck mould turned by said attachment, and a finishing mould aligned with said neck mould and within which the bottle is turned by said neck mould. 2nd. In a glass bottle blowing machine, the combination with a face

plate, a casing carried by said face plate, and an air conduit communicating with said casing, of a rotatable plunger arranged to slide in said casing, a ferrule shaped attachment rotatably mounted upon said casing and fitted to said plunger to turn therewith, a neck mould inclosing said attachment and secured thereto, a support for said neck mould carried by said face plate and embracing the neckmould another mould arranged in line with the plunger and neck mould and means for reciprocating and rotating said plunger, substantially as hereinbefore specified.

No. 69,418. Art of Making Glass Bottles.
(*Art de faire les bouteille de verre.*)



In combination, the double hook or hooked upright having each limb thereof formed of a separate piece of wire with an eye at the



lower end thereof, and having the said eyes flattened transversely and juxtaposed, and the neck cord passing through the said eyes and uniting the said limbs, substantially as described.

No. 69,420. Glass Pressing Apparatus.
(*Appareil à presser le verre.*)

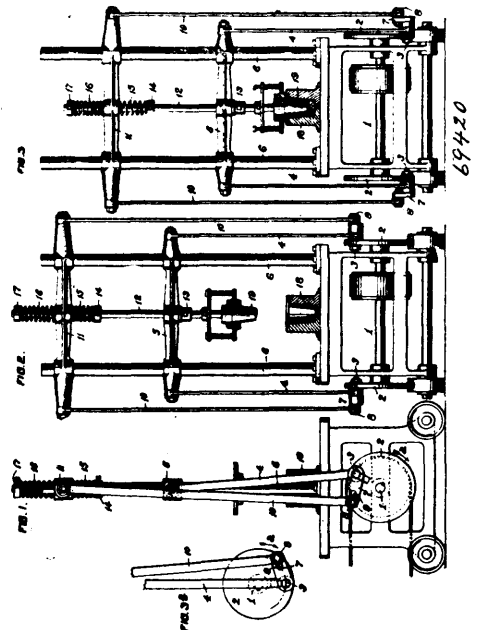
The Grote Bottle Company, Jersey City, New Jersey, U.S.A., assignee of Ludwig Grote, 84 B. East India Dock Road, Poplar, London, England, 20th November, 1900; 6 years. (Filed 21st September, 1900.)

Claim.—1st. The within described process of making a glass bottle with a deep dome shaped bottom, such process consisting in measuring the glass, casting the head of the bottle and forming the mouth and initial cavity within the glass, then suspending the glass by means of its head, gently admitting air under pressure into said cavity, and exposing the glass for manipulation, then working the lower extremity of the glass to render the bottom glass homogeneous and substantially hemispherical, then paddling the same to form a shoulder circumscribing a depending central portion of the bottom glass, reversing or turning the circumscribed bottom glass during the blowing operation and finally completing the blowing of the bottle, whereby a dome or kick-up of any required depth is formed and the glass evenly distributed throughout the bottom and base edge or rim of the bottle. 2nd. In the art of making glass bottles, the process of working the lower extremity of the molten glass in a pendent position to render the bottom glass homogeneous, and circumscribing a depending central portion of said bottom glass with a shoulder by paddling, reversing or turning the circumscribed bottom glass during the blowing operation, and finally completing the blowing of the bottle, substantially as hereinbefore specified.

No. 69,419. Jacquard Machine. (*Machine à la jacquard.*)

The Crompton and Knowles Loom Works, assignee of Albert E. Kelmei, all of Providence Rhode Island, U.S.A., 20th November, 1900; 6 years. (Filed 26th December, 1899.)

Claim.—1st. The double hook or hooked upright having the limbs thereof formed of separate pieces of wire each with the eye at the lower end thereof, and having the said eyes juxtaposed in use, substantially as described. 2nd. In combination, the double upright having each limb thereof formed of a separate piece of wire with an eye at the lower end thereof, and having the eyes of the two limbs juxtaposed, and the neck cord passing through the said eyes and uniting the two limbs, substantially as described. 3rd. The improved double hook or hooked upright for Jacquard machines, having each limb thereof formed of a separate piece of wire with an eye at the lower end thereof, and having the said eyes flattened transversely and juxtaposed in use, substantially as described. 4th



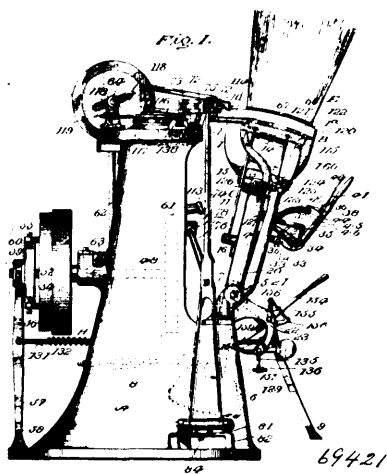
George Ellsworth Cleveland, and James Robinson Lockhart, both of Freedom, Pennsylvania, U.S.A., 20th November, 1900; 6 years. (Filed 5th February, 1900.)

Claim.—1st. In a glass pressing apparatus, the combination of a plunger, plunger actuating mechanism and connections between the actuating mechanism and the plunger, for driving the plunger positively during a portion of its stroke and applying a yielding force to the plunger to effect its final movement, substantially as

set forth. 2nd. In a glass pressing apparatus, the combination of a plunger, means for positively driving the plunger for a portion of its stroke and means for applying a yielding force to the plunger for effecting the final movement thereof, substantially as set forth. 3rd. In a glass pressing apparatus, the combination of a plunger, a plunger actuating rod, two cross heads adapted to effect the operative movement of said rod, one of said cross heads operating positively on the rod to effect its preliminary movement, a yielding connection between the rod and the other cross head and means for shifting the cross heads, substantially as set forth. 4th. In a glass pressing apparatus, the combination of two cross heads, a plunger, a plunger actuating rod passing loosely through the cross means for shifting the cross heads, heads, two shoulders or collars on said rod, one of which is so arranged that one of the cross heads will have a positive bearing thereon, and a spring arranged between the other collar or shoulder and cross head, substantially as set forth. 5th. In a glass pressing apparatus, the combination of a plunger, a plunger actuating rod, two cross heads, connections between the rod and cross heads, whereby one of the latter will apply a positive force to the rod and the other cross head will apply a yielding force to the rod, and means for causing the cross heads to operate successively, substantially as set forth. 6th. In a glass pressing apparatus, the combination of a plunger, plunger actuating mechanism, connections between the actuating mechanism and the plunger for imparting to the plunger a positive unyielding initial movement and a secondary yielding movement, and means for permitting of the arrest of the plunger during the initial movement, upon meeting a substantially unyielding resistance, and the continuance of a yielding pressure upon the glass within the mould during the remainder of the operation, substantially as set forth. 7th. In a glass pressing apparatus, the combination of a plunger, a plunger actuating rod, two cross heads adapted to successively effect the operative movement of said rod, a connection between one of said cross heads and the rod which is under normal operative conditions unyielding but which is adapted to yield in case the plunger meets with a substantially unyielding resistance to its movement, whereby a positive initial movement is imparted to the plunger under normal operative conditions, but whereby the plunger may be stopped in its initial movement upon meeting a substantially unyielding resistance to its initial movement, a connection between the other of said cross heads and the rod which is normally yielding, whereby a final yielding force is applied to the plunger, and means for causing the cross heads to operate successively, substantially as set forth. 8th. In a glass pressing apparatus, the combination of two cross heads, means for shifting the cross heads, a plunger, a plunger actuating rod passing freely through the cross heads, two shoulders or collars on said rod, and springs arranged between the said cross heads and said shoulders or collars, substantially as set forth.

No. 69,421. Broom Sewing Machine.

(Machine à coudre les balais.)



Herbert Cassare, Chicago, Illinois, U.S.A., 20th November, 1900; 6 years. (Filed 29th January 1900.)

Claim.—1st. In a broom sewing machine, the combination of a vise movable bodily to and from the sewing mechanism, a treadle for closing the vise, and connections between the treadle and the vise jaws constructed and arranged to permit the vise to move bodily when closed without disturbing its relation to the treadle, substantially as described. 2nd. In a broom sewing machine, the combination of a vise frame having a rocking movement on suitable pivots to carry the vise to and from the sewing mechanism, vise jaws movably connected to said frame, a treadle, and a system of levers and connections between the treadle and the vise jaws, said connections

having pivot joints in line with the vise frame pivots when the vise is closed, whereby the vise frame may be rocked without disturbing the relative position of the vise jaws, substantially as described. 3rd. In a broom sewing machine, the combination of a vise frame construction to rock on suitable pivots, vise jaws pivoted to said frame, levers pivoted to the frame and connected to the vise jaws, toggle links connected to said levers, a treadle and connection, between the treadle and toggle links, substantially as described. 4th. In a broom sewing machine, the combination of the vise frame rocking on suitable pivots, vise jaws movably connected to the vise frame, levers connected with the vise jaws and pivoted to the vise frame, the toggle links connected with the levers, the treadles and connections between the treadle and toggle links, and parts being so arranged that the toggle links are out of line with each other when the vise is closed whereby the vise is locked when closed, substantially as described. 5th. In a broom sewing machine the combination of the rocking vise frame, the vise jaws movably connected to the vise frame, levers pivotally connected with the vise frame,—adjustable connections between the upper ends of said levers and the vise jaws, and toggle links connected with the lower ends of said levers, substantially as described. 6th. In a broom sewing machine, the combination with a rocking vise frame, vise jaws pivotally connected to said frame, toggle links for operating the vise jaws, said jaws being closed when the links are in line with each other, and adjustable connections between the links and the vise jaws, substantially as described. 7th. In a broom sewing machine, a rocking vise frame comprising a head, depending legs pivotally mounted midway of their length, and a counterweight below said pivots, in combination with a vise supported on said frame, and means for opening and closing the vise, substantially as described. 8th. In a broom sewing machine, a rocking vise frame comprising a head, a pair of separated legs depending from the head, trunnions midway of the legs, counterweights at the lower ends of the legs, and a hollow guide piece depending from the head between the legs, in combination with vise jaws carried by the head, levers for operating said jaws, toggle links connected to the levers, and a movable collar sliding on the central guide and connected to the toggle links, substantially as described. 9th. In a broom sewing machine, the combination of a vise having opposing jaws, a broom clamp movable within said jaws, and inclined guides for said clamp, whereby the broom may be adjusted in the vise in a direction approximately parallel with one of its edges, substantially as described. 10th. In a broom sewing machine, the combination of a vise having opposing jaws, inclined guideways on the inner faces of said jaws, a broom clamp having jaws within the vise jaws and adapted to slide on said guideways, and means for adjusting said clamp upon said guides relatively to the vise jaws, substantially as described. 11th. In a broom sewing machine, the combination of a vise, a broom clamp movable within the vise, a lever and connections for adjusting the clamp, and a part having notches for locking the lever, and said part consisting of a curved bar and a series of interchangeable pieces mounted on said bar, substantially as described. 12th. In a broom sewing machine, the variable adjusting means consisting of a hand lever, a latch pivoted to said lever, and a part having notches in which said latch engages, said part consisting of a curved bar, a series of interchangeable pieces mounted on said bar, smaller spacing pieces for forming notches between said interchangeable pieces, and means for clamping all of said pieces on the bar, substantially as described. 13th. In a broom sewing machine, the combination of a vise having a bodily movement to and from the sewing mechanism, a feed pawl, and a feed rack adjustably connected with the vise, whereby the length of seam may be varied, substantially as described. 14th. In a broom sewing machine, the combination of a rocking vise frame, a vise carried by said frame, a feed rack adjustably connected with the vise frame whereby the length of seam may be varied, and a feed pawl co-operating with the rack, substantially as described. 15th. In a broom sewing machine, the combination of a vise frame, mounted to rock upon suitable pivots, a vise carried by said frame, a rack lever swinging upon the same axis as the vise frame, a feed rack carried by said lever, and means for adjusting the lever relatively to the vise frame whereby the length of seam may be varied, substantially as described. 16th. In a broom sewing machine, the combination with a vise having a bodily movement, and a feed rack and pawl to regulate the movement of the vise, of a broom clamp within the vise, means for adjusting the broom clamp, and connections between said adjusting means and the feed rack, whereby the latter is adjusted relatively to the vise to provide for longer rows of stitching as the broom clamp is lowered, substantially as described. 17th. In a broom sewing machine, the combination with a vise, an adjustable feed rack therefor, and a spring tending to draw said rack in one direction, of a clamp movable within the vise, and a variable stop connected with said clamp, said stop being arranged to limit the movement of the feed rack relatively to the vise, substantially as described. 18th. In a broom sewing machine, the combination with a vise, a feed rack adjustable relatively to the vise, and a spring tending to move the rack in one direction, of a broom clamp adjustable within the vise, suitable connections for adjusting the broom clamp, and a stepped stop connected with the broom clamp and operating to variably limit the movement of the rack relatively to the vise, substantially as described. 19th. In a broom sewing machine, the combination with the vise frame constructed to rock on suitable pivots, vise jaws movably connected to said frame,

and a broom clamp vertically adjustable within the vise jaws and adapted to be held by the vise when the latter is closed, of an adjustable support for said broom clamp connected with the vise frame and capable of being independently lowered while the clamp is sustained by the vise, whereby the clamp may drop automatically to a lower level when the vise jaws are open, substantially as described. 20th. In a broom sewing machine, the combination with the rocking vise frame, the vise supported upon said frame, the broom clamp adjustable within the vise jaws, and the arms 33, for supporting said clamp, of the independently adjustable support for said arms, the hand lever for said support, and means for locking the hand lever, substantially as described. 21st. In a broom sewing machine, the combination with the rocking vise frame and the vise carried thereon, of the rack lever having a fulcrum concentric with the bearing of the vise frame, means for adjusting the rack lever relatively to the vise frame, a rack adjustably carried on said lever, and a handle on said lever, substantially as described. 22nd. In a broom sewing machine, the combination with a vise and means for closing the same, of devices for automatically opening said vise upon the completion of a row of stitches, substantially as described. 23rd. In a broom sewing machine, the combination with a vise and means for closing and locking the same, of devices for automatically unlocking and opening said vise at the completion of a row of stitches, substantially as described. 24th. In a broom sewing machine, the combination with a vise and means for closing the same, of a broom clamp within the vise and adapted to be held thereby when the vise is closed, the devices for automatically opening said vise upon the completion of a row of stitches, and automatically dropping the clamp to adjust the broom for the succeeding row of stitches, substantially as described. 25th. In a broom sewing machine, the combination with a vise having a bodily movement to and from the sewing mechanism, and a treadle operating to close said vise when depressed, of devices constructed to automatically raise the treadle and open the vise upon the completion of each row of stitches, substantially as described. 26th. In a broom sewing machine, the combination with a vise frame constructed to rock upon suitable pivots to carry the vise to and from the sewing mechanism, of means for closing the vise, and means for opening the vise, said latter means being automatically operated by the return movement of the vise frame upon the completion of a row of stitches, substantially as described. 27th. In a broom sewing machine, the combination with a vise frame constructed to rock on suitable pivots to carry the vise to and from the sewing mechanism, and an arm carried by said frame, of devices for closing and opening the vise, said devices including a pivoted tappet in the path of the arm of the vise frame arranged to permit the arm to pass idly in one direction and to be engaged by the arm moving in the opposite direction, whereby the vise is automatically opened upon the completion of a row of stitches, substantially as described. 28th. In a broom sewing machine, the combination of a vise frame having a rocking movement, a treadle and connections therefrom for closing the vise, an arm connected with the vise frame, a second arm connected with the treadle and a spring tappet carried by one of said arms and projecting into the path of the other arm, substantially as described. 29th. In a broom sewing machine, the combination of a broom sewing mechanism normally idle, a vise having a bodily movement to and from said mechanism and means for automatically starting the sewing mechanism when the vise is moved into position for beginning a row of stitches, substantially as described. 30th. In a broom sewing machine, the combination of normally idle sewing mechanism, a vise having a bodily movement to and from said mechanism, means for automatically starting the sewing mechanism when the vise is moved into position for beginning a row of stitches, and means for automatically stopping said mechanism when the row of stitches is finished, substantially as described. 31st. In a broom sewing machine, the combination of normally idle sewing mechanism, a constantly running wheel, a clutch for engaging said wheel with sewing mechanism, a broom holding vise, and means for automatically operating the clutch to start the sewing mechanism when the vise is moved into position for beginning a row of stitches, substantially as described. 32nd. In a broom sewing machine, the combination of a constantly running drive wheel, a clutch normally disconnected therefrom, a spring tending to engage the clutch with the wheel, a trigger holding clutch from the wheel, and means for withdrawing the trigger automatically when the broom is moved into position for beginning a row of stitches, substantially as described. 33rd. In a broom sewing mechanism, the combination of a vise supported to rock upon suitable pivots to and from the sewing mechanism, a clutch for bringing the sewing mechanism into action, and means for automatically operating the clutch to start the sewing mechanism when the vise is rocked into position for beginning a row of stitches, substantially as described. 34th. In a broom sewing machine, the combination of a vise arranged to rock to and from the sewing mechanism, normally idle sewing mechanism, a clutch for starting and stopping said mechanism, and means for engaging said clutch with a running wheel when the vise is rocked in one direction, and for disengaging said clutch when the vise is rocked in the opposite direction, whereby the sewing mechanism is automatically started and stopped by the movement of the vise, substantially as described. 35th. In a broom sewing machine, the combination of a constantly running power wheel, a driving shaft, a clutch for connecting said wheel with said shaft, a cam on said shaft and means for engaging the clutch operating mechanism with said cam upon the completion

of a row of stitches, whereby the clutch is disengaged and the shaft stopped, substantially as described. 36th. In a broom sewing machine, the combination with sewing mechanism and a vise movable to and from said mechanism, of an automatic stopping device for the sewing mechanism, comprising a cam movable with said mechanism, a clutch, an arm connected with the clutch, said arm having a horizontal movement to open the clutch and a vertical movement into and out of the path of said cam, a lever connected with said arm and imparting a vertical movement thereto, and means connected with the broom vise for holding said arm out of the path of the cam while a row of stitches is being sewed and for bringing said arm into the path of said cam upon the completion of a row of stitches, whereby the sewing mechanism is automatically stopped, substantially as described. 37th. In a broom sewing machine, the combination of a pair of needles having their paths of movement at an angle to each other, means for operating said needles, and means for changing the angle between the paths of movement of said needles, substantially as described. 28th. In a broom sewing machine, the combination of a pair of needle ways or guides, and means for changing the angle of said guides with respect to each other, whereby brooms of different thicknesses may be sewed with stitches of the same length, substantially as described. 39th. In a broom sewing machine, a feed rack and pawl or equivalent devices for imparting a constant feed movement to the broom, in combination with needles arranged at an angle to each other, and means for adjusting the angularity of the needles, whereby the machine is adapted to saw brooms of different thicknesses with stitches of the same length, substantially as described. 40th. In a broom sewing machine, horizontal needle guides arranged at an angle to each other, in combination with means for adjusting said guides angularly about the vertical axis of the machine, substantially as described. 41st. In a broom sewing machine, the combination of horizontal needle guides arranged at an angle to each other, needle holding slides upon said guides, needle driving arms connected to brackets at the base of the machine and having their upper ends connected to said slides, and means for adjusting said needle guides and brackets angularly, substantially as described. 42nd. In a broom sewing machine, the combination of angularly adjustable needle guides, needle carrying slides on said guides, rocking arms connected to said slides, a crank pin, pitmans connecting said crank pin with said arms, brackets to which the lower ends of said arms are pivoted, and means for adjusting said brackets angularly and radially with respect to the vertical axis of the machine, substantially as described. 43rd. In a broom sewing machine, a vise provided with a thread holding device constructed to receive and hold the free portion of the thread after the binder has been placed upon the broom, substantially as described. 44th. In a broom sewing machine, a vise provided with a thread holding device, consisting of a pair of spring fingers constructed to receive and hold the free end of the thread after the binder has been wound upon the broom, substantially as described. 45th. In a broom sewing machine, a vise provided with a thread holding device constructed to receive and hold the free end of the thread in combination with a needle threading device constructed to carry the thread from said thread holder into engagement with the needle, substantially as described. 46th. In a broom sewing machine, a vise provided with a thread holder constructed to receive and hold the free end of the thread in combination with a needle treadle device provided with a notch adapted to carry the thread from said thread holder into the eye of the needle, substantially as described. 47th. In a broom sewing machine, the combination of a starting and stopping clutch, a spring tending to bring the clutch into action, a trigger normally holding the clutch out of action and a hand lever operating to withdraw the trigger when moved in one direction and to throw the clutch out of action when moved in the opposite direction, substantially as described.

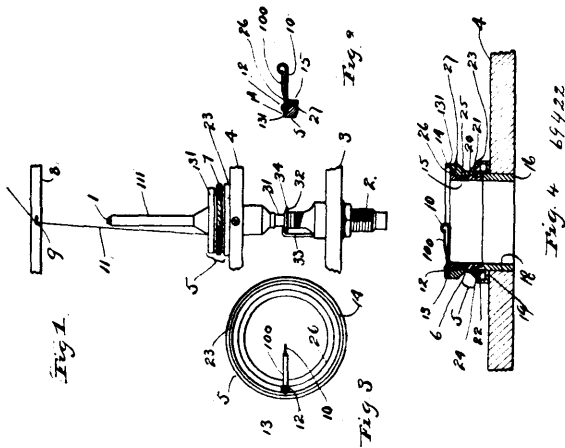
No. 69,422. Spinning and Twisting Frame.

(*Cadre à filer et torire.*)

The Atherton Manufacturing Company, Providence, Rhode Island, assignee of Isaac Hall Russell, Fall River, assignees of Simon Bernard, also of Fall River, Massachusetts, all in the U.S.A., 20th November, 1900; 6 years. (Filed 16th August, 1900.)

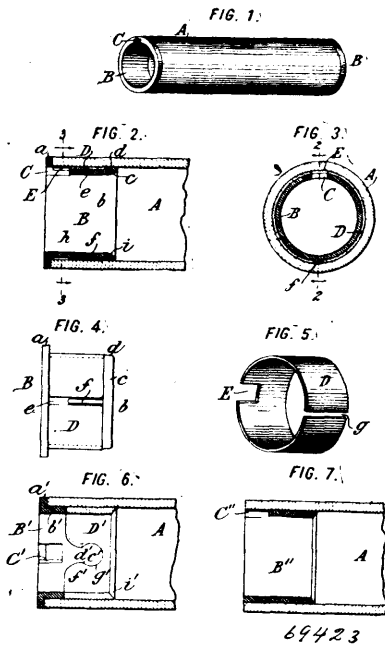
Claim.—1st. In combination, the spindle, the ring having the yarn guide pivotally mounted at the upper end thereof, and means to rotate the ring, said ring having the upwardly extending shell serving to shield the yarn guide and also to arrest the outward swing of the yarn guide and the exterior cylindrical portion to enable the spinner to arrest the rotation of the ring by hand by pressing against said portion, substantially as described. 2nd. In combination, the holder having a shoulder at its upper end, the separate bearing ring having the lip and also having a shoulder to make contact with that of the holder, the said holder and bearing ring being threaded and secured together and the rotating ring revolving upon the exterior of the said bearing ring supported vertically by said shoulder and provided with the yarn guide, the said lip serving to prevent rising movement of the rotating ring, substantially as described. 3rd. In combination, the holder having a shoulder, the separate bearing ring having the lip and also having the shoulder, the said holder and bearing ring being threaded and screwed together, and the rotating ring revolving upon the exterior of the said bearing ring and provided with the yarn guide, the said

lip serving to prevent rising movement of the rotating ring, substantially as described. 4th. In combination, the holder having the



exterior channel for lubricant, the bearing ring having the lip, and detachably applied to the holder and the rotating ring fitting and turning upon the exterior of the detachable bearing ring, held from rising by the said lip, and having the skirt thereof arranged to overlap the outer shell of the said channel, substantially as described. 5th. In combination, the holder having the exterior channel for lubricant, the wicking applied to the holder within said channel, the bearing ring, the rotating ring surrounding the fitting said bearing ring, and also covering said channel, and the wicking applied to the said bearing ring adjacent the bearings thereon for the said rotating ring, substantially as described. 6th. In combination, the ring provided with a yarn guide, means to rotate the ring, a sleeve, a spindle on which said sleeve is mounted with capacity to turn independently of the spindle, and a support in which said spindle is capable of turning, substantially as described. 7th. In combination, the ring provided with a yarn guide means to rotate the ring, a sleeve, a spindle on which said sleeve is mounted with capacity to turn independently of the spindle, a drag device for said sleeve, and a support in which said spindle is capable of turning, substantially as described.

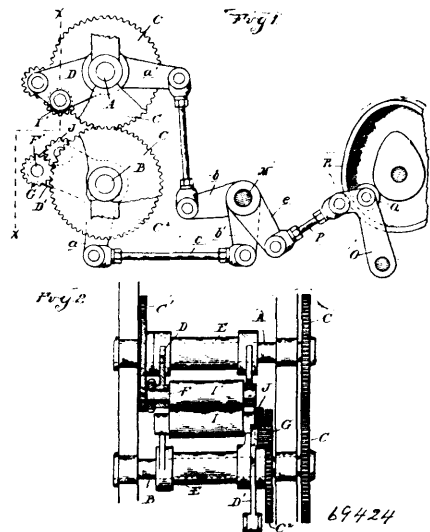
No. 69,423. Spool or Bobbins.] [(Fuscau ou bobine.)



Jacob Davie Kingsland and Alfred Drew Zeigler, both of New York, State of New York, U.S.A., 20th November, 1900; 6 years. (Filed 29th October, 1900.)
 Claim.—1st. In paper spools or bobbins, the body A having a continuous uncut end, in combination with a bushing fixed within the end of said body and having a notch in its outer end within and

covered by the uncut end of said body. 2nd. In paper spools or bobbins, the combination with a body A of fibrous material having an uncut end, of a paper end fixed within the end of said body and having a notched opening through and covered by the uncut end thereof. 3rd. In paper spools or bobbins, the combination with a body of fibrous material, of a notched bushing fixed within the end of said body, and an attacher fixed within said body, said bushing and attacher having interengaging provisions holding the bushing in position. 4th. In paper spools or bobbins, the combination with a body, of a notched bushing fitting in the end thereof, and a notched attacher fixed in said body and engaging said bushing for holding it in place. 5th. In paper spools or bobbins, a body A, a bushing fitting therein, and a split ring surrounding said bushing and fixed within said body for holding the bushing therein. 6th. In paper spools or bobbins, a body A, in combination with a bushing B having a notch C at its outer end, and an attacher surrounding said bushing, having a coinciding notch and fixed within said body for holding said bushing therein. 7th. In paper spools or bobbins, a paper body A, in combination with a metal bushing B fitting therein, and a split ring D surrounding said bushing and fixed within said body, said ring and bushing having interengaging provisions preventing their independent rotation, and said ring holding said bushing in position. 8th. In paper spools or bobbins, the paper body A, in combination with the bushing B having a flange a, notch C, tubular extension b, and groove c, and the paper attacher D fitting in said groove, having a coinciding notch, and fixed within said body for holding said bushing therein. 9th. For paper spools or bobbins, the improved bushing B, having flange a, notch C, body b, groove c and shoulder d. 10th. For paper spools or bobbins, the improved attacher D consisting of a ring like flexible member having a notch E and a cut away portion g adapted to be fixed within a paper body for holding a bushing therein.

No. 69,424. Paper Bag Making Machine. (Machine à faire les sacs de papier.)

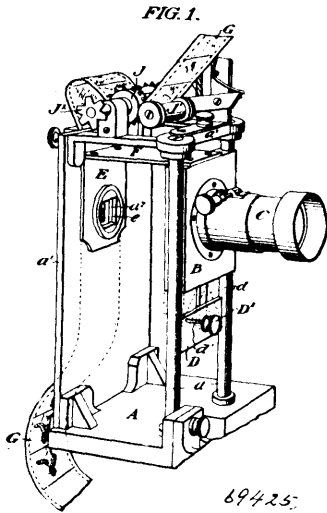


The National Manufacturing Company, assignee of Asa L. Parrish, all of Elhart, Indiana, U.S.A., 20th November, 1900; 6 years. (Filed 17th March, 1900.)

Claim.—1st. The combination with feed devices for the paper, a pair of supplemental feed rolls between which the paper is fed, cutting devices thereon, and means for causing the rolls to move into contact to effect the cutting and then to separate. 2nd. The combination with feed devices for the paper, a pair of supplemental feed rolls between which the paper is fed, mechanism for intermittently reciprocating the rolls into and out of contact and for holding them in contact during the cutting. 3rd. The combination in a machine for making paper bags or tubes of feed devices for the tube, a pair of driven rolls between which the tube is fed, cutting devices thereon, arms in which said rolls are journaled, and means for intermittently rocking said arms for the purpose specified. 4th. The combination in a machine for making paper bags or tubes of feed devices for the tube, a pair of rolls between which the paper is fed, arms in which said rolls are journaled, driving devices for the rolls carried by said arms, a driving connection from the driving means on the arms to stationarily supported driving means, and means for rocking the arms intermittently, for the purpose specified. 5th. The combination in a machine for making paper bags or tubes of two parallel shafts geared together and simultaneously driven, a pair of rock arms sleeved on each shaft, a roll journaled in each pair of rock arms, complementary cutting devices on the rolls, a gear connection between each gear on the shafts and one of the rolls, such con-

necting gearing being carried by the rock arm, and means for intermittently rocking the rock arms, for the purpose specified. 6th. The combination in a machine for making paper bags or tubes of feed devices for the paper tube, a pair of driven rolls between which the tube is fed, cutting devices on the rolls, rock arms in which the rolls are journaled, a rock shaft connection from and between the rock shaft and each rock arm, a cam, and connections from the cam to the rock shaft, whereby the rolls are caused to contact and recede from each other intermittently. 7th. The combination in a machine for making paper bags or tubes of feeding devices for the paper tube, a pair of driven rolls between which the tube is fed, cutting devices on the rolls, rock arms in which the rolls are journaled, the actuating arms *a a'* thereof, the rock shaft *H*, the arms or levers *b b'*, and the connecting rods *c* between the rock arms *a b'*, *a' b* respectively, the lever *O*, the roller wrist *Q* thereon, the car *R*, the rock arm *c* on the shaft *H*, and the connecting rod *P* between the rock arms *c* and the lever *O*, the parts arranged as and for the purpose described.

No. 69,425. Projection Apparatus.
(Appareil de projection.)

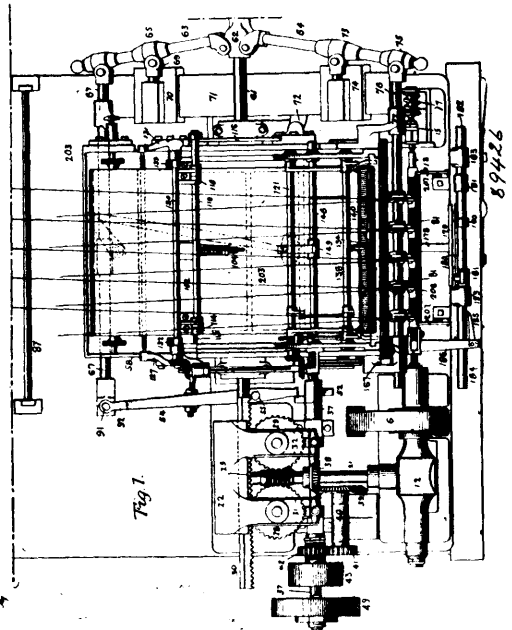


Seigmond Lubin, assignee of John Joseph Frawley, all of Philadelphia, Pennsylvania, U.S.A., 21st November, 1900; 6 years. (Filed 30th March, 1900.)

Claim.—1st. In a projection apparatus, the combination a fixed frame work, mechanism for feeding in succession to a selected exposure or projection point a series of film pictures, a lens carrying plate mounted on said framework in vertically movable relationship with respect to it and to exposure or projection point of the pictures, a frame plate provided with an opening and also mounted on said framework in vertically movable relationship with respect to it and to the exposure or projection point of the pictures, and means for securing said plates in various positions of vertical adjustment with respect to their support and the exposure or projection point of the pictures, substantially as set forth. 2nd. In a projection apparatus, in combination, a supporting frame, mechanism for feeding in succession to a selected exposure or projection point a series of film pictures, a lens carrying plate mounted on said frame in vertically movable relationship with respect to and the exposure or projection point of the pictures, a frame plate having a frame opening, mounted on said frame in vertically movable relationship with respect to it and the exposure or projection point of the pictures, a connection between said plates, and means for securing said plates in various positions of vertical adjustment with respect to the exposure or projection point of the picture, substantially as set forth. 3rd. In a projection apparatus, in combination, a framework, mechanism for leading in succession a series of film pictures, a lens carrying plate movable vertically with respect to the framework, a vertically movable plate frame rigidly connected with said lens carrying plate, and means whereby said lens carrying plate may be secured in various positions of vertical adjustment, substantially as set forth. 4th. In a projection apparatus, in combination, a lens carrying plate adapted to move vertically, a frame plate adapted to move vertically, a connection between said lens plate and said frame plate, a link connected to one of said devices, a gauge plate having an oblique slot, and a set screw passing through said slot and entered in said link, substantially as set forth. 5th. In a projection apparatus, in combination with the framework, a lens carrying plate adapted to move vertically thereon, a rigid connection between said lens plate

and said frame plate, a linked connection to one of said devices, a gauge plate having an oblique slot, and a set screw passing through said slot and entered in said link, substantially as set forth.

No. 9,426. Winding Machine. (Bobincuse.)



James Chris. Anderson, Jersey City, New Jersey, U.S.A., 21st November, 1900; 6 years. (Filed 1st March, 1900.)

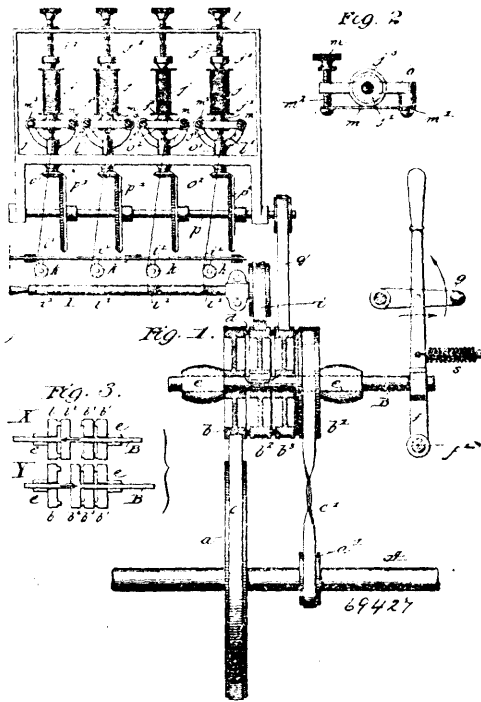
Claim.—1st. In a machine for winding fibres, filaments or strands, the combination of a winding spindle, means for feeding the fibres, filaments or strands thereon in layers to form a coil and means for automatically inserting a sheet material between the layers of the coil, substantially as described. 2nd. In a machine for winding fibres, filaments or strands into coils, bobbins or helices, the combination of a winding spindle and means for automatically inserting sheet material at intervals in the coil, bobbin or helix, substantially as described. 3rd. In a machine for winding fibres, filaments or strands into coils, bobbins or helices, the combination of a winding spindle, means for automatically inserting sheet material at intervals in the coil and means for increasing the length of such sheets as the diameter of the coil increases. 4th. In a machine for winding fibres, filaments or strands into coils, bobbins or helices, the combination of a continuously rotating winding spindle and means for inserting sheet material at intervals in the coil, bobbin or helix, substantially as described. 5th. In a machine for winding fibres, filaments or strands, the combination of means for winding layer upon layer, means for inserting sheet material between the layers and a device serving to reverse the direction of feed and insert the sheet, substantially as described. 6th. The combination with a core or spindle of means for automatically separating sheet material into pieces successively increasing in size and winding them successively upon the core or spindle. 7th. The combination with a core or spindle of means for automatically separating sheet material into pieces successively increasing in size, delivery mechanism for feeding the separated pieces to the spindle and means for shifting the delivery mechanism and spindle with respect to each other to compensate for the increasing diameter of the material on the spindle. 8th. The combination with a winding spindle, of means for winding a plurality of coils or bobbins of material thereon, and means for inserting sheets of material at intervals in said coils, each sheet being common to all the coils. 9th. The combination with a continuously rotating winding core or spindle, of means for winding a plurality of coils of material thereon, and means for inserting sheets of material at intervals in said coils, each sheet being common to all the coils. 10th. In a machine for winding fibres, filaments or strands into coils or bobbins, the combination of a winding core or spindle, mechanism for injecting sheet material at intervals into the coils and means for shifting the positions of the injecting mechanism and spindle or core with respect to each other for the purpose set forth. 11th. In a machine for winding fibres, filaments or strands into coils, bobbins or helices, the combination of a continuously rotating winding spindle or core mechanism for injecting sheet material at intervals into the coils and means for shifting the positions of the injecting mechanism and spindle or core with respect to each other, for the purpose set forth. 12th. In a machine for winding fibres, filaments or strands into coils, bobbins or helices, the combination of a continuously rotating winding spindle or core mechanism for

injecting sheet material at intervals into the coils and means for shifting the positions of the injecting mechanism and spindle or core with respect to each other for the purpose set forth, said means being operative during the formation of a layer of the fibres, filaments or strands. 13th. In a machine for winding fibres, filaments or strands into coils, bobbins or helices, the combination of a winding spindle and a carriage movable with respect to each other, means for winding the fibres, filaments or strands in layers, means for injecting sheet material into the coil and means for shifting the relative positions of the carriage and spindle during the formation of a layer. 14th. In a machine for winding fibres, filaments or strands into coils, bobbins or helices, the combination of a stationary winding spindle and a carriage movable with respect thereto, means for winding the fibres, filaments or strands in layers, means for injecting sheet material from the carriage into the coil at the termination of each layer and means for shifting the relative position of the carriage with respect to the spindle. 15th. In a machine for winding fibres, filaments or strands into coils, bobbins or helices, the combination of a core or spindle and a carriage movable with respect to each other, feeding devices for sheet material carried by the carriage, an ejector for the sheet material also carried by the carriage and to which the feeding devices deliver the sheet material, and means whereby the ejector is operated at the end of each layer of the fibres, filaments or strands on the spindle. 16th. In a machine for winding fibres, filaments or strands into coils, the combination of a winding spindle, a carriage movable with respect thereto, feeding devices for a continuous strip of sheet material carried by the carriage, a knife for cutting the strip, an ejector adapted to act on the cut-off strip and also carried by the carriage, and means for operating the ejector at the end of each layer of the strands on the spindle. 17th. In a machine for winding fibres, filaments or strands into coils, bobbins or helices, the combination of a winding spindle, movable guides directing the strands to the spindle, devices for feeding sheet material, an injector having a fixed throw for injecting the sheet material into the coils at intervals, and means whereby the devices for feeding the sheet material will vary the feed to correspond with the shifting of the position of the tangent point of the strands upon the coil. 18th. In a machine for winding fibres, filaments or strands into coils, bobbins or helices, the combination of a winding spindle, guides directing the strands to the spindle, said guides having a motion tending to change the position of the tangent point upon the coils, devices for feeding sheet material, an injector having a fixed throw for injecting the sheet material into the coils at intervals, a feed controller actuated in unison with the said movement of the guides, whereby the feed of the sheet material will be altered to correspond with a changed position of the tangent point on the coil. 19th. In a machine for delivering sheet material to a winding spindle, the combination of feeding devices for a strip of the sheet material, devices for severing the strip, means for holding the strip after it has been fed, and means for moving the severing devices backward upon the strip to the severing position. 20th. In a winding machine, the combination of a winding spindle, feeding devices for a strip of sheet material, a severing device arranged to travel backward with reference to the direction of feed to its severing position, and means whereby the said backward travel is varied. 21st. In a winding machine, the combination of a winding spindle, feeding devices for a continuous strip of sheet material, a knife arranged to travel backward with reference to the direction of feed to its cutting position, and means whereby the said backward travel is gradually increased in proportion to the increase in diameter of the material on the spindle. 22nd. In a winding machine, the combination of a winding spindle, feeding devices for a continuous strip of sheet material, a knife carrier arranged to travel backward with reference to the direction of feed, a reciprocating element for moving the carrier, a coupling, one part of which is attached to the knife carrier and the other part to said element, and means whereby the coupling will release the carrier at a different position on each stroke of the reciprocating element. 23rd. The combination of a winding spindle and carriage movable with respect to each other, feeding devices for a continuous strip of sheet material, a knife carrier arranged to carry a knife to its cutting position, a reciprocating element arranged to move the knife carrier, a coupling adapted to connect the carrier and reciprocating element together, means for moving the spindle and carriage relatively to each other, and means whereby such relative movements will determine when the said coupling is released. 24th. In a winding machine, the combination of a winding spindle, means for feeding a continuous strip thereto, two slides, one of which carries a knife, a coupling connecting the slides together, means for releasing the coupling at varying positions in the stroke of the slides, and means whereby the knife is actuated to cut the strip at the end of the movement of that slide in which the knife is not located, substantially as described. 25th. In a winding machine, the combination of a winding spindle, means for feeding a continuous strip thereto, a knife for severing the strip after it is fed, said means for feeding consisting of two independent parts acting successively upon the strip and each part being adapted to gradually increase its feed, substantially as described. 26th. In a winding machine, the combination of a winding spindle, means for feeding a continuous strip thereto, a knife for severing the strip after it is fed, said means for feeding consisting of two reciprocating slides, one of which is adapted to be moved by the other, a coupling adapted to connect and disconnect the slides, means actuated in accordance

with the amount of feed required, for controlling said coupling, one of the slides carrying gripping devices for holding the strip during one movement of the slide and also independent feeding devices for moving the strip after the slide stops, substantially as described. 27th. In a machine for winding strands and sheet material into coils the combination of a reciprocating block, two levers each hinged at one end to said block and at the other respectively hinged to two reciprocating rods, one of which guides the strands and the other controls the feed of the sheet material, said levers being pivoted between their extremities. 28th. In a machine for winding strands and sheet material into coils, the combination of a reciprocating block, two levers each hinged at one end to said block and at the other respectively to two reciprocating rods, one of which guides the strands and the other controls the feed of the sheet material, said levers being pivoted between their extremities upon adjustable pivots, substantially as described. 29th. In a machine for winding strands and sheet material into coils, the combination of a winding spindle, a reciprocating block, two levers each hinged at one end to said block and at the other respectively hinged to two reciprocating rods, one of which guides the strands to the spindle of form layers and the other controls the feed of the sheet material toward the spindle, and an intermittently rotating shaft whose motion reverses the direction of movement of the said first mentioned reciprocating rod and simultaneously injects sheet material into the coil, substantially as described. 30th. In a machine for winding sheet material into coils, the combination of a stationary winding spindle, a pivoted carriage, a slide on said carriage whose motions effect the feeding of the sheet material and means whereby the movement of the carriage on its pivot will vary the extent of feed caused by the slide. 31st. In a machine for winding sheet material into coils, the combination of a stationary winding spindle, a pivoted carriage, a slide on said carriage whose motions effect the feeding of the sheet material, a coupling through which the slide is dragged along, a crank carried by the slide and adapted to release said coupling, an incline over which the end of the crank moves when the slide moves, means for changing the relative position of the incline and slide when the carriage is moved on its pivot, to thereby obtain different releasing positions of the coupling, substantially as described. 32nd. In a winding machine, the combination of an intermittently rotating shaft, a reciprocating rod whose direction of movement is reversed by the rotation of said shaft, a strand guide moved by said rod, a winding spindle, and a device for injecting sheet material into the winding coil, said device being operated by the intermittent relations of the shaft, substantially as described. 33rd. In a winding machine, the combination of a winding spindle and a carriage movable with respect to each other, the carriage carrying devices for feeding sheet material to the winding spindle and means whereby the spindle and carriage are moved with respect to each other in proportion to the increase in size of the material on the spindle. 34th. In a winding machine, the combination of a reciprocating block, a reciprocating rod carrying guiding devices for the material to be wound, and a pivoted lever hinged to the block and rod, substantially as described. 35th. In a machine for winding material in the form of strands, fibres or filaments and sheets, the combination of means for winding the strands, fibres or filaments in layers, means for winding the sheet material at the end of each layer and means for reversing the direction of traverse of the strands, fibres or filaments to superpose the layers. 36th. In a winding and wrapping machine the combination of a core or spindle, means for winding fibres or filaments thereon in layers, means for applying sheet material to the surface of the layers and a device for separating the sheet material into parts or pieces of respectively varying size. 37th. The combination with a core or spindle of means for automatically separating sheet material into parts or pieces and wrapping them successively upon said core or spindle. 38th. The combination with a core or spindle of means for automatically separating sheet material into parts or pieces, successively increasing in size, delivery mechanism for feeding the separated pieces to the core or spindle and means for shifting the delivery mechanism and core with respect to each other, to compensate for the increasing diameter of the coil. 39th. In a winding and wrapping machine the combination of a core or spindle, means for winding and feeding fibres or filaments thereon at two or more zones simultaneously, and means for projecting the edge of a material in sheet form into the tangent point between the fibres or filaments and the surface of the coil. 40th. In a winding and wrapping machine the combination of a core or spindle, means for winding and feeding fibre or filaments thereon at two or more zones simultaneously, means for projecting the edge of a material in sheet form into the grip of the fibres or filaments and a device resting upon the surface of the coils and adapted to engage the sheet material. 41st. In a winding and wrapping machine the combination of a core or spindle, means for winding and feeding fibres or filaments thereon at two or more zones simultaneously, means for projecting the edge of the material in sheet form into the grip of fibres of filaments and a roller engaging the surface of the coils and sheet material. 42nd. The combination with a core or spindle, of means for winding a plurality of coils thereon and means for inserting sheet materials in said coils, each sheet being common to all the coils. 43rd. The combination with a continuously rotating winding core or spindle of means for winding a plurality of coils thereon, and means inserting sheet material at intervals in

said coils, each sheet being common to all the coils. 44th. In a machine for winding and wrapping fibres or filaments into coils the combination of a winding core or spindle, mechanism for injecting sheet material at intervals into the coils and means for changing the relative position of the injecting mechanism with respect to the coils, for the purpose set forth. 45th. In a machine for winding and wrapping fibres and filaments, the combination of a core or spindle, means for winding the fibres or filaments thereon, a source of supply of sheet material, feeding devices for advancing in such sheet material and means for separating said material into parts or pieces and for feeding the same successively to the core or spindle. 46th. In a winding machine, the combination of a winding core or spindle, a rod or foundation carrying a plurality of guides for fibres, filaments or strands, said spindle and rod or foundation being bodily movable with respect to each other for the purpose of forming layers upon the spindle. 47th. In a winding machine the combination of a winding core or spindle, a rod or foundation carrying guides for fibres, filaments or strands, said spindle or rod being bodily movable with respect to each other, a reciprocating block, a lever hinged to the block and to the said rod or foundation and itself pivotally mounted upon an adjustable support. 48th. In a winding machine, the combination of a source of power, guiding device for the material to be wound, a reciprocating element connected with the guiding devices, a shaft adapted to reverse the movement of the reciprocating element, a spring and a friction coupling connecting said shaft with the source of power, a stop preventing the rotation of said shaft and means for removing the stop at intervals. 49th. In a winding machine, the combination of a source of power, guiding devices for the material to be wound, a reciprocating element connected with the guiding devices, a shaft adapted to reverse the movement of the reciprocating element, a spring interposed between the shaft and the source of power, a stop preventing the rotation of the shaft, means for removing the stop at intervals and a load or retarding device applied to the shaft.

No. 69,427. Winding Machine. (Bobineuse.)



James Chris Anderson, Jersey City, New Jersey, U.S.A., 21st November, 1900; 6 years. (Filed 14th March, 1900.)

Claim.—1st. In a machine for winding fibres, filaments or strands into coils, bobbins or helices, the combination of a winding spindle, a plurality of spools upon which the fibres, filaments or strands are stored, means for conducting the fibres, filaments or strands from the spools to the spindle, means for rotating the spindle and spools backward, and a yielding connection between the respective spools and said rotating means, substantially as described. 2nd. In a machine for winding fibres, filaments or strands into coils, bobbins or helices, the combination of a winding spindle, a plurality of spools upon which the fibres, filaments or strands are stored, means for conducting the fibres, filaments or strands from the spools to the spindle, means for rotating the spindle and spools backward and an adjustable yielding connection between the respective spools

and said rotating means, substantially as described. 3rd. In a machine for winding fibres, filaments or strands into coils, bobbins or helices, the combination of a winding spindle, means for rotating it, a plurality of spools, means for directing the material stored thereon to the winding spindle, a shaft, a yielding gearing between the shaft and each spool and means for rotating said shaft, substantially as described. 4th. In a machine for winding fibres, filaments or strands into coils bobbins or helices, the combination of a winding spindle, means for rotating it, a plurality of spools, means for directing the material stored thereon, to the winding spindle, a shaft, a yielding gearing between the shaft and each spool, means for reversing the direction of rotation of the winding spindle and rotating the shaft, substantially as described. 5th. In a machine for winding fibres, filaments or strands into coils, bobbins or helices, the combination of a winding spindle, means for rotating it, a plurality of spools, means for directing the material stored thereon to the winding spindle, a shaft, a yielding gearing between the shaft and each spool and means for simultaneously reversing the direction of rotation of the winding spindle and rotating the shaft, substantially as described.

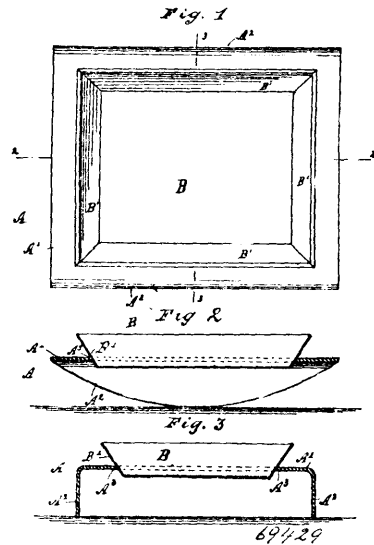
No. 68,428. Artificial Marble. (Marble artificiel.)

Gottfried Scheuber, Berlin, Prussia, German Empire, 21st November, 1900; 6 years. (Filed 23rd July, 1897.)

Claim.—A process for producing artificial marble from the waste of stones capable of receiving polish, which consists in mixing the pulverized stone with a suitable binding means, which consists of two parts of chloride of magnesium solution of 20 degrees Beaumé and 1 part magnesite to 5 parts of dry mixture, as specified, and separately mixing the colouring medium for the veins, which consists of Frankfort black and ochre or any other colouring metallic oxide, with an equal quantity of pulverized stone, forming veins on the first mixture with the latter, after having poured the former into a mould, applying slight pressure to the mass and allowing it to harden, substantially as described.

No. 69,429. Developing Tray Rocker. (Plateau à bascule pour développer.)

(Plateau à bascule pour développer.)



John Houghton Clarke, Framingham, Massachusetts, U.S.A., 21st November, 1900; 6 years. (Filed 8th October, 1900.)

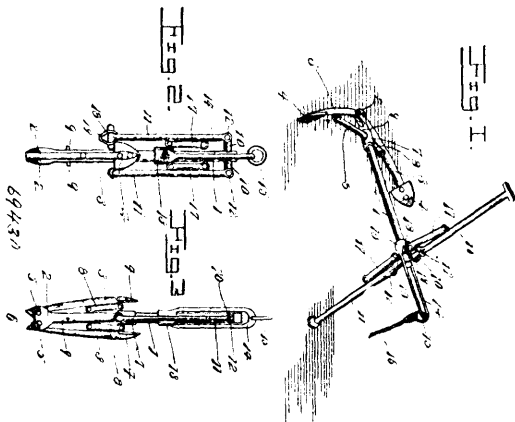
Claim.—1st. As an improved article of manufacture a jointless photo developing tray rocker made from a single piece of material, the top of which has a cavity for the reception of the tray and the sides of which are parallel with each other and rounded or curved upon their under edges. 2nd. A jointless photo developing tray rocker made from a flat blank having a relatively large central tray holding cavity the outer opposing edges of which blank are curved or rounded and are bent or formed to become parallel with each other and to extend in the same direction from the remainder of the blank, as and for the purposes set forth.

No. 69,430. Folding Anchor. (Ancre pliant.)

George W. Blackburn, Florida, U.S.A., 21st November, 1900; 6 years. (Filed 21st July, 1900.)

Claim.—1st. A foldable anchor, having a shank, which is bifurcated at its lower end, opposite arms having their inner ends mitered to abut and pivotally mounted within the bifurcation of the shank, flukes at the outer free ends of the arms, a slide mounted

upon the shank, links pivotally connecting the slide to the respective arms, and a stop provided upon the shank to limit the move-

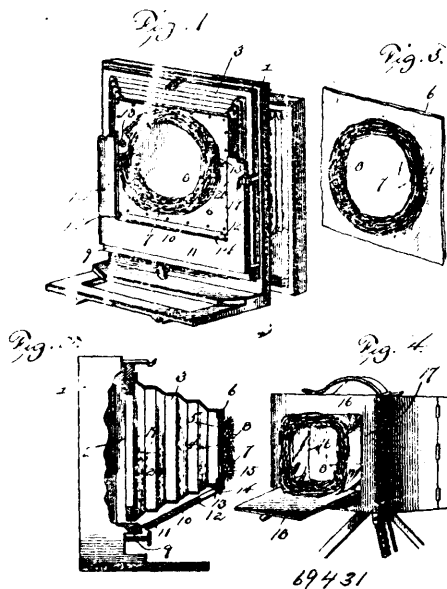


having an opening therein, an outstanding rim or binding of soft material, around the opening in the frame, of an adjustable nature and adapted to retain a fixed shape, and a movably attached holder for supporting the bellows and the parts thereof in operative position, and also closable against the same when folded. 2nd. A focusing attachment for photographic cameras, comprising a bellows, a frame connected to the rear of the bellows and having an opening therein, an outstanding rim or binding of soft material around the opening in said frame, eyes attached to the lower portion of the frame, adjacent opposite sides, and a holder having eyes to engage those of the frame, the said eyes of the frame and holder being disposed at different angles. 3rd. A focusing attachment for photographic cameras, comprising a bellows, a frame connected to the rear of said bellows, and having an opening therein, an outstanding rim or binding of soft material around the opening in the bellows, a U-shaped holder movably attached to a portion of the camera and having side arms, and interlocking devices carried by the frame at the rear of the bellows and the said holder. 4th. A fixed focusing attachment for photographic cameras, comprising a bellows having an opening in the rear reduced portion thereof, an outstanding rim or binding of soft material around the said opening of an adjustable nature and adapted to retain a fixed shape for adjustment, and a support for holding the bellows when in extended position and movable against the said bellows to hold the latter in closed position.

No. 69,432. **S** reopticon. (*Stereopticon.*)

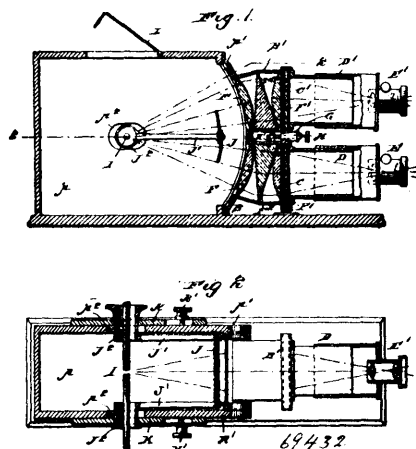
ment of the slide toward the arms. 2nd. A foldable anchor, having a shank, a foldable stock, and a slide mounted upon the shank, having a locking engagement with the stock, and also provided with means for connection with anchor chain or cable to hold the slide in engagement with the stock. 3rd. A foldable anchor, having a shank, opposite stock sections pivotally or hingedly connected to the shank, a slide mounted upon the shank, links pivotally connecting the slide to the respective stock sections, and means for connecting the slide to an anchor cable. 4th. A foldable anchor, having a shank, opposite stock sections pivotally or hingedly connected to the shank, a sleeve slidable upon the shank, links pivotally connecting the sleeve to the stock section, and a yoke connected to the sleeve, slidably embracing and projecting beyond the adjacent end of the shank, and constructed for connection with an anchor cable. 5th. A foldable anchor having a shank, opposite stock sections pivotally or hingedly connected thereto, links pivoted to the respective stock sections, and having a slidable connection with the shank, and a link or ring slidable upon one of the stock sections and to embrace the latter and the adjacent link, in the set up position of the parts. 6th. A foldable anchor, having a shank, opposite fixed stock sections, foldable stock sections pivotally or hingedly connected to the respective fixed sections, links pivotally connected to the respective foldable sections and having a slidable connection with the shank, and a link or ring which is slidable upon one of the foldable sections and arranged to embrace the latter and the adjacent link, and also having a reduced lateral extension to embrace the fixed stock section.

No. 69,431. **C**amera. (*Camera.*)



Thomas James Demorest, Garfield, Washington, U.S.A., 21st November, 1900; 6 years. (Filed 14th July, 1900.)

Claim.—1st. A focusing attachment for photographic cameras, comprising a bellows, a rear frame attached to said bellows and

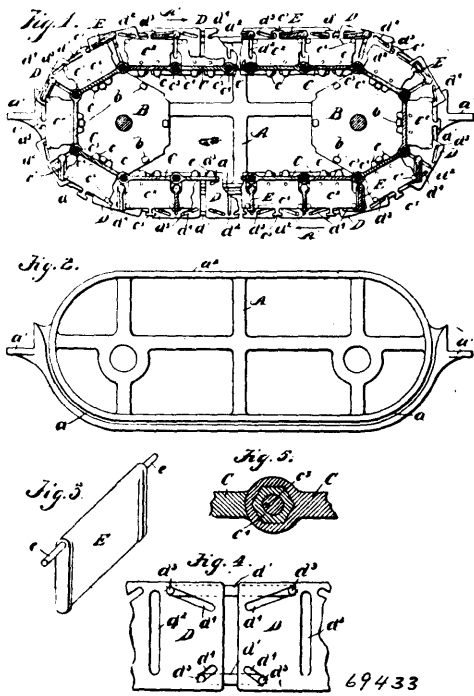


Samuel Elisha Woody, Louisville, Kentucky, U.S.A., 21st November, 1900; 6 years. (Filed 19th May, 1900.)

Claim.—1st. A stereopticon, provided with a light casing, two condensers, each having a lens arranged to focus to the center of the light and a prism for refracting the rays of light passing through the said lens, the said prisms so refracting the light rays as to register the pictures from the two optical systems on the screen, substantially as shown and described. 2nd. A stereopticon provided with a plurality of condensers, and a prism for each condenser so placed as to refract the rays of light coming from a single illuminating point, so that they will be focused upon the same points upon the screen, substantially as set forth. 3rd. A stereopticon, provided with two condensers, each having two condensing lenses, one of said condensers being adjustable relative to the other, and prisms located between the said lenses to refract the rays of light from one lens to the other, substantially as shown and described. 4th. A stereopticon, providing a light casing, two condensers at the end of the light casing, and adjustable relatively to each other, each condenser being provided with two condensing lenses of plano-convex form, and standing at an angle to each other, and a prism interposed between the two lenses, substantially as shown and described. 5th. A stereopticon, comprising a light casing, two condensers at the end of the light casing and adjustable relatively to each other, each condenser being provided with two condensing lenses of plano-convex form, and standing at an angle to each other, a prism interposed between the two lenses, one of the condensers being fitted to slide in a segmental guideway on the light casing, and means for adjusting this condenser relatively to the one in the said guideways, as set forth. 6th. A stereopticon comprising a light casing, two condensers at the end of the light casing and adjustable relatively to each other, each condenser being provided with two condensing lenses of plano-convex form, and standing at an angle to each other, a prism interposed between the two lenses, and a shutter held movably in the light casing between the light and the condenser lenses, substantially as shown and described. 7th. A stereopticon, provided with a light casing, a reversible support fitted to slide in the said casing, and two optical systems carried by said support and adapted to be extended from the said casing to operate in conjunc-

tion with the light-casing, or to be stored therein when the support is removed therefrom and reversed, substantially as shown and described. 8th. A stereopticon, provided with a plurality of condensers each comprising two condensing-lenses arranged at an angle to each other, and a prism interposed between the lenses where the rays of light are practically parallel, for refracting the rays of light from one lens to the other, substantially as shown and described. 9th. A stereopticon, comprising a light-casing, two condensers arranged one above the other and located at the end of the light-casing, the upper condenser being adjustable relative to the lower, slide-holders arranged in front of the condensers and opening into the adjustable tubes carrying the objective lenses, each of said condensers being provided with two condensing lenses standing at an angle to each other, and a prism interposed between the two lenses so that the rays of light passing to one lens from the interior of the light-casing are refracted by the prism to the other lens adjacent to the slide-holder, substantially as shown and described. 10th. A stereopticon, comprising a light-casing, two condensers at the end of the light-casing, a prism for refracting the rays of light passing through or to the said condensers, a segmental guideway in which the frame of one of said condensers is fitted to slide, the said guideway having its center in the light in said casing, and means for adjusting the said movable condenser, substantially as shown and described. 11th. A stereopticon, comprising a light-casing, two condensers at the end of the light-casing, one of said condensers being movable, prisms for refracting the rays of light, and a wedge interposed between the frames of the condensers for adjusting the said movable condenser, substantially as set forth.

No. 69,433. Propelling Apparatus. (Appareil de propulsion.)

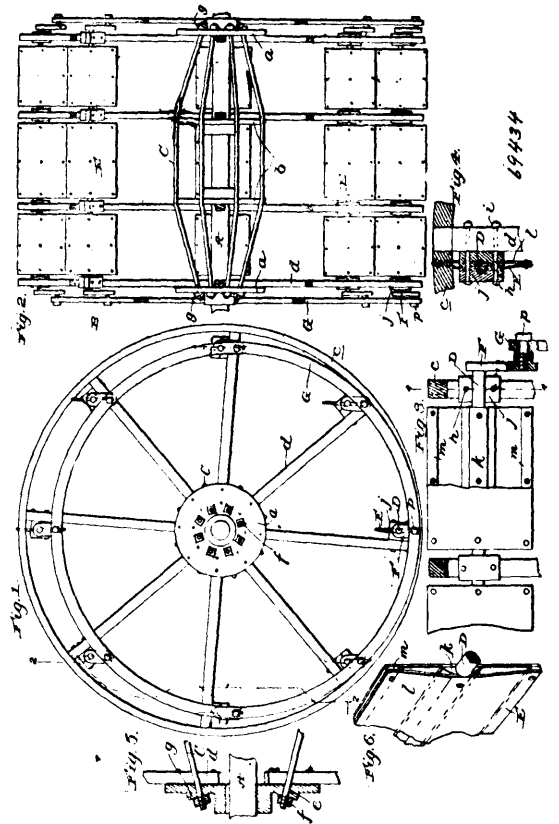


William Lincoln Matts and John Brainard Swain, both of Newark New Jersey, U.S.A., 21st November, 1900; 6 years. (Filed 26th April, 1900.)

Claim.—1st. The combination in a propelling mechanism for vessels, of a movable belt or chain composed of a series of plates C, pivotally connected, driving wheels D, for driving said chain, collapsible blades E, mounted in projecting side pieces e², formed upon the said plates C, of said movable chain, side frames A, carrying said driving wheels B, and means for allowing the collapse of the aforesaid blades, substantially as described. 2nd. The combination in a propelling mechanism for vessels, of a driving belt or chain composed of a series of plates pivotally connected, side projections extending outwardly from said plates forming said belt, lugs or jaws formed upon the under side of said plates of said belt or chain, a side belt or chain made up of a series of plates pivotally fastened by means of suitable rods and connected pivotally at suitable points along the side of the aforesaid driving belt or chain, blades mounted within said side belt or chain, small pins formed upon the end of said blades and engaging through slots in said plates of the side chain or belt and adapted to engage along the track or groove and employed in conjunction with the aforesaid slot and plates of side chain, to overthrow the blade in its downward motion, suitable side

frames for holding the mechanism in position, a groove and track formed upon the said side frame and employed as a guide in and upon which the pins on the blades engage, driving wheels suitably mounted within said side frame, lugs formed upon said driving wheel and adapted to engage the jaws formed upon the under side of the plates forming the aforesaid driving belt or chain, and employed to revolve the mechanism, and suitable means for driving same, substantially as described. 3rd. The combination in a propelling mechanism for vessels, of a driving belt or chain composed of a series of plates pivotally connected, blades mounted within the said driving belt, the side chain or belt composed of plates pivotally connected by means of a rod, small pins formed upon the said blades and engaging with slots upon the said plates forming the side belt or chain, lugs formed upon the side plates in turn formed upon the pivotally connected plates and adapted to engage the said blades and hold them in a horizontal position in travelling along the upper side of belt, driving wheels mounted upon side frames and employed to set the mechanism in motion, a track and groove formed upon the said frame and adapted to allow the small pins on the aforesaid blades to engage within said groove and upon said track, projecting lugs formed upon the aforesaid side frames and affording a means for attaching the mechanism to a vessel, and suitable means for driving the mechanism, substantially as described.

No. 69,434. Paddle Wheel. (Roue à palettes.)

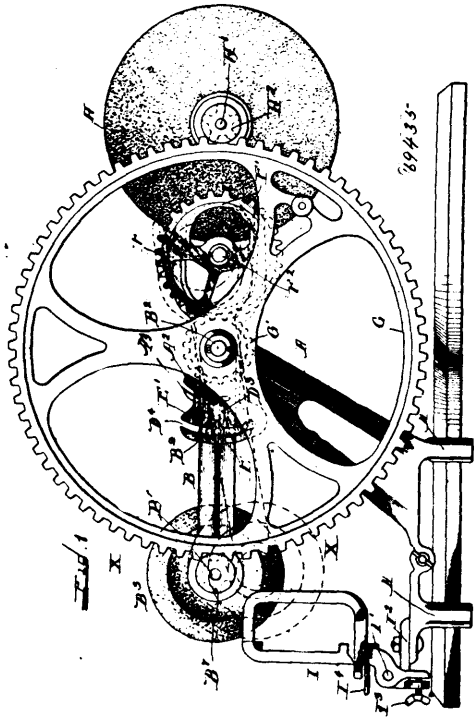


Joseph S. Allison, Portland, Oregon, U.S.A., 21st November, 1900; 6 years. (Filed 12th April, 1900.)

Claim.—1st. A paddle wheel comprising end and intermediate hubs, parallel rims, spokes interposed between and connected to the hubs and rims, paddles fixed on shafts mounted in bearings on the spokes, transverse truss rods bearing on the periphery of the intermediate hub and having inwardly inclined end portions extending through the apertures in the end hubs and provided with threads, and nuts mounted on the threaded ends of the truss rods and bearing against the outer faces of the end hubs, substantially as specified. 2nd. In a paddle wheel, the combination of a rock shaft journaled in suitable bearings and provided with a portion of angular form in cross section, and a paddle comprising sheet metal plates disposed at opposite sides of and fixedly connected to the angular portion of the rock shaft, and metallic straps interposed between and connected to said plates at the longitudinal edges thereof, substantially as specified. 3rd. The herein described paddle wheel consisting of the hubs, the parallel rims, spokes interposed between and connected to the hubs and rims, the bearing blocks arranged on the spokes at points adjacent to the

rims, bolts and nuts detachably connecting the said blocks to the spokes, the transverse rock shafts journalled in the bearing blocks and having their ends extended beyond the same, paddles interposed between the rims and fixed on the shafts, cranks keyed on the extended ends of the shaft so as to turn therewith and yet be removable therefrom, and gravitating rings disposed at opposite sides of the wheel and loosely connected to the cranks, substantially as specified. 4th. The herein described paddle wheel consisting of the end and intermediate hubs, parallel rims corresponding in number to the hubs, spokes interposed between and connected to the hubs and rims, transverse, threaded truss rods bearing on the periphery of the intermediate hub and extending through apertures in the end hubs and equipped with nuts, bearing blocks detachably connected to the spokes, rock shafts journalled in said blocks and having cranks at their ends and also having intermediate portions of angular form in cross section, paddles comprising sheet metal plates disposed at opposite sides of and connected to the angular portions of the shafts, and gravitating rings arranged at opposite sides of the wheel and connected to the cranks of the rock shafts, substantially as specified.

No. 69,435. Grinding Machine. (*Machine à aiguiser.*)

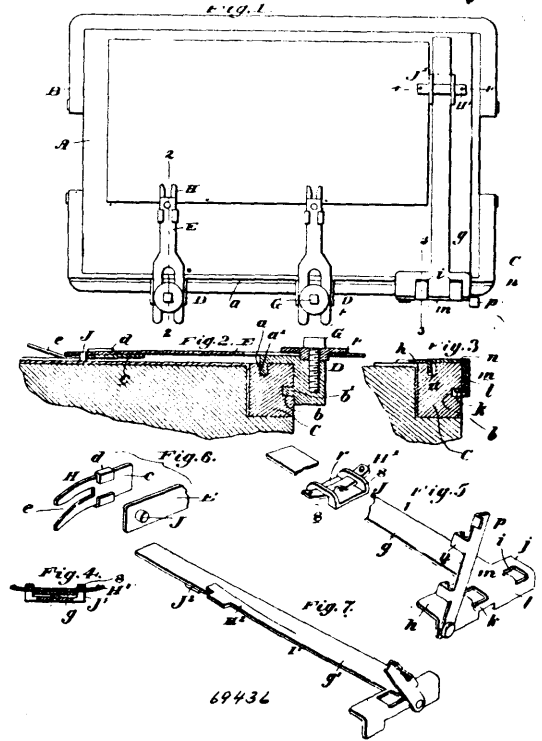


James Macphail, Blue Island, Illinois, U.S.A., 21st November, 1900; 6 years. (Filed 22nd February, 1900.)

Claim.—1st. In a grinding machine, in combination, a main frame, an oscillatory frame pivot jointed, by one end, to the main frame, and carrying a rotatable grinding wheel, mounted therein near the free end thereof, a semi-bifurcated lever mounted, at the base of its bifurcation, concentrically with the oscillatory frame, the unbifurcated end portion thereof lapping by, and extending along substantially parallel with, the pivoted end portion of the oscillatory frame, means for securing the overlapping ends of the semi-bifurcated lever and the oscillatory frame together, while the free end of the latter is at any desired point in the arc of its vibration, an integral or rigidly connected gear and eccentric, concentrically mounted, on the main frame, in such position that the eccentric contacts the bifurcation of the semi-bifurcated lever, a gear wheel and a pinion, concentric and integral, or rigidly connected, mounted concentrically with the oscillatory frame and the semi-bifurcated lever, the former meshing with a pinion on the grinding wheel shaft and the latter meshing with the gear of the gear and eccentric, substantially as and for the purpose specified. 2nd. In a grinding machine, in combination, a main frame, an oscillatory frame pivot jointed by one end, to the main frame, and carrying a rotatable grinding wheel, mounted therein near the free end, a semi-bifurcated lever mounted, at the base of its bifurcation, concentrically with the oscillatory frame, the unbifurcated end portion thereof, lapping by, and extending along substantially parallel with the pivoted end portion of the oscillatory frame, means for securing the overlapping ends of the semi-bifurcated lever and the oscillatory frame together, while the free end of the latter is at any desired point in the arc of its vibration, a grinding wheel, of any desired material, mounted on bearings in the main frame, an integral or rigidly connected gear

and eccentric, concentrically mounted, on the main frame, in such position that the eccentric contacts the bifurcation of the semi-bifurcated lever, a gear wheel and a pinion concentric and integral, mounted concentrically with the oscillatory frame and the semi-bifurcated lever, the former meshing with the pinions on the balance wheel and grinding wheel shafts and the latter meshing with the gear of the gear and eccentric, substantially as and for the purpose specified. 3rd. In a grinding machine, in combination, an oscillatory frame pivot jointed, by one end, to the main frame, and carrying a rotatable grinding wheel, mounted therein at the free end thereof, a grinding wheel, of any desired material, mounted on a bearing in the main frame, a gear wheel mounted concentrically with the oscillatory frame, and meshing with the pinions on the stationary grinding wheel and vibrating grinding wheel shafts, and means for rigidly securing the oscillatory frame to the main frame, while the free end of the former is elevated to any desired point in the arc of its vibration, substantially as and for the purpose specified.

No. 69,436. Tympan Gauge. (*Jauge de tympan.*)

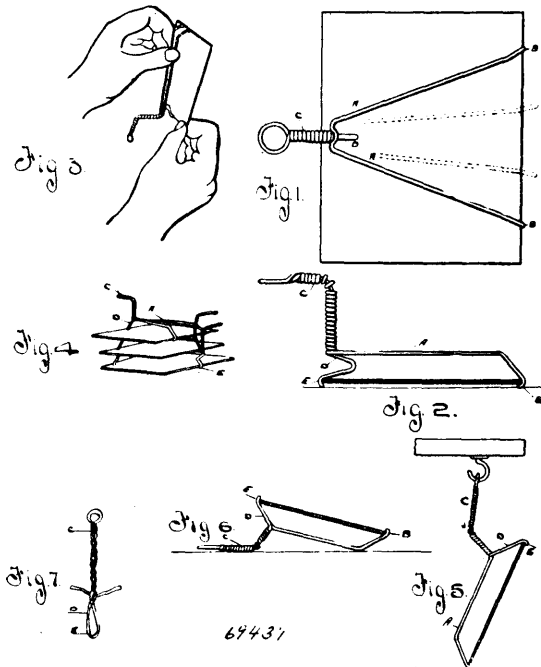


Bernard McGinty, Doylestown, Pennsylvania, U.S.A., 21st November, 1900; 6 years. (Filed 27th February, 1900.)

Claim.—1st. As an improved article of manufacture, a tympan gauge, comprising an arm formed of resilient metal and having a fixed stop at its inner side, the said arm being slitted transversely and longitudinally, whereby it is provided at one edge with a spring tongue, substantially as specified. 2nd. As an improved article of manufacture, a tympan gauge having an arm, a stop slidable on said arm, and a spring tongue arranged in the stop and bearing on the arm of the gauge, whereby it is enabled to serve as a gauge and also to hold the stop against casual movement thereon, substantially as specified. 3rd. As an improved article of manufacture, a tympan gauge having an arm, an adjustable stop arranged at the inner side of the arm and having lateral, apertured ears, and an adjustable spring tongue arranged in the apertured ears of the stop and bearing on the gauge arm, substantially as specified. 4th. As an improved article of manufacture, a tympan gauge having a stop lug J on the inner side of its arm at a point adjacent to the free end and intermediate of the width thereof, and a slidable tongue, comprising a plate having lips grasping the edges of the arm, and also having a resilient, bifurcated portion straddling the top lug of the arm and adapted to extend beyond the end of said arm, substantially as specified. 5th. In a tympan gauge, the combination with a platen, and a platen band having longitudinal grooves in the exposed sides of its cross bar, of a gauge having a clamp, comprising a member provided with a projection adapted to enter one of the grooves of the platen, and a second member pivotally connected to the first-named member, and having a projection adapted to enter the other groove of the platen band, substantially as specified. 6th. In a tympan gauge, the combination with a platen, and a platen band having longitudinal grooves in the

exposed sides of its cross bar, of a gauge, and a clamp, comprising an annular member fixed to the gauge and having an opening, and a projection adapted to enter one of the grooves of the platen band, and a second member pivotally connected to the angular member and having a projection adapted to work through the opening of said angular member and enter the outer groove of the platen band, substantially as and for the purpose set forth.

No. 69,437. Device for Holding Negatives.
(*Porte-épreuve photographique.*)



Charles J. Bousfield, Bay City, Michigan, U.S.A., 21st November 1900; 6 years. (Filed 21st February, 1900.)

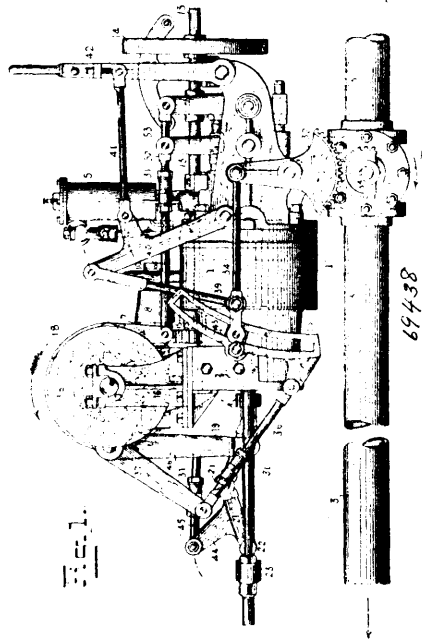
Claim.—1st. A holder for photographic plates, comprising a handle, a short arm projecting below said handle and having a hook N for engaging an edge of the plate, two divergent flexible arms attached to said handle, each arm having a hook for engaging the edge of the plate and holding it by reason of the tendency of the flexible arms to further diverge. 2nd. A photographic plate holder made of flexible wire, comprising two flexible and normally divergent arms, each having a hook at its extremity for engaging an edge of the plate when the arms spread apart, an arm having a hook adapted to engage the edge of the plate that is opposite the first-mentioned hooks, and a handle formed by intertwisting the wire forming the arms, substantially as described.

No. 69,438. Marine Propulsion Apparatus.
(*Appareil de propulsion pour vaisseaux.*)

John Alstine Secor, Brooklyn, New York, U.S.A., 21st November 1900; 6 years. (Filed 7th February, 1900.)

Claim.—1st. In an apparatus for propelling vessels by the reactionary force of explosive gases, a submerged water conduit, an explosion cylinder communicating with said conduit, a charging and compressing piston in the cylinder, and a valve controlling the conduit so constructed and timed as to open the conduit to fill the same while the charge is being drawn in and compressed whereby the greater period of time in the cycle of operation is simultaneously utilized to prepare the gas and water for action, as set forth. 2nd. In an apparatus for propelling vessels by the reactionary force of explosive gases, a submerged water conduit, an explosion cylinder communicating with said conduit, a reciprocating piston in the cylinder having a continuous movement in one direction for drawing in the charge and an intermittent movement in the other direction for compressing the charge and driving out the products of combustion, and a valve controlling the conduit so constructed and timed as to open the conduit to fill the same while the charge is being drawn in and compressed, as set forth. 3rd. In an apparatus for propelling vessels by an explosive force, an explosion cylinder wherein the compression and ignition take place, and wherein the explosive is ignited without transfer or expansion after compression, combined with a submerged water conduit, said cylinder and conduit communicating with each other, and the cylinder having a valved exhaust port leading to the conduit for opening and closing

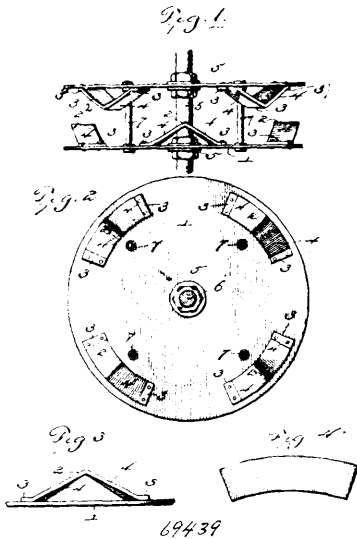
the communication, as set forth. 4th. In an apparatus for propelling vessels by an explosive force, a submerged water conduit, an



explosion chamber having a compressing piston, an inlet for explosive material and an outlet for products of combustion communicating with said conduit, said inlet and outlet being fitted with suitable valves and operating means therefor, as set forth. 5th. In an apparatus for propelling vessels by the reactionary force of explosive gases, a cylinder wherein the explosive is compressed and ignited, having a reciprocating piston and devices for arresting said piston at a desired position of its compression stroke, and locking the same during the interval of explosion, as set forth. 6th. In an apparatus for propelling vessels by the reactionary force of explosive gases, an explosion cylinder having a reciprocating piston, devices for giving the same an intermittent movement during one stroke, and a continuous movement during the other stroke, and devices for admitting and igniting the explosive, whereby a new charge is admitted during one stroke, and is compressed, ignited and expelled during the other stroke, as set forth. 7th. In an apparatus for propelling vessels by means of the reactionary force of explosive gases upon a body of water, a submerged conduit, a chamber wherein the explosive gases are compressed and ignited, provided with a release valve opening to said conduit and a supplemental reversing valve located in the conduit, as set forth. 8th. An apparatus for propelling vessels by the reactionary force of explosive gases upon a body of water, a submerged conduit, communicating intermediately with a chamber wherein the gases are exploded and having branch passages in opposite directions, a reversible valve device interposed at the junction of the passages, operated to close the passage from the conduit to the explosion chamber and also the inlet branch of the conduit in either direction desired, and to open the passage from the explosion chamber to the outlet branch, as set forth. 9th. The combination with an explosive cylinder of a communicating submerged conduit with inlet and outlet passages and an interposed and reversible valve device that operates to open the communicating passage between the cylinder and the outlet of the conduit to expel the water, to close the communicating passage between the inlet and outlet branches of the conduit during the action of the explosive and expulsion of the water and gases, to close the passage between the cylinder and the conduit, and to open the passage between the inlet and outlet of the conduit to admit the water thereto at each interval of explosive action in the cylinder, as set forth. 10th. An apparatus for propelling vessels by means of the reactionary force of explosive gases consisting, essentially, in an explosion cylinder having a reciprocating compressing piston and a submerged water conduit communicating therewith and valve devices for governing the respective inlets and outlets of said cylinder and conduit operated by an independent source of power, as set forth. 11th. In an apparatus for propelling vessels by an explosive force, an explosion chamber having a piston with an intermittent movement and a water conduit communicating with said chamber that is filled and exhausted during each cycle of movement of said piston, fitted with a valve device that is operated to open for the inlet of the water to said conduit during the greater part of said cycle of movement of the piston and

closed during the remainder or lesser part, whereby the entering water is given an extended period to fill the conduit at each double stroke of the piston, as set forth.

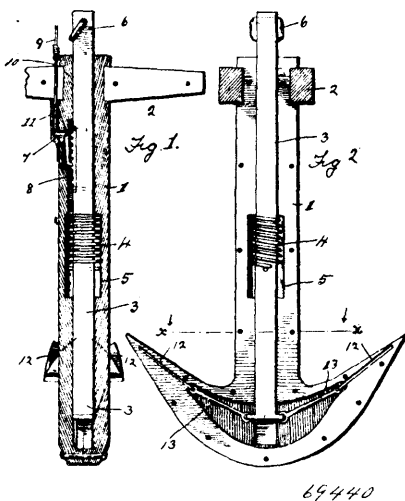
No. 69,439. Paddle Wheel. (Roue à palettes.)



Calvin Chamberlain, Foxcroft, Maine, U.S.A., 21st November, 1900; 6 years. (Filed 1st October, 1900.)

Claim.—1st. A propeller wheel, comprising parallel spaced discs impervious to water and provided upon their adjacent sides with inwardly projecting V shaped blades arranged in independent and disconnected circular series, the blades of each series being separately formed and provided with attaching flanges at both ends and independently connected by means of said flanges to their respective discs at intervals. 2nd. A propeller wheel comprising a shaft, two discs fast thereon and set apart to form a water space which is open only at the periphery of the wheel, an annular series of blades having reversely oblique front and rear sides and attached respectively in staggered order to opposing faces of the discs, the blades at one side of the wheel being separated from those at the opposite side.

No. 69,440. Anchor. (Ancre.)



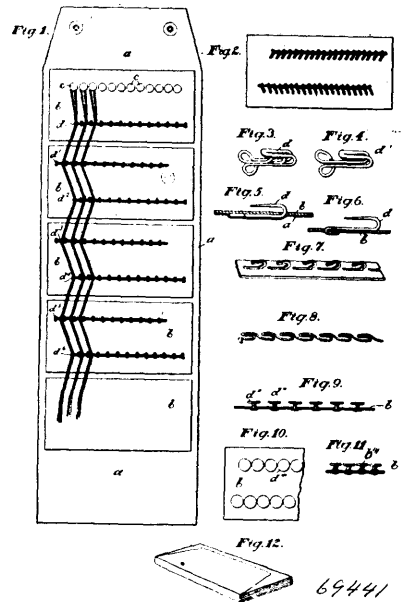
John Callow, New Kamilchi, Washington, U.S.A., 21st November, 1900; 6 years. (Filed 5th September, 1900.)

Claim.—1st. In a device of the character described, a casing provided with flukes, supplementary flukes carried thereby, and means for spreading the supplementary flukes, substantially as described. 2nd. In a device of the character described, a casing having flukes, supplementary flukes carried thereby, and a spring pressed bar slidable in the casing and connected with the supplementary flukes, substantially as described. 3rd. In a device of the character

described, a casing provided with flukes, supplementary flukes carried thereby, a spring pressed bar slidable in the casing and connected with the supplementary flukes, and means for locking the bar in its several positions, substantially as described. 4th. In a device of the character described, a casing provided with flukes, supplementary flukes carried thereby, a spring pressed bar slidable in the casing and connected to the supplementary flukes, a spring pressed pawl pivoted in the casing, a rack bar carried by the sliding bar and adapted to be engaged by the pawl, and means for operating the pawl, substantially as described. 5th. In a device of the character described, a casing having flukes, supplementary flukes pivoted in slots therein, a bar slidably mounted in the casing, means connecting the lower ends of the bar, a spiral surrounding the bar and housed in the casing so as to give the bar a normal downward pressure, a rack carried by the sliding bar, a pawl pivoted in the casing to engage the rack bar, and a stem pivoted to the pawl, substantially as described.

No. 69,441. Device for Holding Skeins of Silk.

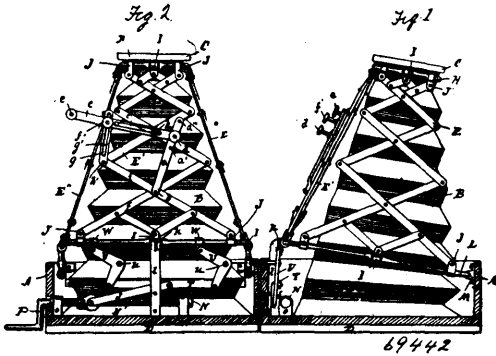
(Appareil pour tenir les écheaux de fil de soie.)



Stasia Sweeney, Springfield, Massachusetts, U.S.A., 21st November, 1900; 6 years. (Filed 15th August, 1900.)

Claim.—1st. In a silk holder, a flexible backing composed of folding sections secured to the backing, and thread holding hooks mounted on the sections and arranged in tortuous lines in the plane thereof, substantially as shown and described. 2nd. A silk holder, comprising a flexible sheet, a sectional backing mounted on the flexible sheet, and thread holding means secured to the sections and arranged in tortuous lines in the plane thereof, substantially as shown and described. 3rd. The combination of a suitable backing, and a series of thread holding means, as *d*, mounted on the said backing, and arranged in succession in tortuous lines, a skein of silk placed on the holding means in a continuous general direction on a tortuous or angular line and in the plane of the backing. 4th. The combination of a series of sections adapted to be folded one upon the other, and a series of thread holding means secured on the sections holding silk or thread extending from section to section in tortuous lines in the plane of the sections when they are extended, substantially as described. 5th. In a silk holder, a flexible backing, folding sections secured on the backing, and thread holding hooks mounted on the sections and secured by the flexible backing and arranged in tortuous lines in the plane of the sections, substantially as shown and described. 6th. A silk holder comprising a suitable backing, and thread holding means mounted thereon in tortuous lines and in the plane of the backing, substantially as and for the purpose specified. 7th. A silk holding device comprising a backing, and lines of three or more hooks mounted thereon with their bills projecting alternately in reverse direction. 8th. A holder for silk thread, etc., comprising a backing, and hooks mounted on the face thereof arranged out of line with each other to maintain thread placed there in tortuous lines on or above the surface of the backing. 9th. A holder for silk, thread, etc., comprising a backing and hooks mounted on the face thereof and arranged in tortuous lines and in the plane of the backing, whereby a skein of silk or thread may be disposed on the hooks, substantially as shown and described.

No. 69,442. Photographic Camera. (Camera.)

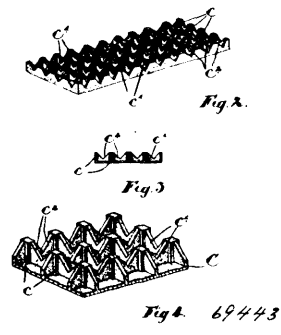
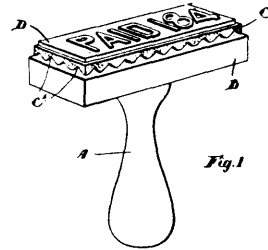


Isaac G. Sigler, Los Angeles, California, U.S.A., 21st November, 1900; 6 years (Filed 9th April, 1900.)

Claim.—1st. A camera, comprising the focusing bellows B, carrying lens holder rim C at its outer end, its rear end being attached to the rim A, lazy tongs E for adjusting said bellows provided with the longitudinally slotted adjusting lever c, carrying on one end the thumb piece e and the other end pivotally attached to the bar a, the bar a pivoted to the lazy tongs at one end and having a plurality of adjusting holes at the other end, the slotted bar g pivoted to the lazy tongs at one end and movably attached near the other end to the lever c, the thumb screw f for gripping the lever c and bar g together, the rods H and L at the front and rear end of the bellows respectively, the crank P having screw threaded shank N, nut R having screw threaded opening adapted to receive shank N and move thereon, and having rod S pivotally attached thereto, rod S forming a working connection between the nut R and bar T, the cranks U pivoted at the center on the bolt u and rotatively attached at one end to bar T and at the other end to the clips W, and the clips W slidably mounted on rod L, substantially as shown and described. 2nd. In a photographic camera, the combination of the following elements: the frame A, to which is attached the focusing bellows B, adapted to be extended and contracted for adjusting the lens, the lazy tongs E attached to said bellows for extending and contracting the same, and provided with means for adjustment, substantially as shown, rod L, to which the rear end of the lazy tongs is attached, the said rod being pivoted to the frame at M and provided with means to cause the lower side of the bar L to approach or recede from the frame D to change the angle of the lens with relation to the sensitized plate, substantially as and for the purpose described. 3rd. In a camera, the crank P, having screw threaded shaft N, screw threaded nut R on said shank, rod S pivoted at one end to said nut and at the other to rod T, rod T having a crank U pivoted at each end thereof, oscillating cranks U pivotally attached to the frame A at u, the front end of the levers having a sliding attachment with rod L, carrying the rear end of the lazy tongs and the rear end of the levers being pivoted to bar T, whereby the rotation of the crank P will tilt the lazy tongs and change the angle of the lens to the sensitized plate, substantially as shown and described. 4th. The herein described device for adjusting the lazy tongs of a camera, comprising lever c and bars a and g and the thumb screws e, f¹ and d, the lever c being adjustably connected with bar g by thumb screw f¹ and having longitudinal slot c¹ for the reception of stud h on which the lever c has a sliding movement, one end of the lever being pivoted to bar a, and the other end having thumb piece or screw e, bar a being pivoted to the lazy tongs at b and having a plurality of holes at the other end for attachment to the lever c, thumb screw d for connecting bar a with lever c, bar g pivoted to the lazy tongs at h¹ and having longitudinal slot g¹ for the reception of thumb screw f¹ for connecting bar g with lever c, substantially as shown and described. 5th. The combination of the lazy tongs E with the focus adjusting attachment comprising the lever c, bars a and g, the said lever and bars being workably attached together and to the lazy tongs as follows: the adjusting lever c, with longitudinal slot c¹, pivoted to bar a at one end and having thumb piece e at the other end, a stud h in slot c¹ mounted on the lazy tongs and forming a sliding attachment of the lever c with the lazy tongs, the bar a being pivoted at one end to the lazy tongs at b and having a plurality of holes, a¹, a¹¹, a¹¹¹ near the other end forming bearings for the thumb screws d on which the lever c is pivoted, the bar g having longitudinal slot g¹ for the reception of the thumb screw f¹ for slidably attaching bar g to lever c. 6th. In combination with the lazy tongs E, carrying the focus adjusting lever c and bars a and g, with the herein described angle adjusting device comprising the crank P, having screw threaded shank N, screw threaded nut R, connecting bar S, pivotally attached at one end to R and at the other to bar T, bar T being pivotally connected with bar S and cranks U, cranks U pivotally mounted on studs u attached to frame A, one arm of the cranks being pivoted to bar T and the other arm pivoted to clips W, clips W slidably mounted on bar L and forming a working connection

between the cranks and the bar, bar L, to which the lazy tongs are connected, pivotally mounted on the frame at M, whereby the rotation of the crank P will tilt the lazy tongs with reference to the frame A, substantially as shown and described. 7th. In a camera, a device for obtaining and retaining the focus comprising the following elements, the back frame A, the front frame C, the bellows B attached to the front and back frames, rod H attached to the front frame, rod L pivotally connected to the back frame, lazy tongs E attached to rods H and L as described and means to adjust and hold the lazy tongs in the adjusted position, substantially as described.

No. 69,443. Rubber Stamp. (Elampe de caoutchouc.)



Charles Wilson Mack, Toronto, Ontario, Canada, 21st November, 1900; 6 years. (Filed 2nd April, 1900.)

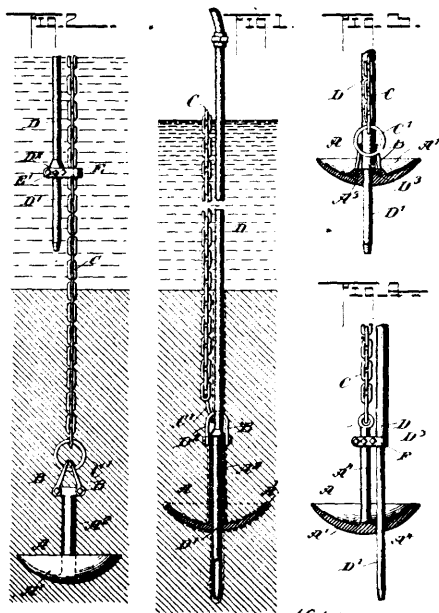
Claim.—The combination with an ordinary base and rubber die, of the cushion base comprising the bottom web, a plurality of rubber posts forming part of the web and the bracing fins also forming part of the web and extending from the top of the post substantially obliquely to the base at each side thereof, so as to leave openings between the tops of the posts and the ordinary base, as and for the purpose specified.

No. 69,444. Mooring Devices. (Appareil d'ancrage.)

Frederick Bowman Langston, New York City, New York, U.S.A., 21st November, 1900; 9 years. (Filed 10th August, 1900.)

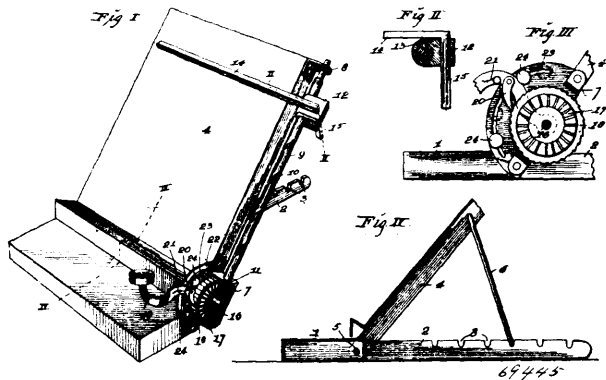
Claim.—1st. A mooring device, comprising an anchor and a pipe detachably connected with said anchor and extending below the bottom thereof, to permit of forcing a fluid under pressure through the pipe into the sand or mud below the anchor, to loosen the sand or mud, the pipe being provided with means to push the anchor down in the loosened sand or mud substantially as shown and described. 2nd. A mooring device, comprising an anchor, a pipe detachably connected with said anchor, and extending below the bottom thereof, to permit of forcing a fluid under pressure through the pipe into the sand below the anchor, to loosen the sand, and a collar on said pipe and adapted to be seated on a fixed part of the anchor, to maintain the extreme lower end of the pipe below the bottom of the anchor, and to permit of pushing the anchor down into the loosened sand, substantially as shown and described. 3rd. A mooring device, comprising an anchor having a hollow shank, a pipe, the lower end of which is fitted into said hollow shank and extends below the bottom of the anchor, and a collar on said pipe and adapted to be seated on the upper end of said shank, to permit of pushing the shank down into the sand by the pipe, substantially as shown and described. 4th. A mooring device, comprising an anchor having a hollow shank, a pipe, the lower end of which is fitted into said hollow shank, and extends below the bottom of the anchor, a collar on said pipe and adapted to be seated on the upper end of said shank, to permit of pushing the shank down into the sand by the pipe, and a funnel formed on the upper end of said shank to act as a guide for inserting the lower end of the pipe in the hollow shank, substantially as shown and described. 5th. A mooring anchor, having a shank with a passage extending through it from end to end, and a fluid pressure pipe fitted in said passage and having means above the

anchor for engaging the anchor to push the anchor downward, the fluid from the pipe being adapted to disturb the earth beneath the



anchor, whereby to permit the sinking of the anchor. 6th. A mooring device having a mooring anchor with a shank formed with a passage extending through it from end to end, and a fluid pressure pipe fitted on said passage and extended below the anchor, the fluid pressure pipe being adapted to disturb the earth beneath the anchor whereby to permit sinking the anchor.

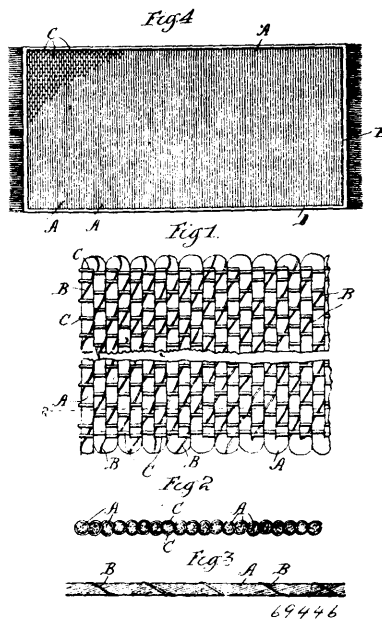
No. 69,445. Copy Holder. (Porte copie.)



Joseph Francis Farish and Charles Adrian Dawes, both of St. Louis, Missouri, U.S.A., 21st November, 1900; 6 years. (Filed 10th March, 1900.)

Claim.—1st. In a copy holder, the combination of a base, a support connected thereto, a movable line indicator adapted to traverse said support, a slide by which said indicator is carried, a grooved shaft with which said slide engages, and means for turning said shaft to cause said slide to travel thereon, substantially as described. 2nd. In a copy holder, the combination of a base, a support connected thereto, a grooved shaft, means of operating said shaft, a slide arranged on said shaft, a screw or pin located in said slide and entering the groove in said shaft, and a line indicating bar carried by said slide adapted to traverse said support, substantially as described. 3rd. In a copy holder, the combination of a base, a support supported thereby, a grooved shaft, a slide having engagement with said shaft and adapted to travel thereon, a line indicator bar carried by said slide adapted to traverse said support, a ratchet gear having engagement with said shaft, and a finger lever adapted to engage said ratchet gear, substantially as described. 4th. In a copy holder, the combination of a base, a support supported thereby, a grooved shaft attached to said support, a slide arranged to travel on said shaft, a line indicating bar carried by said slide, a ratchet gear having engagement with said shaft, a finger lever arranged to engage said ratchet gear, and one or more adjustable stops arranged to limit the movement of said finger lever, substantially as described.

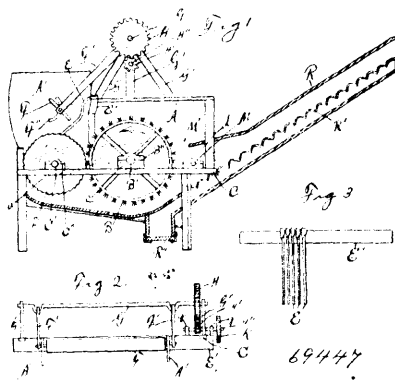
No. 69,446. Woven Fabric. (Tissu.)



Martin Koeck, Oshkosh, Wisconsin, U.S.A., 21st November, 1900; 6 years. (Filed 26th March, 1900.)

Claim.—1st. As a new article of manufacture, a fabric composed of stalks of grass twisted together and served to form a continuous strand, said strand doubled back and forth upon itself, such doubled portions being held together by inter woven binding strands or stays, as and for the purpose set forth. 2nd. As a new article of manufacture, a fabric, the body of which is composed of stalks of grass twisted together and spirally wrapped to form a continuous strand, said strand doubled back and forth upon itself and having interspersed throughout transverse binding stays or strands interwoven therewith, such binding strands or stays being duplicated along the edges of the fabric, as and for the purpose set forth. 3rd. As a new article of manufacture, a mat, the body of which is composed of stalks of grass twisted together and spirally wrapped to form a continuous strand, said strand bent or doubled back and forth upon itself, and having interwoven therewith binding strands interspersed throughout such body portion, and a selvage binding for the edges thereof, as and for the purpose set forth. 4th. As a new article of manufacture, a fabric consisting of a main body portion formed of parallel layers or strands of twisted grass, each strand being encircled spirally by a thread, in combination with transverse binding threads traversing the entire body but alternately under and over adjacent parallel grass strands, as and for the purpose set forth.

No. 69,447. Mattress Making Machine. (Machine à faire les matelas.)



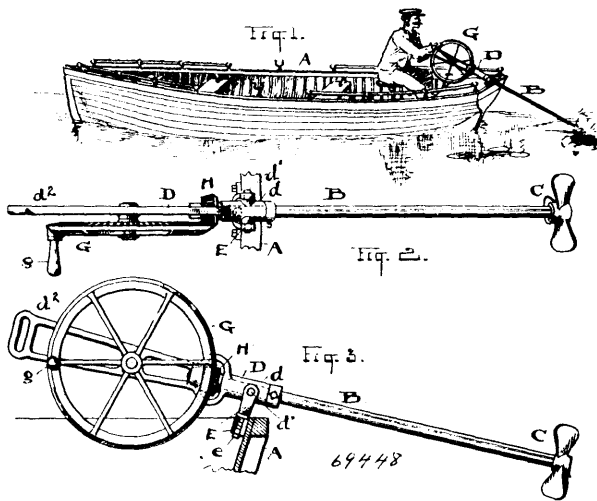
Charles Willis White, Waco, Texas, U.S.A., 21st November, 1900; 6 years. (Filed 20th March, 1900.)

Claim.—1st. In a picking and cleaning machine provided with a suitable frame, a shaft mounted in said frame, a series of saws mounted on said shaft, a bar mounted in said frame above and behind said saws, elastic bars attached to said bar and projecting

down between said saws, said bars having the broad sides turned to said bar and then twisted so that the broad sides are also turned to said saws and the narrow edges turned to the material as it is fed to the saws whereby said saws are made elastic enough and strong enough to permit the feeding of the machine without choking the same, a brush for taking the picked material from said saws, and means for driving said saws and brush. 2nd. In a picking and cleaning machine provided with a suitable frame, a shaft mounted in said frame, a series of saws mounted on said shaft, a bar mounted on said frame, elastic bars attached rigidly at the upper ends to said bar and having the other ends free and projecting down between said saws, said bars having the broad sides turned to said bar and then twisted so that the broad sides are turned to said saws and the narrow edges are turned to the material as it is fed to the saws whereby said bars are made elastic enough and strong enough to permit the feeding of the machine and to prevent the choking of the same, means for feeding material to said saws consisting of a vibrating bar having bearings in the sides of said frame, arms attached to said bar, and a crank shaft to which said arms are attached, and means for driving said machine.

No. 69,448. Steering Propeller.

(Appareil a gouverner et de propulsion.)



Francis Harrington Glidden, Cleveland, Ohio, U.S.A., 21st November, 1900; 6 years. (Filed 16th March, 1900.)

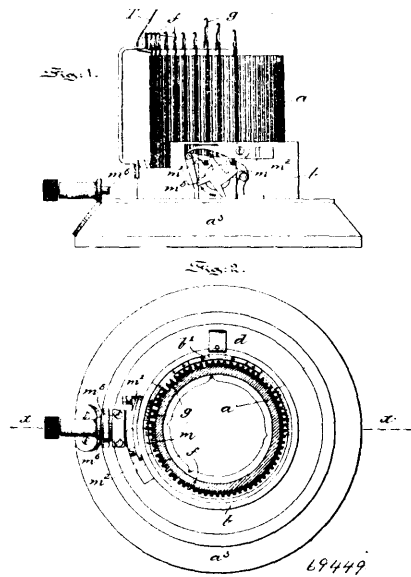
Claim.—1st. The attachment substantially as described consisting of the steering head and the swivel support therefor constructed to prevent the axial rotation of said head, the combined propelling and steering shaft supported at one end in said head and having a propelling wheel at the other end, drive mechanism for said shaft consisting of a power wheel and gear connections between the same and the said shaft, in combination with a boat carrying said parts, substantially as described. 2nd. A steering and propelling mechanism for a boat comprising a head piece having a handle and a swivel support therefor at its outer end adapted to prevent axial rotation of the head-piece on its swivel support, a shaft having its bearing in said head-piece and a propelling wheel on its outer end and a hand wheel and gear connections on said head piece to drive said shaft, substantially as described.

No. 69,449. Knitting Machine. (Machine a Tricoter.)

Henry Brown, Philadelphia, Pennsylvania, 21st November, 1900; 6 years. (Filed 8th February, 1900.)

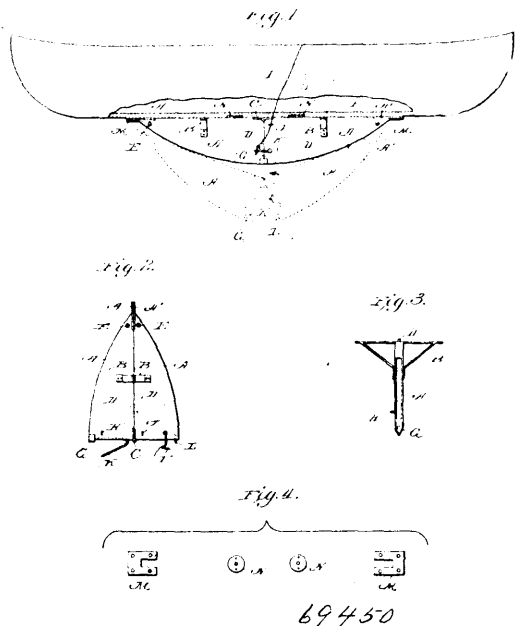
Claim.—1st. In a circular knitting machine provided with a single yarn feed, a set of short latch needles, a set of long latch needles, a cam ring carrying the yarn feed, a main cam carried by said cam ring and arranged at the point where said yarn feed is located, said main cam adapted to elevate both sets of needles at one revolution of the cam ring so that the latches of the short latch needles only are above the loops formed by said needles, and an auxiliary cam carried by the said cam ring and arranged in front of said main cam, said auxiliary cam adapted to be automatically raised at alternate revolutions of the cam ring so as to raise both sets of needles so that their latches are above the loops formed by both sets of the needles, substantially as and for the purposes described. 2nd. In a circular knitting machine having a cam cylinder, a single knitting cam and a single yarn feed carried by said cylinder, a series of short latch needles adapted to be operated to cast off their loops at each revolution of the cam cylinder, an auxiliary cam carried by said cylinder, means for raising and lowering

said auxiliary cam at alternate revolutions of said cylinder, and a series of long latch needles adapted to be elevated by the said auxil-



ary cam to allow the loops on said needles to pass below the latches only when said cam is raised at alternate revolutions of the cam cylinder, substantially as and for the purposes described.

No. 69,450. Centreboard for Boats. (Semelle de vaisseau.)



Charles James Smith, Holley, New York, U.S.A., 21st November, 1900; 6 years. (Filed 5th March, 1900.)

Claim.—1st. A centerboard composed of longitudinal sections hinged together, tongues at their outer ends adapted to removably enter sockets on the boat, a spring adapted to act upon the sections so as to withdraw the tongue from the sockets and thereby detach the board, and means for holding and releasing the sections, substantially as set forth. 2nd. A centreboard composed of longitudinal sections hinged together, tongues at their outer ends adapted to removably enter sockets on the boat, a spring interposed between the sections adapted to withdraw the tongues from the sockets, a hook and eye on the sections for locking the same, and means for releasing the hook, substantially as shown and described. 3rd. A centreboard composed of longitudinal sections hinged together, tongues at their outer ends adapted to removably enter sockets on the boat, a spring adapted to act upon the sections so as to withdraw the tongues from the sockets, means for holding and releasing the

sections, the laterally extending braces B B to bear against the bottom of the boat, reinforcing dowel pins D D, supporting clip G and dowel pin L at the lower meeting corners of the sections, substantially as shown and described.

No. 69,451. Production of Soluble Potassium Salts from Felspar. (*Production de sel de potassium de feldspath.*)

John Gustaf Adolf Rhodin, Manchester, Lancaster, England, 21st November, 1900; 6 years. (Filed 7th March, 1900.)

Claim.—The herein described process for the production of soluble potassium salts from felspar (orthoclase) said process consisting in its essential features in heating a finely powdered mixture, in suitable proportions, of felspar (orthoclase), lime, and common salt to a sufficient heat to cause re-action without melting or fusion, the chemical action depending upon the utilization of a semi-volatilized flux or conveyor, substantially as herein set forth for the purposes specified.

No. 69,452. Process of Producing Ethylene Gas. (*Procédé pour la production de gaz oléfiant.*)

James A. Deuther, Boston, Massachusetts, U.S.A., 22nd November, 1900; 6 years. (Filed 17th April, 1900.)

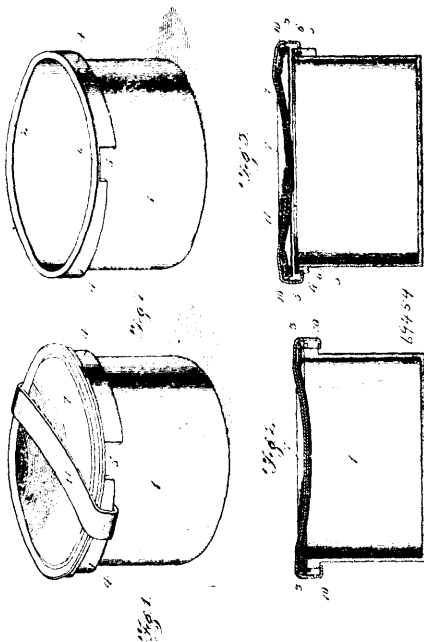
Claim.—The process of producing ethylene gas C_2H_4 , which consists in decomposing water H_2O , in the presence of a compound consisting of a compound such as described, composed of a metal capable of decomposing water, and the carbide of such metal whereby the nascent hydrogen transforms the generated acetylene into ethylene.

No. 69,253. Nitric Acid Manufacture. (*Fabrication d'acide nitrique.*)

John Fleming White, Buffalo, New York, U.S.A., 22nd November, 1900; 6 years. (Filed 5th May, 1900.)

Claim.—The herein described method of converting weak nitric acid into strong nitric acid in the process of manufacturing nitric acid from sodium nitrate and sulphuric acid, which method consists in adding the weak nitric acid to the charge of sodium nitrate and sulphuric acid and distilling the charge, substantially as set forth.

No. 69,454. Jar Closure. (*Fermeture de jarres.*)

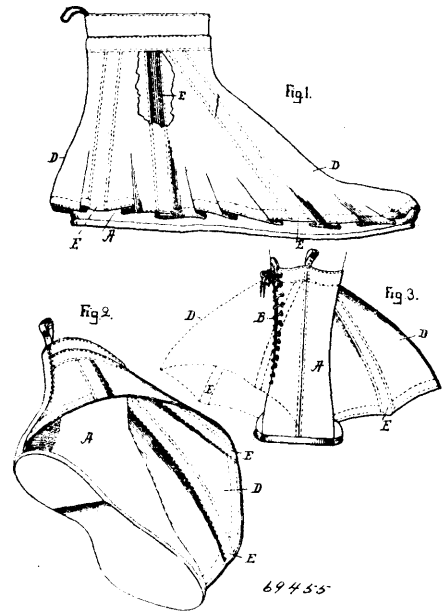


Mae Birney, New Whatcom, Washington, U.S.A., 22nd November, 1900; 6 years. (Filed 5th November, 1900.)

Claim.—The combination with a jar having a continuous, radially extending flange at its mouth and adjacent locking flanges forming continuations of the lower edge of the first-named flange, the locking flanges being separated at their ends by interspaces and having their lower edges slanted in the same direction rotatably of the jar, and the first-named flange extending radially to an extent equal to the radial extension of each locking flange, a cover adapted to rest upon the upper edge of the jar and having its upper face concave, and a rigid clamping plate having a central arc-shaped portion shaped to fit the depression of the cover, the ends of the plate being turned downwardly and inwardly to engage under the locking

flanges, and which inturred portions are of a width to enter and fit the interspaces between the locking flanges, and the separation of the ends of the inturred portions being greater than the separation of the rear walls of the interspaces and less than the diameter of the jar through the locking flanges, whereby, when the inturred ends are engaged with the flanges, they may be operated rotatably to draw the plate downwardly and clamp the cover on the jar, and when the inturred ends are engaged with the interspaces between the locking flanges the plate may be moved longitudinally to disengage one inturred end over the first-named flange.

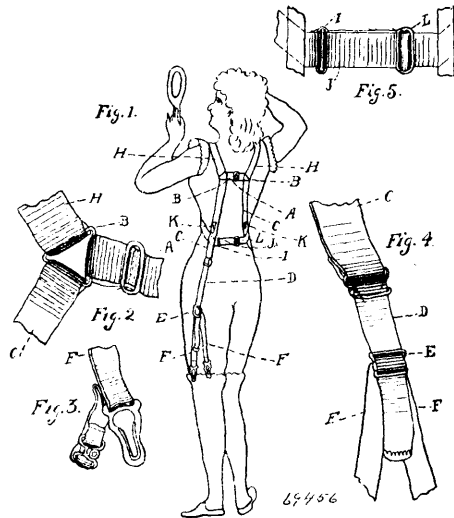
No. 69,455. Swimming Device. (*Appareil à nager.*)



Sone Albin Hessler, Boston, Massachusetts, U.S.A., 22nd November, 1900; 6 years. (Filed 31st October, 1900.)

Claim.—In combination with a boot or shoe upper, of an ankle or leg-closing band or covering, of an overlapping flap attached at its upper end to the top of said shoe upper, or ankle band, and at its front and rear edge to the front and rear portions respectively of said upper, ankle band or covering and a series of stays connected to the said flap and adapted to retain the same in extended position, substantially as and for the purpose set forth.

No. 69,456. Garment Supporter. (*Support de vêtement.*)

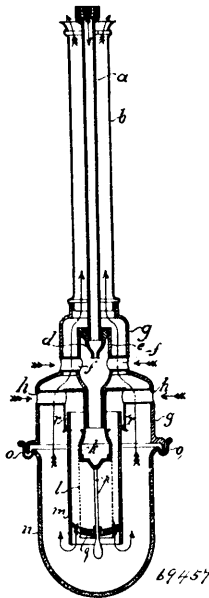


Mabel Florence Loving, St. Joseph, Missouri, U.S.A., 22nd November, 1900; 6 years. (Filed 3rd November, 1900.)

Claim.—1st. In a hose and skirt supporter and shoulder and body brace the combination with duplicate straps CC, of adjustable strap A, elastic tapes DD provided with hose connections, shoulder-straps HH, extending down the front and diagonally around the

sides of the person to connection with said straps CC at the back on a line below the waist, the ends of said straps forming adjustable loop J and adapted to be brought into connection across the back of the person at the hips, and the duplicate skirt-supporting hooks KK, attached to straps CC, the entire construction being adapted to hold the body of the wearer in an upright posture, substantially as described. 2nd. In a combined hose and skirt supporter and brace, the combination with the duplicate supporting straps of an adjustable strap adapted to connect said supporting straps back of the shoulders, an adjustable loop strap adapted to connect and retain said supporting straps back of the hips and the duplicate shoulder straps extended downward in front and at the sides of the person forming connection with said supporting straps back of the hips, substantially as described and for the purpose specified. 3rd. In a hose and skirt supporter and shoulder and body brace, the combination with the duplicate supporting straps of duplicate equilateral triangles carrying the same at their upper ends, of an adjustable strap also carried by said triangles connecting said supporting straps at the back between the shoulders, an adjustable loop strap adapted to connect said supporting straps back of the hips and duplicate shoulder straps also carried at their upper ends by said triangles, extended downward in front and at the sides of the person and forming connection with said supporting straps back of the hips below the line of the waist, substantially as described and for the purpose specified. 4th. In a combined hose and skirt supporter and brace the combination with the duplicate supporting straps of an adjustable strap adapted to connect and retain said supporting straps back of the hips, and the duplicate shoulder straps extended downward in front and at the sides of the person and forming connection with said supporting straps back of the hips, the elastic tapes at the lower ends of said supporting straps, provided with the necessary hooks, buckles, slides and hose connections, substantially as described and for the purpose specified.

No. 69,457. Incandescent Gas Lamp.
(Lampe incandescente à gaz.)



Richard Beese, Dresden, Saxony, German Empire, 22nd November, 1900; 6 years. (Filed 9th March, 1900.)

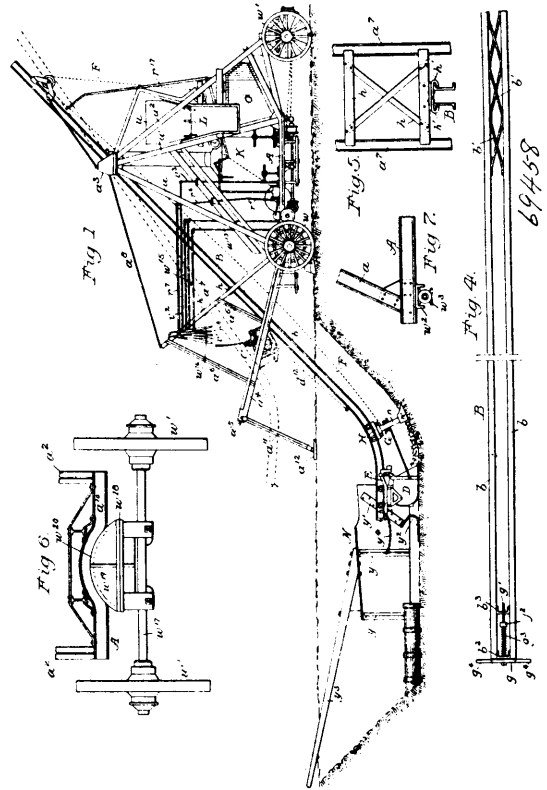
Claim.—1st. In an incandescent gas lamp, the combination of a downwardly burning burner flame, a stocking in connection therewith, a glass cylinder concentrically surrounding the same, a glass bell jar enclosing said cylinder and being in air tight connection with a waste leading pipe for the burnt gases, substantially as described. 2nd. In an incandescent gas lamp, the combination of a stocking I suspended with it narrowed end on the head of the burner, a supporting rod attached to the centre of the burner head and a perforated disc of magnesite fastened to said rod and closing the lower opening of the stocking, as and for the purpose specified.

No. 69,458. Excavating Apparatus. (Appareil à creuser.)

Harvey Childs Lowrie, Denver, Colorado, U.S.A., 22nd November, 1900; 6 years. (Filed 11th July, 1900.)

Claim.—1st. In an excavating apparatus, the combination of an incline having a scoop or other earthworking tool or tools supported and guided thereby and adapted to travel thereon, means for con-

trolling the earthworking tool or tools, and means whereby the said incline may be adjusted longitudinally without varying its inclina-



tion, and its inclination varied without varying its longitudinal adjustment, substantially as described. 2nd. In an excavating apparatus, the combination of an inclined trolley way, a scoop or other earthworking tool or tools supported and guided thereby and adapted to travel thereon, the said trolley way being slidably and pivotally supported at its upper end and suspended at its lower end by means of a rope or chain controlled by a windlass longitudinally movable with relation to the apparatus, whereby the said trolley way may be raised or lowered without varying its inclination, or its inclination varied without varying its vertical adjustment, substantially as described. 3rd. In an excavating apparatus, the combination of an inclined trolley way, a scoop or other earthworking tool or tools supported and guided thereby and adapted to travel thereon, the said trolley way being slidably and pivotally supported at its upper end and slidably connected at its lower end to a movable support, and means for supporting and moving said trolley way longitudinally, substantially as described. 4th. In an excavating apparatus, the combination of an inclined trolley way having a scoop or other earthworking tool or tools supported thereby and adapted to travel thereon, means for controlling the movements of said earthworking tool or tools, and means for automatically moving the lower end of said trolley way rearwardly during the ascent of the earthworking tool or tools, substantially as described. 5th. In an excavating apparatus, the combination of an inclined trolley way having a scoop or other earthworking tool or tools supported thereby and adapted to travel thereon, means for controlling the movements of the earthworking tool or tools, and means for automatically advancing the trolley way after each operation of the earthworking tool or tools, substantially as described. 6th. In an excavating apparatus, the combination of an inclined trolley way pivotally supported near its upper end and flexibly supported at its lower end so that a downward pull upon its upper end will correspondingly raise its lower end, a scoop or other earthworking tool or tools supported by and travelling upon said trolley way, a pulley connected to the trolley way above its pivotal support, a draft chain or rope attached to the earthworking tool or tools passing over said pulley and hence downwardly to a source of power, substantially as described. 7th. In an excavating apparatus, the combination of a main frame, a longitudinally adjustable inclined trolley way pivotally supported at its upper end and flexibly supported at its lower end, a scoop or other earthworking tool or tools supported by and travelling upon said trolley way, a pulley slidably connected to the upper end of the trolley way above its pivotal support, and a draft chain or rope attached to the earthworking tool or tools passing over said pulley and thence downwardly to a source of power, substantially as described. 8th. In an excavating apparatus, the combination of an inclined trolley way slidably and pivotally supported at its

upper end, a scoop or other earthworking tool or tools supported by and adapted to travel upon said trolley way, a carriage slidably connected to the trolley way and supported upon tracks above the lower end and in line with the swinging movements thereof, means for moving and locking said carriage upon its supporting tracks, a windlass or windlasses located upon said carriage, a chain or its equivalent connecting said windlass or windlasses with the lower end of the trolley way, a draft chain or rope attached to the earthworking tool or tools, said draft chain passing over a pulley connected to the trolley way above its pivotal support and thence downwardly to a source of power, substantially as described. 9th. In an excavating apparatus, the combination of an inclined trolley way having its upper end slidably supported in pivoted bearings, a carriage located above the lower end of said trolley way and slidably connected thereto, means for moving the carriage in lines practically parallel with the swinging movements of said trolley way, a windlass on said carriage, and a chain or rope connecting the windlass and the lower end of the trolley way, and a scoop or other earthworking tool or tools adapted to travel on said trolley way, substantially as described. 10th. In an excavating apparatus, the combination of an inclined trolley way slidably and pivotally supported at or near its upper end, a carriage located above the lower end thereof and slidably connected thereto, means for moving said carriage in lines practically parallel with the swinging movements of the trolley way and locking it against movement, means for supporting said trolley way longitudinally, a scoop or other earthworking tool or tools mounted upon said trolley way and adapted to travel thereon, and means for controlling the movements of said earthworking tool or tools, substantially as described. 11th. In an excavating apparatus, the combination of an inclined trolley way pivotally supported near its upper end, a movable carriage connected to said incline below its pivotal support, a scoop or other earthworking tool or tools mounted upon said trolley way and adapted to travel thereon, a pulley connected to the trolley way above its pivotal support, a draft chain or rope attached to said tool or tools, passing over said pulley and thence downwardly to a source of power, and a stop for limiting the backward movement of the carriage connected to the trolley way, substantially as described. 12th. In an excavating apparatus, the combination of an inclined trolley way pivotally supported at or near its upper end, a movable carriage connected to said trolley way below its pivotal support, means for locking said carriage against movement, a scoop or other earthworking tool or tools mounted upon said incline and adapted to travel thereon, a pulley connected to the upper end of the trolley way above its pivotal support, a draft chain or rope attached to said earthworking tool or tools passing over said pulley and thence downwardly to a source of power, substantially as described. 13th. In an excavating apparatus, the combination substantially as hereinbefore described, of a main frame, a longitudinally adjustable trolley way mounted in said frame, a self-dumping scoop mounted on said trolley way and adapted to travel thereon, mechanism for releasing the scoop dumping mechanism slidably mounted on said trolley way and permanently connected to the main frame of the apparatus, whereby the scoop will be dumped at a fixed point with relation to the main frame, regardless of the longitudinal adjustment of the trolley way. 14th. In an excavating apparatus, the combination substantially as hereinbefore described, of a main frame, a longitudinally adjustable trolley way mounted in said frame, a self-dumping scoop mounted upon said trolley way and adapted to travel thereon, a hopper also mounted in said frame, and mechanism for releasing the dumping mechanism of the scoop slidably connected to the trolley way and permanently connected to the main frame of the apparatus in proper relation to said hopper, whereby the scoop will discharge into said hopper regardless of the longitudinal adjustment of the trolley way. 15th. In an excavating apparatus, the combination of an inclined trolley way, a self-dumping scoop adapted to travel thereon, means carried by the scoop for maintaining it in its working position, a draft chain or rope for hauling the scoop up the trolley way, a latch for holding the scoop at the upper end of the trolley way adapted to be released by the action of the scoop in dumping, and means for releasing the dumping mechanism of the scoop, substantially as described. 16th. In an excavating apparatus, the combination of ploughs adapted to travel back and forth upon a suitable support and trim the sides of a trench, and means for moving and holding the ploughs in proper working position when travelling in one direction and withdrawing them from the sides of a trench when travelling in an opposite direction, substantially as described. 17th. In an excavating apparatus, the combination of a scoop adapted to travel back and forth upon a suitable support, ploughs travelling with said scoop in advance thereof adapted to trim the sides of a trench, and means for automatically moving and holding said ploughs in position to trim the sides of a trench wider than the width of the scoop during the forward movement of the latter, and automatically withdraw the same away from the sides of the trench when travelling in the opposite direction, substantially as described. 18th. In an excavating apparatus, the combination of a trolley way, a scoop supported thereby and adapted to travel back and forth thereon, ploughs travelling with said scoop in advance thereof adapted to trim the sides of a trench, and means for automatically moving and holding said ploughs in working position during the advance movement of the scoop and automatically moving the same away from the sides of the trench during the return movement thereof, substantially as described. 19th. In an excavating

apparatus, the combination with a scoop or other earth working tool adapted to travel back and forth upon a suitable support, ploughs mounted in advance of said scoop or other earth working tool and adapted to trim the sides of a trench, the said ploughs being carried by arms pivoted to swing in lines transverse to the line of draft, a pair of toggle joints connecting said arms and moving in opposite directions, a draft chain or rope connected to the knuckle of one of said toggle joints, the other of said toggle joints being connected to the scoop or other earth working tool, whereby a pull upon said draft chain or rope will cause the arms carrying the ploughs to be thrust apart, and a spring for drawing said arms together, substantially as described. 20th. In an excavating apparatus, the combination of a trolley way, a trolley carriage adapted to travel thereon, a scoop carried by said trolley carriage adapted to swing in a line parallel to the line of draft and to normally hang in its dumping position, latching mechanism for maintaining the scoop in its working position, mechanism for releasing said latching mechanism, and a draft chain or rope attached to said scoop at or near its lower front portion, whereby a pull upon said draft chain will cause the scoop to be engaged by its latching mechanism, substantially as described. 21st. In an excavating apparatus, the combination of an inclined trolley way, a trolley carriage adapted to travel back and forth thereon, a scoop carried by said trolley carriage adapted to swing in lines parallel to the line of draft and to normally hang in its dumping position, latching mechanism for maintaining the scoop in its working position, a latch carried by the trolley carriage, a keeper at the upper end of the trolley way for engaging said latch, means whereby said latch is automatically released by the action of the scoop in dumping, and means for releasing the dumping mechanism of the scoop, substantially as described. 22nd. In an excavating apparatus, the combination of a main frame, an inclined trolley way slidably and pivotally supported at its upper end, means for varying the inclination and longitudinal adjustment of said trolley way, and a yoke slidably mounted in the main frame at right angles to the trolley way and slidably connected therewith for preventing lateral motion thereof, substantially as described. 23rd. In an excavating apparatus, the combination of a trolley way having a scoop or other earth working tool or tool supported thereby and adapted to travel thereon, a windlass, a draft chain attached to said earth working tool or tools and to said windlass, an engine for driving said windlass, and a lever or levers mounted in the path of said tool or tools for controlling the supply of steam to the engine, substantially as described. 24th. In an excavating apparatus, the combination of an inclined trolley way, a scoop or other earth working tool or tools supported thereby and adapted to travel thereon, and a hood or shield connected to the lower end of said trolley way for preventing the path of the scoop from becoming clogged at the bottom of the trolley way by a caving in of the side walls of a trench, substantially as described. 25th. In an excavating apparatus, the combination of an inclined trolley way having an outwardly curved lower end, a trolley carriage adapted to travel back and forth thereon, a scoop suspended from said trolley carriage adapted to swing in a line parallel to the line of draft and normally hang in its dumping position, latching mechanism for engaging and holding said scoop in its working position, and a draft chain or rope working in a line practically parallel to the trolley way and attached to the scoop below its pivotal point, substantially as described. 26th. In an excavating apparatus, the combination with a main frame, of two sets of carrying wheels arranged at right angles to each other, one set being readily detachable from said frame and having their tread surface below that of the other set, an engine mounted upon said frame, and means for operatively connecting and disconnecting the wheels of either set with the driving shaft of said engine, substantially as described. 27th. In an excavating apparatus, the combination of a main frame, an inclined trolley way slidably and pivotally supported at its upper end, a carriage slidably connected to said trolley way supported upon tracks located above the lower end of said trolley way in line with the swinging movements thereof, racks secured to said tracks, a driving shaft mounted in said carriage carrying pinions meshing with said racks, a hand lever for operating said driving shaft, a brake for locking said shaft against rotation, a windlass carried by said carriage, means for operating said windlass, a chain or rope connected to the lower end of the trolley way and to said windlass, a self-dumping scoop trolley mounted upon said trolley way, scoop dumping mechanism slidably connected to the trolley way and permanently connected to the frame of the apparatus, a hopper located in proper relation to the scoop dumping mechanism, a pulley slidably connected to the trolley way above its pivotal support and permanently connected to the main frame, and a draft chain or rope attached to said scoop and passing over the pulley at the upper end of the trolley way and downward to a source of power, substantially as described.

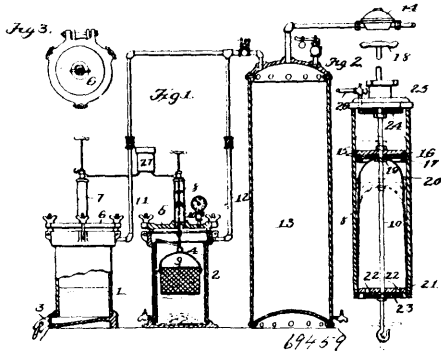
No. 69,459. Acetylene Gas Generator.

(Générateur à gaz acétylène.)

Thomas Andrew Bryan, Baltimore, Maryland, U.S.A., 22nd November, 1900; 6 years. (Filed 28th May, 1900.)

Claim.—1st. In a gas generator, the combination of a generating chamber constructed to contain water, provided on the top with a dome approximately hemispherical, and having upon the interior of the dome a flexible hemispherical diaphragm or section, correspond-

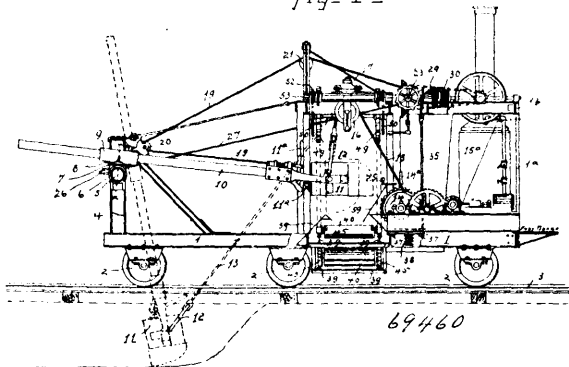
ing in form with the interior of the dome, by which it will be supported throughout its entire surface when under gas pressure,



and a carbide carrying device suspended from the flexible section or diaphragm, which by the increase of gas pressure within the generator will permit the carbide receptacle by its weight to dip into the water and generate gas, and which as the gas pressure increases will be expanded and lift the carbide receptacle out of the water and stop the generation of gas. 2nd. In an acetylene gas generator, the combination of a generating chamber constructed to contain water with a spherical chamber mounted upon it and in communication with it, a flexible hemispherical diaphragm secured transversely of the spherical chamber, and conforming in shape with the interior of the spherical chamber when in its two extreme positions, up and down, and a carbide receptacle suspended from the diaphragm, substantially as described. 3rd. In an acetylene gas generator, the combination of a gas generator constructed to contain water, a spherical chamber mounted upon it and in communication with it, a flexible hemispherical diaphragm secured transversely to the spherical chamber and conforming in shape with the interior of the spherical chamber when in either of its two extreme positions, up or down, and a carbide receptacle suspended from the diaphragm and a valve mounted upon the suspensory rod of the carbide receptacle, which is adapted to close the communication between the generator and the chamber when the diaphragm is at its position of extreme elevation. 4th. In an acetylene gas generator, the combination of a gas generating chamber constructed to contain water, having a cylinder mounted upon it and in communication with it, a cup-shaped piston of flexible material in the cylinder and fitted tightly enough therein to be expanded as the pressure in the cylinder increases, and a piston rod passing through the top of the cylinder and extending below the piston, and a carbide receptacle suspended over the lower end of the piston rod, substantially as described. 5th. In an acetylene gas generator, the combination of a gas generating chamber constructed to contain water, having a cylinder mounted upon it and in communication with it, a cup-shaped piston constructed of flexible material in the cylinder, and fitting tightly enough therein to be expanded, as the pressure in the cylinder increases, and a piston rod passing through the top of the cylinder and extending below the piston, and a carbide receptacle suspended over the lower end of the piston rod, and a flexible sack secured at its lower end to the lower end of the cylinder and at its bottom end to the piston, the piston rod passing through its centre, substantially as described.

No. 69,460. Excavating Machine. (Machine à creuser.)

Fig-1 -



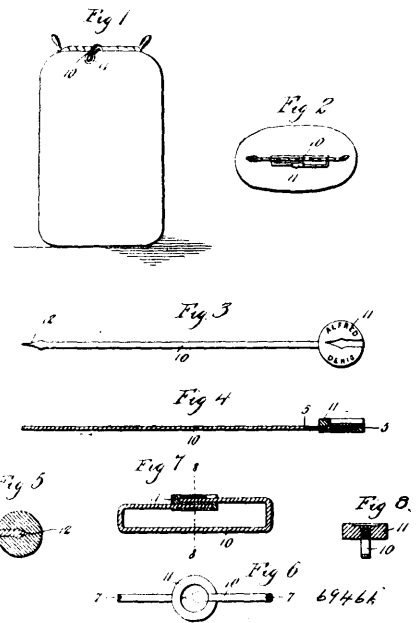
John H. W. Libbe, Toledo, Ohio, U.S.A., 22nd November, 1900; 6 years. (Filed 23rd May, 1900.)

Claim.—1st. In an excavating machine, a horizontal beam at the front of the machine, a dipper and dipper arm mounted upon said

beam, and means for shifting the dipper arm laterally along said beam. 2nd. In an excavating machine, a dipper and dipper arm, a horizontal beam at the front of the machine, connections between the dipper arm and the beam, and means for moving said dipper arm longitudinally and transversely on said horizontal beam. 3rd. In an excavating machine, a horizontal beam at the front of the machine, a dipper and dipper arm, a swivelled connection between the beam and dipper arm, means for reciprocating the dipper arm longitudinally, and means for shifting the dipper arm bodily along the arm. 4th. In an excavating machine, a cylindrical beam along the front of the machine, a sleeve loose thereon, a dipper arm, a sleeve loose on the dipper arm, swivelled connections between said two sleeves, means for tilting and sliding said first-mentioned sleeve on the beam, and means for sliding the dipper arm in its sleeve. 5th. In an excavating machine, a beam extending along the front of the machine, a plurality of dippers and dipper arms operatively mounted upon said beam, and means for actuating said dipper arms. 6th. In an excavating machine, a beam extending along the front of the machine, a series of dippers operatively mounted upon said beam and adapted to cut toward the machine, a travelling apron or carrier running parallel with said beam, and means for swinging said dippers above the carrier and for dumping their contents upon the carrier. 7th. In an excavating machine, a travelling apron or carrier, a series of dippers arranged parallel therewith, arms or handles for said dippers, means for projecting and retracting said arms, means for shifting said arms laterally, means for swinging said arms in vertical planes, means for swinging the dippers above the carrier, and means for dumping the contents of the dippers upon the carrier. 8th. In an excavating machine, a dipper and dipper arm, a series of clutches adapted and arranged to control the movements of said dipper and dipper arm, a tilting platform for the operator, and connections between said platform and one of said clutches. 9th. In an excavating machine, an apron or carrier comprising a series of trough-like sections pivoted or hinged together at their straight meeting edges, a plate secured to each end of each of said trough-like sections, a wheel for each of said plates, two tracks, one above the other, for said wheels, sprocket wheels to propel said carrier, combined with excavating mechanism adapted to discharge upon said carrier and means for controlling said carrier and said excavating mechanism. 10th. In an excavating machine, a frame having mounted at the rear thereof the engines and gearing, an endless apron or carrier, two tracks, one above the other for the support of the carrier, said tracks leading from end to end of the frame, a series of dippers adapted to discharge upon said carrier, and a series of dipper arms for said dippers operatively supported at the front of said machine, said supports being arranged in parallel relation with the carrier.

No. 69,461. Means of Sealing Sacks.

(Moyen de sceller les sacs.)

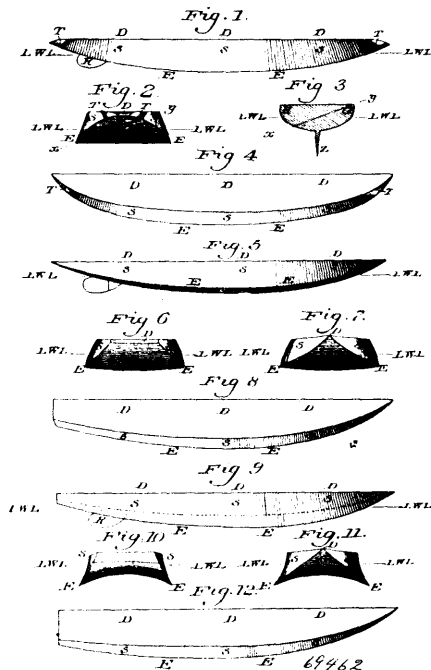


Alfred Denis, St. Hyacinthe, Quebec, Canada, 22nd October, 1900; 6 years. (Filed 31st October, 1900.)

Claim.—1st. The combination with a bag or sack, of a seal having a bendable strip united by a soft metal body or disc, substantially as described. 2nd. A bag seal comprising a bendable strip, and a soft metal disc or body united thereto, substantially as described. 3rd. A bag seal comprising a bendable strip, and a soft metal body

or disc united permanently by an interlocking key connection, substantially as described. 4th. A bag seal comprising a bendable strip having a pointed extremity, and a soft metal disc united permanently to the other extremity of said strip, substantially as described. 5th. A bag seal comprising a bendable strip having at each end a spear shaped head, and a soft metal body or disc permanently united to the spear shaped head at one end of said strip by interlocking key connection, substantially as described. 6th. The combination with a folded bag mouth, of a seal having a bendable strip engaging at a number of points with the bag mouth the ends of said bendable strip being permanently united by a compressed body or disc, substantially as described. 7th. The combination with a folded bag mouth, of a seal having a bendable strip which is passed through the bag mouth at a number of points, the two ends of said strips being united permanently together by a soft metal body or disc which is compressed around said ends of the strip, substantially as described.

No. 69,462. Hull for Ships and Boats.
(Coque de vaisseaux.)



Cipriano Andrade and Alfred Day Pardee, both of Haverford, Pennsylvania, U.S.A., 22nd November, 1900; 6 years. (Filed 17th July, 1900.)

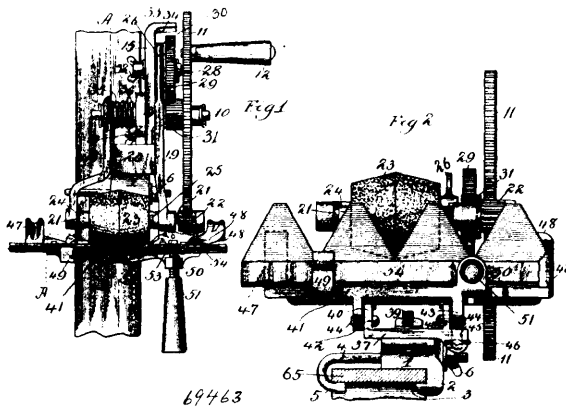
Claim.—1st. In the hull of ships and boats, a substantial edge (whose lateral aspect is a straight line, or a broken line or curve whose midship portion is lower its forward or after end), formed by the intersection of the hull's bottom with a side disclosing a deck narrower than said bottom in the transverse section.

No. 69,463. Grinding Machine. (Machine à aiguiser.)

The Plano Manufacture Company, Chicago, Illinois, assignee of James Macphail, Blue Island, Illinois, U.S.A., 22nd November, 1900; 6 years. (Filed 14th March, 1900.)

Claim.—1st. A grinding machine comprising a grinding wheel, a pivoted frame carrying the wheel at one end and having an extended portion at the other end beyond the pivotal point, an eccentric co-operating with such extended portion to vibrate such frame, a frame carrying such eccentric and adjustable in position to vary the position of arc of vibration. 2nd. A grinding device comprising a vibrating grinding wheel frame a grinding wheel therein, mechanism for vibrating the frame, a driving wheel operating said mechanism and simultaneously rotating the grinding wheel and means for throwing said mechanism out of operation and simultaneously locking said mechanism. 3rd. A grinding device comprising a base portion or support, a main stud in such support, a rotatable grinding wheel, a frame pivoted on said stud, carrying at one end the grinding wheel and having an extension at the other end beyond its pivotal point, an adjustable eccentric contacting such extension to vibrate the frame and the grinding wheel, a gear actuating the eccentric, a main driving gear wheel rotating the grinding wheel and having a pinion meshing with the eccentric actuating gear. 4th. A grinding machine comprising a base portion or support, a main stud therein, a rotatable grinding wheel, a frame pivoted on said stud, carrying at one end the grinding wheel and

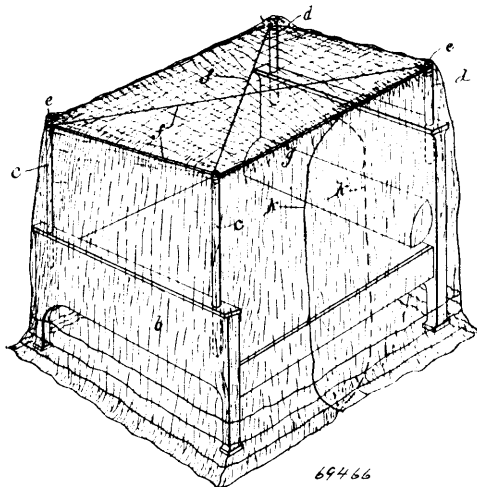
having a bifurcated arm extending beyond its pivotal point, an adjustable eccentric located between the bifurcations of said arm



and adapted to vibrate the frame, a gear wheel actuating said eccentric, and a main driving gear wheel arranged on the main stud, and adapted to rotate the grinding wheel and having a pinion to actuate the eccentric actuating gear wheel. 5th. A grinding machine comprising a standard or support, a main stud therein, a rotatable grinding wheel, a frame pivoted on said stud, carrying at one end the grinding wheel and having a bifurcated arm extending beyond its pivotal point, an eccentric located between the bifurcations of said arm and adapted to vibrate the frame, a gear wheel actuating said eccentric, means for removing it from mesh from its driving pinion to prevent vibration of the frame and a main driving gear wheel adapted to rotate the grinding wheel and having a pinion to actuate the eccentric actuating gear wheel. 6th. A grinding machine comprising a standard or support, a main stud on said standard, a grinding wheel, a frame pivoted on the stud and carrying the grinding wheel at one end and having an extension on its opposite end beyond its pivotal point, a bell crank shaped lever pivoted on the main stud, one arm being substantially horizontal and projecting parallel to said extension of the frame, such arm having a longitudinal slot, a stud adjustable in said slot, an eccentric mounted on such shaft and a driving wheel for simultaneously rotating the grinding wheel and the eccentric to vibrate the frame. 7th. A grinding machine comprising a standard or support, a main stud therein, a grinding wheel, a frame pivoted on the stud and carrying the grinding wheel at one end and having an extension on its opposite end beyond its pivotal point, a bell crank shaped frame pivoted on said stud and adjustable with respect to the standard, an eccentric journaled in one of the arms of the bell crank shaped frame and adapted to contact said extension of the grinding wheel frame to vibrate the same and means for rotating the grinding wheel and for rotating the eccentric to vibrate the grinding wheel frame. 8th. A grinding machine comprising a standard or support, a main stud therein, a rotatable grinding wheel, a frame pivoted on the stud and carrying the grinding wheel at one end and having an extension on its opposite end beyond its pivotal point, a bell crank shaped frame pivoted on said stud and having one of the arms thereof projecting downward adjacent to said standard and provided with a slot, a clamping bolt passing through the standard and received by said slot to hold said bell crank shaped frame in adjusted positions, the other arm thereof extending rearwardly substantially horizontal and provided with a slot, a stud adjustable in said last named slot, a gear wheel provided with an eccentric and mounted on last named stud, such eccentric contacting said extension of the grinding wheel frame, a main driving gear rotating the grinding wheel, and a pinion intermediate such driving gear wheel and the eccentric provided gear wheel. 9th. A grinding machine, comprising a standard or support, a main stud mounted therein, a rotatable grinding wheel, a frame pivoted on the stud and carrying the grinding wheel at one end and having a bifurcated extension on its opposite end beyond its pivotal point, an arm mounted on said stud and extending rearwardly, a gear wheel, an eccentric thereon embraced by said bifurcated extension to vibrate the grinding wheel frame, a stud for said gear wheel and adjustably mounted in said arm, a driving wheel rotating the grinding wheel and having a pinion meshing with said gear wheel, and a projection on said arm to engage in and lock said gear wheel when adjusted out of mesh. 10th. A grinding machine, comprising a base, a vibrating grinding wheel frame mounted thereon and having a bifurcated extension, an eccentric embraced by such extension and having a stud, a bracket arranged on the base and having a slot in which the stud is adjustably secured, driving mechanism for operating said eccentric, and a lug or tooth on said bracket adapted to engage the eccentric when adjusted out of operation with the driving mechanism, whereby the eccentric is held in different positions to adjust and hold the frame from vibrating and at different altitudes. 11th. A grinding machine, comprising a standard or support, a main stud therein, a rotatable grinding wheel, a frame pivoted on the stud and carrying the grind-

a second drawing hole, thereby forming the second strip into a pipe inclosing the first one, and repeating the described operation as many times as is necessary for forming walls of the proper thickness, which walls are welded together, thereby forming one solid wall.

No. 69,166. Bedstead. (Bois de lit.)

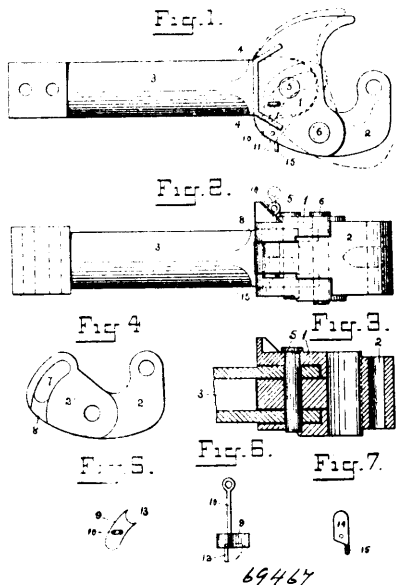


69466

John Grant, Farnham, Quebec, Canada, 23rd November, 1900; 6 years. (Filed 7th November, 1900.)

Claim.—1st. A canopy frame consisting of a series of standards, length of wire, cord, or the like, stretched between the tops of said standards to form sides and ends and diagonally from corner to corner to form guys or stays, and net material extending over the top of said frame and hanging from all sides thereof, substantially as described and for the purpose set forth. 2nd. A canopy frame consisting of four standards, a single length of wire, cord, or the like stretched around the tops of said standards to form sides and ends, and diagonally between all corners to form guys or stays, and net material extending over the top of said frame and hanging from all sides thereof, substantially as described and for the purpose set forth. 3rd. A canopy frame consisting of four standards, a single length of wire, cord, or the like stretched around the tops of said standards to form sides and ends, and diagonally between all corners to form guys or stays a length *g* of wire, cord or the like, stretched between the standards at one side, net curtains *k* hung from and movable along said length *g*, and net material extending over the top of said frame and hanging from all sides except the curtained side thereof, substantially as described and for the purpose set forth.

No. 69,567: Car Coupler. (Attelage de chars.)

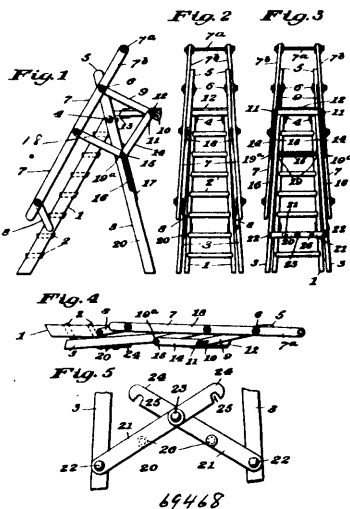


69467

Andrew J. Beard, East Lake, Alabama, U.S.A., 23rd November, 1900; 6 years. (Filed 5th November, 1900.)

Claim.—1st. In a car coupling, the combination of a draw bar, a draw head pivotally secured to the said draw bar by a pin, a knuckle pivoted to said draw head, and provided with a tail wing, a slot in the said tail wing through which the said pin passes, and means to automatically lock the said tail wing by blocking the said slot, substantially as described. 2nd. In a car coupling the combination of a draw bar, a draw head pivotally secured to the said draw bar by a pin, a knuckle pivoted intermediate, its end provided with a tail wing, a curved slot in the said tail wing, through which the said pin passes, a curved groove in extension of the said slot, and means to automatically lock the said tail-wing by blocking the said slot, substantially as described. 3rd. In a car coupling combination of a draw bar, a draw head pivotally secured to said draw head by a pin, a knuckle pivoted at its centre and provided with a tail wing, a curved slot in the said tail wing through which the said pin passes, a curved groove in extension of the said slot, and a gravity lock nut adapted to rest in the said groove and drop into the said slot, substantially as described. 4th. In a car coupling the combination with a draw bar, a recessed draw head and their pivot pin, of a pivoted knuckle provided with a slotted and grooved tail wing, which swings within and around said pivot pin, which passes through the slot, an automatic gravity lock nut contained within the said recess, the said nut riding in the said groove when the coupling head is open and dropping into the said slot when the coupling head is closed, to lock the same, substantially as described. 5th. In a car coupling the combination with a draw bar, a draw head, their pivot pin, and a slotted tail wing, of a gravity lock nut conforming in contour with the slot and having its forward bearing face grooved out to correspond with the curved surface of the pivot pin against which it bears, and a stem for said nut passing through a slot in the draw bar and through the draw head, substantially as described. 6th. In a car coupling the combination with a draw-bar, a draw head and knuckle having a slotted tail wing pivotally attached thereto, of a gravity lock nut having pivotally connected supporting pin adapted to fold therein, a tripping lever pivotally connected to the head, the lever adapted to trip the supporting pin and drop the lock nut, substantially as and for the purpose described.

No. 69,168. Step Ladder. (Echelle à marches.)



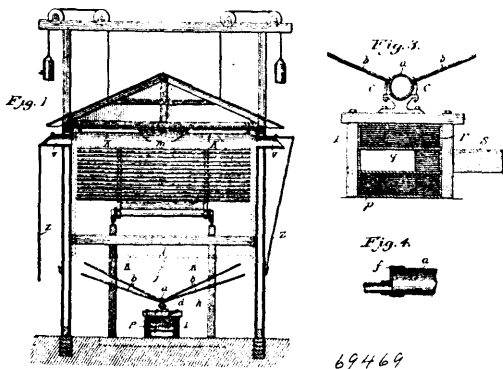
69468

Montiz Eichler, Carthage, Ohio, U.S.A., 23rd November, 1900; 6 years. (Filed 5th November 1900.)

Claim.—1st. In a ladder the combination of a body, props pivotally connected thereto, a hand rail carried by the body and adapted to be raised and lowered, mechanism for moving the props away from each other and means controlled by said prop moving mechanism for holding the hand rail in raised position, substantially as set forth. 2nd. In a ladder the combination of a body, props pivotally connected thereto, a bucket rest carried by the body and adapted to be raised and lowered, mechanism for moving the props away from each other and means controlled by said prop moving mechanism for holding the bucket rest in raised position, substantially as set forth. 3rd. In a ladder, the combination of a body, props pivotally connected thereto and levers each pivotally connected at one end to one of the props and provided with a pin, the levers being pivotally connected and provided with hook like parts for engagement with said pins to stop the levers against pivotal movement when the props are forced apart, substantially as set forth. 4th. In a ladder the combination of a body, props pivoted thereon, a hand rail pivotally connected to the body, a bucket rest also pivotally connected to the body, a cross bar guided on the props, toggle links connecting the cross bar to the hand rail and bucket rest and means for holding said cross bar against move-

ment, substantially as set forth. 5th. In a ladder, the combination of a body, props pivoted thereon, a hand rail pivotally connected to the body, a bucket rest also pivotally connected to the body, a cross bar guided on the props, toggle links connecting the cross bar to the hand rail and bucket rest, means for forcing the props away from each other, and a device controlled by said means and arranged to hold said cross bar against movement on the props, substantially as set forth. 6th. In a ladder, the combination of a body, props pivoted thereon, a hand rail pivotally connected to the body, a bucket rest also pivotally connected to the body, a cross bar guided on the props and having heads at its ends, toggle links connected, respectively, to the hand rail and bucket rest, and held on the ends of the cross bar between the said heads and the sides of the props and means for forcing the props away from each other to clamp the links between them and the heads of the cross bar, substantially as set forth. 7th. In a ladder, the combination of a body, props pivotally connected thereto, a bucket rest also pivotally connected to the body, a link having one end pivotally connected to the bucket rest and having its opposite end arranged for sliding engagement with the props to permit the bucket rest to be moved pivotally upon the body, and means for holding the link against sliding movement when the bucket rest is moved in position for use, substantially as set forth. 8th. In a ladder, the combination of a body, props pivotally connected thereto, a bucket rest also pivotally connected to the body, a connection between the props and the bucket rest whereby the latter is raised and lowered into and out of position for use when the props are moved pivotally upon the body, a link having one end pivotally connected to the bucket rest and having its opposite end arranged for sliding engagement with the props and means for holding the link against sliding movement when the bucket rest is moved into position for use, substantially as set forth. 9th. In a ladder the combination of a body, props pivotally connected thereto, a bucket rest also pivotally connected to the body, a connection between the props and the bucket rest whereby the latter is raised and lowered into and out of position for use when the props are moved pivotally on the body, means for forcing the props away from each other, a link connected at one end to the bucket rest and having its opposite end arranged for sliding engagement with the props, and means actuated by the movement of the props away from each other, for holding said link against sliding movement on the props, substantially as set forth. 10th. In a ladder the combination of a body, props pivotally connected thereto, a hand rail also pivotally connected to the body, a connection between the props and the hand rail whereby the latter is raised and lowered when the props are moved pivotally on the body, a link having one end pivotally connected to the hand rail and having its opposite end arranged for sliding engagement with the props and means for holding the link against sliding movement upon the props when the hand rail is raised, substantially as set forth. 11th. In a ladder, the combination of a body, props pivotally connected thereto, a hand rail also pivotally connected to the body, a connection between the props and the hand rail whereby the latter is raised and lowered when the props are moved pivotally on the body, means for forcing the props away from each other, a link connected at one end to the hand rail and having its opposite end arranged for sliding engagement with the props, and means actuated by the movement of the props away from each other for holding said link against sliding movement upon the props substantially as set forth.

No. 69,469. Dry Kiln. (Four à sécher.)



69469

Alonzo Henry Simms, Birmingham, Alabama, U.S.A., 23rd November, 1900; 6 years. (Filed 26th April, 1900.)

Claim.—1st. In a kiln, the combination with a heating pipe, of a cold air flue beneath the pipe, said flue sub-divided into two or more independent chambers, these chambers super-imposed one above the other, and extending successively one beyond the other. 2nd. In a kiln, the combination with a main header pipe carrying a series of radiating pipes, of a cold air flue beneath the header, said flue sub-divided into two or more independent chamber, these chambers

super-imposed one above another and extending successively one beyond another. 3rd. In a kiln, the combination with a header carrying a series of radiating pipes and mounted or supported throughout its length upon anti-friction bearings, of bolts hooked over certain of the radiating pipes for securely fastening the header in place at that point while expansion and contraction takes place throughout the remainder of the length of the header upon the anti-friction bearings which support it. 4th. In a kiln, a cold air flue composed of two or more super-imposed compartments, one extending beyond the next one above and said compartments perforated on their upper surfaces and doors or shutters at the outer end of each flue compartment for the regulation of the air supply thereto. 5th. The combination with a suitable support, of a header thereon, said header carrying radiating pipes, and eye bolts secured to certain of the radiating pipes for securing the header at one end upon its support, and rollers upon which the header rests. 6th. In a kiln, the combination with a main header pipe and radiating pipes extending therefrom, of cold air ducts extending from a common point and divided into separate compartments for discharging at different points immediately beneath the header pipe, valves for these compartments and hot air dampers at the upper end of the kiln for the discharge of heated air therefrom. 7th. In a kiln, the combination with a main header pipe of cold air ducts extending in proximity thereto, said ducts of varying lengths and perforated for the escape of air, and extending to a common point, and valves for the outer ends of these ducts. 8th. In a kiln, the combination with a header wholly located within the kiln and supported upon anti-friction bearings throughout its length, and sets of inclining, diverging, radiating pipes extending from each side of the header pipe, which balance the latter axially upon the bearings, of means located at one end for rigidly securing it in place, and a steam pipe passing from the exterior into the kiln and discharging into the header in close proximity to the point where the header is secured, whereby no strain is felt upon the wall of the kiln due to the expansion and contraction of the header.

No. 69,470. Ore Roasting Furnace.

(Fournaise à calciner les minerais.)

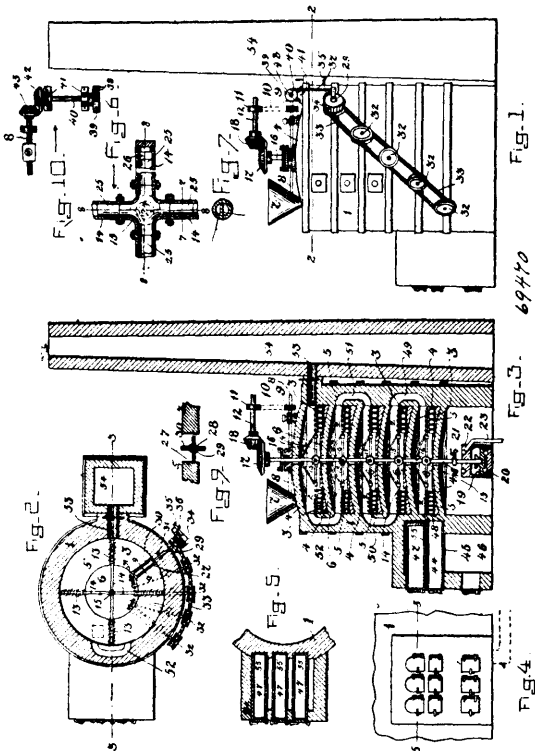


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

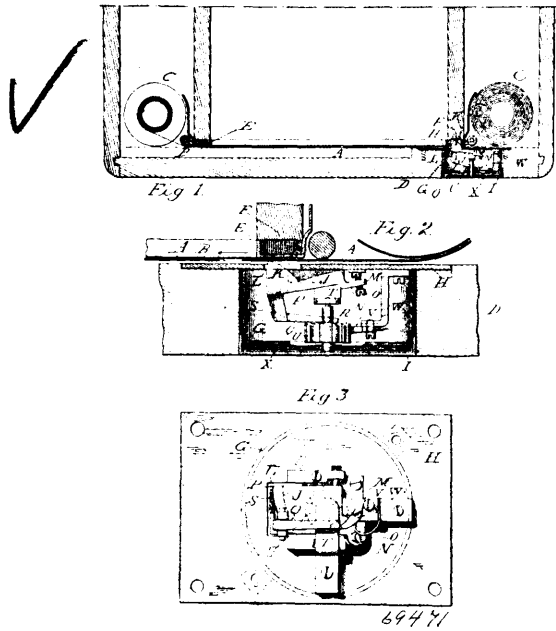
69470

Harrison B. Meech, Denver, Colorado, U.S.A., 23rd November, 1900; 6 years. (Filed 10th October, 1899.)

Claim.—1st. A furnace for roasting ores, having two or more ovens, each of said ovens having an opening in the bottom or bed thereof, and a shaft with longitudinal blades located in each of said openings, said shafts extending through the wall of said furnace, and mechanism for simultaneously rotating said shafts from the outside of said furnace, substantially as described. 2nd. A furnace for roasting ores, having two or more ovens, each of said ovens having an opening in the bottom or bed thereof, a shaft with longitudinal blades located in each of said openings, said shafts extending through the wall of said furnace, a sprocket wheel fast to each of said shafts, a sprocket chain connecting said sprocket wheels and means attached

to one of said shafts for rotating the same. 3d. A furnace for roasting ores having two or more ovens, each of said ovens having an opening in the bottom or bed thereof, a shaft with longitudinal blades located in each of said openings, said shafts extending through the wall of said furnace, a sprocket wheel fast to each of said shafts, a sprocket chain connecting said sprocket wheels, and a pawl and ratchet mechanism connected to one of said shafts, whereby all of said shafts with longitudinal blades are simultaneously rotated.

No. 69,471. Camera Indicator. (Indicateur de camera.)

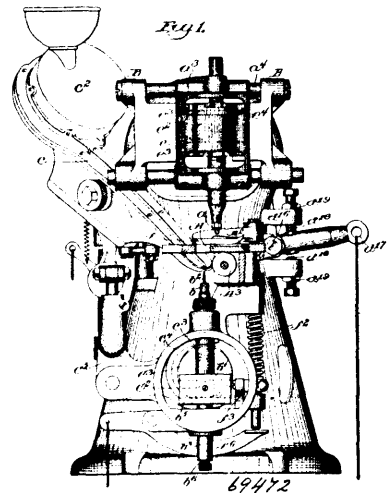


Arthur W. McCurdy, Washington, Columbia, U.S.A., 23rd November, 1900; 6 years. (Filed 24th October, 1899.)

Claim.—1st. In a camera or roll holder, the combination of a suitable indicating device, a lever for actuating the same and a spring for moving said lever across the path of travel of the film and by said movement causing a positive actuation of the indicator, substantially as described. 2nd. In a camera or roll holder, the combination of a suitable indicating device, a lever for actuating the same, said lever having a movement out into the path of travel of a film, and means for yieldingly holding said lever in contact with the film, and causing it to pass through openings in the film and by said movement to actuate the indicator, substantially as described. 3rd. In a camera or roll holder, the combination of a film support, an indicating device, a lever for actuating said indicating device, and means for moving said lever toward said film support across the path of travel of the film and by said movement actuating the indicator. 4th. In a camera or roll holder, the combination of a suitable indicating device, and means adapted to actuate the same extending out into the path of travel of a film, said means being so arranged and adapted that it will normally rest on one surface of the film and hold the indicating mechanism out of action, but will move and actuate the same when released by the film, substantially as described. 5th. In a camera or roll holder, the combination of a film support, and a registering device projecting toward said support across the path of travel of a film, said device being adapted to move back from said support by a perforated film, substantially as described. 6th. In a camera or roll holder, the combination of a film support, an indicating device, a lever for actuating said indicating device movable towards and from said support across the path of travel of the film, a spring for throwing said lever toward the film support and thereby actuating the indicator, and means, substantially such as described, for holding the indicator against backward rotation. 7th. In a camera or roll holder, the combination of a film support, an indicating device, a lever for actuating the same, said lever being movable toward and from said support across the path of travel of the film, a spring for throwing said lever toward the support and thereby actuating the indicator, and a dog or detent for holding the indicating device in opposition to the backward movement of the lever. 8th. In a camera or roll holder, the combination of a film support, an indicating device, a lever, said lever being provided with a nose K at its outer end, a spring for actuating said lever and throwing its nose across the path of travel of the film, a pawl carried by said lever for actuating the indicating device as the nose of said lever is thrown across the path of travel of the film, and a dog or detent for holding the indicating device in opposition to the rearward

movement of the pawl. 9th. In a camera or roll holder, the combination of a film support, a lever provided with a nose K, a spring for throwing said lever in one direction and projecting its nose across the path of travel of a film, a ratchet wheel, an indicating plate connected to said ratchet wheel, a pawl Q connected to the lever and adapted to move the ratchet wheel in one direction as the nose of the lever is projected across the path of travel of the film, and a dog or detent serving to hold the ratchet in its adjusted position. 10th. In a camera or roll holder, the combination of a suitable film support, a lever provided with a nose K adapted to pass across the path of travel of a film and toward said film support, a spring M for actuating said lever, a ratchet wheel, an indicating plate carried by said wheel, a spring actuated pawl O carried by said lever for actuating the ratchet wheel as the nose of the lever is thrown across the path of travel of the film, and a locking dog or detent V for holding the ratchet wheel against rearward movement. 11th. In combination with an indicating device, a setting lever and a spring for actuating the same, and a film movable relatively to the lever and adapted to come into direct operative relation therewith, said film being provided with openings, whereby the lever is thrown back by the film and is permitted to move forward under the force of the spring and thereby to actuate the indicating device when an opening of the film comes opposite the lever. 12th. In combination with an indicator, a spring actuated pawl for moving the same, and a travelling perforated film adapted to throw the pawl back to its engaging position and to permit its forward or actuating movement when an opening of the film comes to a predetermined position. 13th. In a camera or roll holder, the combination with means for supporting and advancing a perforated film, of an indicator, an operating device therefor, said device being supported independently of the film-supporting and advancing means, connections intermediate the operating device and the indicator, and means for normally pressing said device toward the film so that it will pass into the perforations therein as they come into registration therewith and by said movement into the perforations to directly actuate the indicator, substantially as described. 14th. In a camera or roll holder, the combination with means for supporting an advancing perforated film, of an indicating device, a lever, and means for normally pressing said lever toward the film and causing it to pass into the perforations therein, and by said movement to actuate the indicator, substantially as described. 15th. In a camera or roll holder, the combination with means for supporting and advancing a perforated film, of an indicating device, a lever supported independently of the film-supporting and advancing means, and means for normally pressing said lever toward the film and causing it to pass into the perforations therein, and by said movement to actuate the indicating device, substantially as described.

No. 69,472. Eyeletting Machine. (Machine à aillet.)



The Peerless Machinery Company, New York City, New York, assignee of Perley Richmond Glass, Quincy, Massachusetts, U.S.A., 23rd November, 1900; 6 years. (Filed 29th October, 1900.)

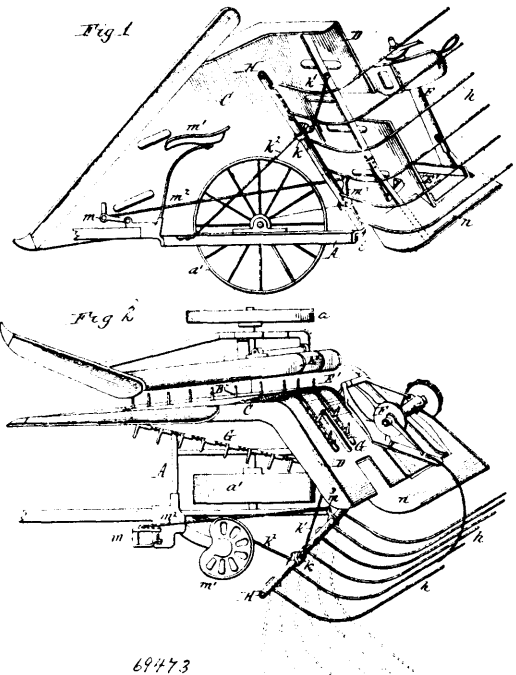
Claim.—1st. In an eyeletting machine, the combination with a tubular punch provided with an annular clenching surface, of an anvil into contact with which said punch is adapted to move in the punching operation, means for separating said punch from said anvil after the punching operation by a lateral movement of one of said parts, means for forcing the punch through the material so that the end thereof extends beyond the surface of the material, a reciprocating setting device adapted to co-operate with said annular clenching surface, and means for automatically supplying said setting device with eyelets. 2nd. In a machine for setting eyelets, rivets and the like, the tubular punch provided with an annular

clenching surface, means for producing a longitudinal and lateral movement thereof to punch and feed the material, a setting device co-operating with said punch, and means for forcing the punch farther through the material during such lateral movement, so that the punch projects beyond the surface of the material prior to the operation of said setting device. 3rd. In a machine for setting eyelets, rivets and the like, the tubular punch provided with an annular clenching surface, means for producing a longitudinal and lateral movement thereof to punch and feed the material, a setting device co-operating with said punch, means for varying the extent of the lateral movement of the punch to vary the feed movement of the material, and means for forcing the punch farther through the material during such lateral movement so that the punch projects beyond the surface of the material prior to the operation of said setting device. 4th. In a machine for setting eyelets, rivets and the like, a tubular punch provided with an annular cutting edge smaller in diameter than the eyelet to be set and an annular clenching surface, means for producing a longitudinal and lateral movement thereof to punch and feed the material, a setting device co-operating with said punch, means for presenting the article to be inserted in the material to said setting device, and means for forcing the punch farther through the material during such lateral movement, so that the punch will project beyond the surface of the material prior to the operation of said setting device. 5th. In a machine for setting eyelets, rivets and the like, a tubular punch provided with an annular clenching surface, means for producing a longitudinal and lateral movement thereof to punch and feed the material, a setting device co-operating with said punch, means for forcing the punch through the material so that it projects beyond the surface thereof prior to the setting operation, and independent means for holding the material after the lateral movement of the punch has taken place to feed the same. 6th. In a machine for setting eyelets, rivets and the like, a tubular punch, means for producing a longitudinal and lateral movement thereof to punch and feed the material, said punch being tapered and provided with an annular clenching surface, means for forcing the material into said punch after the punching operation so that the punch projects beyond the surface of the material, a setting device co-operating with said punch, means for presenting the article to be inserted in the material to said setting device, a gripper member adapted to hold the material on its support during the punching and setting operations, and means for separating said gripper member from said support during the lateral movement of the punch which feeds the material. 7th. In a machine for setting eyelets, rivets and the like, a tubular punch, means for producing a longitudinal and lateral movement thereof to punch and feed the material, said punch being tapered and provided with an annular clenching surface, means for forcing the material onto said punch after the punching operation so that the punch projects beyond the surface of the material, a setting device co-operating with said punch, means for presenting the article to be inserted in the material to said setting device, a gripper member adapted to hold the material on its support during the punching and setting operations, means for separating said gripper member from said support during the lateral movement of the punch which feeds the material, and independent means for operating said gripper member to insert the material. 8th. In an eyeletting machine, the combination with the tubular punch provided with a clenching portion, of means for producing a reciprocating longitudinal movement thereof to force the cutting edge into the material, means for producing a lateral movement thereof, means for forcing the material onto the punch until said punch projects beyond the surface thereof, connecting mechanism whereby the longitudinal and lateral movements of the punch are produced to punch and feed the material, and a setting device to co-operate with the clenching portion of the punch. 9th. In an eyeletting machine, the combination with the tubular punch provided with a clenching portion, of means for producing a reciprocating longitudinal movement thereof, means for producing a lateral movement thereof, connecting mechanism whereby the longitudinal and lateral movements of the punch are caused to punch and feed the material, means for varying the extent of the lateral movement of the punch, a setting device to co-operate with the clenching portion of the punch, and means for causing the punch to project through the material and beyond the surface thereof prior to the setting operation. 10th. The combination with the punch, of the laterally movable punch guide frame, a laterally stationary setting device, an oscillating member co-operating with said frame, an arm projecting radially from said oscillating member, as lot or channel in said rod, the walls of which follow an arc struck from the axis of a suitable driving shaft when said arm is in such a position that the punch is in line with the setting device, a rod having a projection co-acting with the walls of said slot, the said rod also being provided with a forked guide co-operating with said driving shaft, a cam on said driving shaft co-acting with said rod to produce a substantially reciprocating movement thereof, and independent means for laterally moving said rod to vary the point of connection between the same and said radial arm, as set forth. 11th. The combination with the tubular punch projecting from and surrounded by an annular clenching surface, of an anvil to co-operate with said punch in the punching operation, means for separating the punch and anvil after the punching operation, means for subsequently forcing said punch through the material until it projects beyond the surface thereof, and a setting device adapted to present an eyelet to said punch

which guides the eyelet into the hole in the material and co-operates with the setting device in the clenching of said eyelet. 12th. In an eyeletting machine, a tubular tapered punch provided with and projecting from an annular clenching flange, the cutting edge of the punch being smaller in diameter than the eyelet to be set and the outer surface of the punch beyond the cutting edge increasing to a diameter equal to or greater than that of the eyelet, an anvil or support for the material in conjunction with which support the cutting edge of the punch is caused to perforate the material, means for forcing the punch through the material so that the tapered end of the punch will project beyond the surface of the material, a setting device adapted to present an eyelet to said projecting punch so that the latter enters the eyelet and guides it into the perforation, said setting device then co-operating with the clenching portion of the punch to set the eyelet, and connecting mechanism whereby said parts automatically co-operate to punch the material and set the eyelet. 13th. In an eyeletting machine, the combination with the punch adapted to move laterally to feed the material along a suitable support, of one or more fingers projecting from said support to engage the material and press it onto said punch, substantially as described. 14th. In an eyeletting machine, the combination with the punch adapted to move laterally to feed the material, of an anvil to co-operate with said punch in the punching operation, means for separating the punch and anvil prior to the lateral feed movement of said punch, and means for forcing the material onto said punch in the lateral movement thereof, for the purpose set forth.

No. 69,473. Bundle Carrier for Harvesters.

(*Porte-gerbe pour moissonneuses.*)

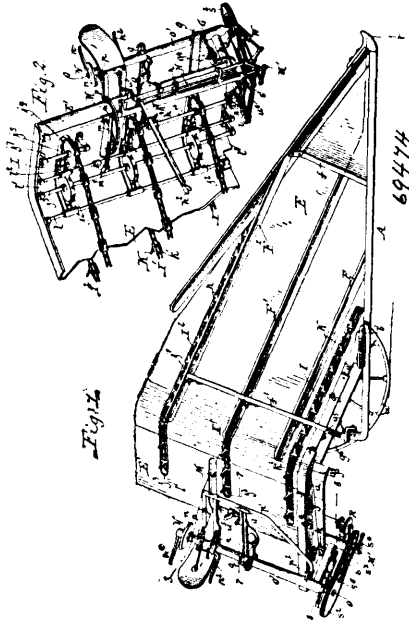


The Johnston Harvester Company, assignee of George Albert Farrell, and Christian Maul, all of Batavia, New York, U.S.A., 23rd November, 1900; 6 years. (Filed 2nd November, 1900.)

Claim.—1st. The combination with the main frame, the supporting and driving wheels, and the binder mechanism arranged on the frame in rear of said wheels, of a bundle carrier arranged to receive the bundles from the binder mechanism and inclining stubbleward and forwardly and upward, toward the axis of said wheels, substantially as set forth. 2nd. The combination with the main frame, the supporting and driving wheels, and the binder mechanism arranged on the frame in rear of said wheels, of a bundle carrier composed of rock shaft journalled on the frame adjacent to the binder mechanism and inclining forward and upward toward the axis of said wheels and tines secured to said shaft and projecting stubbleward and rearwardly, substantially as set forth. 3rd. The combination with the main frame, and the supporting and driving wheels, of a conveyer platform arranged lengthwise of the frame and inclining stubbleward and upward, a binder deck extending stubbleward from the platform in rear of the axis of said wheels and inclining stubbleward and forwardly upward, and a bundle carrier composed of a rock shaft arranged adjacent to said deck and inclining stubbleward forwardly and upward and tines secured to said shaft and projecting stubbleward and rearwardly, substantially as set forth. 4th. The

combination with the hollow rock shaft of the bundle-carrier, of a step-bearing on which said shaft rests, and a connecting hook pivotally arranged in said bearing and engaging with said rock shaft, substantially as set forth. 5th. The combination with the shaft of a bundle carrier having two sets of perforations, of a tire having a return bend which bears against one side of said shaft between said perforations and the end portion of the return bend through the other, and a fastening device applied to the end of the return bend on the opposite side of the shaft, substantially as set forth.

No. 69,474. Corn Harvester. (*Moissonneuse à blé d'inde.*)

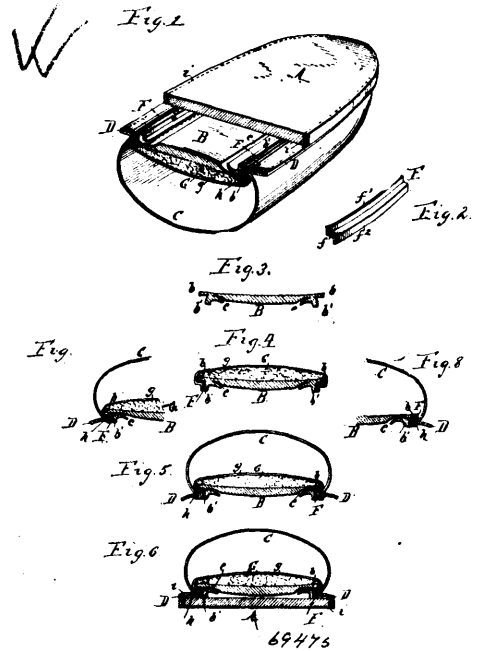


The Johnston Harvester Company, assignee of George Albert Farrall, and Christian Maul, all of Batavia, New York, U.S.A., 23rd November, 1900; 6 years. (Filed 2nd November, 1900.)

Claim.—1st. The combination with the platform and binder deck, and a conveyer belt provided with folding teeth, of a guide bar for said teeth arranged in the binder deck and pivoted at its front end, a rigid shifting device engaging said guide bar near its free end and supporting the same against the pressure of the stalks, and means whereby said shifting device is actuated, substantially as set forth. 2nd. The combination with the platform and binder deck and a conveyer belt provided with folding teeth, of a guide bar for said teeth arranged in the binder deck and pivoted at its front end, a rocking shifting arm arranged below the binder deck and bearing against the free rear end of said guide bar, the needle mechanism, and means whereby said shifting arm is actuated from the needle mechanism, substantially as set forth. 3rd. The combination with the platform and binder deck and a conveyer belt provided with folding teeth, of a guide bar for said teeth arranged in the binder deck and pivoted at its front end, a rock shaft arranged below the binder deck, a shifting arm secured to said rock shaft and shaft and bearing against the free rear end of said guide bar, an actuating arm secured to said rock shaft, a needle, and a slotted bar connecting the needle with said actuating bar, substantially as set forth. 4th. The combination with the rotary driving arm, the driving wheel of the binder mechanism, the coupling dog mounted on said wheel, and the compressor shaft and arm, of a trip lever whereby the coupling dog is held out of engagement with the driving arm and which is provided with an actuating shoulder and a bar which is actuated from the compressor shaft and which bears against said shoulder for moving the trip arm to release the coupling dog and which has a sliding connection with the trip arm which permits the bar and the compressor shaft to continue their movement after the trip lever has been released from the coupling dog, substantially as set forth. 5th. The combination with the rotary driving arm, the driving wheel of the binder mechanism, and the coupling dog mounted on said wheel, of a driven wheel meshing with said driving wheel and making a greater number of turns than said driving wheel, a tappet on the driven wheel, a trip lever which is adapted to hold the coupling dog out of engagement with the driving arm and which is prevented from engaging with the coupling dog by said tappet when the latter strikes said trip lever, and means whereby said trip lever is disengaged from the coupling dog by the movement of the compressor shaft, substantially as set forth. 6th. The combination with the breast plate, and the supporting standard about the axis of which the plate is swung in adjusting it toward and from the binder deck, of an adjusting arm connected at its free end with the breast plate and at its opposite end with the standard by a pivotal connection

arranged concentric with the axis of the standard, and an adjustable attaching device connecting said arm with the standard, whereby in adjusting the arm by the attaching device the arm is enabled to turn about the standard without binding, substantially as set forth. 7th. The combination with the breast plate and the supporting standard about the axis of which the plate is swung in adjusting it toward and from the binder deck, and which is provided with fastening arms on opposite sides, of an adjusting arm connected at its free end with the breast plate and at its opposite end with the standard by a pivotal connection arranged concentric with the axis of the standard, an adjustable bolt connecting said adjusting arm with one of the fastening arms of the standard, and a bolt and slot connection whereby the other fastening arm of the standard is connected with said adjusting arms, substantially as set forth. 8th. The combination with the finger bar, of a reciprocating cutter bar carrying the knives, guard caps which are secured to said cutter bar and project rearwardly under the finger bar and forwardly under the overhanging portion of the fingers, and rollers which are arranged on the lower side of these caps and bear against the front side of the finger bar, substantially as set forth. 9th. The combination with the longitudinal platform and the binder mechanism, of a throat bottom having its rear part, adjacent to the binder mechanism connected near its rear end to an adjusting mechanism which is controlled by the driver and having in front of said rear part a vertically adjustable part to which said rear part is pivoted, substantially as set forth. 10th. The combination with the inclined binder deck, and the throat bottom arranged on the upper side of the binder deck and having its rear part vertically adjustable, of a vertically movable hand lever arranged on the lower side of the binder deck, and a connecting rod extending from said hand lever downwardly on the lower side of the binder deck and around the lower edge of the latter to the throat, substantially as set forth.

No. 69,475. Shoe. (*Chaussure.*)

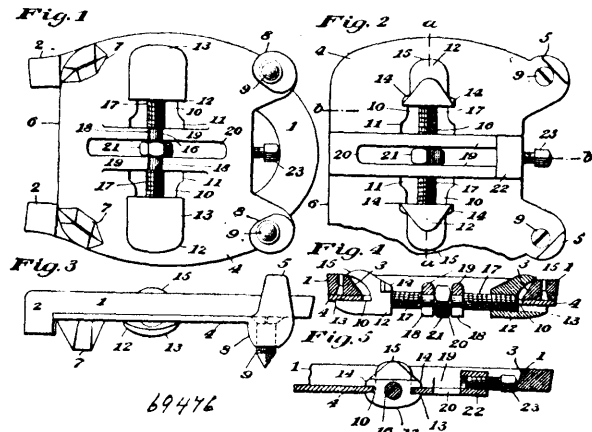


The Shawroth Shoe Company, assignee, of Albert Comey Rounds, Buffalo, New York, U.S.A., 23rd November, 1900; 6 years. (Filed 3rd November, 1900.)

Claim.—1st. The combination with a vamp of a shoe, of an insole provided on its margin with the upper outwardly projecting flange and with a lower depending flange which is arranged inwardly from the upper flange, said upper flange having a horizontal underside, and a vertical outer sides which extend upwardly from the outer end of the horizontal side, and said lower flange having a vertical outer side, which extends downwardly from the inner end of said horizontal side, and an elastic strip provided with a horizontal web, which is secured against said horizontal underside of the upper flange, a vertical outer flange extending outwardly from the outer end of the web and secured to the vertical outer side of said upper flange, and a vertical inner flange extending downwardly from the inner end of said web and secured to the vertical outer side of said lower flange, substantially as set forth. 2nd. The combination with the insole and the vamp of a shoe, of an elastic strip arranged along the edge of the insole, a cushion arranged along the edge of the insole, and a covering arranged over the cushion and lapped with its edge downwardly over the

outer side of the elastic strip, substantially as set forth. 3rd. The combination with an insole provided on its margin with an upper outwardly projecting flange and with a lower depending flange, which is arranged inwardly from the upper flange, said upper flange having a horizontal underside and a vertical outer side which extends upwardly from the outer end of the horizontal side and said lower flange having a vertical outer side, which extends downwardly from the inner end of said horizontal side, an elastic strip, provided with a horizontal web, which fits against the horizontal underside of said upper flange, a vertical outer flange extending upwardly from the outer end of the web and fitting against the vertical outer side of said upper flange, and a vertical inner flange extending downwardly from the inner end of said web and fitting against the vertical outer side of said lower flange, a cushion arranged upon the insole, a covering arranged over the cushion and lapped with the edge downwardly over the outer side of this elastic strip, a vamp lapped against the edge portion of the covering, a welt fitting against the outer side of the vamp, and a single line of stitches extending through the insole, strip covering, vamp and welt, substantially as set forth.

No. 69,176. Horseshoe. (For à cheval.)

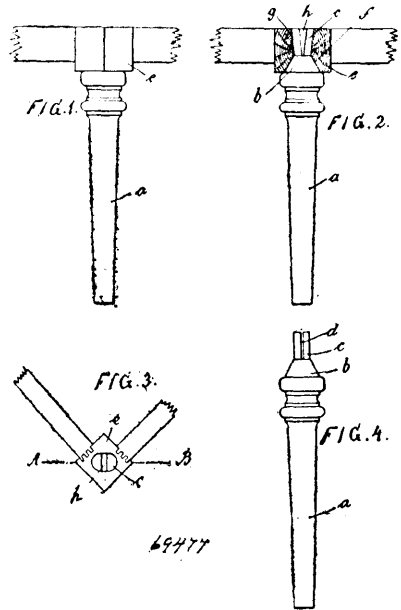


Walter Clarke, assignee of John N. Clarke, both of Evansville, Indiana, U.S.A., 23rd November, 1900; 6 years. (Filed 5th November, 1900.)

Claim.—1st. In a device of the character described, the combination of a body portion having calks and provided with guide slots, each formed with an expanded part extended through the body portion, a slide block insertible in the expanded portion of and movable along each guide slot for engagement with a horseshoe, and a shaft held to turn on the body portion and having oppositely screw-threaded end portions each engaged with one of said devices for moving the said devices in opposite directions, substantially as set forth. 2nd. In a device of the character described, the combination of a body portion having calks and provided with guide slots having expanded portions, slide blocks insertible in the expanded portions of the guide slots and movable along the slots in position to engage a shoe and means to move said slide blocks, substantially as set forth. 3rd. In a device of the character described the combination of a body portion having guide slots and provided with ribs arranged between the slots and recessed on the under side of the body portion, slide blocks movable along the guide slots, a shaft having its central part held in the recesses of the ribs and its end portions oppositely screw-threaded and engaged with the slide blocks and an enlargement of the shaft between the ribs, substantially as set forth. 4th. In a device of the character described, the combination of a body portion having calks and provided with guide slots, each having an expanded portion, slide blocks each insertible in the expanded portion of and movable along one of the guide slots for engagement with a horseshoe, and means to move the slide blocks, each slide block having lateral projections at top and bottom adapted for engagement along the edges of its guide slot, with the upper and lower surfaces of the body portion to hold said slide block in position in its slot, substantially as set forth. 5th. In a device of the character described, the combination of a body portion having calks and provided with devices for engagement with a horseshoe, a shaft held to turn and provided with a central enlargement and oppositely screw-threaded end portions each engaged with one of said devices for moving the said devices in opposite directions and ribs upon the body portion for engagement upon opposite sides of the enlargement of the shaft, to hold the shaft against endwise movement, substantially as set forth. 6th. In a device of the character described, the combination of a body portion having means to engage a horseshoe, and a screw having threaded engagement with the forward part of the body portion and provided with a head adapted for turning engagement with the forward part of the horseshoe, to press the body portion rearwardly to engage the devices with the horseshoe, sub-

stantially as set forth. 7th. In a device of the character described, the combination of a body portion having calks, devices carried by the body portion and movable relatively to each other for engagement with opposite sides of a horseshoe to hold the body portion in place thereon, means to move said shoe engaging devices relatively to each other and a device carried on the body portion and movable for engagement with the forward part of the horseshoe, substantially as set forth.

No. 69 177. Means of Uniting Pieces of Wood.
(Moyen de joindre des pièces de bois.)



Commanditgesellschaft Zur Verwertung der Terlinden Schen Stuhl Patente Trefftz Co. Aa hen, German Empire, assignee of Gerhard Terlinden, Oberhausen, 23rd November, 1900; 6 years. (Filed 7th November, 1900.)

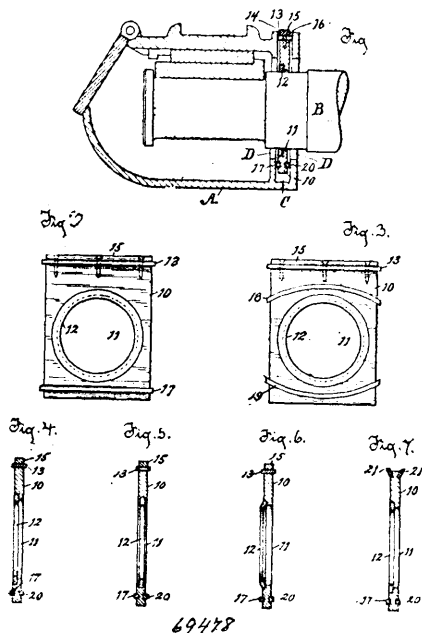
Claim.—1st. Improved means for securing chair legs to the frame of chairs or for uniting other pieces of wood, consisting in making the pegs of the legs from a conical and a cylindrical portion which latter after the insertion of the peg into a double conical hole of the frame for securing the joint against strain and pressure, is likewise conically shaped by a wedge driven into the slot of the cylindrical part, substantially as described and shown in the drawings. 2nd. Modification of the joint as set forth in claim according to which the peg hole does not extend quite through the frame, so that when driving in the chair leg provided with a wedge, the cylindrical portion of the peg is also made conical, substantially as described and shown in the drawings. 3rd. Modification of the joint as set forth in claim 1, according to which the wedge is secured to a separate upper frame or other part, which on being fitted to the seat frame forms a rigid connection between the frame and chair leg, substantially as described and shown in the drawings.

No. 69,178. Dust Guard. (Garde poussiere.)

Frederick Hachmann and Adolph Giesen, both of St. Paul, Minnesota, Elizabeth Baasen, Milwaukee, Wisconsin, Carver W. Barber, Red Wing, and Dr. Ovide Martel, St. Paul, both in Minnesota, all in the U.S.A., 23rd November, 1900; 6 years. (Filed 5th November, 1900.)

Claim.—1st. A dust guard for a car axle journal box, comprising an integral plate with an axle aperture, a ring of felt or analogous material secured to the plate about said aperture adapted to bear against the inserted axle and close the aperture, the strips of felt or analogous material on the plate projecting from the surface thereof above and below the axle aperture adapted to bear against the adjacent wall or walls of the dust chamber of the journal box and close the chamber above and below the axle. 2nd. The combination with a car axle journal box provided with a dust guard chamber, and an axle extending through the walls of the dust guard chamber into the journal box, of a dust guard in the chamber about the axle, the dust guard comprising an integral plate with an axle aperture, felt or

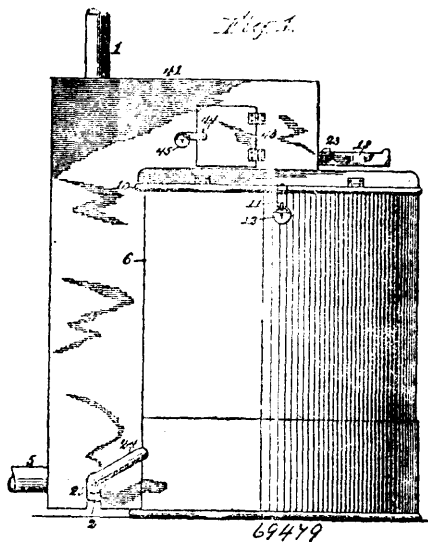
analogous material on the plate about and closing the axle aperture around the axle, and strips of felt on the guard plate above and



69478

below the axle aperture closing the space between the plate and the adjacent wall of the guard chamber.

No. 69479. Coin Controlled Skimmed Milk Measurer.
Measseur de lait actionné par une pièce monnaie)



Lena G. Hill, Cedar Rapids, Iowa, U.S.A., 23rd November, 1900 6 years. (Filed 1st September, 1900.)

Claim.—1st. The combination of a liquid containing receptacle, of valve mechanism normally set in one position, for discharging, and movable into another position, for filling, a lock for holding said valve mechanism in its normal position, a trip for said lock, a float in said liquid containing receptacle, and devices under control of a quantity check for rendering said float operative to actuate said trip and release said lock, substantially as described. 2nd. The combination with a liquid containing receptacle, of valve mechanism normally set in one position, for discharging, and under strain to move into another position, for filling, a lock for holding said valve mechanism in its normal position, a trip for said lock, a float within said liquid containing receptacle, and a quantity check for rendering said float operative to actuate said trip and to release said lock, substantially as described. 3rd. The combination with a liquid containing receptacle, of valve mechanism normally set in one position, for discharging, and moveable into another position

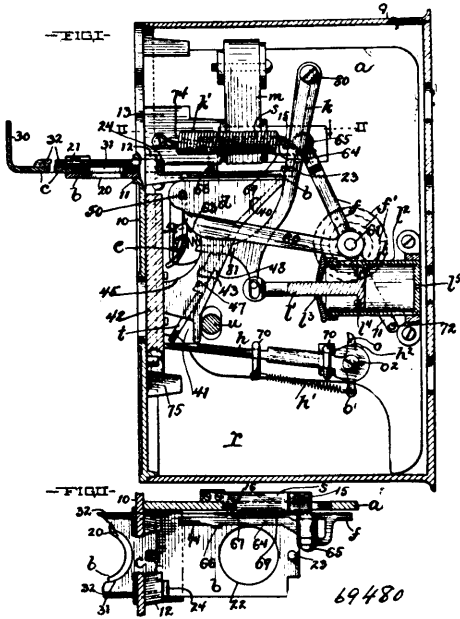
for filling, of a lock operative to hold said valve mechanism both in its discharging and filling positions, a float in said receptacle, a trip for said lock, under control of a quantity check operative on said trip to primarily release said lock and serving as a stop to limit the upward movement of said float, substantially as described. 4th. The combination with a liquid containing receptacle, of valve mechanism normally set in one position, for discharging, and movable into another position, for filling, a lock operative to hold said valve mechanism in its normal position, a trip for said lock involving a cam block or head, a float in said receptacle provided with a tapered standard, said cam block or head adapted to be controlled by a quantity check to release said lock, and said check having a perforation or seat engageable with said tapered stem or standard to limit the upward movement of said float and cause the same to again actuate said trip to permit said valve mechanism to be returned to normal position, substantially as described. 5th. The combination with a liquid containing receptacle, of valve mechanism normally set in one position, for discharging, and movable into another position, for filling, a lock operating to hold said valve mechanism in its normal position, a trip for said lock involving a vertically movable cam block or head and a transversely movable feed slide, a float within said receptacle, said feed slide constructed to carry a quantity check into engagement with said cam block, to actuate said trip and serving later as a stop to limit the upward movement of said float and cause said float to again actuate said trip, substantially as described. 6th. The combination with a liquid containing receptacle, of valve mechanism normally set in one position, for discharging, and movable into another position, for filling, a lock operating to hold said valve mechanism in its discharging and filling positions, a trip for said lock, involving the vertically movable cam block and the transversely movable feed slide having a recess or seat, a float in said receptacle having a tapered stem or standard, said slide adapted to carry a quantity check having one or more cam acting end lugs for action on said cam block, and provided with a slot or perforation for co-operation with said stem or standard to limit the upward movement of said float, the said parts operating substantially as and for the purposes set forth. 7th. The combination with a liquid containing receptacle, containing a float with tapered stem or standard, of valve mechanism normally set in one position, for discharging, and movable into another position, for filling, a lock operating to hold said valve mechanism in its discharging and in its filling position, a trip for said lock involving the cam block with a yielding connection to said lock and the feed slide having a recess or pocket, adapted to carry a quantity check having the projecting cam lugs at one end and the elongated perforation or slot in its body, the said parts operating substantially as described. 8th. The combination with a liquid containing receptacle, of valve mechanism normally set in one position for discharging and movable into another position for filling, a vertically pivoted lock segment having a notch, a detent adapted to engage the notch, a gravity catch pivoted on the segment below the notch and normally held inoperative by said detent, but operative to hold said detent inoperative after it has been released and until after certain movements of the valve mechanism have been performed. 9th. The combination with a liquid containing receptacle of valve mechanism controlling the delivery of the fluid therefrom, a lock or latch for holding said valve mechanism in a set position, a trip for said lock, a float in said receptacle, said trip and float being under the control of a quantity check to thereby trip the lock by movement of the check and thereafter to determine the raise of the float. 10th. The combination with a liquid containing receptacle, of valve mechanism controlling the delivery of the liquid therefrom, a lock or latch for holding said valve mechanism in a set position, a float in said receptacle, and a trip for said lock, which trip is adapted to be primarily operated by movement of a quantity check, and which float is adapted to be stopped by said check, said float acting through the check to again actuate the trip. 11th. The combination with a liquid containing receptacle, of valve mechanism for controlling the delivery of the fluid therefrom, a lock for holding said valve mechanism in one position, a trip for said lock a float within the receptacle, the upward movement of the float being controlled by a quantity check which serves as a stop for the float and causes the same to actuate the trip to release said lock.

No. 69480. Toll Collecting Machine for Telephones.
(Machine de péage pour téléphones.)

The American Toll Telephone Company, assignee of William Alva Foss, all of Cleveland, Ohio, U.S.A., 23rd November, 1900; 6 years. (Filed 4th September, 1900.)

Claim.—1st. A machine of the character indicated, comprising a clock work that includes an escapement having its anchor provided with an arm or lever, means for winding up the clock work, a movable part within the machine and arranged to be engaged by a coin or check of a predetermined size and provided with a member arranged to render it capable of engaging and detaining the aforesaid anchor arm or lever, and means whereby the aforesaid coin engageable part is actuated, through the medium of the coin or check, in the direction required to release the aforesaid anchor arm or lever, substantially as and for the purpose set forth. 2nd. A machine of the character indicated, comprising a clock work including an escapement that has its anchor provided with an arm or

lever, mechanism for winding up the clock work, a suitably supported swinging part arranged to be engaged by a predetermined

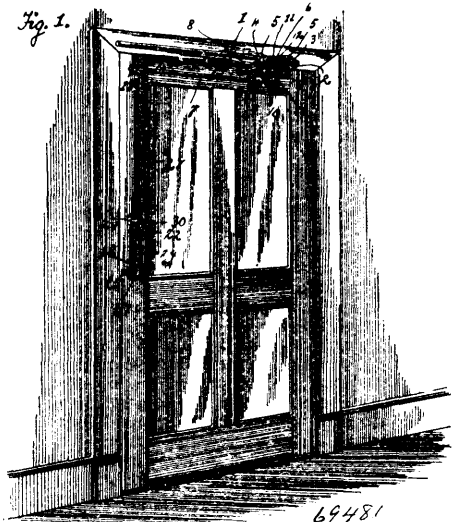


size of coin or check introduced into the machine, which swinging part is provided with an arm that has a member arranged to bear the free end of the anchor arm or lever during the winding up of the clock work, and means for actuating the said swinging part, through the medium of the coin or check, in the direction required to cause it to release or recede from the aforesaid anchor arm or lever, substantially as and for the purpose set forth. 3rd. A machine of the character indicated, comprising a signal constituting noise producible instrument, a passageway for conducting the coin or check, required in the operation of the machines into the latter, means for arresting the coin or check within the machine, a movable part arranged to be engaged by the coin or check in the arrested position of the latter and provided with means for maintaining the signal inoperative, and means whereby the said coin engageable part is, through the medium of the coin or check actuated in the direction required to effect the operation of the signal. 4th. In a machine of the character indicated, the combination, with a clock work comprising an escapement whose anchor is provided with an arm or lever, a hopper internally of the machine for receiving the coin or check required in the operation of the machine, means for feeding the coin or check to the hopper and means for winding up the clock work while the coin or check is fed to the hopper, and a shoulder or shoulders internally of the hopper for arresting the coin or check, of a movable part adapted to cooperate with said shoulder or shoulders in the detention of the coin or check within the hopper and provided with a member that bears the free end of the aforesaid anchor arm or lever during the winding up of the clock work, and means for dislodging the coin or check from the aforesaid shoulder or shoulders, and, through the medium of the coin or check, actuating the aforesaid movable detaining part in the direction required to release the aforesaid anchor arm or lever, substantially as and for the purpose set forth. 5th. A machine of the character indicated, comprising an internal hopper, a signalling device, a suitably supported gate *e* arranged within the hopper and capable of swinging forwardly and rearwardly and instrumental in the operation of the signalling device, which gate is slotted laterally as at 55 and is normally in its forwardly swung position, means acting to actuate the gate rearwardly, mechanism for holding the gate in its forwardly swung position, means for feeding the coin or check required in the operation of the machine to the hopper, a shoulder or shoulders 43 formed internally of the hopper, a suitably operated forwardly and rearwardly tiltable lever *k* having an arm 81, all arranged and operating, substantially as and for the purpose set forth. 6th. A machine of the character indicated, comprising an internal hopper arranged within the forward side of the machine and having its rear wall inclining forwardly and downwardly and provided with a slot 48, means for feeding the coin or check required in the operation of the machine to the hopper, coin arresting means provided internally of the hopper, a forwardly swinging gate *e* within the hopper forward of the said coin arresting means and having the lateral slot 55 and an arm 52, the suitably operated lever *f* having the arm 60, all arranged and operating, substantially as shown for the purpose specified. 7th. A machine of the character indicated, comprising an internal hopper having its forward side

provided with a window, and having its rear wall inclining forwardly and downwardly and provided with a slot 48, a device for feeding the coin or check to the hopper, a coin arresting means internally of the hopper, the forwardly and rearwardly swinging gate *e* within the hopper forwardly of the coin arresting means, which gate has an arm 52 and the lateral slot 55, means acting to swing the said gate rearwardly, the suitably operated lever *f* having the arm 60, the lever *k* having the arm 61 and arranged to be actuated by the aforesaid feeding device in one direction, a spring for actuating the said lever in the opposite direction, and means for retarding the operation of the said spring, all arranged and operating substantially as shown, for the purpose specified. 8th. A machine of the character indicated, comprising an internal hopper having its forward side provided with a window and having its rear wall inclining forwardly and downwardly and provided with a slot 48, a device for feeding the coin or check to the hopper, coin arresting means formed internally of the hopper, the forwardly and rearwardly swinging gate *e* within the hopper forward of the said coin arresting means, which gate has the arm 52 and the lateral slot 55, means acting to swing the said gate rearwardly, the suitably operated lever *f* having the arm 60, the lever *k* having the arm 81 and arranged to be operated by the aforesaid feeding device in the one direction, a spring for operating the said lever *f* in the opposite direction, the piston *l*, and the rod *l*¹, and the cylinder *l*² containing the piston and having the air inlet *l*³ and the air vent *l*⁵, all arranged and operating substantially as shown, for the purpose specified. 9th. A machine of the character indicated, comprising the stationary frame work provided with a front having a slot extending therethrough, a hopper at the inner side of the said front, a device for feeding a coin or check from the outer side of the front to the said hopper, a shoulder or shoulders formed internally of the hopper and having the arrangement required to arrest a coin or check of a predetermined size, gate arranged to render it capable of obstructing the passageway through the hopper and normally in its non-obstructing position, means acting to move the gate into its obstructing position, mechanism for actuating the said gate from its obstructing to its non-obstructing position, mechanism for dislodging the coin or check from the aforesaid shoulder or shoulders and instrumental in the withdrawal of the aforesaid gate from its obstructing position, means for operating the dislodging mechanism, a signal, and means whereby the signal is rendered operative by the aforesaid dislodgement of a coin or check from the aforesaid shoulder or shoulders, substantially as and for the purpose set forth. 10th. A machine of the character indicated, having an internal hopper for receiving the coin or check required in the operation of the machine, a device for feeding the said coin or check to the hopper, a rearwardly tiltable lever arranged at the inner end of the path of the slide, a bar operatively connected with the lever and arranged to be operated by the coin feeding device during the inward actuation of the latter, a clock work comprising a clock spring wound up during the rearward tilting of the said lever and adapted to return the said lever from its rearwardly tilted to its normal position, and means for disengaging the aforesaid bar from the coin feeding device and arranged to operate upon the said bar upon the winding up of the clock spring as aforesaid. 11th. A machine of the character indicated having an internal hopper for receiving the coin or check required in the operation of the machine, a slide for feeding the coin or check to the hopper, a forwardly and rearwardly tiltable lever arranged at the inner end of the path of the slide, a bar operatively connected with the lever and arranged to be operated by the slide during the inward actuation of the latter, a clock work comprising a clock spring acting to retain the said lever in its forwardly tilted and normal position, and means for disengaging the aforesaid bar from the slide, all arranged and operating substantially as and for the purpose set forth. 12th. A machine of the character indicated, comprising an internal hopper arranged within the forward side of the machine, and having its rear wall inclining forwardly and downwardly and provided with a slot 48, means for feeding the coin or check to the hopper, two shoulders 43 and 43 formed internally of the hopper upon opposite side walls, respectively of the hopper, a signal constituting noise producible instrument, a movable part arranged to be engaged by the coin or check when the latter has been arrested within the hopper by the aforesaid shoulders and provided with means for maintaining the signal inoperative, and means whereby the said coin engageable part is, through the medium of the coin or check, actuated in the direction required to permit the operation of the signal. 13th. A machine of the character indicated having a slide for feeding the coin or check into the machine, the forwardly and rearwardly tiltable lever *f*, the bar 64 having the depending lug 66 and the laterally projecting pin or member 67, a clock work comprising a clock spring *f*¹, the spring *s* having the incline 15, all arranged and operating substantially as shown, for the purpose specified. 14th. A machine of the character indicated, having a slide for feeding the coin or check into the machine, a forwardly and rearwardly tiltable lever arranged at the inner end of the path of the said slide, a bar 64 operatively connected with and extending forwardly from the said lever and having its forward end provided with a depending lug or member 66 having the arrangement required to render it capable of being engaged and actuated rearwardly by the slide when the slide is in its forward position, a clock work comprising a clock spring that is operatively connected with and wound up by the aforesaid lever when the

lever is tilted rearwardly, and means for disengaging the aforesaid bar from the slide when the aforesaid spring has been wound up as aforesaid, substantially as and for the purpose set forth. 15th. A machine of the character indicated, having an internal hopper for receiving the coin or check required in the operation of the machine, which hopper has its lower end provided with an outlet, a gate forming endwise shiftable bar arranged to normally obstruct the lower end of the passageway through the said outlet, a forwardly tiltable dog supported from the said bar, a stop upon the bar for preventing tilting of the said dog rearwardly of its normal position, means acting to retain the aforesaid bar in its forward or normal position, a slide for feeding the coin or check to the hopper, a bar 64 arranged to be operated by the slide, means for disengaging the last-mentioned bar from the slide, and the lever *f* operatively connected with the said last-mentioned bar and having an arm 71 provided with a laterally projecting pin or member 72, all arranged and operating substantially as shown, for the purpose specified. 16th. A machine of the character indicated, having an internal hopper for receiving the coin or check required in the operation of the machine, which hopper has its lower end provided with an outlet, a plate of glass forming a window at the forward side of the hopper, a gate forming endwise shiftable bar arranged to normally obstruct the lower end of the passageway through the said outlet, a forwardly tiltable dog supported from the said bar, a stop upon the bar for preventing tilting of the said dog rearwardly of its normal position, means acting to retain the aforesaid bar in its forward or normal position, a device for feeding the coin or check to the hopper, and mechanism arranged to be actuated by the said feeding device during the latter's operation and provided with means for engaging the forward side of the aforesaid dog and thereupon actuating the bar in its non-obstructing position, and the arrangement of part being such that the said bar shall have its forward end engaging the inner side of the aforesaid window in the normal and obstructing position of the said bar so that the latter upon its release after each rearward actuation thereof, shall return and strike against the aforesaid window, substantially as and for the purpose set forth.

No. 69,481. Door Holder. (Arrête-porte.)

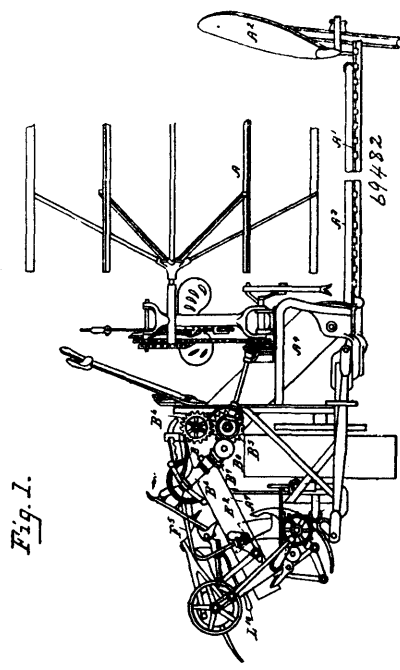


James M. Chritton and James Andrew Goodner, both of Pueblo, Colorado, U.S.A., 26th November, 1900; 6 years. (Filed 26th September, 1900.)

Claim.—1st. A device of the class described, comprising a horizontal swinging arm, a clutch composed of a swivelled or pivoted casing, a pair of clutch levers fulcrumed between their ends on the casing and having openings to receive the arm, a coiled spring disposed on the arm and interposed between the engaging ends of the levers, and a stem or rod arranged to engage the other ends of the levers, and operating mechanism connected with the stem or rod, substantially as described. 2nd. A device of the class described, comprising a swinging rod or arm, a bracket, a clutch pivotally mounted on the bracket and comprising a pivoted casing, spring actuated levers fulcrumed between their ends and having openings at their engaging ends and receiving the rod or arm, and a stem connected with the other ends of the levers and adapted to disengage them from the swinging rod or arm and passing through the pivot of the clutch, and operating mechanism connected with the stem, substantially as described. 3rd. A device of the class described, comprising a swinging arm, a pivotally mounted clutch composed of an open pivoted casing, a pair of substantially L-shaped spring actuated levers loosely fulcrumed at their angles in the casing and having

openings receiving the said arm, and operating mechanism connected with the levers, substantially as described. 4th. A device of the class described, comprising a swinging arm, a pivotally mounted clutch composed of an open casing the substantially L-shaped clutch levers loosely fulcrumed at their angles in the open casing and provided at their outer end with openings for the reception of said arm, means for holding the levers in engagement with the rod, and a stem extending centrally through the casing and arranged to actuate the inner ends of the levers, and operating mechanism connected with the stem, substantially as described. 5th. A device of the class described, comprising a swinging arm, a pivoted clutch having spring actuated levers for engaging the arm, a rock shaft extending across the top of the door and provided at its ends with arms, one of the arms being connected with the said levers, and operating mechanism connected with the other arm of the rock shaft for rotating the latter, substantially as described. 6th. A device of the class described, comprising a clutch, a rod connected with the clutch, a double eccentric designed to be mounted on a spindle, and a pair of rods connected with the eccentric and having a sliding connection with the rod, permitting the rod to be operated when the spindle is rotated in either direction and also adapted to permit the spindle to be operated independently of the rod when the latter is locked out of operation, substantially as described. 7th. A device of the class described, comprising a clutch mechanism, a rock shaft connected with the clutch mechanism, a rod extending from the rock shaft, a plate mounted on the rod and provided with openings, a double eccentric designed to be mounted on a spindle, a pair of rods passing loosely through the openings of said plate to form a sliding connection and pivotally connected with the eccentric at opposite sides of the spindle, and a clamping device for engaging the rods, substantially as described. 8th. A device of the class described, comprising an oscillating rod or arm, a clutch for engaging the arm, a rock shaft connected at one end with the clutch, a rod connected with the rock shaft at the other end thereof, a double eccentric connection between the rod and a knob or spindle having a sliding movement on the rod, whereby the rod is normally adapted to be operated when the knob or spindle is rotated in either direction and is capable of being arranged to permit an independent operation of the spindle, and a clamping device engaging the rod and adapted to lock the spindle against movement, substantially as described. 9th. A device of the class described, comprising an oscillating arm, a clutch engaging the same, a rock shaft connected with the clutch and adapted to disengage the same from the arm, a rod extending from the rock shaft, means for connecting the rod with a knob or spindle whereby the rod may be operated when the knob or spindle is rotated in either direction, and a clamping device engaging the rod and adapted to lock the knob or spindle against rotation, substantially as described.

No. 69,482. Harvester. (Moissonneuse.)



William M. Whitely, Springfield, Ohio, U.S.A., 26th November, 1900; 18 years. (Filed 30th October, 1900.)

Claim.—1st. In a grain binding harvester, wherein the grain is elevated from the cutting apparatus to the grain binder deck before being bound, a butt adjuster mechanism constructed to pierce the grain at different points and at the same time to sweep the grain

from the grain delivery end of the elevator toward the grain binding mechanism, and faster than the heads of the grain are moved in their ordinary flow to even up the butts of the grain and placing it centrally for the binding of the gavel. 2nd. In a grain binding harvester, having a grain elevator, consisting of a pair of belts, a grain binding mechanism arranged at the side of the machine and distinct from the grain elevator, a grain binder deck intermediate between the grain elevator and the binding mechanism for the reception of the cut grain from the elevator, a butt adjuster operating upon the grain, piercing said grain at different points, to move the butts of the grain from the elevator to the binding mechanism, said butt adjuster being adapted to swing horizontally over the binder deck and move the grain straight or obliquely as may be required for the purpose of centrally binding the gavels. 3rd. In a grain binding harvester, having a grain cutting and elevating mechanism, with a grain binder deck to receive the cut grain from the elevator, a butt adjuster mechanism connected with the elevator portion of the machine and independent of said grain binder and grain binder deck, one member of said butt adjuster piercing the grain at different points longitudinally and crosswise, and pressing it upon the binder deck, and forcibly moving same from the grain delivery end of the elevator to the binding mechanism straight or obliquely as desired, said butt adjuster being provided with a grain depressor upon one side thereof to hold the grain down in compact form upon the deck, the teeth of the butt adjuster in its reciprocating and elevating motion to be drawn out from the grain without raising it from the imprisoned condition, said grain depressor oscillating with the butt adjuster in its horizontal movements. 4th. In a grain binding harvester, a butt adjuster pivotally supported upon the elevator frame, independent of the binder deck and grain binder, and composed substantially of three active parts, viz., a wing board extending from near the grain delivery end of the elevator to the binding mechanism and along the butts of the grain, a toothed, orbitally moving, reciprocating arm operating over the grain between said grain delivery end of the elevator and the binding mechanism, and having teeth to pierce the grain at different points and forcibly drawing it downward to the binding mechanism, a grain depressor extending from near the grain delivery end of the elevator, and over and above the grain, downward, and toward the binding mechanism along the side of the teeth of the butt adjuster mechanism, for the purpose of bearing the grain down and compressing it in compact form that the teeth may withdraw without lifting the grain. 5th. In combination with a grain binding harvester, having an elevating apparatus and grain binding mechanism, with an intermediate binder deck, a butt adjuster mechanism to pierce the grain at different points and compress it on the binder deck and forcibly move said grain from the upper end of the elevator belts toward the binding mechanism. 6th. In a grain binding harvester, with a grain elevator, grain binding mechanism and a grain binder deck intermediate, a butt adjuster composed of a wing board at the butts of the grain extending from the elevator to the binding mechanism, a butt adjuster portion having a series of teeth both longitudinally and crosswise disposed, its front end having a greater vertical movement than its rear in its orbital movement, its teeth pinioning the grain to the binder deck and forcibly moving it from the grain delivery end of the elevator to the binding mechanism. 7th. A grain binding harvester, a grain binder deck intermediate between the elevator and grain binding mechanism, a butt adjuster adapted to move the butts of the grain from the delivery end of the elevator belts forcibly to the binding mechanism, either in straight or oblique lines as may be necessary to bind the grain centrally, an orbitally moving toothed arm mechanism piercing the grain at different points, comprising the same to the binder deck and forcing the butts of the grain downward to even them with the heads. 8th. In a grain binding harvester, having a grain cutting, elevating and binding mechanism, a binder deck between the delivery end of the elevator belts and the binding mechanism, in combination with a toothed butt adjuster mechanism piercing the grain at different points, compressing the same on the binder deck and forcibly moving said grain to the binding mechanism, said butt adjuster being capable of lateral movement independently of the binder deck, and having the capacity of adjusting the grain whether long or short and delivering the same to the band tying mechanism centrally, the adjustment being made by the operator while the machine is in motion. 9th. In a grain binding harvester, having a grain cutting and elevating mechanism on one side of the machine, and a grain binding mechanism upon the opposite side of the machine, a grain binder deck intermediate between the elevator and binding mechanism, a butt adjuster composed of a wing board and an orbitally moving toothed arm, acting upon the butts of the grain between the grain elevator and the binding mechanism and connected and driven from the elevating apparatus portion of the machine, forward of the grain and outside thereof, and independent of the grain binding mechanism and grain binder deck portions of the machine, and adapted to swing over the grain binder horizontally to adjust the different lengths of grain to be bound centrally. 10th. In a grain binding harvester, having a grain elevating and grain binding mechanism, a grain binder deck intermediate for receiving the grain from the elevator, a binder deck cover located above said grain binder deck between which the flow of the grain passes from the elevator to the binding mechanism, a butt adjuster connected to the grain elevator portion of the machine, a grain depressor along

the side of the teeth of the grain adjuster to depress the grain down upon the binder deck, said grain depressor being pivotally attached to the elevator part of the machine at its forward end, to move horizontally in unison with the butt adjuster throughout its movements in adjusting the different lengths of grain to the grain binding mechanism. 11th. In a grain binding harvester, a butt adjuster pivotally supported upon the elevator frame, adapted to swing horizontally to and from the band position of the grain binder, said butt adjuster having a reciprocating arm with teeth which pierce the grain at different points upon the binder deck, and having a compressing portion above the points of said teeth to compact the grain to the binder deck, and having a positive motion to force the grain to the binding mechanism. 12th. In a grain binding harvester, a butt adjusting mechanism having an arm with a series of teeth longitudinally and crosswise disposed at the forward end, said forward end connected to and orbitally rotated by a crank, the rear end of said arm upwardly extending and pivotally connected to a vibrating link, the lower end of said link pivotally connected to the wing board, said crank and vibrating link operating to move the butt adjuster arm orbitally over and above the grain and in proximity to the grain delivery end of the elevator, and downward, piercing the grain at different points, compressing it upon the binder deck, and forcibly moving the grain downwardly under the grain depressor toward the binding mechanism. 13th. In a grain binding harvester, a butt adjusting mechanism pivotally supported upon the elevator frame, independent of the binder deck and grain binder, composed substantially of two parts, viz.:—an adjustable wing board pivotally supported at the upper end of the elevator and near the delivery end of same, extending downwardly along the line of travel of the butts of the grain toward the binder, and a butt adjusting mechanism having an arm with a series of teeth longitudinally and crosswise disposed, operating over and into the grain between the delivery end of the elevator and the binding mechanism to deliver said grain properly to the binder. 14th. In a grain binding harvester, a butt adjusting mechanism at the forward end of the machine, at the butt end of the grain, and between the elevator and grain binding mechanism, one of the members of said butt adjuster consisting of a wing board attached to the elevator portion of the machine, above the binder deck and entirely independent of the binder adjustments, a vibrating link pivotally connected at its lower end to said wing board, its upward end pivotally connected to an upwardly extending portion of the toothed arm, which operates to bring the butts of the grain down to the binder, said vibrating link controlling all of the movements of the rear end of the said toothed arm, and the forward end of said toothed arm controlled in all of its movements by a crank supported upon the elevator portion of the grain harvester. 15th. In a grain binding harvester, a butt adjusting mechanism between the elevator and grain binder, and above the binder deck at the butts of the grain, one member of said butt adjusting mechanism consisting of a toothed arm operating over and above the grain, and into and downwardly moving the grain toward the binding mechanism, its front end operated by a revolving crank supported by the elevator part of the machine, its rear end pivotally connected to a vibrating link above the grain and to one side thereof to afford of lateral adjustability without contacting with the binding mechanism in said adjustment. 16th. In a grain binding harvesting machine, an orbitally reciprocating butt adjuster mechanism, a toothed arm having a series of teeth on the line of its length and crosswise thereto, operating on the butts of the grain, and over and above the grain in its upward and forward movement in an open unobstructed space for its free action above the binder deck and binder deck cover, a grain depressor between the elevator and binding mechanism, said toothed end moving above the topmost point of the elevator grain delivery and in close proximity to the grain delivery belts of the elevator and stripping roller to grasp the highest flow of the grain as it comes from the elevator, and force it downward to the binder deck and pinion it thereon, and forcibly move said grain over the binder deck to the binder mechanism. 17th. In a grain binding harvesting machine, having two elevator belts between which the grain is seized, two top rollers for said grain belts, a stripping roller in near proximity thereto, a butt adjuster working in conjunction with said elevating mechanism and operated from one of said rollers. All of said parts held in working contact by a single piece metallic combination box B upon the forward end of the machine, uniting said elevator parts and driving gear for the butt adjuster arm and supporting the wing board independent of the binding mechanism. 18th. In a grain binding harvester, a butt adjusting toothed arm operating on the grain by an orbitally reciprocating movement between the elevator and grain binder, the rear end of said arm guided in its movements by a vibrating link, one end pivoted to the arm and its opposite end at a lower point which will cause said toothed arm to rise above the grain in its forward movement, and in connection with its crank driven movement at its front end to cause said arm to descend into the grain upon the binder deck, compress said grain upon the deck while being moved downward toward the binder, and said pivoted link and crank cause the toothed arm to rise out clear of the grain after it has been delivered to the binder. 19th. In a grain binding harvester, a butt adjuster driving mechanism composed of a rotating crank journaled at the front end of the toothed arm which moves the grain, the cranked shaft of the crank journaled upon the elevator portion of the machine to give motion to the toothed arm and be wholly independent of the binding mechanism to admit of its adjustability. 20th. In a grain binding har-

vesting machine, a butt adjuster mechanism, one of its members operated by a rotary crank, the cranked shaft of said crank being driven by a gear wheel, the hub of said gear wheel extending over and covering the cranked shaft and rigidly attached thereto, and forming a journalled bearing outside of the cranked shaft for said cranked shaft. 21st. In a grain binding harvester, a butt adjuster mechanism composed of the wing board and toothed arm and its driving crank, the gearing for driving the same journalled on and in the pivotal frame CI, which is pivotally attached to a portion of the elevator frame work to admit the horizontal adjustment of said butt adjuster parts, and sustaining the same in their proper working relations to the grain binder deck, entirely independent of the grain binder that the butt adjuster and binder may each be free to adjust independently of each other. 22nd. In a grain binding harvester, an elevator, grain binder, grain binder deck intermediate, a wing board and its connecting parts which control the toothed arm in its orbitally reciprocating movements, the operator's adjusting lever connecting to said wing board extending to an elevator portion of the machine for the purpose of adjusting horizontally and locking in different positions said butt adjuster members for the purpose of delivering the grain centrally to the binder. 23rd. In a grain binding harvester a butt adjuster composed essentially of the following members, a wing board pivotally connected to the elevator part of the machine, an orbitally reciprocating arm having teeth longitudinally and crosswise disposed, one end of said toothed arm pivotally connected to said wing board to guide its movements in delivering the grain to the binder, said toothed arm driven by a crank at its forward end, the crank shaft of said crank journalled in a connected part with the wing board, a pivotal grain depressor under which the grain is forced by the toothed arm over the binder deck, all of said members controlled in their horizontal adjustment, while working in unison with each other, by means of an adjusting lever connected to one or more parts and extending within reach of the operator, and fixedly held in engagement to some part of the elevator portion of the machine. 24th. In a grain binding harvester, a butt adjusting mechanism adapted to swing horizontally, and pivotally connected to the elevator part of the machine, said butt adjuster operated by gearing arranged to permit of said horizontal adjustment, said gearing held in engagement by means of a yoke bracket G, surrounded in the bearing for the vertical shaft driving mechanism and fixedly connected to a member of the swinging portion of the butt adjuster to hold said gears in proper contact by admitting of the adjustability of the butt adjusting mechanism. 25th. In a grain binding harvester, a butt adjuster mechanism arranged to swing horizontally upon a vertically inclined pivot joint arranged outside of the grain line and connecting with the elevator part of the machine, the wing board, the toothed arm, its driving crank and operating parts workably connected together and self contained and attachable and detachable from the harvester part of the machine. 26th. In a grain binding harvester, a butt adjuster having an arm with teeth, its forward end connected to and operated by a crank driven at the butt end of the grain and outside thereof, its lower end supported by a vibrating link pivoted thereto, and outside of and above the butts of the grain, the opposite end of said vibrating link pivoted to the wing board outside of the butts of the grain the butt adjuster moving orbitally over and above the grain, its teeth piercing the grain, compressing it upon the binder deck and forcibly moving the grain toward the binding mechanism. 27th. In a grain binding harvester, a grain elevator, grain binding mechanism and grain binder deck intermediate, a butt adjuster and co-acting parts composed of rotatively reciprocating orbitally moving butt adjuster having an arm with teeth longitudinally and crosswise disposed, the forward end of said arm operated and controlled by a crank vertically rotative, its rear end having a non-toothed portion at a higher altitude than its toothed portion, and pivotally connected to a vibrating link uprightly from the wing board at the butts of the grain, the operation being first for said toothed arm's forward end to be carried by its driving crank upward and over the grain, then downward into the grain on the binder deck, and forcibly and positively moving the grain toward the binding mechanism, the rear non-toothed portion of the butt adjuster arm acting above and against the grain in the rearward throw of the driving crank to compact the butts of the grain and move the same down into a gavel position preparatory for binding and ejecting. 28th. In a grain binding harvester, a grain elevator, a grain binding mechanism, a grain binder deck between, over which the grain passes to the binding mechanism, a grain butt adjusting mechanism composed of a wing board at the butts of the grain extending from the elevator over the binder deck toward the binding mechanism to control the butts of the grain in their downward passage, a butt adjuster a portion of its arm having a series of teeth both lengthwise and crosswise disposed, its forward end operated by a vertically rotating crank, its rear non-toothed upper and outer extending portion pivotally connected with the upper end of a vibrating link, the lower end of said vibrating link pivotally connected to the wing board, said butt adjuster having an orbital movement above and over the grain in one direction, and into and with the grain in an opposite direction, the forward teeth of said butt adjuster rising to a higher altitude than its rear teeth and moving forward over the grain to embrace it and bring it down to and over the grain binder deck toward the binding mechanism. 29th. In a grain binding harvester, wherein grain is elevated from the cutting apparatus to and on a grain binder deck to one side of which is a grain binding mechanism, a grain

butt adjuster and grain moving parts composed of the following devices:—a wing board extending from the elevator along the butts of the grain and over the binder deck toward the binding mechanism, two elevator belts extending to near the binder deck and between which is located a stripping roller which serves to lift the grain from the lower elevator belt and transfer it on to the binder deck, a many toothed butt adjuster, its forward arm portion controlled by a vertically moving crank driven from one of the grain moving rollers, the rear non-toothed end of the butt adjuster arm pivotally connected by a vibrating link to said wing board, the toothed grain butt adjuster mechanism having a forward upward movement over the grain and down into the grain to move said grain binderward, the movement of said grain butter adjuster being orbital, and its forward end or toothed portion rising higher above the grain on the binder deck than its rear non-toothed portion to embrace and gather in the up-flowing grain from the elevator and sweep said grain downward, all of its teeth act to pinion the grain, compact it on the grain binder deck and positively move it toward the binding mechanism. 30th. In a grain binding harvester, having a grain elevator and grain binding mechanism, a grain binder deck intermediate, a wing board extending from the elevator to the grain binder over the grain binder deck at the butts of the grain, and guiding the butts in their passage toward the binding mechanism, a butt adjuster, its arm having teeth lengthwise and crosswise disposed at its forward end, its rear end upwardly and outwardly inclined and controlled by a vibrating link, one end of said link being pivoted to the non-toothed end of said arm, its opposite end to a portion of the machine independent of the binding mechanism so as not to interfere with said binding mechanism being shifted longitudinally with the grain, the forward toothed end of said butt adjuster arm being operated by a crank which is driven from one of the grain moving rollers, said butt adjuster having an orbitally reciprocating motion and operating to rise above the grain in one direction and descend and pierce the grain in another direction for the purpose of compacting and pinioning the grain upon the binder deck and forcibly moving it toward the binding mechanism. 31st. In a grain binding harvester, a grain butt adjusting mechanism pivotally supported upon the elevator frame independent of the binder deck and grain binder, composed substantially of three active parts in controlling and moving the grain from the elevator to the binding mechanism, viz:—a wing board extending from near the grain delivery end of the elevator to the binding mechanism along the butts of the grain, a reciprocating arm having a series of teeth longitudinally and horizontally disposed, operating over the grain between the grain delivery end of the elevator and the binding mechanism to forcibly draw the grain over the grain binder deck toward the binding mechanism, a grain depressor extending from near the grain delivery end of the elevator and over and above the grain, downward, and toward the binding mechanism along the inside of the teeth for the purpose of the depressing of the grain down and compressing it in a compact form that the teeth may withdraw without lifting the grain. 32nd. In combination with a grain binding harvester, having an elevator apparatus and grain binding mechanism with an intermediate grain binder deck, a grain butt adjusting mechanism pivotally connected to the elevator portion of the machine and adapted to swing horizontally, said grain butt adjuster having a reciprocating orbital movement over and above the grain with teeth to pierce said grain at different points, a wing board at the butts of the grain operating in conjunction with said grain butt adjuster to control the movement of the grain, a holding down mechanism connected with the elevator part of the machine and adapted to swing horizontally with the wing board and grain butt adjuster that the grain may be compactly and positively delivered from the elevator end of the machine to the grain binding mechanism, all three of said mechanisms operating in conjunction with each other in their several offices and adapted to swing in unison horizontally to deliver the grain centrally to the band. 33rd. In a grain binding harvester, a butt adjuster mechanism, one of its members being an orbitally reciprocating toothed arm acting over and above the grain and into and downwardly moving the grain to the binder, in combination with a grain butt controlling wing board at the butts of the grain, both members supported by the elevator parts and independent of the grain binder. 34th. In a grain binding harvester, a butt adjusting mechanism, one of its members composed of a toothed arm, channel-shaped, for the purposes set forth and described. 35th. In a grain binding harvester, having an elevating apparatus and a binding mechanism adjustable longitudinally with the grain, a grain binder deck situated between the elevating apparatus and the grain binding mechanism, and a butt adjuster, one of its members operating over and above the grain, into and downward with the grain, a wing board member of said butt adjusting mechanism connected to the elevator portion of the machine to control the butts of the grain in conjunction with the toothed arm member in its downward passage to the binding mechanism. 36th. In a grain binding harvester, a butt adjusting mechanism, the following co-operative parts, a reel to reel the grain upon the platform belt, a knife to sever the stalk, a platform belt to convey the grain horizontally across the path of the machine, two upwardly inclined endless grain elevator belts to take the grain from the horizontal platform belt conveyor and deliver said grain over the main driving and supporting wheel upon the grain binder deck, a stripping roller at the top of the grain elevator belt in close proximity to the top of the lower elevator belt, a grain binder deck

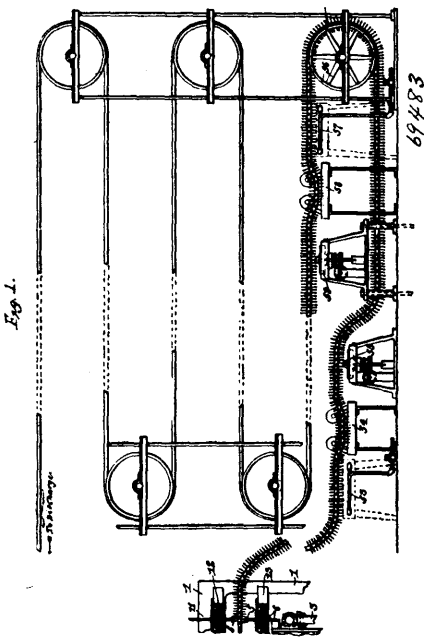
situated between the two elevator belts and said stripping roller and the grain binding mechanism, a cover or grain guide distant above the grain binder deck, a grain depressor above the grain binder deck and under which the grain passes to the grain binding mechanism, a butt adjusting mechanism, one of its members a wing board at the butts of the grain supported and controlled upon portions of the elevator parts of the machine and independent of the binding mechanism and its adjustments, another member of the butt adjusts an orbitally reciprocating toothed arm, its forward end moved and controlled by a rotating crank shaft, the rear end controlled by a vibrating link, one of its ends pivoted to the rear upwardly extending part of said toothed arm, its lower end pivoted to said wing board, said orbitally reciprocating toothed arm operating over and above the grain in its forward motion toward the elevator and descending into the grain and depressing it upon the binder deck and forcibly moving said grain under the grain depressor and toward the binding mechanism. 37th. In a grain binding harvester, the combination of two elevating grain belts which deliver the grain upwardly and over the main driving wheel upon the grain binder deck, a stripping roller operating in the same direction as the lower elevator belt and situated between said elevator belt and the grain binder deck. All three of these members acting in conjunction with each other to properly deliver the grain upon said grain binder deck, a butt adjuster and its co-operative parts composed of a wing board at the butts of the grain, a toothed butt adjuster and grain depressor operating in conjunction with each other to pinion the grain down upon the binder deck and forcibly move said grain toward the grain binding mechanism. 38th. In a grain binding harvester, a butt adjuster for forcibly moving the grain over the grain binder deck from the grain delivery end of the elevator to the binding mechanism, composed of the following parts:—A wing board at the butts of the grain connected with the elevating mechanism, an orbitally reciprocating toothed arm acting over and above the grain in its forward movement, the front end of said toothed arm moved and controlled by a rotating cranked shaft, its rear end being upwardly and outwardly inclined over the grain and to one side thereof and controlled by a pivoted vibrating link, one end of which is pivotally connected to the upwardly and outwardly inclined end of the toothed arm, its opposite end pivotally connected to said wing board or some connecting part therewith, all of said butt adjuster mechanism being entirely disconnected from the binding mechanism to permit said binder to have a longitudinal adjustment without interfering with the free operation of the butt adjuster. 39th. In a grain binding harvester, a butt adjuster mechanism composed of the following co-operative members, a pivoted wing board at the butts of the grain to guide said butts in their downward passage toward the binding mechanism, a toothed arm butt adjusting mechanism operating over and above the grain in its orbitally reciprocating motion, its front toothed end reaching in its movement in close proximity to the grain elevating mechanism and having a downward movement into and compressing the grain upon the binder deck and moving said grain toward the binding mechanism, the forward end of said toothed arm connected to a rotating crank, its rear end to a pivoted link connecting with the pivoted wing board, a grain depressor pivotally connected at its front end, the grain being forced under said grain depressor by the toothed arm butt adjuster and a controlling mechanism, one end attached to the wing board directly or indirectly, its opposite end to some portion of the elevator parts, the first three mentioned members being horizontally adjustable and being held and controlled at any desired point of adjustability by an adjusting lever, that the grain may be delivered centrally to the band mechanism for binding. 40th. In a grain binding harvester, a butt adjusting mechanism composed in part of an orbitally reciprocating, flexibly divided toothed arm operating to bring the grain from the elevator over the binder deck toward the binder mechanism, said flexibly divided toothed arm to yield upwardly when encountering very large masses of grain without its operation being impaired in the work of delivering the grain to the binder mechanism. 41st. In a grain binding harvester, a butt adjuster toothed arm being divided into two parts and elastically controlled for the purpose of adaptation to the varying quantities of grain to be acted upon in forcibly moving said grain from the elevator to the binding mechanism. 42nd. In a grain binding harvester, a butt adjusting mechanism operating on the grain at intervals and over and above it, in combination with a wing board and vibrating link pivotally connected to the rear end of said toothed arm and to said wing board, its front end being propelled by gearing from one of the grain delivering rollers to the elevating mechanism. 43rd. In a grain binding harvester, a butt adjuster composed of a horizontally adjustable wing board connected to the elevator part of the machine, a toothed arm connected thereto, said toothed arm having teeth longitudinally and crosswise disposed, all of said teeth acting upon the grain at the same time upon the binder deck to take the grain forcibly and positively from the elevator to the grain binder and with the capacity to adjust said grain for the band, whether the same be long or short. 44th. In a grain binding harvester, a butt adjuster mechanism adjustably and pivotally connected to the upper part of the elevator, having an arm with a series of teeth longitudinally and crosswise disposed, the forward end of said arm connected to and orbitally rotated by a crank, its rear end upwardly extending and pivotally connected to a vibrating link, the lower end of same pivotally secured to the wing board, the crank and vibrating

link operating to move the butt adjuster orbitally over and above the grain and into the grain delivery end of the elevators, to cause the said teeth to descend into and pierce the grain at different points, said arm and teeth in their downward movement acting to compress and forcibly move the grain to and under the depressing devices provided to receive and confine the grain to the binder deck while it is being forcibly moved toward the grain binder, and while the butt adjuster releases itself to repeat the operation. 45th. In a grain binding harvester, a butt adjuster operating between the elevator and grain binder, one of its members composed of an orbitally reciprocating toothed arm, moving over and above the grain in its forward motion and into said grain in its rearward motion, the forward end of said toothed arm wider than the rear end to act over a greater area of grain in front near the elevator than in the rear opposite the band needle for the purpose of moving the grain vigorously near the elevator to clear it and mildly rearwardly so as not to clog said band needle with the grain being pressed close against it. 46th. In a grain binding harvester, a butt adjusting mechanism comprising an orbitally reciprocating toothed arm having teeth lengthwise and crosswise disposed to pinion the grain to the grain binder deck and forcibly move it en masse as found under the grain depressor towards the binding mechanism. 47th. In a grain binding harvester, having a grain elevator and grain binding mechanism, a grain binder deck intermediate, a wing board extending from near the elevator to the grain binder and over the grain binder deck at the butts of the grain guiding the same in their passage to the binding mechanism, a butt adjuster having its teeth longitudinally and crosswise disposed, its rear end upwardly extending and controlled by a vibrating link, one end of said link being pivotally connected to the upwardly extending part of the toothed arm, and the opposite end to some portion of the machine independent of the binding mechanism so as not to interfere with said binding mechanism being shifted longitudinally with the grain, the forward end of the toothed butt adjuster arm being operated by a crank which is driven from one of the grain moving rollers, said butt adjuster having an orbital motion and operating to rise above the grain in one direction and descend into and pierce the grain in another direction for the purpose of compacting and pinioning the grain upon the binder deck and forcibly moving it toward the binding mechanism. 48th. In a grain binding harvester, a butt adjuster operating between the elevator and binding mechanism over the grain binder deck and adapted to adjust the grain lengthwise and sidewise to the binding mechanism, its driving mechanism composed of a vertically rotating shaft and a horizontally rotating shaft crosswise thereto, the vertical shaft at the front of the grain and the horizontal shaft above the grain, the centers of each shaft substantially intersecting each other at their axial centers and co-acting to produce the continuous driving operation of said butt adjusting mechanism through all the horizontal adjustments. 49th. In a grain harvesting machine, the combination of an orbitally reciprocating fork mechanism at the inner end of the cutting apparatus and meeting ends of the horizontal grain belts, operated by means of a rotating crank and controlled in its movements by a swinging link, one end connected with the upper end of the fork and the other end of said link connected to some portion of the harvesting machine, the cranked shaft operating said fork passing through the centre or pivotal joints of the oscillating reel support. 50th. In a grain harvesting machine, the combination of an orbitally reciprocating fork mechanism at the inner end of the cutting apparatus and meeting ends of the horizontal grain conveying belt and elevator belts, operated by means of a rotating crank and controlled in its movements by a swinging link connected with the upper end of said fork and to a portion of the harvesting machine, the cranked shaft operating said crank and fork passing through the pivotal joints of the oscillating reel support and a tubular sleeve bearing provided for said cranked shaft, which also serves as a pivotal joint or support for the foundation of the vertically swinging arm of the reel. 51st. In a grain harvesting machine, the combination of an orbitally reciprocating fork mechanism at the inner end of the cutting apparatus and meeting ends of the horizontal grain conveying belt and elevator belts, operated by means of a rotating crank and controlled in its movements by a swinging link connected with the upper end of said fork and to a portion of the harvesting machine, the cranked shaft operating said crank and fork passing through the pivotal joints of the oscillating reel support, and a tubular sleeve bearing provided for said cranked shaft, which also serves as a pivotal joint or support for the foundation of the vertically swinging arm of the reel, said cranked shaft in its tubular bearing pivot for the reel support having a gear and chain wheel mounted thereon and connected thereto, the chain wheel operating the reeling mechanism and the toothed gearing, giving motion to both the fork and cranked shaft and reel chain mechanism. 52nd. In a grain harvesting machine, the combination of an orbitally reciprocating fork mechanism at the inner end of the cutting apparatus and meeting ends of the horizontal grain conveying belts and elevator belts, operated by means of a rotating crank and controlled in its movements by a swinging link connected with the upper end of said fork and to a portion of the harvesting machine, the cranked shaft operating said crank and fork passing through the pivotal joints of the oscillating reel support, and a tubular sleeve bearing provided for said cranked shaft, which also serves as a pivotal joint or support for the foundation of the vertically swinging arm of the reel, said cranked shaft in its tubular bearing pivot for the reel support having a gear and chain wheel mounted

thereon and connected thereto, the chain wheel operating the reeling mechanism and the toothed gearing, giving motion to both the fork crank and reel chain mechanism, said gear wheel on said cranked shaft driven by an oblique connecting shaft extending to and connected with and driven by one of the upper elevator roller shafts. 53rd. In a grain binding machine, a bifurcated crank ejector operating from the crank upon the tyer wheel shaft, the upper end of said ejector connected to and controlled by a link, the opposite end of said link connected to the binder parts and controlling the toothed ends of said ejector to move around the gavel, one of the toothed parts operating near the breast plate of the binder and the other distant therefrom and acting upon the grain at two different points at the same time on one side of said breast plate in combination with a rotative ejector arm on the opposite side of the breast plate, acting at the same time upon the grain to eject the gavel. 54th. In a grain binding machine, a bifurcated crank ejector operating from the tyer wheel shaft by a crank thereon, a link controlling mechanism pivoted at the upper end of said ejector and to a portion of the grain binder, the crank journal operating said ejector, being oblique, to the tyer wheel shaft to move the tines away from the knot tying parts in its upward movement and nearer to said knotting mechanism in its downward movement, one of the tines being brought in proximity to the band in the ejection of the gavel. 55th. In a grain binding machine, a bifurcated crank ejector operated from an oblique crank on the tyer wheel shaft, said ejector having an orbitally rotative movement but non-rotating, the tines of said ejector moving elliptically in the plane of their rotative movement, the tines rising higher over the grain and lower into the grain and nearer to the band position during its driving cranks rotation, in combination with a rotating arm ejector operated from said tyer wheel shaft on the opposite side of the breast plate. 56th. In a grain binding harvesting machine, having an elevating device and grain binder deck to one side thereof, upon which the grain falls from the elevator, an orbitally moving reciprocating grain lifting toothed arm at the rear of the end of the elevator to lift and move the grain upwardly along the line of the elevator to deliver it to the binder deck. 57th. In a grain binding harvesting machine, having an elevator and grain binder, an orbitally reciprocating toothed arm at the rear of the grain binder deck and operating to lift and draw the grain downward over said grain binder deck to the grain binding mechanism.

No. 69,483. Match Making Machine.

(Machine à faire les allumettes.)



William E. Cook, Ottawa, Ontario, Canada. 26th November, 1900; 6 years. (Filed 7th December, 1900.)

Claim.—1st. In a match machine, a splint cutting mechanism, comprising cross heads carrying the splint cutters, the said cutters being mounted opposite to each other and arranged so as to cut splints when they recede from each other and to deliver the splints when they approach each other, and a shaft having cranks arranged diametrically opposite for moving the cross heads toward and away from each other at each revolution of the crank shaft, substantially as described. 2nd. In a match machine, the combination with a suitable conveyer for receiving match splints, of a splint cutting mechanism adapted to cut splints and place them in the said carrier from opposite sides thereof, substantially as described. 3rd. In a

match machine, the combination with a conveyer of a splint cutting mechanism comprising oppositely moving cross heads carrying cutters and arranged upon opposite sides of the said conveyer, means for reciprocating the said cross heads toward and away from each other for cutting the splints and inserting them upon opposite sides of the conveyer, substantially as described. 4th. In a match machine, the combination with a suitable carrier, of reciprocating splint cutting cross heads arranged upon opposite sides thereof, a shaft having oppositely arranged cranks connected with the said cross heads, whereby they are caused to approach each other in cutting match splints and deposit the said splints in a carrier upon each side thereof and will both simultaneously recede for the next cut, substantially as described. 5th. In a match machine, the combination with a suitable splint carrier, of a cutting mechanism comprising cross heads, die beds secured to the said cross heads and plates mounted upon the said die beds, the said cross heads being arranged upon opposite sides of the said carrier whereby upon the reciprocation of the cross heads, the cutters will cut the match splints and place them upon opposite sides of the carrier, substantially as described. 6th. In a match machine, the combination with a suitable carrier, of a cutter for cutting match splints, said cutter comprising a die bed having a dovetailed groove formed upon its outer supporting face, and die plates having cutting edges, the said plate also having dovetailed tenons adapted to engage the said dovetailed groove for securing the die plates to the die bed, substantially as described. 7th. In a match machine, the combination with a carrier, of a cutter for cutting splints and inserting them therein, comprising a die bed having a dovetailed groove formed in its supporting face, a series of die plates having dovetailed projections adapted to engage said groove, whereby the die plates may be secured upon the plate for forming a continuous row of cutters, substantially as described. 8th. In a match machine, the combination with a suitable carrier, of a cutter for placing splints therein comprising a die bed having a groove formed in its supporting face, die plates provided with dovetailed projections for engaging the said groove, whereby the die plates are centrally supported upon the die bed, and dies or cutting edges formed upon each end of the die plates projecting beyond the opposite sides of the die bed, whereby the cutter is adapted to cut two rows of splints, one upon each side of the die bed simultaneously, substantially as described. 9th. In a match machine, the combination with a carrier, of reciprocating cutters mounted in the same place and upon opposite sides of the said carrier, the said cutters comprising die beds, and die plates centrally supported upon the supporting face of each of the said beds and having dies or cutting edges projecting upon opposite sides of the said beds, whereby each cutter is adapted to cut two rows of splints simultaneously and place them in the opposite sides of the carrier, substantially as described. 10th. In a match machine, the combination with a suitable frame, of an upper and lower cross head mounted therein and moving in suitable guides, a main shaft mounted below said cross heads, the lower cross head being connected with the shaft by means of a pitman and crank, wrist pins formed upon the outer ends of the upper cross head and pitmen connecting the said wrist pins with cranks upon power shaft, the latter cranks being arranged oppositely to the former crank, the construction being such that as the main shaft revolves the cross heads will be caused to simultaneously approach each other and recede, and cutters secured to the said cross heads for cutting the match splints, substantially as described. 11th. In a match machine, the combination with a carrier, of cutters adapted to cut match splints and place them in the opposite sides of the said carrier, feed troughs extending upon either side of the carrier and adapted to supply blocks of wood to each of the cutters, whereby the splints may be simultaneously cut and placed upon the opposite sides of the carrier, substantially as described. 12th. In a match machine, the combination with a carrier, of reciprocating cutters mounted upon each side thereof, said cutters being adapted to cut rows of splints upon each side of each of their cutter heads simultaneously, and converging troughs leading to each side of each of the cutters, whereby blocks of wood may be supplied for cutting rows of match splints at a time and inserting them in a carrier substantially as described. 13th. In a match machine, the combination with reciprocating cutters for cutting match splints, of a carrier located between them, feed troughs for feeding blocks of wood to each side of said carrier, each comprising a longitudinal box or trough having a suitable floor for supporting the blocks, a partition dividing the troughs into two parts longitudinal, feed rollers adapted to engage the blocks above and below for forcing them toward the cutters, means for rotating the said feed rollers, and covers arranged upon the troughs in proximity to the cutters, whereby the blocks are enclosed upon all sides and firmly held in place, substantially as described. 14th. In a match machine, the combination with a suitable carrier, of reciprocating cutters adapted to place splints therein from opposite sides, guides for directing the splints into the carrier mounted in proximity to each cutter, and means for moving the said guides oppositely with respect to each other and each in union with its own cutter, substantially as described. 15th. In a match machine, the combination with reciprocating cutters, of a carrier adapted to pass between them, means for feeding the carrier forward, said cutters being provided with cutting edges upon each side, of the cutter heads, whereby they cut two rows of splints at a time, guides for directing the

splints into a carrier interposed between each of the rows of splints cut by two cutters, rods supporting the said guides, levers for operating the said rods, cams adapted to move the guides to correspond with the movement of the cutters, and gearing connecting the said cams with the main power shaft of the machine for rotating them, substantially as described. 16th. In a match machine, the combination with reciprocating cutters, of a carrier adapted to pass between them, means for feeding the carrier forward to receive charges of match splints, guides for directing the splints from each cutter into the carrier, one guide being provided for each cutter, cams connecting with said guides, and mounted upon shafts arranged upon each side of the carrier, a single shaft connected with each of the cam shafts by means of gearing, whereby they are both rotated simultaneously, and gearing connecting the said single shaft with the main power shaft of the machine, substantially as described. 17th. In a match machine, the combination with a suitable carrier and means for feeding the same forward, of cutters arranged upon opposite sides thereof and adapted to insert match splints in the carrier from each side, means for supplying heads to said matches, and ejecting means mounted upon each side of the said carrier adapted to eject the complete matches from each side of the carrier simultaneously, substantially as described. 18th. In a match machine, the combination with a suitable carrier, of means for placing splints in the said carrier from opposite sides, means for ejecting the complete matches from each side of the carrier chain, comprising plungers mounted upon opposite sides of the carrier, and means for reciprocating the said plungers towards and away from each other simultaneously to eject the matches from both sides at once, substantially as described. 19th. In a match machine, the combination with a suitable carrier, of means for placing splints in the opposite sides thereof, an ejecting mechanism comprising plungers mounted upon the opposite sides of the said carrier, the said plungers carrying a series of plates adapted to engage the matches, said plates being arranged alternately with respect to each other, and means for reciprocating the plungers, whereby they are caused to eject matches from the opposite sides of the carrier at the same time, substantially as described. 20th. In a match machine, the combination with a splint carrier, of means for inserting splints upon each side thereof, ejecting means comprising oppositely reciprocating plungers carrying a series of plates arranged opposite to the matches in the carrier, each of the said plates being provided with projections which coincide with the ends of the matches, and means for reciprocating the said plungers, whereby the projections are caused to push the completed matches from the chain upon both sides thereof, substantially as described. 21st. In a match machine, the combination with a carrier chain, of means for inserting splints in opposite sides thereof, an ejecting means comprising oppositely reciprocating plungers each made up of a carrier bar and a series of plates mounted thereon, guides for directing the movement of the said carrier bars, projections formed upon the said plates and coinciding with the ends of the match splints, the plates of one ejector being arranged opposite the spaces between the plates of the other ejector, whereby the completed matches will be forced out of the carrier between the plates upon each side of the said carrier simultaneously, and means for reciprocating the said plungers, substantially as described. 22nd. In a match machine, the combination with a carrier chain, of means for feeding the same forward, means for placing the splints in opposite sides thereof, guides directing the said carrier to the ejecting mechanism, ejecting plungers mounted upon opposite sides of the said carrier, carrier bars moving in said guides, plates mounted upon the said carrier bars and having projections coinciding with the matches, and means for reciprocating the plungers toward and away from each other, the construction being such that when the plungers approach the carrier, they will each force the completed matches out of the carrier between the plates of the opposite plunger, the carrier bars acting as cushions for preventing the matches from going too far, and plates guiding the matches so as to fall in approximately the same plane in which they were ejected, substantially as described. 23rd. In a match machine, the combination with a suitable carrier, of means for inserting matches therein, ejectors arranged on opposite sides of the carrier for knocking the completed matches out of the same from each side and comprising reciprocating plungers, bell crank levers engaging the said plungers for reciprocating them, links connecting the said bell crank levers with cams for actuating the said levers, and gearing connecting the said cams with the main shaft of the machine, substantially as described. 24th. In a match machine, the combination with a carrier, for receiving match splints in its opposite sides, of means for ejecting the said splints from each side simultaneously, belts adapted to receive the matches from each side of the carrier, the said belts being mounted upon fixed pulleys and adjustable pulleys, being provided with means for taking up the slack of the belt, sprocket gearing connecting the fixed pulleys with the shaft upon the frame of the machine, and worm gearing connecting the said shafts with the power shaft of the match machine whereby movement is imparted therefrom to the said belts, substantially as described. 25th. In a match machine, the combination with a splint cutting mechanism adapted to place splints in opposite sides of a carrier, a carrier for receiving the said splints, a heating, paraffining and heading mechanism for supplying the splints upon one side of the carrier with igniting heads, a second heater, paraffining pan and composition vat arranged upon a different plane for placing heads upon the match splints on the other side of the said

carrier, means for directing the chain in the plane of one heading mechanism and then to the plane of the other, and means for drying and ejecting the completed matches, substantially as described. 26th. In a match machine, the combination with a carrier, of means for placing matches in each side thereof, a heating, paraffining, and heading mechanism for placing heads upon the splints on one side of the carrier, means for guiding the said chain to another heading mechanism, comprising a heating device, a paraffining pan, and a composition vat located upon a different plane for the other heading mechanism so as to place heads on the other splints on the other side of the carrier, and a dryer frame for supporting the carrier until the matches have dried, and means for ejecting the completed matches, substantially as described. 27th. In a match machine, the combination with a cutter, of a carrier comprising outer and inner slats, the inner slats being provided with a series of wedge faces adapted to correspond with each other, the construction being such that when the inner slats are moved longitudinally with respect to each other, they are spread apart so as to grip the splints between them and the outer slats, substantially as described. 28th. In a match machine, the combination with a suitable carrier, of a cutter for cutting splints and placing them in a carrier, having cylindrical cutting edges, the said cutters being grooved upon their under surfaces, so as to provide straight cutting edges between the cylindrical cutters for trimming the unevenness left upon the blocks of wood by the cylindrical cutters, substantially as described. 29th. A cutter for match machines comprising a body portion and cylindrical cutting edges, the said body portion having grooves upon its under surfaces forming trimming edges for trimming the unevenness left upon the blocks of wood by means of the cylindrical cutters, substantially as described. 30th. In a match machine, the combination with a carrier adapted to receive splints upon opposite sides, of a series of cams for feeding the said carrier having spiral projections or ribs for engaging the sections of the carrier to feed it forward, intermediate auxiliary flanges or ribs of less height than the main ribs for further engaging the sections of the carrier, whereby they are centered perfectly for receiving the match splints, and cutters for cutting the splints and placing them in said carrier, substantially as described. 31st. In a match machine, the combination with upper and lower cutters, of feed troughs leading to each, rollers for feeding blocks of wood in said troughs, ratchet wheels secured to the said rollers, pivoted frames carrying pawls for engaging the said ratchet wheels, a link connecting the upper and lower pawl frames, and a pitman connecting the lower frame with an eccentric upon the main shaft of the machine, whereby the frames will be caused to operate the ratchet wheel, substantially as described. 32nd. In a match machine, the combination with upper and lower cutters, of converging feed troughs leading to each side of each cutter, feed rollers mounted in each of said troughs, ratchet wheels secured to the rollers in each trough, arms carrying pawls for engaging each ratchet wheel, cross bars connecting the said arms, arms or levers secured to the said cross bars, links connecting the said arms and a pitman engaging an eccentric on the main power shaft and connecting it with the said lower arms, and dogs for preventing the ratchet wheels from rotating in the wrong direction, the whole construction being such that the blocks of wood will be fed forward to the cutters in all four troughs simultaneously, substantially as described. 33rd. In a match machine, the combination with a suitable splint carrier, of means for placing splints in both sides of the same and means for ejecting the completed matches from both sides of the carrier, belts adapted to receive the splints discharged from each side of the said carrier chain, the said belts collecting and discharging the completed matches at any suitable point, and means for operating the belts, substantially as described.

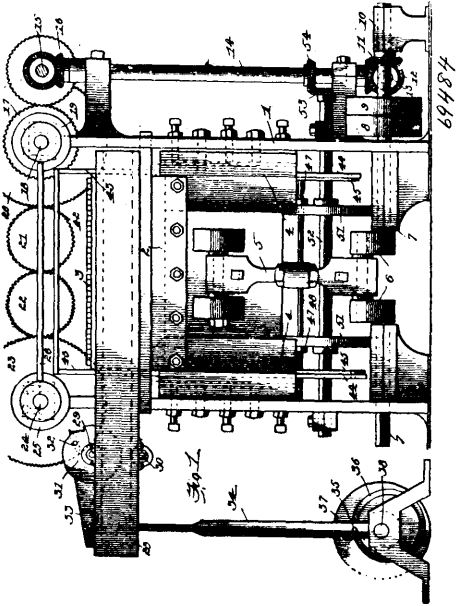
No. 69,484. Match Making Machine.

(Machine à faire les allumettes.)

William E. Cook, Ottawa, Ontario, Canada, 26th November, 1900; 6 years. (Filed 7th December, 1899.)

Claim.—1st. In a match machine, the combination with a carrier chain, of a cutter head, cutters secured to said head and overhanging opposite sides thereof so as to be capable of cutting two rows of splints, one row upon each side of the cutter head and placing them into the sections of the said carrier chain, which follow one another, the travel of such chain being in a plane across that in which the cutter head moves and from one cutter line toward the other, substantially as described. 2nd. In a match machine, the combination with a cutter head, of cutters secured thereon, and overhanging opposite sides so as to be capable of cutting parallel rows of splints, one row upon each side of the cutter and placing them into the sections of a carrier chain, which follow one another, the travel of such chain being in a plane at a right angle to the movement of the cutters and from one cutter line toward the other, substantially as described. 3rd. In a match machine, the combination with a cutter head, of a double cutter centrally supported thereon and having cutting edges projecting beyond each side of the said cutter head, whereby it is capable of cutting a row of splints on each side of the cutter head, simultaneously, substantially as described. 4th. In a match machine, the combination with a cutter head, of a cutter made up of a series of dies placed side by side, each die being centrally supported on the said cutter head, and having its cutting edges projecting beyond each side of the said cutter head, whereby it is capable of cutting splints upon each side of the cutter head,

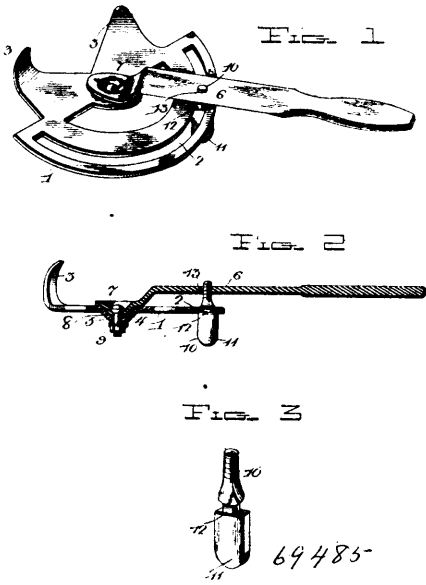
simultaneously, substantially as described. 5th. In a match machine, the combination with a reciprocating cutter head, of a



cutter mounted thereon adapted to cut upon each side of the said cutter head, feed troughs leading to opposite sides of the cutter and arranged upon the same side of the machine, whereby an attendant can easily reach and supply both troughs, and means for reciprocating the cutter head, substantially as described. 6th. In a match machine, the combination with a reciprocating cutter head, of a cutter adapted to cut two rows of splints mounted thereon, a carrier chain for receiving the said splints, and a guide adapted to pass between the rows of splints for guiding them gradually into the carrier chain, substantially as described. 7th. In a match machine, the combination with a reciprocating cutter head, of a carrier chain adapted to receive the said splints, means for feeding the carrier chain forward, and bolts having slat embracing portions for centring and clamping each section of the carrier chain immediately over the cutter to receive its charge of match splints, substantially as described. 8th. In a match machine, the combination with a reciprocating cutter adapted to cut two rows of match splints, of a guide adapted to engage the splints for directing them to a carrier chain, cams connected with the operating mechanism of the machine, and means connecting the said cams with the said guide whereby the guide will be caused to operate in conjunction with the cutter upon the splints, substantially as described. 9th. In a match machine, the combination with a reciprocating cutter head, of a cutter adapted to cut splints upon the opposite sides of the said cutter head, a guide adapted to be interposed between the said splints comprising a guide bar, supporting rods, levers connected with said rods, and discs having cam paths formed in their faces for engaging the said levers, whereby the movement of the splint is regulated according to the movement of the cutter, substantially as described. 10th. In a match machine, the combination with a reciprocating cutter head, of a cutter mounted thereon, a guide adapted to co-operate with the cutter for directing the match splints, rods carrying the said guide, levers connecting the said rods, discs connected with the operating mechanism of the machine having cam paths formed in their faces, the levers connecting the said cam paths with the guide supporting rods, the shape of the said cam paths being such that the guide will be caused to accommodate itself to the movement of the cutter and will be quickly withdrawn from between the match splints, to permit of the chain being fed forward substantially as described. 11th. In a match machine, the combination with a reciprocating cutter, of a carrier chain comprising sections formed of slats and wedge bars adapted to receive splints therefrom, means for centring each section of the carrier chain over the cutter, comprising reciprocating bolts and beveled projections on the said bolts adapted to engage the inner slats to draw them against the wedge bars so as to form wide receiving openings for the splints, substantially as described. 12th. In a match machine, the combination with the reciprocating cutter, of a carrier chain for receiving splints therefrom, composed of sections formed of slats and wedge bars, a centring and slat opening mechanism adapted to hold each section of the carrier chain over the cutter, comprising reciprocating bolts having beveled projections for engaging the slats, said bolts being guided upon the frame of the machine, discs for operating said bolts, said discs having cam paths formed in their faces, and antifriction rollers formed in said bolts for engaging the said cam paths, substantially as described. 13th. In a match making machine, the combination with a

reciprocating cutter, of a carrier chain for receiving splints therefrom, means for centring each section of the carrier chain over the cutter comprising reciprocating bolts, means for reciprocating said bolts in conjunction with the movement of the cutter, and beveled projections mounted upon the bolts adapted to embrace each section of the chain between them successively as the bolts are lowered, substantially as described. 14th. In a match making machine, the combination with a cutter, of a match splint carrier adapted to receive splints from the said cutter, said carrier comprising sections of slats, intermediate slats in each section, and means for extending the same for gripping the splints in the carrier chain, substantially as described. 15th. In a match making machine, the combination with a cutter, of a carrier chain for receiving splints therefrom, the said carrier chain comprising sections formed of exterior and interior slats, links for binding the said slats to form sections, and links for connecting the sections to form a continuous chain, and wedge bars interposed between the interior slats, the construction being such that when the wedge bars are forced inwardly, they will expand the inner slats against the ends of the match splints, substantially as described. 16th. In a match machine, the combination with a cutter, of a carrier chain adapted to receive splints from the same, the said chain comprising sections formed of outside and inside slats, wedge bars interposed between the inner slats having beveled faces formed thereon, corresponding beveled faces being formed upon the inner slats, the construction being such that when the wedge bars are forced inwardly, the wedge faces will cause the inner slats to separate and grip the match splints between them and the outer slats, substantially as described. 17th. In a match machine, the combination with a cutter, of a match splint carrier for receiving the splints therefrom, comprising sections forward of outer and inner slats, wedge bars interposed between the inner slats having wedges formed thereon, the said wedges having beveled faces and flat faces, the inner slats being provided with corresponding notches formed in their inner faces, the construction being such that when the wedge bars are forced inwardly, the outer bars will be separated by the beveled faces but will be held in their open position by the flat faces, substantially as described. 18th. In a match machine, the combination with a cutter, of a match splint carrier adapted to receive splints therefrom, means for feeding the said carrier forward by an intermittent movement, the said carrier comprising sections formed of fixed slats and inner expanding slats, and means for operating the inner expanding slats, substantially as described. 19th. In a match machine, the combination with a cutter, of a carrier chain for receiving splints comprising sections formed of fixed slats and expanding slats, cams for feeding the chain, cam paths formed on the faces of the said cams, and bolts adapted to engage the said cam paths, the construction being such that the bolts will be intermittently forced inwardly to spread the expanding portion of the chain, substantially as described. 20th. In a match machine, the combination with a cutter, of a carrier for receiving splints therefrom, the said carrier comprising fixed and expanding slats, means for spreading the expanding slats, comprising bolts adapted to be moved transversely with respect to the frame of the machine, and feed cams for feeding the chain forward, the said feed cams being provided with cam paths in their faces, and antifriction rollers upon the said bolts engaging the said cam paths, the construction being such that when each carrier section has received its charge of matches, the bolts shall be thrust forward to spread the expanding portion of the chain for gripping the splints, substantially as described. 21st. In a match machine, the combination with a reciprocating cutter, of a carrier chain adapted to receive splints from the said cutter, said carrier chain comprising fixed and expanding slats, the said expanding slats being arranged between the fixed slats, the construction being such that two rows of splints may be received in each section of the chain and clamped therein at one operation, substantially as shown. 22nd. In a match machine, the combination with a cutter, of a carrier chain mounted thereon adapted to receive splints from the cutter, said carrier chain comprising fixed slats and intermediate expanding slats means for expanding the said expanding slats for gripping the splints, and means for releasing the expanding slats after the completed matches have been discharged from the carrier, whereby they are ready for a new charge of splints, substantially as described. 23rd. In a match machine, the combination with a reciprocating cutter, of a carrier chain for receiving splints therefrom, said chain comprising fixed slats and expanding slats, wedge bars for spreading the expanding slats, means for operating the said wedge bars to grip the splints, said studs mounted upon the said wedge bars, and guides mounted in the frame, the construction being such that when the studs upon the wedge bars engage the said guides, the wedge bars will be operated so as to open the chain, substantially as described. 24th. In a match machine, the combination with a cutter, of a carrier chain for receiving splints therefrom, said chain comprising a series of sections formed of exterior and interior slats, the exterior slats being provided with limiting studs for making even spaces between them, and the inner slats being adapted to expand to grip the splints between them and the outer slats, substantially as described. 25th. In a match machine, the combination with a cutter, of a carrier chain for receiving splints therefrom, said chain comprising a series of sections formed of exterior and interior slats, the inner slats being adapted to expand to grip the splints between them and the outer slats, and bands for holding the slats together and giving them additional strength.

No. 69,485. Hoof Trimmer. (*Nettoyeur de sabots.*)

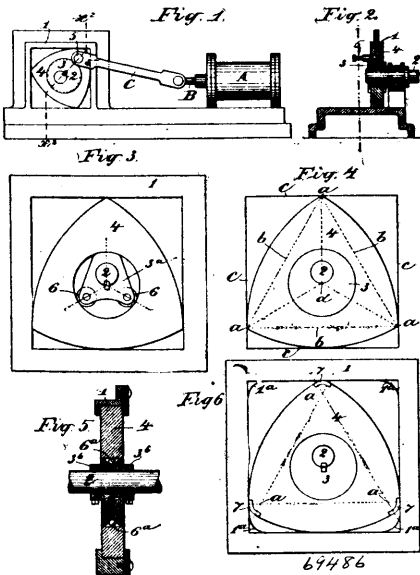


Albert Maxwell, Witt's Springs, Arkansas, U.S.A., 26th November, 1900; 6 years. (Filed 17th September, 1899.)

Claim.—A hoof trimmer comprising, in combination, a base plate having attached claws at one side and a segmental curved slot at the other side, a cutting blade pivoted to said base plate, and a set screw to engage with said cutting blade and having a head that projects through said slot and which is of greater breadth than said slots and is provided with a shank, substantially as and for the the purpose set forth.

No. 69,486. Mechanical Movement.

(*Mouvement Mécanique.*)

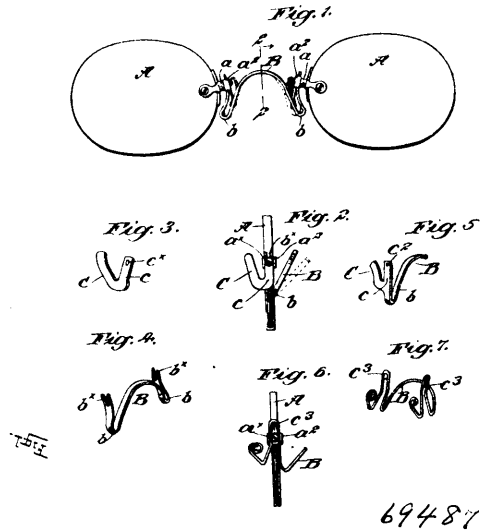


William Augustus Pitt, Stamford, Connecticut, U.S.A., 26th November, 1900; 6 years. (Filed 4th September, 1900.)

Claim.—A mechanical movement comprising a fixed part having in it a square chamber, a rotatively mounted shaft which extends through the centre of said chamber, an eccentric fixed on said shaft within said chamber, and an equilateral triangular body, with rounded faces, within said chamber and embracing said eccentric, the center of said triangular body being co incident with the centre of said eccentric, substantially as set forth.

No. 69,487. Eyeglass and Spectacle.

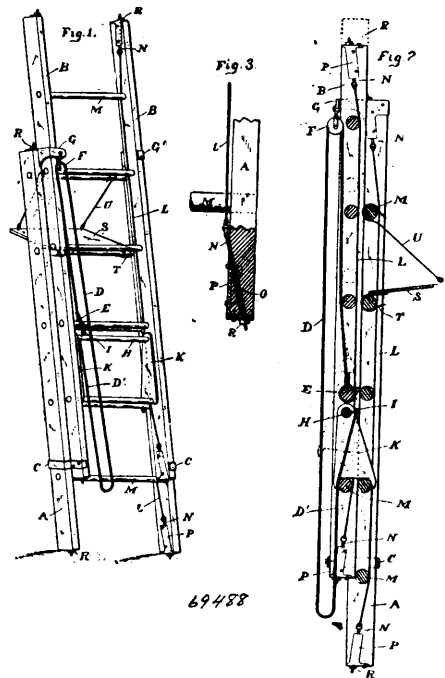
(*Monocle et lunettes.*)



David Hunt Ludlow, Easton, Pennsylvania, U.S.A., 26th November, 1900; 6 years. (Filed 26th October, 1900.)

Claim.—1st. In combination, a pair of lenses, clamping posts connected with said lenses, a saddle bridge formed with depending loops the upwardly extending free extremities of which are connected with the clamping posts and the inner face of which bridge from its crest to the bights of its loops is adapted to lie in unbroken continuous contact with the wearer's nose, and nose-rests, substantially as set forth. 2nd. In combination, a pair of lenses, clamping posts connected with said lenses, a saddle bridge formed with depending loops, the upwardly extending free extremities of which are connected with said clamping posts and exist in a plane approximately coincident with that of the lenses, the body portion of which bridge lies in a plane forming an angle with that of the lenses, and the inner face of which from its crest to the bights of its loops is adapted to lie in unbroken continuous contact with the nose of the wearer, and nose rests, substantially as set forth.

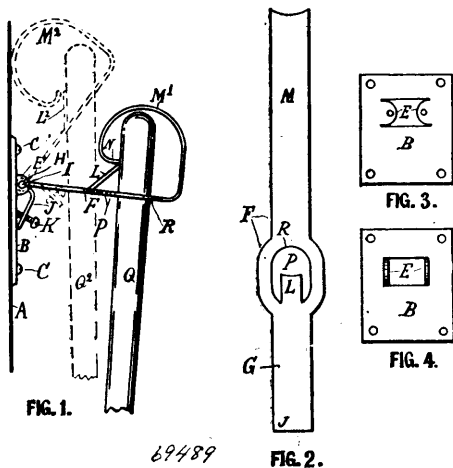
No. 69,488. Extension Ladder. (*Echelle à rallonge.*)



Benjamin Hallman Ziegler and David Betzner, both of Berlin, Prussia, 26th November, 1900; 6 years. (Filed 5th November, 1900.)

Claim.—1st. An extension ladder comprising a stationary member and a movable member attached to said stationary member and longitudinally adjustable relatively thereto, and locking devices attached to movable member B and adapted to catch on top face of rungs of stationary member A to lock movable member B in its adjusted position as and for the purpose set forth. 2nd. An extension ladder comprising a stationary member and a movable member attached to said stationary member and longitudinally adjustable relatively thereto, locking devices K attached to shaft H journaled in the movable ladder B, and adapted to catch on top of face of rungs of stationary member A, a rope D¹ secured to lever I and fastened to shaft H and meant for locking and unlocking movable member B, as and for the purpose set forth. 3rd. A ladder having its sides provided with metallic trussing devices, composed of steel wires L secured at their ends to the ends of the said ladder sides, attached to bolts N passing through metal casting P, forming a plate and washer, and means for tensioning said wires as and for the purpose set forth. 4th. A ladder having metal castings P attached to its sides, steel wires L passing under rings and fastened at their ends to bolts N, bolts passing through holes in castings P for tensioning said wires as set forth. 5th. A ladder having a movable shelf S attached to rungs of said ladder by means of metal straps T and hooks U, as and for the purpose hereinbefore set forth.

No. 69,189. Broom Holder. (Port-balai.)



James Thomas Mumford, Correctionville, Iowa, U.S.A., 26th November, 1900; 6 years. (Filed 25th October, 1900.)

Claim.—A holder for suspending brooms and like implements by the free end of the handle, the same consisting of a bracket or plate securable to a wall or other rigid object, and a normally horizontally disposed arm pivoted with one end to said plate to swing upward and having an aperture or opening adapted to receive the end of the broom handle in a verticle position and hold it by frictional contact when the arm swings partly downward and a guard above said opening made integral with the swinging arm and adapted to limit the upward movement of the handle and to raise the arm, substantially as and for the purpose set forth. 2nd. A holder for suspending brooms and similar implements by the free end of the handle, the same consisting of a bracket or plate securable to a wall or other rigid object, a normally horizontally disposed arm pivoted with one end to said plate to swing upward, and having an aperture or space adapted to receive the broom handle and by frictional contact hold it when the arm swings downward towards its normal position, and a guard limiting the upward passage of the handle and forming a hook or tongue which engages one side of the handle to assist in holding it, substantially as shown and described.

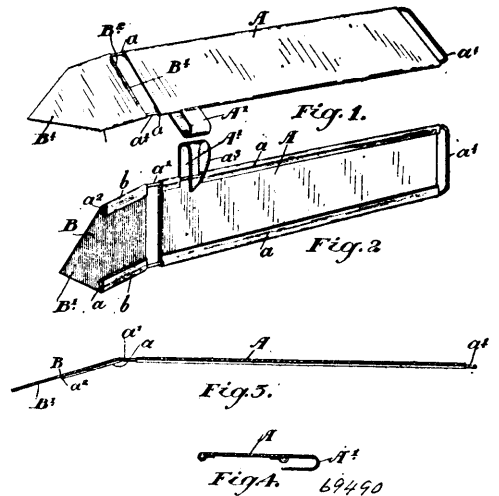
No. 69,490. Potato Peeler and Slicer.

(Appareil à peler et trancher les patates.)

James Fletcher, the Hamlet of Gibraltar: Ontario, Canada, 26th November, 1900; 6 years. (Filed 27th October, 1900.)

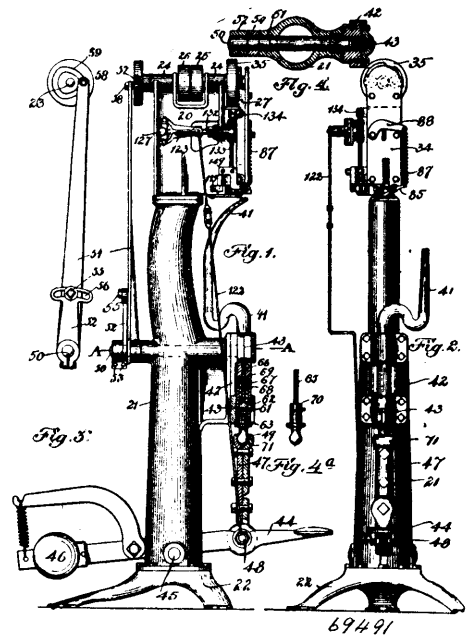
Claim.—1st. In a potato peeler and slicer, the combination with the handle, of the blade B suitably connected at the side edges to the handle and at an obtuse angle to the same and separated from such handle by an opening, such blade being provided with a suitable cutting edge at the front side of such opening as and for the purpose specified. 2nd. In a potato peeler and slicer, the combination with the handle, of the blade B suitably connected at the side edges to the handle and at an obtuse angle to the same and separated from such handle by an opening, such blade being provided with a suitable cutting edge at the front side of such opening and having an acute angled end as and for the purpose specified. 3rd. A potato peeler and slicer comprising a handle made of a plate having turned inside edges, a wire surrounding such plate and

extending through the edges, a blade having turned in side edges into which the ends of such wires extend, such blade being set at an



obtuse angle to the handle, separated slightly from the handle by an opening, and provided with a suitable cutting edge as and for the purpose specified. 4th. In a potato peeler and slicer, the combination with the handle, of the laterally projecting blade U-shaped in form and provided with a rear cutting edge as and for the purpose specified.

No. 69,491. Pegging Machine. (Machine à cheviller.)



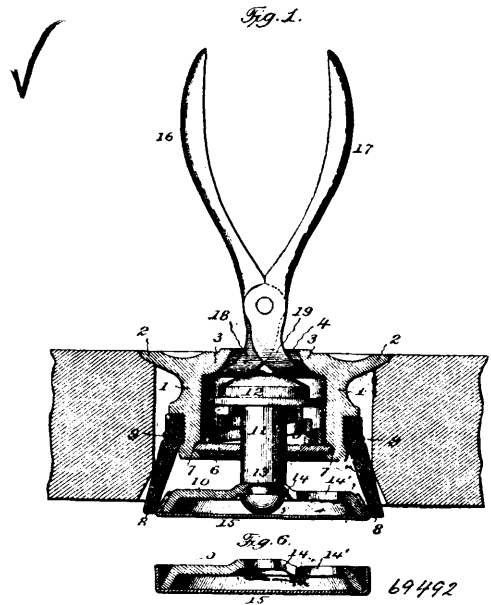
Isaïe Fréchette, Montreal, Quebec, Canada, 26th November, 1900; 6 years. (Filed 31st October, 1900.)

Claim.—1st. In a pegging machine, mechanism for feeding a strip of peg wood, a side cutter for severing a peg from said strip of peg wood and an end cutter adjacent to said side cutter for severing a portion from one edge of said peg wood strip. 2nd. In a pegging machine, mechanism for feeding a strip of peg wood, a side cutter for severing a peg from said strip of peg wood, an end cutter for severing a portion of said peg wood strip from the main body thereof, and mechanism for moving said cutters toward and away from said strip of peg wood. 3rd. In a pegging machine, mechanism for feeding a strip of peg wood, a side cutter for severing a peg from said strip of peg wood, an end cutter for severing a portion of said peg wood strip from the main body thereof, mechanism to move said cutters toward and away from said strip of peg wood, and mechanism to move said end cutter vertically in relation to the edge of said strip of peg wood. 4th. In a pegging machine, mechanism for feeding a strip of peg wood, a side cutter for severing a peg from said

strip of peg wood, an end cutter for severing a portion of said peg wood strip from the main body thereof, mechanism for moving said cutters toward and away from said strip of peg wood, a shoe support and mechanism connecting said shoe support and end cutter whereby any variation in height of said shoe support moves said end cutter an equal distance in relation to the edge of said strip of peg wood. 5th. In a pegging machine, mechanism for feeding a strip of peg wood, a side cutter for severing a peg from said strip of peg wood, an end cutter for severing a portion of said peg wood strip from the main body thereof, and mechanism to change the relative location of said end cutter and said strip of peg wood to each other. 6th. In a pegging machine, mechanism for feeding a strip of peg wood, a cutter for severing a peg from said strip of peg wood, an end cutter for severing a portion of said peg wood strip from the main body thereof, mechanism for moving said cutters toward and away from said strip of peg wood, and mechanism to change the relative location of said end cutter and said strip of peg wood to each other. 7th. In a pegging machine, mechanism for feeding a strip of peg wood, a cutter for severing a peg from said strip of peg wood, an end cutter for severing a portion of said peg wood strip from the main body thereof, in combination with a shoe support and mechanism connecting said shoe support and end cutter, whereby any variation in height of said shoe support changes the relative location of said end cutter and said strip of peg wood. 8th. In a machine for pegging boots and shoes, a driver, mechanism to feed pegs one by one beneath said driver, an end cutter for severing a portion of each of said pegs from the main body thereof and mechanism to change the relative location of said end cutter and pegs before said pegs are driven in the shoe. 9th. In a machine for pegging boots and shoes, a driver, mechanism to feed pegs one by one beneath said driver, an end cutter for severing a portion of each of said pegs from the main body thereof, a shoe support, and mechanism connecting said shoe support and end cutter, whereby a variation in height of said shoe support changes the relative location of said end cutter lengthwise of said pegs. 10th. In a machine for pegging boots and shoes, a driver, mechanism to feed pegs one by one beneath said driver, an end cutter for severing a portion of each of said pegs from the main body thereof, a shoe support, and mechanism connecting said shoe support and end cutter, whereby a variation in height of said shoe support moves said end cutter an equal distance lengthwise in relation to said pegs. 11th. In a machine for pegging boots and shoes, a driver, mechanism to feed pegs one by one beneath said driver, an end cutter for severing a portion of each of said pegs from the main body thereof, and mechanism to move said cutter in a direction parallel to the plane in which said pegs are fed. 12th. In a machine for pegging boots and shoes, a driver, mechanism to feed pegs one by one beneath said driver, an end cutter for severing a portion of each of said pegs from the main body thereof, mechanism to move said cutter in a direction parallel to the plane in which said pegs are fed and in a direction at right angles to said plane. 13th. In a machine for pegging boots and shoes, a driver, mechanism to feed pegs one by one beneath said driver, an end cutter for severing a portion of each of said pegs from the main body thereof, a shoe support, and mechanism connecting said shoe support and end cutter, said mechanism operating to impart to said end cutter a motion equal in extent to the variation in height of said shoe support and in a direction parallel to the plane in which said pegs are fed. 14th. In a machine for pegging boots and shoes, a driver, mechanism to feed pegs one by one beneath said driver, an end cutter, a cutter block arranged to co-operate with said end cutter, and mechanism to move said end cutter in a direction at right angles to the plane in which said pegs are fed and to the cutting edge of said cutter block, and to thereby sever a portion of each of said pegs from the main body thereof. 15th. In a machine for pegging boots and shoes, a driver, mechanism to feed pegs one by one beneath said driver, an end cutter, a cutter block arranged to co-operate with said end cutter, mechanism to move said end cutter and cutter block in a direction parallel to the plane in which said pegs are fed. 16th. In a machine for pegging boots and shoes, a driver, mechanism to feed pegs one by one beneath said driver, an end cutter, a cutter block arranged to co-operate with said end cutter, mechanism to move said end cutter and cutter block in a direction parallel to the plane in which said pegs are fed, and mechanism to move said side and end cutters in a direction at right angles to said plane and thereby sever a portion of each of said pegs from the main body thereof. 17th. In a pegging machine, mechanism for feeding a strip of peg wood, a side cutter for severing a peg from said strip of peg wood, an end cutter, a cutter block arranged to, co-operate with said end cutter, and mechanism for moving said side and end cutters in a direction at right angles to the plane in which said strip of peg wood is fed. 18th. In a pegging machine, mechanism for feeding a strip of peg wood, a side cutter for severing a peg from said strip of peg wood, an end cutter, a cutter block arranged to co-operate with said end cutter, mechanism to move said end cutter and cutter block in a direction parallel to the plane in which said strip of peg wood is fed, and mechanism to move said side and end cutters in a direction at right angles to said plane. 19th. In a machine for pegging boots and shoes, a driver, mechanism to feed pegs one by one beneath said driver, an end cutter for severing a portion of each of said pegs from the main body thereof, a cutter arm to which said end cutter is fastened, a rock shaft fast to said cutter arm, mechanism for rocking said rock shaft and mechanism for imparting a reciprocating

motion thereto. 20th. In a machine for pegging boots and shoes, a driver, mechanism to feed pegs one by one beneath said driver, an end cutter for severing a portion of each of said pegs from the main body thereof, a cutter arm to which said end cutter is fastened, a rock shaft fast to said cutter arm, mechanism for rocking said rock shaft, a shoe support, and mechanism connecting said shoe support and rock shaft, said mechanism operating to impart to said rock shaft a reciprocating motion equal to the variation in height of said shoe support. 21st. An anvil adapted to be attached to the shoe support of a pegging machine, said anvil having a groove in the top surface thereof, and a projection in the bottom of said groove. 22nd. An anvil adapted to be attached to the shoe support of a pegging machine, said anvil having a semi-annular groove in the top surface thereof, said semi-annular groove formed of two grooves adjacent to each other, with a semi-circular projection 185 separating one of said grooves from the other. 23rd. An anvil adapted to be attached to the shoe support of a pegging machine, said anvil having a semi-circular opening 77 in the top connecting with a chamber 78 in the stem thereof, a rim 75 with a semi-annular groove 76 therein, said semi-annular groove formed of two grooves adjacent to each other, with a semi-circular projection 185 separating one of said grooves from the other, and a projection 79 extending from said rim into said semi-circular opening 77, substantially as described for the purpose specified. 24th. An anvil adapted to be attached to the shoe support of a pegging machine, said anvil having a depression in the upper surface thereof and a projection located in said depression and adapted to divide the end of a peg driven into said depression. 25th. In a back gauge for pegging machines, a slide, one end thereof arranged to bear against the edge of a boot or shoe sole, a spring arranged to force said slide away from said sole, two sets of teeth upon said slide, and a double pawl pivoted to the frame of said machine and adapted when raised to engage one of said sets of teeth, and when lowered to engage the other of said sets of teeth.

No. 69,492. Expanding Bungs. (Bandon à expansion.)

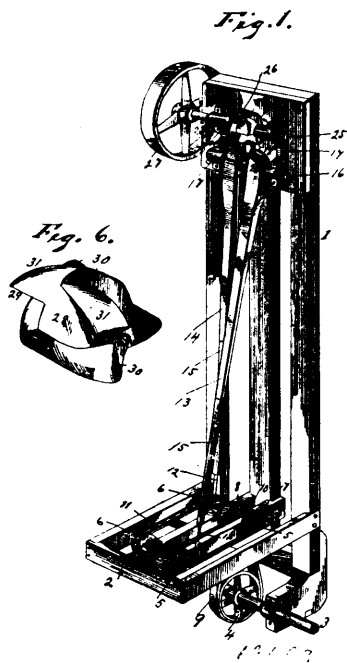


Elwood Calhoun Phillips, Chicago, Illinois, U.S.A., 26th November, 1900; 6 years. (Filed 2nd November, 1900.)

Claim.—1st. In an expanding bung or stopper, the combination of a main body portion formed with a spring containing cavity and an returned rim at the upper end of such cavity to afford an abutment for the operating implement, an actuating spring arranged in said cavity, an elastic closure skirt secured to the main body portion, a movable expander head engaging said skirt and connected to said actuating spring, and means for imparting vertical movement to said expander head, substantially as set forth. 2nd. In an expanding bung or stopper, the combination of a main body portion formed with a spring containing cavity and an returned rim at the upper end of such cavity to afford an abutment for the operating implement, an actuating spring arranged in said cavity, a spider support for said spring secured to the lower end of the main body portion, an elastic closure skirt secured to the main body portion, a movable expander head engaging said skirt and connected to said actuating spring, and means for imparting vertical movement to said expander head, substantially as set forth. 3rd. In an expanding bung of the character herein described, the combination of the main body portion, elastic closure skirt, expander head, carrying shank therefor provided with a beaded upper end, a conical coiled

spring, and means for imparting vertical movement to the expander head, substantially as set forth. 4th. In an expanding bung of the character herein described, the combination of the main body portion, elastic closure skirt, expander head, carrying shank for such expander head, and an actuating spring, the expander head being detachably secured to the shank by a radially extending slot having an entrance orifice at its outer end, and the shank formed with an annular recess to engage with the walls of such slot, substantially as set forth.

No. 69,493. Driving Force Mechanism.
(*Mécanisme de force motrice.*)



James Whittington, Williford, Arkansas, U.S.A., 26th November, 1900; 6 years. (Filed 5th September, 1900.)

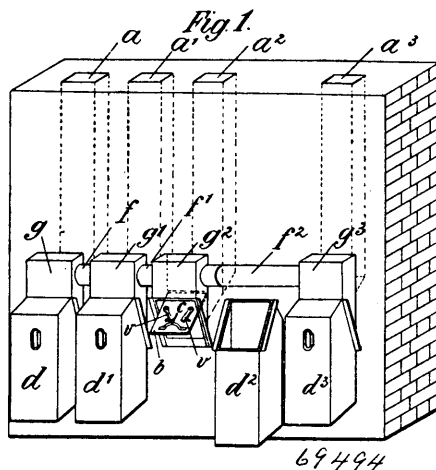
Claim.—1st. In a device of the character set forth, the combination with two shafts, rectilinearly movable devices supported by the said shafts, and actuating mechanism therefor, of automatically adjustable levers having the movable parts of each attached respectively to the said rectilinearly movable devices, a driving shaft, and a compound ratchet applied to the driving shaft and acting jointly with the opposite end portions of the said levers by an alternate thrust to actuate the said driving shaft. 2nd. In a device of the character described, the combination of a shaft, a compound ratchet applied to the shaft, levers mounted with their fulcra in line and acting jointly by an alternate thrust of one end against the aforesaid ratchet to actuate its shaft, and operating mechanism for imparting a rectilinear motion to the opposite ends of the levers in alternate and opposite directions, substantially as described. 3rd. In a device of the character specified, the combination of a shaft, a ratchet wheel on said shaft, rectilinearly movable belts, shafts supporting said belts, actuating mechanism for the belts, automatically adjustable levers connected to opposite portions of the belts to receive an opposite and alternate simultaneous movement, and pawls applied to the levers to co-operate with the aforesaid ratchet wheel, substantially in the manner set forth and for purpose described. 4th. In a device of the character described, the combination of a shaft, a compound ratchet wheel applied to the said shaft, rectilinearly movable belts, shafts supporting said belts, means for imparting movement to the belts, automatically adjustable levers connected to the said belts, and pawls applied to the levers and acting jointly by an alternate thrust against the ratchet wheel to impart a continuous rotary movement to the shaft thereof, substantially as set forth.

No. 69,494. Soot Catcher. (*Attrape Suir.*)

Hermann Appel, Mathiasstrasse, 31 Breslau, Germany, 26th November, 1900; 6 years. (Filed 17th September, 1900.)

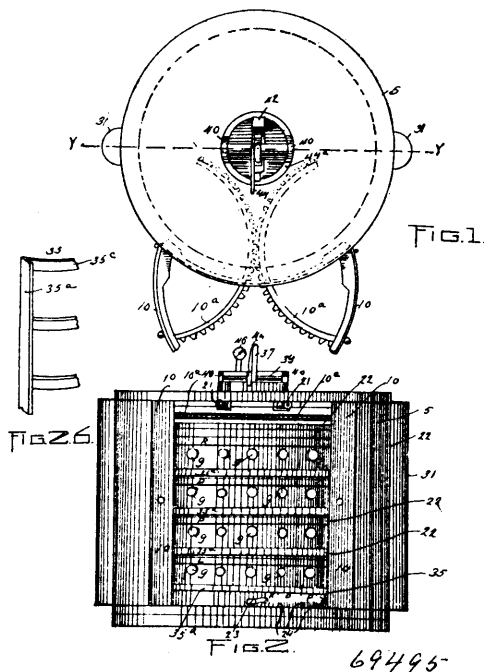
Claim.—1st. A soot catcher comprising in combination an upper chamber *g*, lid *b, e*, for the soot entrance and the air outlet respectively in said chamber *g*, and a lower chamber *d* removable from chamber *g* and adapted to serve as soot receptacle and be emptied and replaced without interrupting work and a fastener provided on the lower lid *b* or on the back of the box in order to permit the closure of the said lid while the box *d* is removed. 2nd. A soot

catcher comprising in combination an upper chamber *g* lids *b, e*, for the soot entrance and the air outlet respectively in said chamber *g*



and a lower chamber *d* removable from chamber *g*, and adapted to serve as soot receptacle and be emptied and replaced without interrupting work and a fastener provided on the lower lid *b*, or on the back of the box, the lid *b* having an opening adapted to be closed by lid *e* when the lid *b* is closed and adapted to be opened by the own weight of the lid *e*, when the large lid *b* is opened. 3rd. A soot catcher, comprising in combination an upper chamber *g*, lids *b, e*, for the soot entrance and the air outlet respectively in said chamber *g*, and a lower chamber *d* removable from chamber *g* and adapted to serve as soot receptacle and be emptied and replaced without interrupting work and a fastener provided on the lower lid *b*, or on the back of the box, and lateral metal protecting rails for guiding the boxes *d* in order to prevent the wearing of the chimney. 4th. A soot catcher, comprising in combination an upper chamber *g*, lids *b, c*, for the soot entrance and the air outlet respectively in said chamber *g* and a lower chamber *d* removable from chamber *g* and adapted to serve as soot receptacle and be emptied and replaced without interrupting work and a fastener provided on the lower lid *b* or on the back of the box, the said chamber *g* having closable orifices for external communication.

No. 69,495. Voting Machine. (*Machine à voter.*)



Josiah Frain and Martin Herstrom, both of Denver, Colorado, U.S.A., 26th November, 1900; 6 years. (Filed 5th September, 1900.)

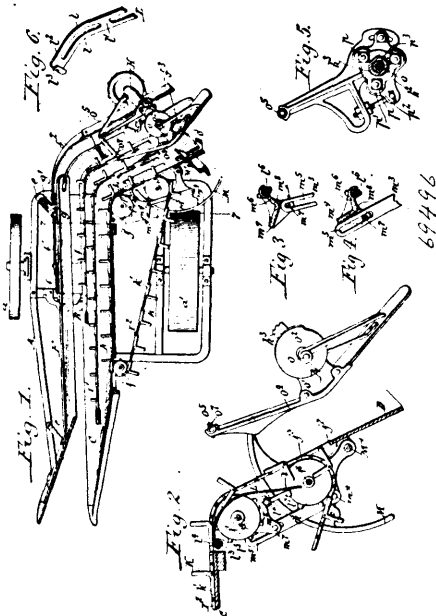
Claim.—1st. In a voting machine, the combination with a suitable casing and a door, of a rotary frame inclosed thereby, suitable registers mounted on the frame, push keys supported on the frame and connected with the registers, the keys for voting straight tickets, which extend around the frame and occupy positions parallel to each other, the keys corresponding to the same office of all the tickets being arranged in vertical series, and suitable slides shifted by the actuated key, for the other slides in the same vertical position, against movement when any key is pressed inwardly, another vertical slide for locking the actuated key at its inward limit of the movement and means operated by the closing of the door for acting on the last named slide, whereby the actuated key is released and allowed to return to its normal position. 2nd. The combination with the casing and a door, of a rotary frame inclosed thereby, a vertical shaft around which the frame moves, said shafts being provided with a bottom flange or plate and having a vertical movement therefor vertical partitions radially arranged on the rotary frame, push keys mounted on said partitions, one above another, registers also mounted on the partitions and adapted to be operated by the keys, which are positioned in horizontal series around the rotary frame, collars mounted on the rotary frame adjacent the shaft and surrounding the same, dogs mounted on the rotary frame and located between each collar, and all the keys in the corresponding horizontal series, said dogs engaging the collar and said keys, a suitable connection between the collars and the shaft thereby, when the rotary frame is properly adjusted the vertical movement of the shaft will raise the collar and operate all the keys in the same horizontal series, through the instrumentality of the interposed dogs, and suitable means actuated by the closing of the door, for imparting the vertical movement of the shaft. 3rd. The combination with a casing, of a rotary frame journaled therein on a vertical axis and suitable vote registers mounted on the frame, push keys mounted on the rotary frame for actuating the registers, said keys being arranged in vertical and horizontal series, means actuated by an actuated push key for locking all the other push keys in the same vertical series against movement, means for locking the actuated in the operated position, and suitable means for releasing the actuated key whereby the operating parts are returned to their normal position read for the next voter. 4th. The combination with a suitable case and doors, of a rotary frame journaled in said casing on a vertical axis, counting registers mounted on the frame, push keys mounted on the rotary frame and adapted to actuate the registers, said keys being arranged in vertical and horizontal series, means actuated by the inward thrust of any key for locking all the other keys in the same vertical series against movement, means for locking the actuated key at its inward limit of movement, and means operated by the closing of the door for releasing the actuated key. 5th. The combination with a casing provided with a door, of a rotary frame journaled in the casing, a counting register mounted on the rotary frame, push keys mounted on said frame and arranged in vertical series, means operated by an actuated key for locking all the other keys in the same vertical series against movement a vertically movable slide locking the actuated key in the operated position, and means operated from the door of the casing for raising said slide and releasing the actuated key. 6th. The combination with the casing and a door, of a rotary frame journaled therein on a vertical axis, spring held push keys mounted on the said frame and arranged in vertical and horizontal series, vertical slides arranged one above another and operated by the actuated push key, whereby the keys above in the same vertical series are locked against movement, a vertical slide for locking the actuated push key in the operated position, dogs mounted on the rotary frame and engaging the inner extremity of each push key, a central vertical shaft, vertically movable but normally locked against rotary movement, collars mounted on the rotary frame and surrounding the shaft, said collars being arranged to turn with the rotary frame, and move vertically with the shaft independently with the rotary frame, the shaft and collars being so connected that by the proper adjustment of the frame, the upward movement of the shaft raises the collar, the collars being positioned to engage the dogs, whereby as a collar is raised, all the push keys in the same horizontal series are actuated, and a yoke lever interposed between the shaft and the door, whereby the closing of the door raises the shaft. 7th. The combination with a casing of a rotary frame journaled in said casing, a vertically movable shaft surrounded by the rotary frame push keys mounted on the rotary frame and projecting inwardly toward the shaft, means interposed between the push keys and the shaft, whereby the vertical movement of the shaft actuates the push keys, and suitable means for imparting the vertical movement to the shaft. 8th. The combination with a casing, of a rotary frame journaled therein on a vertical axis, a vertically movable shaft surrounded by the rotary frame, push keys mounted on said frame and projecting inwardly toward the shaft, a suitable connection between the said shaft and the keys, whereby the vertical movement of the shaft actuates the key, and suitable means for actuating the shaft. 9th. The combination with a casing, of a rotary frame journaled therein, a vertically movable shaft surrounded by said frame, push keys mounted on the frame and projecting inwardly toward the shaft, a suitable connection between the shaft and the keys whereby the vertical movement of the shaft actuates the keys, and suitable means for operating the shaft. 10th. The combination with a casing and a door, a rotary frame journaled in the casing, push keys mounted on the casing, a suitable connection between the

keys and the shaft, whereby the movement of the shaft actuates the keys, and means operated by the door for actuating the shaft. 11th. The combination with a suitable casing, vote registers and operating means therefor, of a shaft vertically movable in said casing and a connection between the casing, and a connection between the shaft and the vote registering mechanism, whereby the movement of the shaft actuates the vote registering means. 12th. The combination with a casing and a door, and a vote registering mechanism inclosed by the casing, of a shaft vertically movable in said casing, a connection between said shaft and the vote registering mechanism, whereby the movement of the shaft actuates said mechanism, and means actuated by the door of the casing for actuating the said shaft. 13th. The combination with a casing and a suitable vote registering mechanism, of a vertical shaft vertically movable in said casing, a slide shoe for locking the shaft to the casing to prevent rotation, a crank shaft, blocks arranged to slide on the casing and in which the crank shaft is journaled, a vertical projection made fast to the shaft, and having an opening engaged by the shaft of the crank shaft, whereby the vertical shaft may be raised by the raising of the said lever arm, the arrangement of the parts being such that, as the lever is raised, the shoe is shifted to release the shaft. 14th. The combination with a suitable casing and vote registering mechanism inclosed thereby, of a vertical shaft vertically movable in said casing and normally arranged to operate the vote registering mechanism, a total vote register, and a suitable connection between the shaft and the said register, whereby the raising of the shaft operates the register. 15th. In a voting machine, the combination with a suitable casing, of a set of push keys arranged one above another, each key being provided with two inclined faces and two shoulders, locking slides arranged one above another and engaging each other, one of these slides normally engaging one inclined face of each key except the uppermost, whereby as any key is thrust inwardly, its inclined face actuates its engaging slide raises said slide and all other slides above it, whereby a slide is brought immediately in the rear of one shoulder of each key, locking the inactive keys against movement, and a long vertical slide engaging the other inclined face of each key, whereby as any key is pushed inwardly the slide is raised, and lowered to fall in front of the other shoulder on the actuated key whereby the latter is locked against the return movement. 16th. In a voting machine, the combination of a casing and a set of push keys arranged one above another, each key having an inclined face and a shoulder, a long vertical slide engaging the inclined face of each key whereby as any key is pushed inwardly, the slide is raised and allowed to fall in front of the shoulder on the actuated key, whereby the latter is locked against the return movement, a vertical movable shaft located in the centre of the casing and a suitable connection between said shaft, and the inner extremities of the push keys whereby the movement of the shaft actuates said keys. 17th. The combination with a voting machine, of a number of push keys arranged one above the other and provided with bevelled faces and shoulders, a number of short slides arranged one above another, a slide normally resting on an inclined face of each except the uppermost, and a long slide normally resting on a bevelled face of each key, whereby when any key except the uppermost is pressed, the short slides are arranged to positions immediately in the rear of the shoulders of the inactive keys, whereby the latter are locked against inward movement, the long slide being raised by the actuated key, until the slide drops in front of a shoulder on said key, thus locking the latter against the return movement. 18th. In a voting machine, the combination of a casing, a door and a set of spring returned push keys arranged one above another, each key having an inclined face and a shoulder, a long vertical slide normally engaging the inclined face of each key, whereby as any key is pushed inwardly, the slide is raised and allowed to fall in front of the shoulder on the key, whereby the latter is locked against the return movement, and means for automatically raising the long slide to release the push key comprising a vertically movable shaft provided with a flange adapted to engage the long slide as the shaft is actuated, and a connection between the door and shaft whereby the closing of the door actuates the shaft. 19th. The combination, in a voting machine of a number of push keys arranged one above another and provided with bevelled or inclined faces and shoulders, a number of short slides arranged one above another, a slide normally resting on an inclined face of each key whereby when any key except the uppermost is pressed the short slides are raised to positions immediately in rear of the shoulders on the inactive keys, whereby the latter are locked against the inward movement, the long slide being raised by the actuated key until the slide drops in front of a shoulder on said key, thus locking the latter against the return movement, and means for automatically raising the long slide sufficiently to release the actuated key and allow the latter to return to its normal position, whereby the short slides are allowed to return to their normal position unlocking the inactive keys. 20th. The combination with a casing, a door and vote registering mechanism inclosed by the casing, of a vertical shaft located in said casing, a connection between the door and the shaft whereby the movement of the door actuates the shaft vertically and a connection between the shaft and the vote registering mechanism, whereby the said movement of the shaft actuates the said mechanism. 21st. The combination with a casing, a door, and vote registering mechanism of a vertical shaft operating said mechanism, a lever yoke engaging the shaft and connection between the said door and the yoke whereby the movement of the door actuates the yoke,

22nd. The combination with a casing, of a rotary frame adjustably mounted therein, vote registering mechanism carried by said frame, a vertically movable shaft arranged to operate said mechanism, and means for actuating the shaft. 23rd. The combination with a casing an 1 a door, of a rotary frame mounted therein, vote registering mechanism carried by said frame and means for locking the frame in a predetermined position, comprising a locking dog mounted on the outer part of the casing and engaging teeth forming on the adjacent portion of the rotary frame, the arrangement being such that the closing of the door engages the dog and unlocks the rotary frame. 24th. The combination with a casing provided with a door, of a rotary frame mounted therein on a vertical axis, vote registering mechanism carried by said frame, a locking dog for holding the frame in any desired position of adjustment the arrangement being such that the closing of the door engages the dog and unlocks the frame and suitable means for returning the frame automatically to its normal position. 25th. The combination with a casing and a door, of a rotary frame mounted therein, on a vertical axis, vote registering mechanism carried by said frame, a locking dog mounted on the outer part of the casing and engaging teeth formed on the adjacent portion of the rotary frame, the arrangements being such that the closing of the door engages the dog and unlocks the frame, and suitable means for returning the frame automatically to its normal position, comprising weights supported by cords connected with the rotary frame, whereby, as the latter is turned by the voter, the weights are raised. 26th. The combination with a casing, of a cylindrical frame journaled in said casing, a central vertically movable shaft and vote registering mechanism carried by said frame and adapted to be actuated by the movement of the shaft. 27th. The combination with the casing, of a cylindrical frame journaled in said casing on a vertical axis, vote registering mechanism carried by said frame, and a vertically movable shaft, surrounded by said frame and arranged to operate the vote registering mechanism. 28th. The combination with a casing, of a cylindrical frame journaled therein, a central vertically movable shaft, vertical radial partitions mounted on said frame, vote registers carried by said partitions and keys also carried by the partitions and arranged to operate the registers, the push keys being operated by the movement of the shaft. 29th. The combination with the casing vote registering mechanism disclosed thereby, a vertical shaft located in the casing for operating said mechanism, a yoke lever having arms engaging said shaft, wings pivoted on said lever, and doors connected to the casing and provided with rollers which engage the said wings and actuate the levers as the doors are closed, the said rollers passing under the wings during the opening movement of the doors. 30th. The combination with the casing, and vote registering mechanism inclosed thereby, and two doors hinged to the casing and provided with engaging segmental racks, whereby the doors must move simultaneously and a suitable connection between the doors, and the vote registering mechanism whereby the movement of the doors operate said mechanism.

No. 69,496. Corn Harvester.

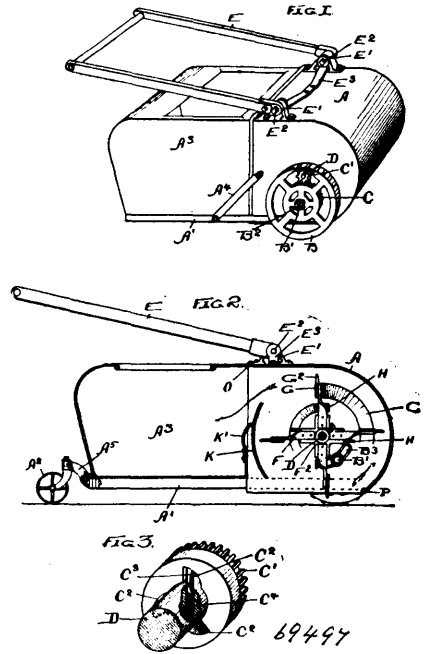
(Moissonneuse de blé d'Inde.)



The Johnston Harvester Company, assignee of George Albert Farrell and Christian Maul, all of Batavia, New York, U.S.A., 27th November, 1900; 6 years. (Filed)

Claim.—1st. The combination with the platform and the binder deck, the conveyer belt provided with folding teeth and a rock shaft, of a tooth guide which consists of a plate forming two bars arranged lengthwise on opposite sides of the conveyer belt, a cross piece connecting the bars near their rear ends, a cross piece connecting the bars at their front ends, and a shaft socket at the front end, substantially as set forth. 2nd. The combination with the platform and the binder deck, the oscillating needle, a conveyer belt provided with feeding teeth, a tooth guide which is movable toward and from the deck, and a rock shaft having a shifting arm for said guide, of a connecting bar which is connected at one end with the needle, and an actuating arm which is secured to said rock shaft and has a sliding connection with said bar and is provided with a bearing shoulder adapted to engage with the end of said bar, and with a bearing face extending laterally from said shoulder, and adapted to bear against the side of said bar, substantially as set forth. 3rd. The combination with the knotter shaft and the knotter mechanism which is capable of vertical adjustment on the same, of a main frame provided with a standard in which the knotter shaft is journaled and which is composed of a lower section, secured to the main frame, and an upper section which is detachably secured to the lower section, said upper section forming a rigid extension of the lower section when in place and supporting the knotter shaft near the knotter mechanism when the latter is in its highest position, while said upper section can be removed when the knotter mechanism is to be placed in a lower position, substantially as set forth. 4th. The combination with the knotter shaft and the knotter mechanism which is capable of vertical adjustment on the same, of a main frame provided with a standard in which the knotter shaft is journaled and which is composed of a lower section, secured to the main frame, and an upper section which is detachably secured to the lower section, a brace attached at its lower end to the main frame, an arm connecting the upper end of the lower standard section with said brace, and a breast plate capable of vertical adjustment on the upper portion of said brace, substantially as set forth. 5th. The combination with the binder deck, and the stalk conveyer, of an upright needle shaft arranged on the under side of the deck and journaled in a stationary bearing, a binder needle mounted on said shaft and adjustable lengthwise thereon, an upright knotter shaft facing the binder deck, a knotter mechanism mounted on the knotter shaft and adjustable lengthwise thereon, a standard in which the knotter shaft is journaled and which consists of a stationary lower section and a removable upper section, a retaining boss arranged on the upper end of the lower standard section and engaging with a recess in the lower end of the upper standard section and clamping bolts passing through ears on the opposing ends of said standard sections, substantially as set forth.

No. 69,497. Lawn Rake. (Rateau pour pelouses.)



The Finley Lawn Rake Company, assignee of Irving M. Phillips, all of Joliet, Illinois, U.S.A., 27th November, 1900; 6 years. (Filed 7th November, 1900.)

Claim.—1st. The lawn rake consisting of a casing A, adjustable carrying wheels B, a revolving rake located in said casing and having a clutching connection to said wheels, and also having vanes for

breaking up the air currents, a refuse receptacle A³ receiving the grass and leaves from the rake, and a rear frame and roller for supporting said receptacle, substantially as specified. 2nd. The lawn rake having a revolving rake embodying spirally curved blades carrying the rake teeth, and vanes curved spirally but reversed from the curve of the blades, substantially as described. 3rd. The lawn rake having a revolving rake embodying spirally curved blades carrying rake teeth, and vanes located between the blades and the axis and serving to break up the air currents, substantially as specified. 4th. The lawn rake within are combined a revolving rake having its teeth carried by spirally curved blades supported upon radiating arms, and a refuse receptacle located back of and receiving the grass and leaves thrown up by the rake, said rake having vanes inside the blades for preventing uneven action by the rake, substantially as specified. 5th. The revolving rake embodying blades G, plates G¹, and rake teeth G² clamped between said blades and plates, the plate G¹ being made to conform to the teeth, substantially as specified. 6th. The revolving rake, consisting of blades mounted upon the twisted arms F radiating from the shaft, said arms, teeth carried by said blades, and plates riveted to the blades and clamping the teeth thereto, substantially as specified. 7th. The revolving rake embodying blades carrying the rake teeth and having their inner edges bent over to form a stop to the teeth, and plates riveted to the blades and clamping the teeth thereto, substantially as specified. 8th. The revolving rake embodying blades for carrying the teeth, and having their inner edges bent over as shown, a series of staples forming the teeth, and plates riveted to the blades and clamping the teeth thereto, substantially as specified. 9th. The combination of the blades, staples forming the teeth, and the clamping plates, the plates being riveted to the blades between the limbs of the staples and the blades having their inner edges bent over to act as a stop to the staples, substantially as specified. 10th. The combination with the casing and the revolving rake therein, of the supporting wheels having gears meshing with pinions on the rake shaft, said wheels being adjustable and held to the casing by journals passing through curved slots concentric with the rake shaft, substantially as specified. 11th. The revolving rake embodying a shaft, hubs having radiating recessed arms F¹, twisted arms F¹ inserted in said arms F¹, and toothed blades and air vanes attached to said arms F, substantially as specified. 12th. The revolving rake, consisting of a shaft, hubs having recessed arms F¹, twisted arms F¹ inserted in said hub arms, and spiral tooth carrying blades and spiral vanes attached to said arms F, substantially as specified. 13th. The lawn rake having in combination with a removable receptacle for the grass and leaves, a supporting frame, and means consisting of the side braces, the castor wheel arm and the rake casing between which the receptacle is readily positioned and by which it is held while the rake is operating, substantially as specified. 14th. The lawn rake having its handles pivotally attached to the top casing above its top, so that the operator pushes thereon in a substantially horizontal direction, essentially as set forth.

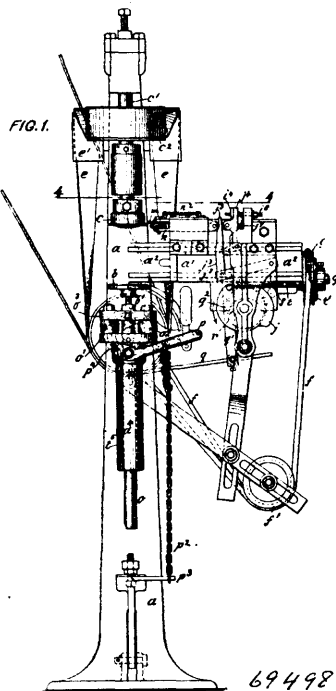
No. 69,498. Can Heading Machine.

(Machine à poser le fond des bidons.)

Max Ams, assignee of Julius Brenzinger, New York City, New York, U.S.A., 27th November, 1900; 6 years. (Filed 30th November, 1899.)

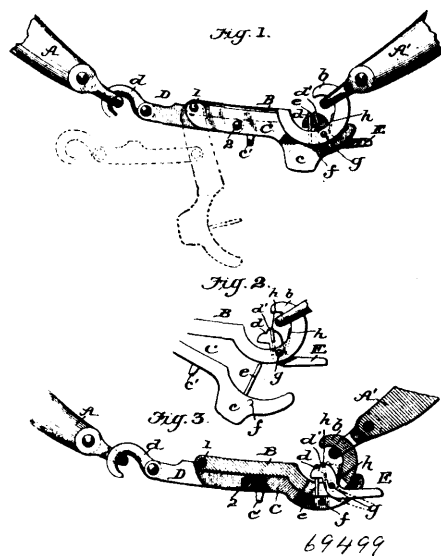
Claim.—1st. In a can heading machine, a seaming roller, a slide carrying the same, a cam, and a wedge adapted to be actuated by the cam and engage the slide, substantially as specified. 2nd. In a can heading machine, a seaming roller, a slide carrying the same, a lever, a cam engaging the same, and a wedge pivoted to the lever and adapted to engage the slide, substantially as specified. 3rd. In a can heading machine, a seaming roller, a slide carrying the same, means for actuating said slide, and a yielding buffer, engaging the slide actuating means, substantially as specified. 4th. In a can heading machine, a seaming roller, a slide carrying the same, a wedge adapted to engage the slide, a cam for actuating the wedge, and a yielding buffer engaging the wedge, substantially as specified. 5th. In a can heading machine, a pair of seaming rollers, a pair of slides carrying the same, a pair of cams, a pair of levers successively operated by the cams, and wedges pivoted to the levers and adapted to engage the slides, substantially as specified. 6th. In a can heading machine, a roller adapted to fold the seam, a roller adapted to compress the seam, a pair of cams, and wedges actuated by said cams and adapted to successively advance said rollers, substantially as specified. 7th. In a can heading machine, a rotatable platform, a movable bearing for supporting said platform, a pair of seaming rollers, and means for advancing said rollers against the work by the raising of the bearing, substantially as specified. 8th. In a can heading machine, a rotatable platform, a movable bearing for supporting said platform, a pair of seaming rollers, means for advancing the rollers against the work by the raising of the bearing, and means for automatically lowering the bearing, substantially as specified. 9th. In a can heading machine, a rotatable platform, a movable bearing for supporting the same, a worm shaft, a loose pulley mounted thereon, a clutch operated by the bearing and adapted to couple the pulley to its shaft, a cam shaft intergeared with the worm shaft, slides actuated by the cam shaft, and seaming rollers carried by the slides, substantially as specified. 10th. In a can heading machine, the combination of the following elements, a driving shaft, a worm shaft, a cam shaft intergeared therewith, a pair of cans

mounted on the cam shaft, slides actuated by the cams, seaming rollers carried by the slides, a rotatable platform, an adjustable



platform support, means actuated by the platform support for coupling the driving shaft to the worm shaft, and means for automatically lowering the platform support, substantially as specified.

No. 69,499. Hame Fastener. (Couplière d'attelles.)

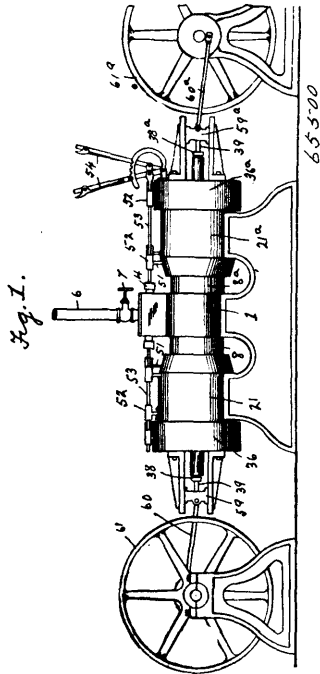


Silas Thomas Marlette and Thomas G. O'Brien, both of Buffalo, New York, U.S.A., 27th November, 1900; 6 years. (Filed 5th November, 1900.)

Claim. 1st. A hame fastener comprising a section B formed with a hooked end opening upwardly, a hooked section D, an intermediate section C made wide enough to receive the shank of both the section B and D, recessed on the upper side to receive the shank of section B and jointed to it at one end, and having at the other end a curved seat whose concave side fits the convex side of the hook of section B, said section C being also recessed on its under side to receive the shank of section D and being jointed to it at a point near the middle of the said section C, and locking devices connecting the hooked end of B to the curved seat of C, substantially as and for the purpose described. 2nd. A three part hame fastener, one of the end sections being made with a large upturned hook opening upwardly and con-

taining locking devices, and the middle section being formed with a concave seat fitting up against the lower convex side of said hook and co-operating with the locking devices, substantially as described. 3rd. In a hame fastener, the combination of the hooked section B having a slot in the lower portion of the hook, and a spring actuated locking latch in the slot, and a subjacent section C having a locking keeper attached to the same and projecting up through the slot in the hook to engage with the locking latch, substantially as described. 4th. In a hame fastener, the combination of the hooked section B having a slot in the lower portion of the hook, and a spring actuated locking latch in it, and a subjacent section C having bifurcated curved ends and a loop shaped keeper rigidly attached to the same and projecting up through the slot in the hook to engagement with the locking latch, substantially as and for the purpose described.

No. 69,500. Duplex Steam Engine. (*Machine à vapeur.*)



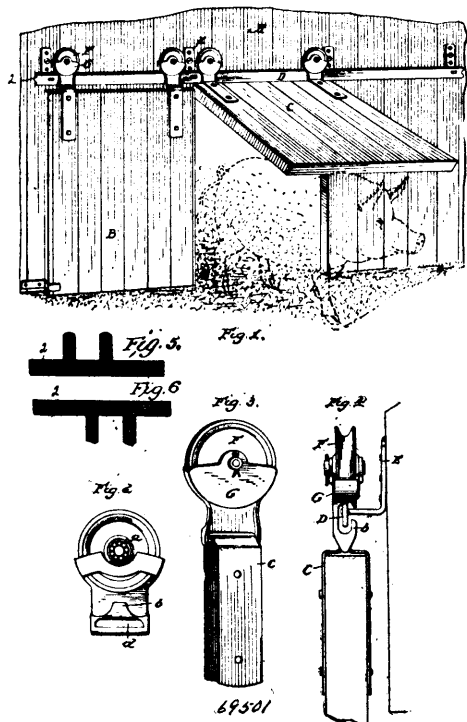
John B. O'Donnell and James H. Craycroft, both of Lee's Summit 27th November, 1900; 6 years. (Filed 7th November, 1900.)

Claim.—1st. In a duplex engine having a pair of cylinders disposed end to end and operated alternately by a common piston rod and piston on said rod, a steam entrance, a central admission chamber, into which both cylinders, open, two outer steam chambers in the casing beyond each of said cylinders and opening into each other centrally, radial ports for exhaust steam leading from said cylinders to the first of said outer steam chambers, radial ports leading from the entrances of said cylinders, longitudinal passages connecting with said radial ports and leading into the second outer steam chamber, reciprocating slide valves mounted in the casings, transverse to said radial ports and having openings registering therewith, nozzles in the outer ends of said longitudinal passages, radial ports leading from the first outer steam chamber and opening into said longitudinal passages immediately behind the orifices of said nozzles, tappet valves slidably mounted on the piston rod, and extending radially therefrom, within said central steam chamber and the second outer steam chambers, and adapted to alternately open and close the entrances to the cylinders and openings connecting said outer chambers, and exhaust ports in said second outer chambers, substantially as set forth. 2nd. In a duplex steam engine, the combination of a pair of cylinders disposed end to end, open at their outer ends and operated by a common piston rod, divisible pistons on said rod, consisting of conical portions, fixed to the rod, and annular portions surrounding said conical portions and separable therefrom, inwardly projecting flanges at the head ends of the cylinders against which said annular portions impinge to divide the piston head at the end of the direct stroke, a steam entrance, a central admission chamber into which both cylinders open, two outer steam chambers in the casing beyond each of said cylinders, longitudinal passages connecting with said radial ports and leading into the second outer steam chambers, reciprocating slide valves mounted in the casings transverse to said radial ports and having openings registering therewith, nozzles in the outer ends of said longitudinal passages, radial ports leading from the first outer chamber and opening into said longitudinal passages immediately behind the orifices of said nozzles, tappet valves slidably mounted on the piston rod and extending

radially therefrom, within said central steam chamber and the second outer steam chambers, and adapted to alternately open and close the entrances to the cylinders and the openings connecting said outer chambers, and exhaust ports in said second outer chambers, substantially as set forth. 3rd. In a duplex engine, the combination of a pair of cylinders disposed end to end, and operated by a common piston rod, pistons on said rod, a central admission chamber between said cylinders and connecting therewith, two outer steam chambers at the head of each cylinder, communicating with each other by central openings through which the rod passes, exhaust port in the outermost of said chamber, means for passing expanded steam around or through the pistons into the first of said outer chambers, at the end of the direct stroke, tappet valves slidably mounted on the rod within the admission chamber and the second outer chamber, adapted to alternately open and close the entrances to the cylinders and the openings between said outer chambers, valve rods mounted on the casing and having arms extending through the same into the path of said tappet valves, for reversing the engine, valve controlled radial and longitudinal steam passages leading around the cylinders from the entrances thereto to said second outer chambers, said longitudinal passages terminating in nozzles adapted to produce a blast to draw expanded steam from the cylinders and first outer chambers and project it into said second outer chambers, substantially as set forth. 4th. In a duplex steam engine, the combination of a pair of cylinders axially in line, open at both ends and operated by a common piston rod, pistons on said rod, a central admission chamber between said cylinders and connecting therewith, two outer steam chambers, concentric with the rod, at the head of each cylinder, and connecting with each other by central openings through which the rod passes, exhaust ports in the outermost chambers, means for passing expanded steam around or through the pistons at the end of the direct stroke, tappet valves slidably mounted on the rod within the admission chamber and the second outer chambers, adapted to alternately open and close the entrances to the cylinders and the opening between said outer chambers, radial ports leading from said entrances and connecting with longitudinal passages opening into said outer chambers, slide valves reciprocating transversely across said radial ports having openings and having openings registering therewith to regulate the admission of steam to said ports, openings in the inner walls of the cylinder casings, between the admission chamber and said longitudinal passages in alignment with said passages, nozzles fitted in said openings and projecting into said passages beyond said radial ports, valves for admitting steam to said nozzles and means for opening said valves during the return stroke, other nozzles in the outer ends of said longitudinal passages, radial ports opening from the first outer steam chambers into said longitudinal passages, behind the orifices of said last-mentioned nozzles whereby live steam is supplied to the cylinders during the return stroke, and expanded steam drawn out of the path of the pistons during both the return and direct strokes, substantially as set forth. 5th. In a duplex engine, the combination of a central steam entrance, a central admission chamber, a plurality of cylinder on each side of said chamber, all said cylinders being arranged axially in line and operated by a common piston rod having openings at each end, through which the rod passes, the outer cylinders being of greater capacity than the inner cylinders, pistons on the rod in each of said cylinders, means for passing expanded steam around or through said pistons at the end of the direct stroke, two outer steam chambers in the casing, at the head end of each cylinder, connected by central openings through which the rod passes, exhaust ports in the outermost chambers at each end of the engine, radial ports leading from the entrances of said cylinders longitudinal passages connecting with said radial ports and leading into the second outer steam chambers, nozzles in the outer ends of said longitudinal passages, radial ports leading from the first outer steam chamber adjacent to each cylinder and opening into said longitudinal passages immediately behind the orifices of said nozzles, tappet valves slidably mounted on the piston rod and extending radially therefrom, within said admission chamber and the second outer steam chambers, adapted to alternately open and close the entrance to the cylinders and the openings connecting said outer chambers, substantially as set forth. 16th. In a duplex engine, the combination of a central steam entrance, a central admission chamber, a plurality of cylinder on each side of said chamber, all said cylinders being arranged axially in line and operated by a common piston rod and having openings at each end, through which the rod passes pistons on the rod in each of said cylinders, means for passing expanded steam around or through said pistons at the end of the direct stroke, two outer steam chambers in the casing at the head of each cylinder, connected by central openings through which the rod passes, exhaust ports in the outermost in said chambers, at each end of the engine, tappet valves slidably mounted on the rod, within the admission chamber and second outer chambers, adapted to alternately open and close the entrances to the cylinders, and the openings between said outer chambers, radial ports leading from said entrances and connecting with longitudinal passages opening into said outer chambers, openings in the inner walls of the cylinder casings, in alignment with the said passages, nozzles fitted in the said openings and projecting into said passages, beyond said radial ports, valves for admitting steam to said nozzles during the return stroke, and means for operating said valves, other nozzles in the outer ends of said longitudinal passages, radial ports opening from the first outer steam chambers

into said longitudinal passages behind the orifices of last-mentioned nozzles, whereby live steam is supplied to the cylinders during the return stroke and expanded steam drawn out of the path of the pistons during both the return and direct strokes, substantially as described.

No. 69,501. Door Hanger. (Ferrure de ports.)



F. E. Myers and Brothers, assignee of Philip A. Myers, all of Ashland, Ohio, U.S.A., 27th November, 1900; 6 years. (Filed 7th November, 1900.)

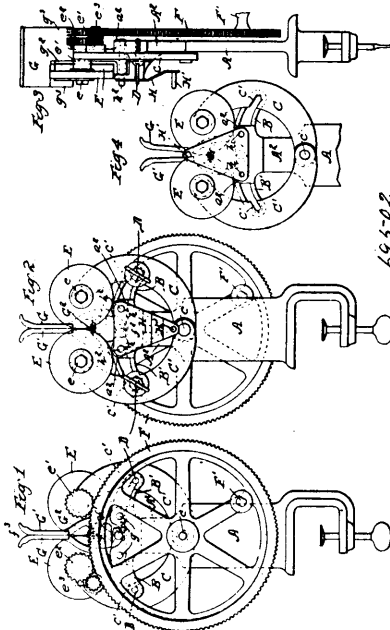
Claim.—1st. A door hanger, comprising a hanger frame and a door suspended therefrom so as to have lateral movement, substantially as described. 2nd. A door hanger, comprising a roller and frame and a door pivoted thereto at its upper edge so as to swing laterally, substantially as described. 3rd. A door hanger, comprising a roller, a frame having a longitudinal movement on a track and a door having a lateral movement, said door being suspended from the hanger, substantially as described. 4th. A door hanger, comprising a roller, a frame partially encasing the roller and having an eye at its lower end, a door suspended therefrom and a shield *b* projecting up above the lower edge of the track to keep the hanger in place on the track, substantially as described. 5th. A door hanger, comprising a frame open on the front, a wheel journaled therein and fitting upon a track and projection from the frame extending upwardly to partially close the open front and prevent derailing of the hanger, substantially as described. 6th. The combination with a door hanger, a rail or track having supporting brackets morticed thereto, said track being reversible, substantially as described. 7th. In combination with the door hanger, the rail or track having supporting brackets morticed centrally thereof whereby said track may be reversed, substantially as described. 8th. In combination with the door hanger, the rail or track having supporting brackets secured thereto intermediate of the track edges so as to render it capable of being reversed, substantially as described.

No. 69,502. Sharpening Machine. (Machine à aiguiser.)

The Universal Sharpening Machine Company, Chicago, Illinois, assignee of Mary Louise Worden, administratrix of the Estate of Charles A. Worden, in his life time of Denver, Colorado, all in the U.S.A., 27th November, 1900; 6 years. (Filed 13th June, 1900.)

Claim.—1st. In a sharpening machine, the combination of grinding wheels and a holding device consisting of spring actuated pivoted jaws, substantially as described. 2nd. In a sharpening machine, the combination with the device for holding a blade consisting of spring actuated pivoted jaws, of a pair of grinding wheels mounted one on each side of said blade holding device and pivoted supports carrying said grinding wheels whereby the angular distance between said grinding wheels may be varied, substantially as described. 3rd. In a sharpening machine, the combination with the grinding

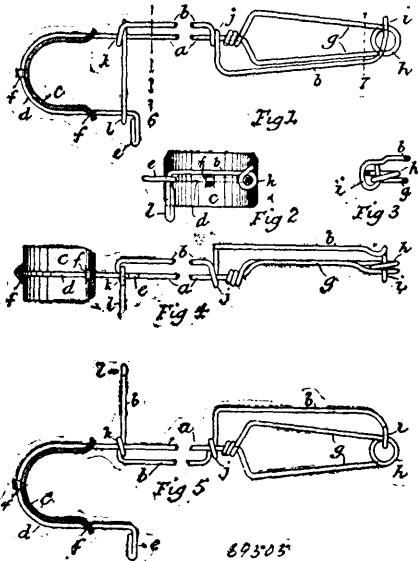
wheels and adjustable supports for the same, of a blade holding device, consisting of a pair of jaws having an opening or recess in



which the grinding wheels revolve and depending arms outside said grinding wheels, substantially as described. 4th. In a sharpening machine, the combination with the grinding wheels and adjustable supports for the same, of a blade holding device, consisting of a pair of spring actuated metal jaws having an opening or recess in which the grinding wheels revolve and depending arms outside said grinding wheels, substantially as described. 5th. In a sharpening machine, the combination with the base or support, of supports adjustably secured to said base, a pair of grinding wheels, each of said grinding wheels mounted on one of said adjustable supports, a supporting plate fixed with respect to said base and located between said adjustable supports and spring actuated jaws adapted to hold the blade in position add mounted upon said supporting plate, substantially as described. 6th. In a sharpening machine, the combination with a base, of arms adjustably secured thereto, means for securing said arms in different angular positions, uprights carried by said arms, shafts journaled in said uprights, wheels mounted fast on said shafts, upright pivoted jaws mounted between said wheels and adapted to hold the blade of the instrument to be ground in a vertical plane, substantially as described. 7th. In a sharpening machine, the combination with the base or support, of arms adjustably secured thereto, means for securing said arms in different angular positions, uprights carried by said arms, shafts journaled in said uprights, wheels mounted fast on said shafts, upright pivoted jaws mounted between said wheels and adapted to hold the blade to be ground in a vertical plane and means for rotating said shafts at the same rate of speed, substantially as described. 8th. In a sharpening machine, the combination with a base, of a pad or arms pivoted thereto, means for securing the said arms in different positions, uprights carried by said arms, shafts journaled in said uprights, a grinding wheel mounted fast on each of said shafts, spring actuated upright pivoted jaws mounted between the said wheels and adapted to hold the blade of the instrument to be ground in a vertical plane, substantially as described. 9th. In a sharpening machine, the combination with the base or support of arms adjustably secured thereto, shafts journaled in said arms, grinding wheels mounted on said shafts each shaft provided with a pinion, a driving gear mounted on the base or support, the pinion on each shaft meshing directly with said driving gear and the pinion on the other shaft meshing with an auxiliary pinion which meshes with the driving gear and a blade holding device consisting of pivoted jaws for holding the blade in a vertical plane while being ground, substantially as described. 10th. In a sharpening machine, the combination with a base or support of arms pivoted thereto, a grinding wheel mounted in each of said arms, engaging pins located below said grinding wheels and a gauge provided with a pin adapted for insertion between said grinding wheels, said gauge adapted also for engagement with said pin, substantially as described. 11th. In a sharpening machine, the combination with the device for holding a blade consisting of a pair of spring actuated pivoted jaws, of a pair of grinding wheels mounted one on each side of said blade holding device, pivoted supports carrying said grinding wheels whereby the angular distance between the grinding wheels may be varied and a gauge for regulating the said distance consisting of a plate of substantially triangular shape, one corner provided with a

slide ways at their outer ends and below said transversely extending arms formed into diverging downwardly extending and rearwardly curved arms, provided at their extremities with bearings for the crank shaft, substantially as described. 6th. In an engine of the type specified, the combination with the main frame, cylinder, crank shaft and slideway, of the connecting rod, the piston rod and slide mounted on said slideway and having a pin thereon for connecting the piston and connecting rods, substantially as described. 7th. In a steam engine the combination with the cylinder, crank shaft and slideway, of a slide having a pin projecting at right angles to the slideway, a connecting rod journaled on said pin and a piston rod having a bearing in which said pin fits, substantially as described.

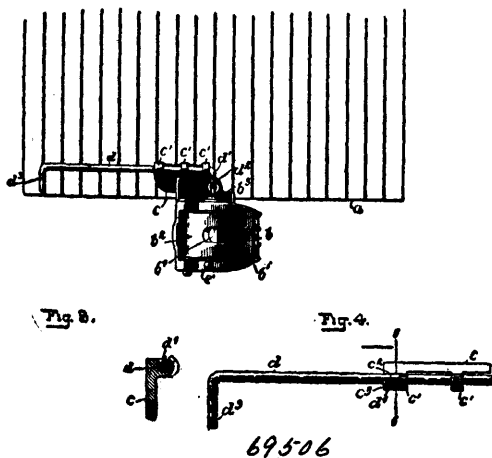
No. 69,505. Cow Shackle. (Entrave pour vaches.)



Albert Edwin Whitney, Heram, Victoria, Australia, 27th November, 1900; 6 years. (Filed 5th November, 1900.)

Claim.—1st. In an appliance of the class indicated, a main rod having at one end a hook and at the other a handle, in combination with a movable or locking rod connected to the main rod between the handle and the hook, also at one end to a ring on the said handle and having its other extremity bent transversely and then downward, forming a catch completely closing the said hook, all substantially as set forth. 2nd. In an appliance of the class indicated, a main rod having a handle and a hook, in combination with a pad on said hook, and (attached to said main rod) a locking rod, the extremity of which closes the said hook, the locking rod being adapted to be moved by manipulation at the said handle into the open position, whereupon it has a tendency to spring closed, substantially as set forth.

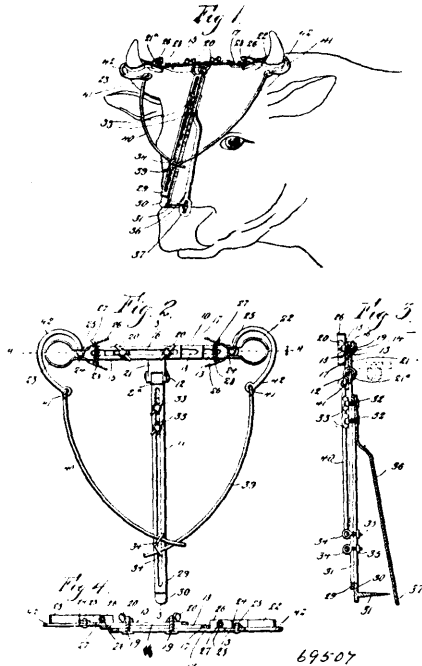
No. 69,506. Car Coupler. (Attelage de chars.)



George William Smillie, Newark, New Jersey, U.S.A., 27th November, 1900; 6 years. (Filed 5th November, 1900.)

Claim.—1st. In a car coupler, the combination of a draw head provided with an upwardly extending plate or extension projecting laterally beyond one side thereof, a knuckle, a locking pin or bolt, and a horizontally arranged lever supported in bearings on said plate or extension with one end having connection with said locking pin or bolt, substantially as and for the purpose set forth. 2nd. In a car coupler, the combination with a draw head having a knuckle and a locking pin or bolt, of a lug or bracket carried by said draw head, provided with an opening extending therethrough and with a slot in its wall arranged with a part thereof extending at right angles to the said opening therein, and a lever having a loose bearing in the opening in said lug or bracket provided with a pin thereon for entering the said slot in the latter, and an operative connection between the bolt and lever, substantially as and for the purpose set forth.

No. 69,507. Animal Poke. (Carcan.)

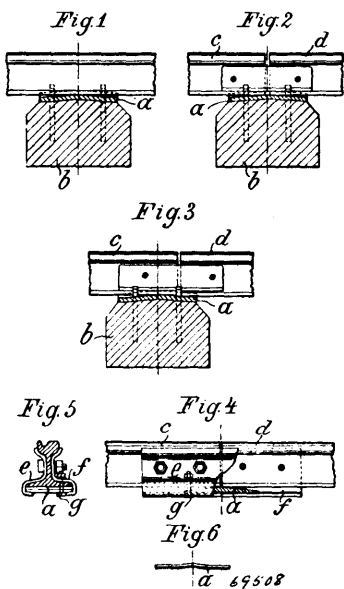


Louis Bilodeau, St. Evariste Station, Quebec, Canada, 27th November, 1900; 6 years. (Filed 8th November, 1900.)

Claim.—1st. A cattle nosing appliance, comprising a brow member, a nose member equipped with a normally concealed or inactive barb adapted to be brought into operative position by pressure against the nose member, and means for holding the appliance on an animal's head, substantially as described. 2nd. A cattle nosing appliance, comprising a brow member, a nose member adjustably connected with the brow member and carrying a normally concealed barb, and means for attaching the appliance to an animal's head, said nose member being free to follow the movements of the animal's head, substantially as described. 3rd. A cattle nosing appliance, comprising a brow member, means for attaching said brow member to the animal's head, and a nose member having a hinged connection with the brow member and carrying a normally inactive barb adapted to be brought into position for service by pressure applied on the freely movable member, substantially as described. 4th. A cattle nosing appliance, comprising a brow member, a nose member equipped with a barb, and a spring for normally holding the nose member and its barb to an inactive position, substantially as described. 5th. A cattle nosing appliance provided with a nose member equipped with a barb, a spring arranged to rest against the animal's nose and to hold the nose member and its barb to an inactive position, and means for holding the nose member in place on an animal's head, substantially as described. 6th. A cattle nosing appliance, comprising a nose member provided with a barb, a spring connected to the nose member and arranged at one side thereof so as to rest against an animal's nose and to hold the barb to an inactive position, and side members connected with the nose members, substantially as described. 7th. A cattle nosing appliance, comprising an extensible brow member having plates adjustably connected together, a nose member connected with the brow member, and means attached to the brow member for holding the appliance in operative positions, substantially as described. 8th. A cattle nosing appliance, comprising an extensible brow member having a series of parts adjustably connected together, a nose member connected to one part of the brow member and normally disposed in central relation with respect to

the other adjustable parts of said brow member, a barb on the nose member, and means connected with the brow member for holding the appliance in operative position, substantially as described. 9th. A cattle nosing appliance, comprising an extensible brow member having its parts adjustably connected together, horns clamps carried by the parts of said brow member, and a nose member having a concealed barb, substantially as described. 10th. A cattle nosing appliance, comprising a brow member, the horns clamps connected to the end portions of the brow member and each having spring-controlled jaws arranged to firmly grip one horn, and a nose member having a concealed barb connected to the brow member. 11th. A cattle nosing appliance, comprising a brow member, an extensible nose member provided with a barb, and a spring connected to the nose member, substantially as described. 12th. A cattle nosing appliance, comprising a brow member, an extensible nose member having one part thereof connected hingedly with the brow member and its extensible part provided with a barb, and a spring which is adjustable with the extensible part of the nose member, substantially as described. 13th. A cattle nosing appliance, comprising a brow member, a two part nose member having one part hinged to the brow member and its other part provided with a barb, means for clamping the two parts of the nose member adjustably together, a leaf spring connected with the extensible part of the nose member so as to be adjustable therewith and provided with an opening disposed opposite to the barb, and means for attaching the brow member to an animal's head, substantially as described. 14th. A cattle nosing appliance, comprising a brow member, a nose member provided with a barb and with a housing spring, and auxiliary members disposed on opposite sides of the nose member and connected with both the nose and brow members, substantially as described. 15th. A cattle nosing appliance, comprising a brow member, a nose member pivoted thereto and provided with a barb and with a housing spring, the bows attached to the brow member, and the auxiliary members loosely connected with the bows and with the nose member, substantially as described.

No. 69,508. Rail Plate. (Plaque de rails.)



Jaroslav Skála, Göding, Moravia, Austria-Hungary, 27th November, 1900; 6 years. (Filed 8th November, 1900.)

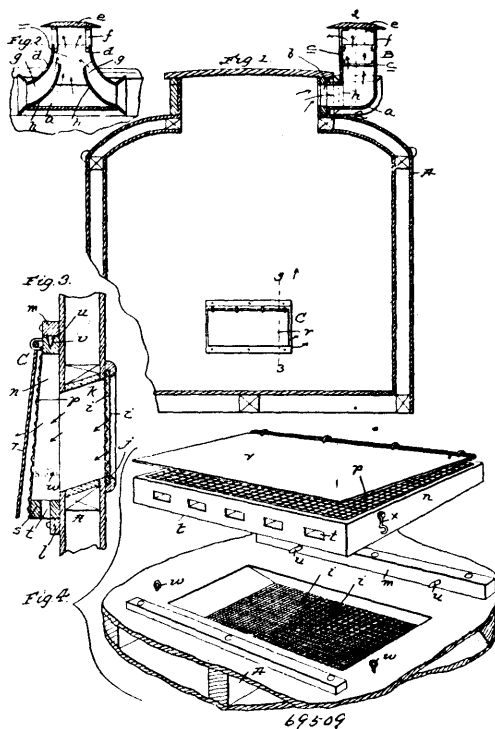
Claim.—Supporting plate for rails, said plate being provided with a roof-shaped upper bearing surface upon which the rails are always bearing only along one single line and which in the case of a jointing together of rails of different heights allow of such longitudinal displacement of the rail as to bring the upper edges of the same to the identical height, substantially as described.

No. 69,509. Car Ventilating System. (Système de ventiler les chars.)

William T. Cottier, Portland, Oregon, U.S.A., 27th November, 1900; 6 years. (Filed 9th November, 1900.)

Claim.—1st. The combination with a car having a deck and deck sashes, of a suction device comprising a body disposed longitudinally of the car, and parallel to one deck sash thereof, and having a lateral branch extending through said deck sash and communicating with the interior of the car body, and also having side walls and upwardly and inwardly curved end walls, a cap supported at a suitable distance above the chimney formed by said side and end walls of the body, and interior curved walls arranged in the body and serving in con-

junction with the side walls and curved end walls thereof to form inductors, substantially as specified. 2nd. The combination with a



car having an opening *k* in one of its walls, of a rectangular open frame arranged at and connected to the inner side of said end wall, and having opening *t* in its lower bar for the discharge of dust and dirt, a screen attached to the interior of the car, and an imperforate flap connected in a hinged manner to the upper bar of the frame and arranged to normally rest over the screen carried by said frame, substantially as specified. 3rd. In an air induction device for cars, the combination of the wall of a car body having an opening, a screen arranged over the opening and in a frame connected to the outer side of said wall, a horizontal bar connected to the inner side of the wall below the opening, a horizontal bar arranged above the opening and having depending dowel pins, a rectangular frame interposed between the lower and upper bars, and having sockets in its upper horizontal bar receiving the dowel pins of the latter, and also having its lower bar of a greater width than the lower bar on the end wall, and provided with discharge aperture, a screen connected to the inner face of said frame, and a flap connected in a hinged manner to the upper bar of the frame, and adapted to normally rest over the screen, and a detachable connection between the frame and the wall of the car. 4th. In a ventilated car, the combination of a car body, a suction device connected to the upper portion thereof, a screen arranged in a frame at the outer side of one of the upright walls of the car body and over the opening therein, a rectangular open frame arranged at and connected to the inner side of said end wall, and having openings *t* in its lower bar for the discharge of dust and dirt, a screen attached to the inner face of said frame, and an imperforate flap connected in a hinged manner to the upper bar of the frame, and arranged to normally rest over the screen carried thereby, substantially as specified.

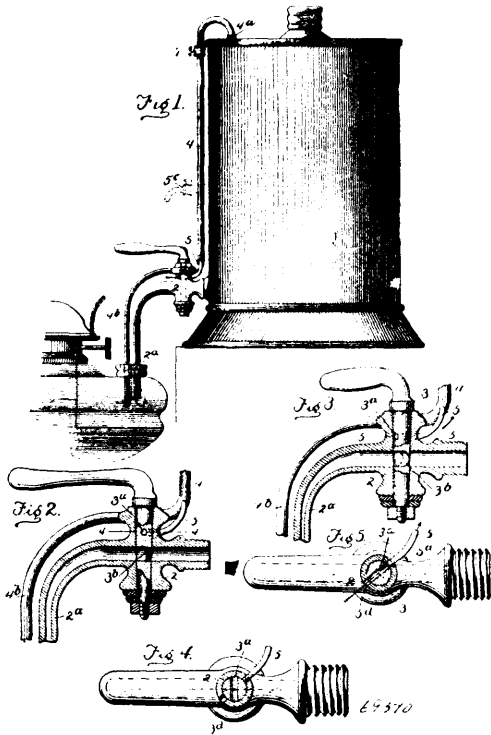
No. 69,510. Lamp Filling Oil Can. (Bidon à huile pour remplir les lampes.)

(Bidon à huile pour remplir les lampes.)

Alexander Kitterman, Portland, Oregon, U.S.A., 27th November, 1900; 6 years. (Filed 9th November, 1900.)

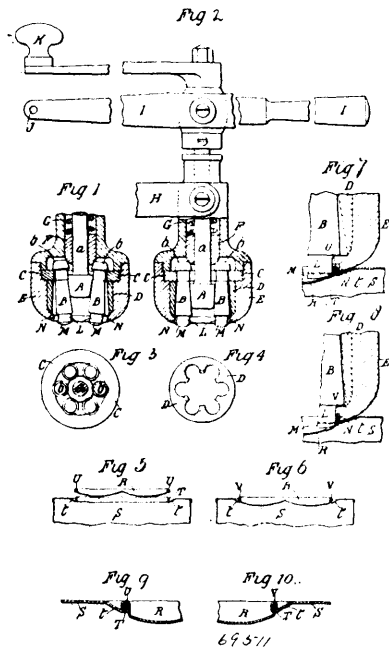
Claim.—1st. A liquid holding vessel, having a faucet provided with an air vent passage in its body, and a similar passage in its valve, the valve vent passage having such relation with the main or discharge passage therein that the air vent passage can be turned in line with the air passage of the faucet body for cutting off the discharge passage therein, a main air vent or tube connection to the can having its entrant end projected below the faucet nozzle and having a member in communication with the air passage in the faucet, as specified. 2nd. The combination with the oil can having a main air vent and a discharge faucet having a transverse air vent

or passage communicating with the main air vent and a valve having in addition to its discharge passage a supplemental passage adapted



to be brought either in or out of line with the supplemental air passage without cutting off the fluid discharge, substantially as described.

No. 69,511. Can Closing Machine.
(Machine pour clore les bidons.)

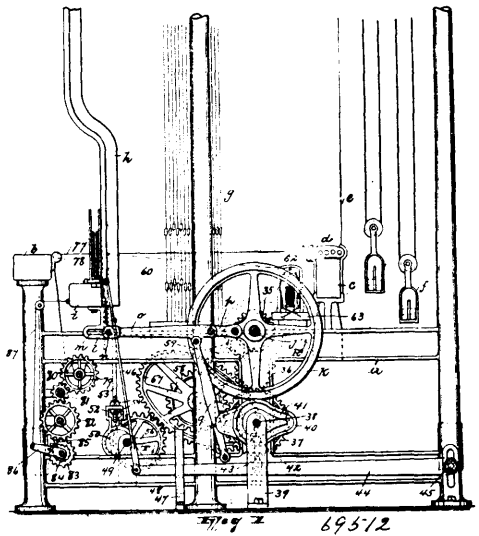


Conrod Field Mendham, South Norwood, London, England, 27th November, 1900; 6 years. (Filed 17th October, 1900.)

Claim.—1st. The combination with a stationary casing, provided with a circular jaw, of rollers arranged inside the casing, and a revoluble mandril, depressible or working in a fixed bearing, operating to move the said rollers towards the jaws, and to revolve them about their own axes and the axis of the jaw, substantially as

set forth. 2nd. The combination with a stationary casing, having a circular jaw, of roller arranged inside the casing, with projecting beads arranged below the jaw, and a revoluble mandril depressible or working in a fixed bearing and forcing outward and revolving the said rollers and their beads, substantially as set forth. 3rd. The combination with a stationary casing having a circular jaw, and a collar above the jaw, of rollers provided with beads at their lower ends and conical heads at their upper ends by means of which the said rollers are pivotally supported on the upper edge of the said collar, and a revoluble mandril forcing outward and revolving the said rollers, substantially as set forth. 4th. The combination with a stationary casing provided with a circular jaw at its lower part, a collar above the jaw, and a cage provided with chases between the said jaw and collar, of rollers journalled beads supported on the collar and a revoluble mandril forcing outward and revolving the said rollers, substantially as set forth. 5th. The combination with a stationary casing, having a circular jaw, of rollers pivotally supported inside the casing, a revoluble mandril bearing against the rollers below their fulcrum, and a spring pressed thimble bearing against said rollers above their fulcrum, operating to move them away from the jaw when the pressure of the mandril against them is removed, all substantially as and for the purpose herein described.

No. 69,212. Needle Loom. (*Navette de metiers.*)



George Francis Knett, Paterson, New Jersey, U.S.A., 27th November, 1900; 6 years. (Filed 17th July, 1900.)

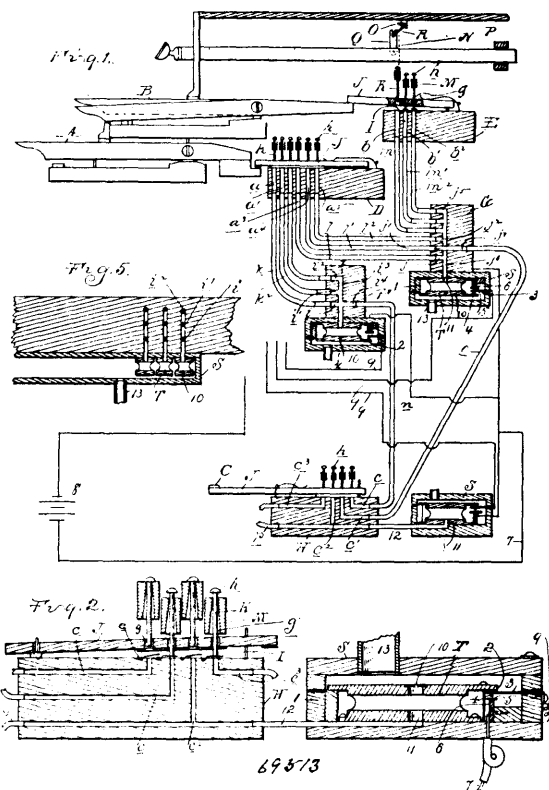
Claim.—1st. In a loom, the combination, with warp controlling mechanism and a batten having a groove or grooves in its upper surface, of reciprocating bars seated in said groove or grooves, filler carriers mounted on said bars, loopers adapted to reciprocate transversely of said filler carriers, levers fulcrumed on said batten and operatively connected to said bars, and means for vibrating said levers and reciprocating the loopers, said means being operative independently of the action of said batten, substantially as described. 2nd. In a loom, the combination, with a warp controlling mechanism and a batten, of reciprocating bars mounted on said batten, filler carriers mounted on said bars, a suitably guided frame carried by and movable transversely with reference to the batten, loopers carried by said frame and adapted to co-act with the filler carriers, levers mounted on said batten, rods pivotally connecting said bars and said levers, and means for vibrating said levers and reciprocating said frame, said means being operative independently of the action of the batten, substantially as described. 3rd. In a loom, the combination, with a warp controlling mechanism and a batten having a groove in its upper surface, of reciprocating bars seated side by side in said groove, filler carriers adjustably mounted on said bars, a vertically movable frame carried by and movable transversely with reference to the batten, guides for said frame carried by said batten, loopers carried by said frame, yieldingly mounted therein, and adapted to co-act with the filler carriers, levers mounted on said batten, rods pivotally connecting said bars and said levers, and means for vibrating said levers and reciprocating said frame, substantially as described. 4th. In a loom, the combination, with a warp controlling mechanism and a batten and with the drive shaft, of reciprocating bars carried by said batten, filler carriers mounted on said bars, levers fulcrumed on said batten and operatively connected to said bars, a vertically movable and suitably guided frame carried by said batten, loopers carried by said frame, yieldingly mounted therein and adapted to co-act with said filler carriers, suitably journalled eccentrics operatively connected to said frame, suitably fulcrumed levers oper-

atively connected to said first named levers, operative connecting means between said drive shaft and said eccentrics and between said drive shaft and the last named levers, and means for reciprocating the batten, substantially as described. 5th. In a loom, the combination, with warp controlling mechanism including a batten and with the drive shaft, of reciprocating bars carried by said batten, filler carriers mounted on said bars, levers fulcrumed on said batten and operatively connected to said bars, a vertically movable and suitably guided frame adapted to reciprocate transversely of said batten, loopers carried by said frame and adapted to co-act with said filler carriers, another and suitably journaled shaft, eccentrics and an eccentrically mounted gear carried on said last named shaft, operative connection between said eccentrics and the frame, a suitably journaled elliptical gear engaging said eccentrically arranged gear and operatively connected to the drive shaft, suitably journaled cams, gearing connecting said cams and the drive shaft, levers operatively engaging said cams, pitmen connecting said levers and said first-named levers, and operative connecting means between said batten and the drive shaft, substantially as described. 6th. In a loom, the combination, with the batten and with reciprocating filler carriers, of a vertically movable frame, guides for said frame carried by said batten, clamps adjustably mounted on said frame, and loopers yieldingly carried by said clamps and adapted to co-act with said filler carriers, substantially as described. 7th. In a loom, the combination, with the batten and with reciprocating filler carriers, of a vertically movable frame, guides for said frame projecting downwardly from said batten, clamps adjustably mounted on said frame, oscillating blocks supported by said clamps, and loopers carried by said blocks and adapted to co-act with said filler carriers, substantially as described. 8th. In a loom, the combination, with the batten and with reciprocating filler-carriers, of a vertically movable frame, guides for said frame projecting downwardly from said batten, clamps adjustably mounted on said frame, oscillating blocks supported by said clamps and loopers carried by said blocks and adapted to co-act with said filler-carriers, each looper being disposed eccentrically of the pivotal axis of its block, substantially as described. 9th. In a loom, the combination, with the batten and with reciprocating filler-carriers, of a vertically movable frame, guides for said frame projecting downwardly from said batten, clamps adjustably mounted on said frame and provided with slotted projections at their upper ends, blocks pivotally connected to said clamps beneath the projections thereof, and loopers adjustably mounted in said blocks, penetrating said slotted projections and adapted to co-act with said filler carriers, substantially as described. 10th. In a loom, the combination with a batten having a longitudinal slot therein, of reciprocating bars arranged in said slot, strips secured upon said bars and having openings, slotted plates arranged on said bars over the openings therein, screws projecting into the strips and penetrating the slots of said plates, posts adjustably mounted on said plates over said openings and provided with adjusting nuts, and needles penetrating and adjustably mounted on said posts, substantially as described. 11th. In a thread-controlling device, the combination, with a spool or bobbin, of a pair of suitably disposed co-acting levers, a flier revolvably arranged in the axial line of said spool or bobbin and including an elastic arm provided with an eccentrically disposed eyelet, said levers having eyelets at the ends thereof adjacent the flier, and said flier arm being adapted to engage the other ends of said levers, and springs tending to separate the eyelet ends of said levers, substantially as described. 12th. The combination of a pair of suitably fulcrumed spring controlled co-acting levers, a spool or bobbin disposed between the same, and a flier revolvably mounted above said spool or bobbin, and including an upwardly extending arm and a downwardly extending arm, the former carrying an axially disposed eyelet and the latter carrying an eccentrically disposed eyelet and the upper arms of the levers being also provided with eyelets, the lower arms of said levers being adapted to be engaged by the downwardly extending arms of the flier, substantially as described. 13th. The combination, with an arch-shaped frame and a spool or bobbin arranged within the same, of a pair of co-acting levers fulcrumed in said frame on opposite sides of said spool or bobbin, a flier revolvably mounted upon said spool or bobbin and comprising upwardly and downwardly extending arms, and an axially disposed eyelet carried by said first-named arm and an eccentrically disposed eyelet carried by the other arm, said levers having eyelets at the ends thereof adjacent the flier and being adapted to be engaged by the downwardly extending arm at the other of their ends, and springs tending to separate the eyelet ends of said levers, substantially as described. 14th. The combination, with an arch-shaped frame and a spool or bobbin arranged therein, of a pair of levers fulcrumed in said frame on opposite sides of said spool or bobbin, a flier revolvably mounted upon said spool or bobbin, and comprising upwardly and downwardly extending flexible arms, and an axially disposed eyelet carried by said first-named arm and an eccentrically disposed eyelet carried by the other arm, said levers having eyelets at the ends thereof adjacent the flier and having their other ends bent inwardly, the one more than the other, and adapted to engage said downwardly extending arm, springs tending to separate the eyelet ends of said levers, and a stationary eyelet carried by said frame above said flier, substantially as described. 15th. In a loom, the combination, with the frame including a breast-beam and with shedding mechanism including the batten, of a horizontally reciprocating frame, guiding means carried by said breast-beam and sustaining

said reciprocating frame, filler-carriers movable longitudinally of said batten, means for actuating said reciprocating frame, loopers pivotally supported in said reciprocating frame and adapted to co-act with said filler-carriers, a movable device engaging said loopers, and a detent adapted to trip said device to disengage the loopers therefrom, substantially as described. 16th. In a loom, the combination with warp-controlling mechanism and a batten, of reciprocating bars mounted on said batten, filler-carriers mounted on said bars, loopers adapted to reciprocate transversely of said filler-carriers, levers fulcrumed on said batten and operatively connected to said bars, a drive shaft journaled in said frame, operative connecting means between said driving shaft and said levers, operating connecting means between said driving shaft and said loopers, a longitudinally reciprocating pitman operatively connected to said batten, means for guiding said pitman, and a link pivotally connected at one of its ends to said pitman and having eccentric connection with said shaft at the other of its ends, substantially as described.

No. 69,513. Electro-Pneumatic Action.

(Action électro-pneumatique.)

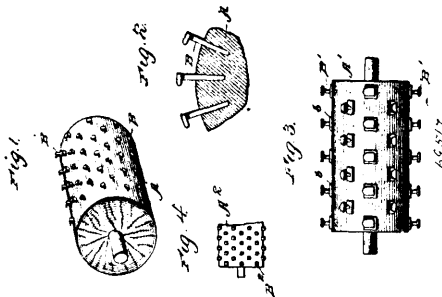


John T. Austin, Detroit, Michigan, U.S.A., 28th November, 1900; 6 years. (Filed 9th September, 1900.)

Claim.—1st. In an electro pneumatic action, the combination with a key and an electric circuit, of a pneumatic circuit closer for said circuit controlled by said key, and a stop controlled pneumatic coupler connection for said circuit closer. 2nd. In an electro pneumatic action, the combination with a series of electric circuits and a corresponding series of keys, of a series of pneumatic circuit closures for said circuits individually controlled by said keys, and stop controlled pneumatic coupler connections for said circuit closures. 3rd. In an electro pneumatic action, the combination with an electric circuit and a corresponding key, of a pneumatic circuit closer for said circuit comprising a windchest, a collapsible pneumatic motor therein having a small port or bleed, opening into said chest, an exhaust connection of greater capacity, a valve closing said exhaust connection controlled by said key and normally separated electric contacts adapted to be closed by the collapsing of said pneumatic motor. 4th. The combination with a key, a stop, and an automatically opening valve controlling a motor current, of two independent mechanical means for holding said valve normally closed, the one adapted to be released by the operation of the key and the other by the stop, an electric circuit and a pneumatic circuit closer therefor controlled by said valve. 5th. The combination with a key, a stop, and a series of automatically opening valves, each controlling a motor current of mechanical means for holding said valves normally closed adapted to be released by the operation of the key, independent mechanical means for holding said valves closed adapted to be individually released by said stops, electric circuits corres-

ces leading thereto and pipes or passageways leading to such orifices, of a blower or blowers having connection to the opposite ends of such pipes and communicating with the outer air as and for the purpose specified. 2nd. In a ventilating device for passenger cars, the combination with the compartment or compartments of the car having orifices leading thereto and pipes or passageways leading to such orifices, of a blower or blowers having connection to the opposite ends of such pipes and a temperature regulating casing with which such blower communicates, such casing having a communication with the outer air, as and for the purpose specified. 3rd. The combination with the compartments of the car and the fresh and vitiated air, orifices opening thereinto and the passageways leading therefrom respectively to opposite ends of the car and blowers connected at the opposite end to the passageways and communicating with the open air and means for driving such blowers, as and for the purpose specified. 4th. In an ordinary passenger car, the combination with the blower receiving fresh air from the receptacle in proximity to it, and having suitable connection for operating it from the car wheel axle, of a second blower located at the opposite end of the car designed to draw and exclude foul air from the body of the car, suitable tubes connecting the said blowers with the various compartments, inlets and outlets for the ingress and egress of fresh and foul air respectively, as and for the purpose specified. 5th. In a ventilating device for passenger cars, the combination with a blower or blowers located at the end thereof, provided with an inlet for fresh air and outlets leading to the various parts of the car, of suitable connections between the fan and the car wheel axle for operating the same, an opening or openings in the car wall for the ingress of fresh air to the blower, and an opening or openings for egress of foul air leading to the opposite end of the car, as and for the purpose specified. 6th. The combination with a blower or blowers at the end thereof, provided with inlet and outlet pipes, of an upright rod having friction or gear wheels at each end thereof designed to contact with friction or gear wheels in operating the fan, suitable connection between the said rod and axle, openings in the car wall for the ingress and egress of air, as and for the purpose specified. 7th. The combination with a blower or blowers at the ends of the car having an upright rod journaled in the same and friction or gear wheels at each end thereof, of threaded pins or pintles designed to come in contact with each end of the said rod, means of operating the said rod, and hereby the fan from the car wheel axle, and openings in the car wall for the ingress of air, as and for the purpose specified. 8th. The combination with a blower or blowers located at one or both ends thereof and having a fan operated through the contact of friction or gear wheels at each end of an upright rod, of a horizontal shaft springheld in a pair of standards, and connected with the car wheel axle by a suitable belt, the gear wheel at the end of the said shaft designed to come in contact with the gear wheel at the lower end of the upright rod, suitable inlets and outlets in the blower, and openings in the car wall for the ingress and egress of air, as and for the purpose specified. 9th. In an ordinary passenger car, the combination with a blower having a fan operated by suitable connection with the car wheel axle, of an air receptacle below the said blower enclosing a temperature regulating device, an opening through the car and leading into the said receptacle, an opening leading from the said receptacle to the blower above, a valve on the back of the said blower, and suitable outlets at the front of the said blower, as and for the purpose specified. 10th. an ordinary passenger car, the combination with the blower, receiving its air from the receptacle beneath it, and having suitable connection for operating it from the car wheel axle, of a plurality of tubes protruding from the mouth of the said blower and leading to the various portions or compartments of the car, and openings in the walls of the car in the several compartments forming the mouth or the outlets of the said tubes leading from the blower, as and for the purpose specified.

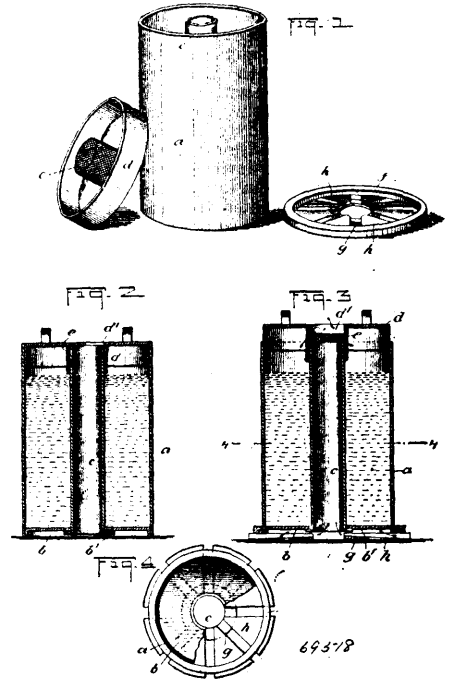
No. 69,517. Tamping Roller. (Bourroir.)



John W. Fitzgerald, Kern, California, U.S.A., 28th November, 1900; 6 years. (Filed 12th November, 1900.)

Claim.—A road roller provided with separate compression shoes.

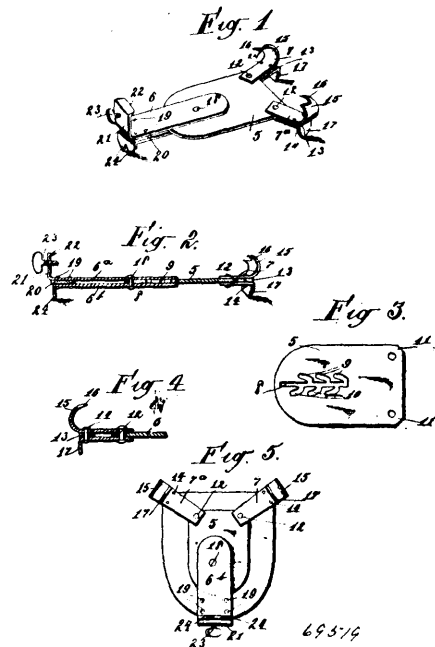
No. 69,518. Milk Can. (Bidon à lait.)



John German, Aubrey, Wisconsin, U.S.A., 28th November, 1900; 6 years. (Filed 12th November, 1900.)

Claim.—A milk can having a tube passing therethrough from top to bottom, a cover having an opening registering with the tube, and a tube projecting from the cover at the opening thereof, and having sliding engagement with the tube on the can, a portion of said cover tube being perforated and forming a screen, while the other portion of the cover tube is imperforate, so that according to the position of the cover, the interior of the can is ventilated or not.

No. 69,519. Ice Creeper. (Grappin.)

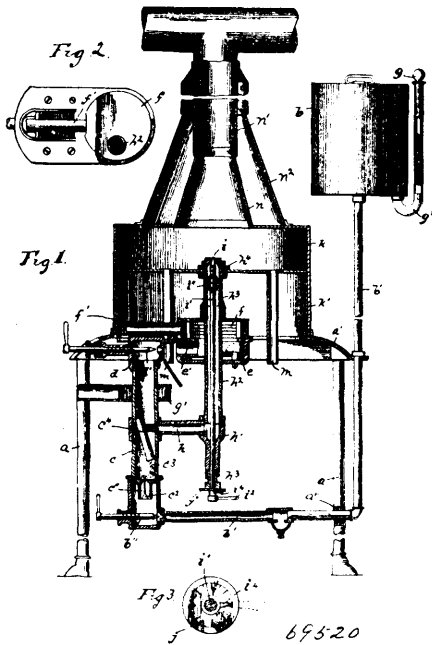


John Horton Balcom, Halifax, Nova Scotia, Canada, 28th November, 1900; 6 years. (Filed 13th November, 1900.)

Claim.—1st. An ice creeper comprising two members extensibly coupled together and each having means for engagement with a heel, and also provided with penetrating spurs, substantially as described. 2nd. An ice creeper comprising a spurred plate member

having means for engagement with a heel, and a lever member fulcrumed on the plate member, and also provided with a spur and heel engaging devices, substantially as described. 3rd. An ice creeper comprising a spurred plate member having heel engaging devices, a lever member having a shiftable fulcrum connection with said plate member, and heel engaging means on the lever member, substantially as described. 4th. In an ice creeper, the combination of the plate member provided with a slot having a series of offsets, a lever member loosely embracing the plate member, and provided with a fulcrum pin adapted to be shifted in the slot and to loosely fit in either of the offsets therein, spurs on the respective members, and heel engaging devices also on the members, substantially as described. 5th. In an ice creeper, the combination with a plate member, of arms pivoted thereto and each having prongs adapted for engagement with a corner of the heel, and suitable holding spurs, substantially as described. 6th. In an ice creeper, the combination of a plate member, arms pivoted to said plate member, and each provided with heel engaging spurs, and with a penetrating prong, and a lever member connected with the plate member and likewise provided with a penetrating spur and with heel engaging devices, substantially as described. 7th. In an ice creeper, the combination of a slotted plate member having the offsets from the slots, arms pivoted to the front end of the plate member and each provided with upstanding prongs and with a downwardly extending spur, and a lever member loosely embracing the plate member and provided with a fulcrum pin which fits in the slot or offsets of the plate member, said lever member also having the depending spurs and the upstanding flange which is formed with a lip and which supports a binding screw, substantially as described.

No. 69,520. Oil Gas Generator.
(Générateur de gaz à huile.)

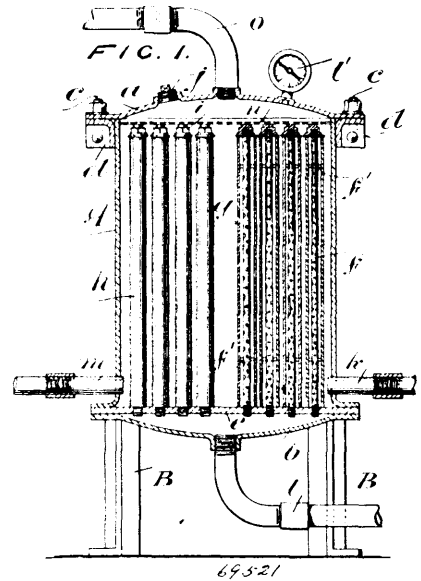


Norval C. Henning, New Vienna, Ohio, U.S.A., 28th November, 1900; 6 years. (Filed 19th December, 1899.)

Claim.—1st. In an oil gas generator the combination of a vapourizing chamber or retort having an oil supply connection, a burner communicating with and supplied directly from said chamber, and extending in proximity thereto, for the purpose of heating the same to generate vapour therein, a superheating chamber or retort communicating with the first mentioned chamber or retort and associated with the burner so as to be subjected to the heat of the same, and an air chamber adjacent to the burner receiving the discharging end of said superheating retort. 2nd. In an oil gas generator, the combination of a vapourizing chamber or retort having an oil supplying connection, a burner communicating with and supplied directly from said chamber and extending in proximity thereto for the purpose of heating the same to generate vapour therein, a superheating chamber or retort communicating with the first mentioned chamber or retort, and extending through the burner near one side of the same, an air chamber adjacent to the latter and receiving the discharging end of the superheating retort. 3rd. In an oil gas generator, the combination of a standpipe having an

oil supplying connection at its lower part and constituting a retort at its upper part, valves at the upper and lower ends of said standpipe controlling outflow of vapour and inflow of oil respectively, a burner alongside the retort portion of said stand pipe and communicating therewith, and having a branch extending over the top thereof, an air heating chamber or oven arranged over the burner and having one or more air inlet pipes depending below the burner a supplemental stand pipe extending through the main portion of the burner and communicating through a suitable connection at its lower end with the first mentioned standpipe, and opening at its upper end into the air heating chamber, and a valve controlling outlet of gas from said supplemental standpipe into the air heating chamber. 4th. The improved method of generating illuminating gas, the same consisting in vapourizing hydrocarbon liquid, burning part of the vapour without superheating and apply resultant heat for further vaporization of the liquid, superheating part of the vapour, and mixing heated air with the superheated vapour to produce illuminating gas. 5th. The improved method of generating illuminating gas, the same consisting in vaporizing hydrocarbon liquid, burning part of the vapour without superheating and applying resultant heat for further vaporization of the liquid, superheating part of the vapour, by such resultant heat, heating air by such resultant heat, and mixing such heated air with the superheated vapour to produce gas of high illuminating power.

No. 69,521. Fluid Filtration and Purification.
(Filtration et purification de fluides.)



William Henry Barr, Bury, England, 28th November, 1900; 6 years. (Filed 22nd March, 1900.)

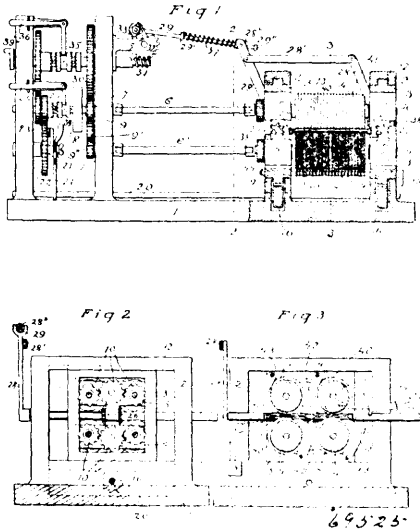
Claim.—1st. A filter bed consisting of an inner supporting and drainage tube, an outer perforated cylinder or tube, a space being left between the tubes for the free circulation of the fluid, the outer cylinder or tube being provided with a straining jacket preferably of mercerized and unstretched cotton cambric, upon which is deposited a coating of filtering earth or media, substantially as described and illustrated. 2nd. In a filtering apparatus, a casing, a plurality of filtering beds therein, each comprising an inner supporting and draining tube and an outer perforated cylinder with a straining jacket upon said cylinder, composed of mercerized cotton, having a coating of filtering earth, and means for washing said filter beds while in position, substantially as described.

No. 69,522. Boot and Shoe. (Chaussure.)

Arthur Williams, Nos. 141 and 143 St. George's Road, North Fitzroy, near Melbourne, Victoria, Australia, 28th November, 1900; 6 years. (Filed 10th November, 1900.)

Claim.—1st. The herein described method of manufacturing boots and shoes in which the upper having been pulled over the insole is attached thereto by stitches passing through from a channel which is formed in said insole and in which the outer sole is sewn through

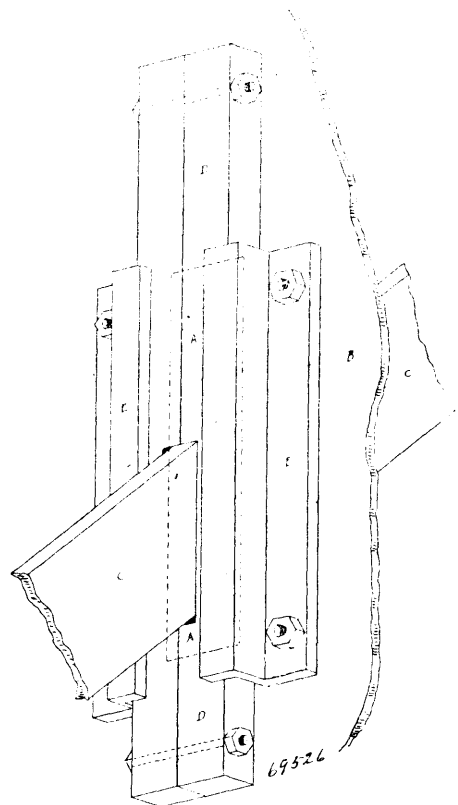
No. 69,525. Grid Spinning Machine. (Edature.)



Charles Albert Gould, Portchester, New York, assignee of Rufus N. Chamberlain, New York City, U.S.A., 28th November, 1900; 6 years. (Filed 19th July, 1899.)

Claim.—1st. In a machine for spinning battery plates, the combination with parallel spinning knives, of knife sustaining and aligning means interposed between the knife portions which enter the battery plate, and preventing bending thereof, substantially as explained. 2nd. In a machine for spinning battery plates, the combination with parallel spinning knives, of knife sustaining means impinging opposite sides of the portions of the knives that enter the metal, and aligning said portions of the knives previous to their entering the metal. 3rd. In a machine for spinning battery plates, the combination with parallel spinning knives, movable knife sustaining means alining the knives in the line of penetration, and receding from the metal as penetration advances. 4th. In a machine for spinning battery plates, the combination of a stationary blank support, a group of parallel spinning knives, shiftable to bring them to bear upon different portions of the blank, means for producing relative feeding movement between the blank and the knives, and means for imparting spinning movement to the knives independent of the feeding movement. 5th. In a machine for spinning battery plates, the combination of a plate support, and a plurality of spinning knives operating simultaneously upon the same side of the plate, and means to shift the knives and plate relatively and independently of the feeding movement to cause the knives to successively finish different portions of the plate. 6th. In a machine for spinning battery plates, the combination with parallel spinning knives, of a stationary blank support, means for feeding the spinning knives relatively to the blank support, and driving mechanism imparting a spinning movement to the knives at a higher rate of speed than the feeding motion thereof. 7th. In a machine for spinning battery plates, the combination of means for supporting a blank plate, a plurality of pairs of spinning rolls adapted to operate simultaneously upon different portions of such plate, means for effecting relative feeding motion of said rolls and plate, means for rotating said pairs of rolls simultaneously at a higher rate of speed than the relative feeding motion of the rolls and the plate, and means for causing the said sets of rolls to approach the plate. 8th. In a machine for spinning battery plates, the combination with a spinning roll having a plurality of spinning knives, means for supporting a blank plate, means for causing relative feed for such plate and roll, and shifting means independent of such feeding means for changing the relative position of such plate and rolls by a movement parallel to the feeding movement to subject different parts of the plate to the action of the roll. 9th. In a machine for spinning battery plates, the combination with a spinning roll, means for supporting a blank plate, means for causing relative feed of such plate and roll, shifting means independent of such feeding means for changing the relative position of such plate and roll by a movement parallel to the feeding movement to cause different portions of the plate to be operated upon, and means connected to such shifting means and to the roll operating devices to automatically operate the shifting means when the operation of the roll is completed. 10th. In a machine for spinning battery plates, the combination with a pair of spinning rolls and means for supporting a blank plate between them, means for producing a relative feeding movement between the blank and rolls, and means for driving said rolls in the same rotative direction, whereby their adjacent portions move in opposite direction, and the tangential effect of the respective rolls on the blank plate is balanced and the feed not affected in either direction.

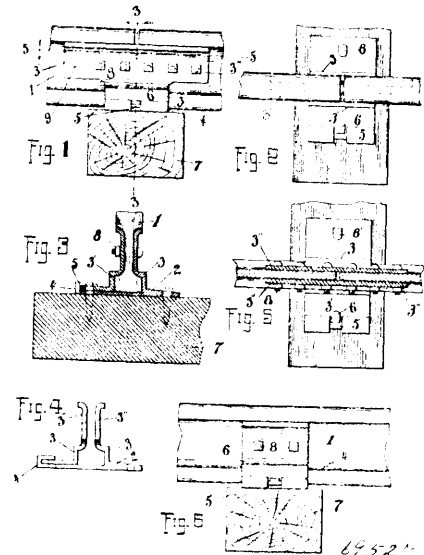
No. 69,526. Locomotive Back Damper. (Porte du cendrier de locomotives.)



Setts Horton Violet and John V. McMullen, both of Port Hope, Ontario, Canada, 28th November, 1900; 6 years. (Filed 3rd October, 1900.)

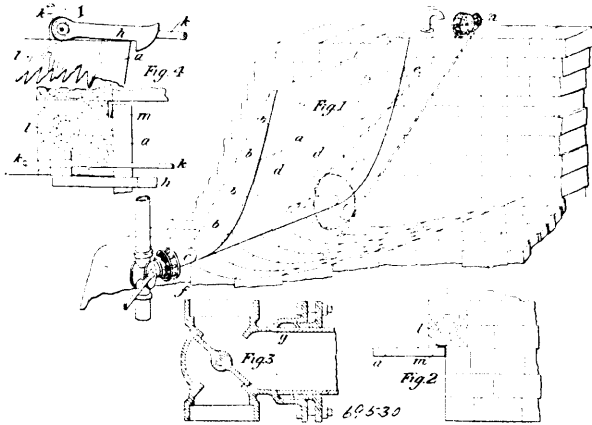
Claim.—The covering of the slot in the back damper by a screen of any non-inflammable material, the said screen sliding freely with the movements of the shaking bar in metal grooves to be attached to the back damper.

No. 69,527. Reversible Rail and Joint. (Rail et joint de retournement.)



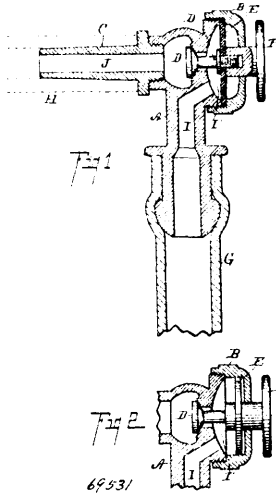
James Ely Hall, Henry Fredrick Buente, both of Nameoki, and Rudolph Behlers, St. Louis, Mo., U.S.A., 28th November, 1900; 6 years. (Filed 10th November, 1900.)

and described. 4th. A hollow lock gate provided with a shaft at its lower end about which it is mounted to swing, a fluid supply



discharge pipe connected to said shaft and having a valve adapted to direct fluid through said shaft into the gate and out of said shaft into the discharge pipe, and an air pipe leading into the gate, as set forth. 5th. A lock gate mounted to swing, a hook for locking the gate against its abutments when in a closed position, an eccentric on which the hook is mounted, and a shaft carrying a lever and the said eccentric, substantially as shown and described.

No. 69,531. Valve. (Soupape.)



Harley M. Dunlap, Battle Creek, Michigan, U.S.A., 29th November, 1900; 6 years. (Filed 12th July, 1899.)

Claim.—1st. In a valve mechanism or stop cock of the class described, the combination of the casing A, with an inlet passage I, and chambers P connected therewith, a discharge tip C secured thereto, a diaphragm E, a cap B to secure said diaphragm in place to form one side of chamber P, a valve D with stem D' closing toward said chamber P, a button F, with suitable shank clamping said valve stem to the diaphragm E, all co-acting so that air entering at I will act on the diaphragm and close the valve till overcome by pressure on the button F, for the purpose specified. 2nd. In a valve mechanism or stop cock of the class described, a casing having an inlet and outlet, a valve within adapted to close against the pressure of the fluid to be retained, a diaphragm or equivalent of larger area than the valve connected to the same to receive the pressure and hold the valve normally closed, and means as a button to apply pressure to the valve to open the same, the pressure of the fluid causing the valve to close automatically, for the purpose specified.

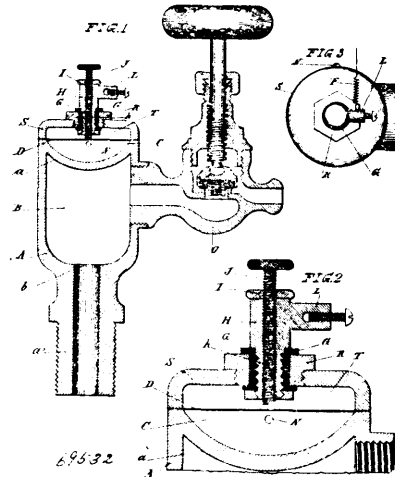
No. 69,532. Electric Alarm Try Cock.

(Robinet du niveau d'eau électrique.)

Stephen M. Matthews, Toronto, Ontario, Canada, 29th November, 1900; 6 years. (Filed 26th December, 1899.)

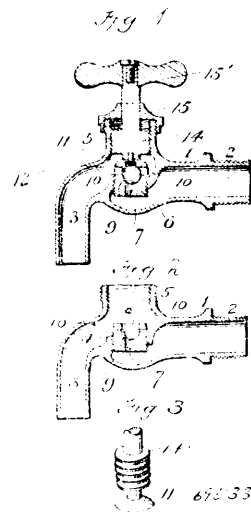
Claim.—1st. An electric alarm try cock, consisting of an expansion chamber communicating with the water column or boiler, a concavo-convex end for the expansion chamber, a diaphragm opposed

to the concavo-convex end adapted to form between itself and the said end of the chamber an hermetically sealed air chamber, a sup-



plemental end for the expansion chamber enclosing the diaphragm, an insulated post passing through the supplemental end, a contact screw passing through the post, and the point of which is adapted to be engaged by the diaphragm when actuated by the expansion of the air within the hermetically sealed air chamber to complete the circuit to the alarm, substantially as specified. 2nd. An electric alarm try cock, consisting of an expansion chamber communicating with the water column or boiler, a concavo-convex end for the expansion chamber, a diaphragm opposed to the concavo-convex end adapted to form between itself and the said end of the chamber an hermetically sealed air chamber, a supplemental end for the expansion chamber enclosing the diaphragm, an insulated post passing through the supplemental end, a contact screw passing through the post in circuit with the alarm, the point of which is adapted to be engaged by the diaphragm when actuated by the expansion of the air within the hermetically sealed air chamber, which is provided with an opening between the diaphragm and supplemental end to allow of the escape of the air from within it, substantially as specified.

No. 69,533. Faucet. (Fausset.)

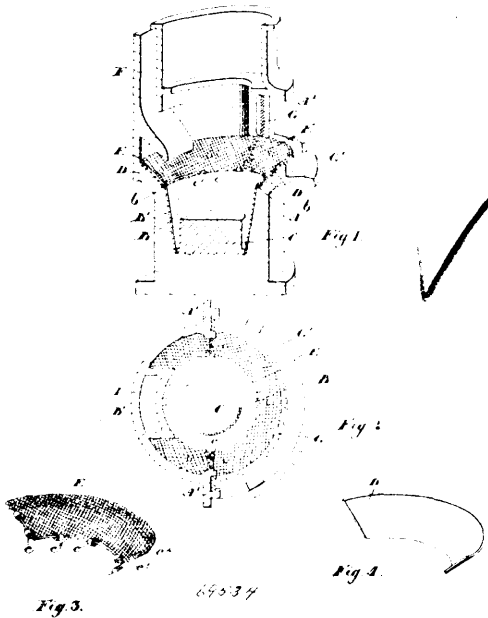


Richard Barrett, Dover, New Jersey, U.S.A., 29th November, 1900; 6 years. (Filed 13th March, 1899.)

Claim.—1st. The herein described faucet comprising a casing, a cup like member projected into the outlet chamber of said casing, and having an upper open end and a lower valve seat, outlet slots or openings being formed in the walls thereof, and an independently movable ball valve located in said cup like member and adapted normally to rest on said seat, as set forth. 2nd. The combination with a cock or faucet having an inlet and an outlet pipe, a screw threaded opening therebetween and a screw threaded extension of the removable screw plug located in the said opening and projecting above the upper end thereof, having a central opening formed with a concave valve seat and the upper portions of the walls of said plug

formed with outlet slots or openings intersecting said concave seat, the ball valve and the valve rod, substantially as described. 3rd. The combination with a cock or faucet having an inlet and an outlet pipe, a screw threaded opening therebetween, and a screw threaded extension, of the removable screw plug located in said opening and projecting above the upper end thereof having a central opening formed with a concave valve seat, and the upper portions of the walls of said plug formed with outlet slots or openings intersecting said concave seat and serving the double purpose as water passages and to receive a screw driver to turn the plug, a ball valve, the rotatable disc and valve rod to which said disc is pivotally connected, substantially as described.

No. 69,534. One Stamp Mill Mortar. (Mortier de bocard.)



George Herbert Nissen, Toronto, Ontario, Canada, 29th November, 1900; 6 years. (Filed 16th January, 1900.)

Claim.—1st. In a one stamp mill mortar, the combination with the wall and the die, of the reverse cone frustum-shaped recess extending down to the bottom of the die and up to a point above the top thereof, and having an annular shoulder formed at the top of the wall around the recess and approximately at the angle of forty-five degrees, and the amalgam plates supported thereon, as and for the purpose specified. 2nd. In a one stamp mill mortar, the combination with the wall and the die, of the reverse cone frustum-shaped recess extending down to the bottom of the die and up to a point above the top thereof, and having an annular shoulder formed at the top of the wall around the recess and approximately at an angle of forty-five degrees, and the amalgam plates supported thereon and perforated screens superimposed upon and secured to the plates, as and for the purpose specified. 3rd. In a one stamp mill mortar, the combination with the wall and the die, of the reverse cone frustum-shaped recess extending down to the bottom of the die and up to a point above the top thereof and having an annular shoulder formed at the top of the wall around the recess and approximately at an angle of forty-five degrees, and the amalgam plates supported thereon and the screens superimposed upon the plates and provided with lips for securing them in place upon such plates, as and for the purpose specified. 4th. In a one stamp mill mortar, the combination with the wall and the die, of the reverse cone frustum-shaped recess extending down to the bottom of the die and up to a point above the top thereof and having an annular shoulder formed at the top of the wall around the recess and approximately at an angle of forty-five degrees, and the amalgam plates supported thereon and at the semi-circular ejecting orifice for the ore having wings extending out laterally therefrom, and the lips connecting the wings and the semi-circular screen extending between the wings, as and for the purpose specified.

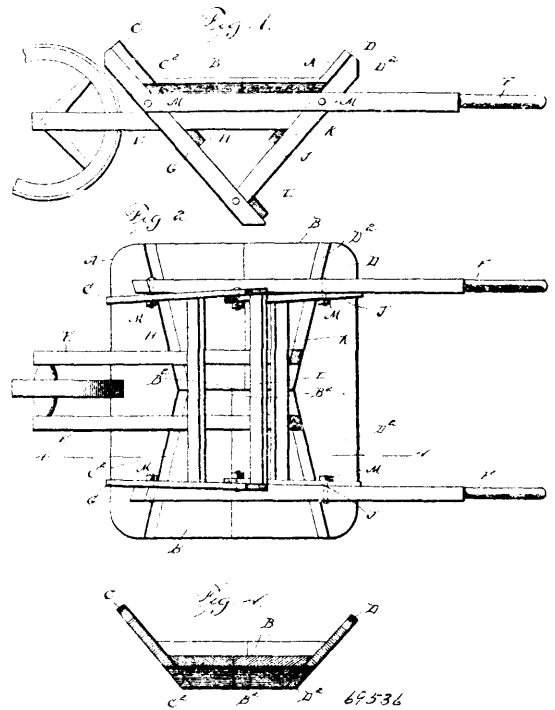
No. 69,535. Rubber Tire Repairing Compound.

(Composé pour réparer les bandages de caoutchouc.)

John Ostberg, 10 Balston Street, St. Kilda, Victoria, Australia, 29th November, 1900; 6 years. (Filed 18th September, 1899.)

Claim.—The herein described compound consisting of pure rubber, resin, boiled linseed oil and dextrose, substantially as set forth.

No. 69,536. Wheel Barrow. (Brouette.)

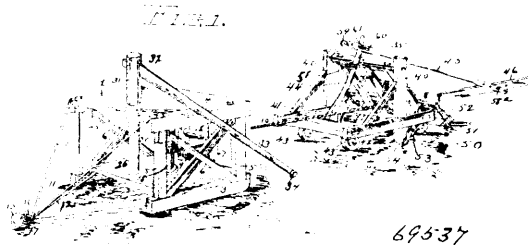


Vigil A. Gates, Charleston, West Virginia, U.S.A., 29th November, 1900; 6 years. (Filed 4th August, 1900.)

Claim.—1st. In a wheel barrow, the combination of a bed formed of separable front, back and side portions, front and rear supports connected respectively to the front and rear portions of the bed, handles connected to the side portions of the bed and connections between the handles and supports for holding the portions of the bed together, substantially as and for the purposes specified. 2nd. In a wheel barrow, the combination of a bed or tray having two separable bottom portions and the two handle bars, and the two wheel bars, one handle bar and one wheel bar attached to each bottom portion of the bed, and separable supports for the bed and bars, forming a knock down wheel barrow, substantially as and for the purposes specified. 3rd. In a wheel barrow, the combination of two separable bottom portions, and the two handle bars, and the two wheel bars, one handle bar and one wheel bar being attached to each bottom portion, a bed front piece, a bed back piece, vertical supports at front and back and connected to the bed front pieces and bed back piece and cross braces on the supports respectively below and near the front and back pieces for supporting the wheel bars, substantially as and for the purposes specified. 4th. In a wheel barrow, the combination of two separable bottom portions, and the two handle bars, and the two wheel bars, one handle bar and one wheel bar being attached to each bottom portion, a bed front piece, a bed back piece, vertical supports at front and back and connected to the bed front pieces and bed back piece and cross braces on the supports respectively below and near the front and back pieces for supporting the wheel bars, substantially as and for the purposes specified. 5th. In a wheel barrow, the combination of a bed or tray formed of separable front, back and side portions, the front and rear supports connected respectively to the front and rear portions of the bed or tray, wheel bars secured each to one of the side portions of the bed or tray, and cross braces carried by the front and rear supports and arranged for engagement beneath the wheel bars to support the same, substantially as and for the purposes specified. 6th. In a wheel barrow, the combination of a bed or tray formed of separable front, back and side portions, front and rear supports connected respectively to the front and rear portions of the bed or tray, handles each connected to one of the separable side portions of the bed or tray, wheel bars, each also connected to one of the separable portions of the bed or tray, cross braces carried by the respective front and rear supports and arranged for engagement beneath the wheel bars for supporting the same and detachable connections between the cross braces and the handle bars for holding the several parts of the bed or tray together, substantially as and for the purposes specified. 7th. In a wheel barrow, a bed consisting of two bottom portions, and a front bed piece and a rear bed piece, the two bottom portions inclining downward toward the center of the barrow and meeting there, and having their meeting edges beveled, and each having inclined front and rear edges, causing the bottom pieces to be narrower at their meeting edge than at their outer edge, and the front bed pieces and the rear bed piece each having in their lower edge two inclines meeting at the longitudinal center of the barrow, the planes of these front and back pieces

being inclined downward and inward and the handle bars and wheel bars, each front piece having two upright legs, and the back piece two upright braces, the two legs inclining downward and inward, and the two braces inclining downward and inward and meeting below, and a cross piece for the front bed and a cross piece for the back bed piece, for supporting the wheel bars, connected to the upright supports of each piece, one of the handle bars and one of the wheel bars connected to one of the bed bottom portions and the other handle bar and the other wheel bar connected to the other bed bottom portion, the whole forming a knock down barrow, conveniently left in four general portions excluding the wheel, and capable of being rapidly and quickly connected together in a wheel barrow, substantially as and for the purposes specified. 8th. In a wheel barrow, a bed in which there are two tapered bottom portions inclining downward and meeting at the center of the barrow, and a front bed piece inclined downward and rearward toward the bottom portions and having its lower edge shaped to meet these portions, and a back bed piece inclined downward and forward toward the bottom portions, and having its lower edge shaped to conform to the adjacent edges of these portions, and upright supports connected to the front bed piece and inclined therewith, and other upright supports connected to the back bed piece and inclined therewith, these lower portions of the supports of the front piece arranged to meet the lower positions of the supports of the back piece, and to be connected thereto, substantially as and for the purposes specified.

No. 69,537. Apparatus for Moving Houses.
(Appareil pour transporter les maisons.)



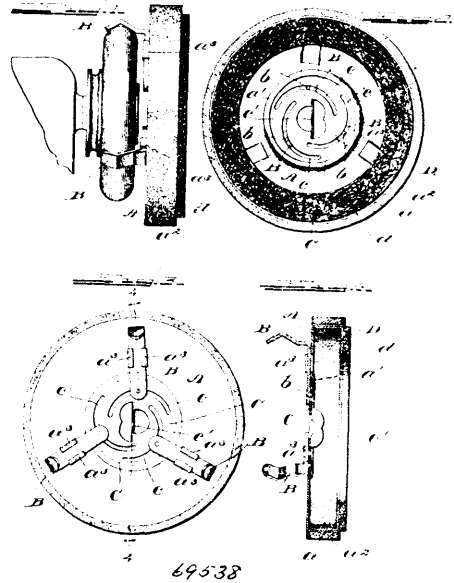
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Jerome Abbee, Reno, Nevada, U.S.A., 29th November, 1900; 6 years. (Filed 17th October, 1900.)

Claim.—1st. An apparatus of the class described, comprising a capstan frame designed to be connected to the house or other structure to be moved, a drum or spool mounted on the capstan frame, means for rotating the drum or spool, a rope or cable connected with the said spool, and a separate and independent anchoring frame connected with the front or outer end of the rope or cable and adapted to be advanced independently of the capstan frame, substantially as described. 2nd. An apparatus of the class described, comprising a capstan frame provided with means for winding up a rope or cable and designed to be secured to the house or other structure to be moved, a separate portable anchoring device comprising a supporting frame, anchors, and a tongue connected with and adapted to withdraw the anchors from the ground when the anchoring device is to be advanced and a rope or cable connecting the anchoring device and capstan frame and adapted to permit the former to be advanced and independently of the latter, substantially as described. 3rd. An apparatus of the class described, comprising a capstan frame designed to be connected with the structure to be moved a vertical spool shaft, a vertical drum or spool mounted on the spool shaft at the lowest portion thereof, a clutch for connecting the drum or spool with the spool shaft and for releasing the former, a vertical shaft or spindle extending above the capstan frame, gearing connecting the shaft or spindle with the spool shaft a sweep or lever connected with the upper portion of the shaft or spindle, a separate portable anchoring device provided with wheels and having anchors and a rope or cable extending from the anchoring device to the drum or spool and adapted to permit the said anchoring device to be advanced independently of the capstan frame, substantially as described. 4th. An apparatus of the class described comprising a capstan frame provided with a drum and having means for operating the same and an anchoring device composed of vertically movable supporting frame, a rock shaft adapted to support the rear portion of the supporting frame and pivoted to the top of the same, a combined tongue and lever connected with the bottom of the anchor carrying machine and provided with an arm and connections between the rock shaft and the combined tongue and lever, substantially as described. 5th. In an apparatus of the class described, the combination of a vertically movable supporting frame, an inclined anchor carrying frame arranged at the front of the supporting frame and pivotally connected at its top with the same and provided at its bottom with anchors, means for limiting the movement of the pivoted frame independent of the supporting frame and a combined tongue and lever connected with the bottom of the pivoted frame and provided with a depending arm, substantially as described. 6th. In an apparatus of the class described, a portable anchoring device comprising a supporting frame, a rock shaft or axle adapted to support the rear portion of

the said frame, an inclined anchor carrying frame arranged at the front of the supporting frame and pivotally connected at the top with the same, a tongue connected with the bottom of the pivoted frame and having an arm, and a catch for automatically locking the parts when the tongue is swung downward, substantially as described. 7th. In an apparatus of the class described, a portable anchoring device comprising a vertically movable supporting frame, an inclined oscillating anchor carrying frame arranged at the front of the supporting frame and connected with the top thereof, a catch arranged at the top of the pivoted frame, an axle or rock shaft adapted to support the rear portion of the supporting frame and provided with an arm arranged to engage the said catch, a combined tongue and lever connected with the pivoted frame, and adjustable connections between the combined tongue and lever and the arm of the rock shaft, substantially as described. 8th. In an apparatus of the class described, a portable anchoring device comprising a supporting frame, an inclined anchor carrying frame supported with the top of the supporting frame, a slotted arm secured to one of the frames, a pin mounted on the other frame and operating in the slot, a combined tongue and lever connected with the inclined frame, and a rear rock shaft or axle connected with the combined tongue and lever, substantially as described. 9th. In an apparatus of the class described, a portable anchoring device comprising a supporting frame, an inclined anchoring carrying frame, a rock shaft supporting the rear portion of the supporting frame and having an arm, a combined tongue and lever connected with the anchor carrying frame and the connecting rod adjustably secured to the combined tongue and lever and having a slot and pin connection with the arm of the rock shaft, substantially as described.

No. 69,538. Grinding Devices for Sewing Machines.
(Appareil à aiguiser pour machines à coudre.)



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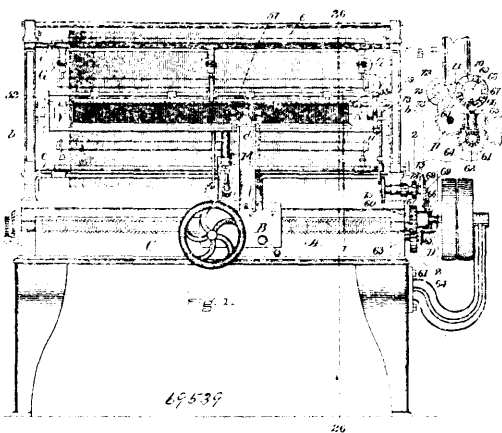
Harry Austin Trenholm, Chicago, Illinois, U.S.A., 29th November, 1900; 6 years. (Filed 14th June, 1900.)

Claim.—1st. A grinding and polishing attachment for sewing machines, comprising an abrading wheel or disc, provided with a plurality of clamping jaws, which are adapted to engage the periphery of a wheel on the shaft of said sewing machine, and means for simultaneously opening and closing said jaws for the purpose of causing them to either grip or release the wheel. 2nd. A grinding and polishing attachment for sewing machines, comprising a wheel or disc provided with a plurality of laterally extending jaws, a cam plate having cam grooves, which are engaged by studs or projections on the jaws, and means for rotating said cam plate for the purpose of opening and closing said jaws. 3rd. An attachment for sewing machines, comprising a suitable abrading wheel, a plurality of clamping jaws which are slidably mounted on said wheel and which are adapted to grip or engage an annular object on the rotary shaft of a sewing machine, a cam plate rotatably mounted upon said abrading wheel and having suitable connection with said adjustable clampings, and means for rotating said plate for the purpose of opening and closing said jaws. 4th. A grinding and polishing attachment for sewing machines, comprising a suitable wheel or disc provided with suitable abrading or polishing surfaces, clamping jaws adapted to engage the periphery of a wheel or annular member on the rotary shaft of a sewing machine and adjustably upon said abrading wheel or disc in such a manner as to be moveable in directions tangential to a circle, having the axis of rotation

as its center, a rotatable plate provided with semi-circular cam-grooves or slots, engaged by the inner ends of said jaws, and means for rotating said plate for the purpose of causing said tangentially adjustable jaws to either grip or release said wheel or annular member on the sewing machine shaft. 5th. The combination of a disc or wheel provided with tangentially adjustable jaws adapted to grip the periphery of a rotary wheel or other annular object, and a rotatable cam plate provided with semi-circular grooves or slots engaged by said jaws. 6th. An attachable friction wheel or disc, provided with tangentially adjustable jaws adapted to engage a wheel or other annular object, a rotatable cam plate provided with tangentially adjustable jaws adapted to engage a wheel or other annular object, a rotatable cam plate provided with semi-circular cam groove or slots engaged by said jaws, the jaws being movable in directions radial or substantially radial to the centers or points from which the said semi-circular slots are struck, and means for rotating said plate for the purpose of adjusting said jaws. 7th. An abrading wheel or disc provided on one side with laterally projecting and tangentially adjustable jaws adapted to engage the periphery of a sewing machine wheel, a centrally arranged and rotatable cam plate provided with semi-circular or segmental cam grooves or slots, the inner end of said jaws being provided with projections which engage said semi-circular slots, and means for rotating said cam plate, substantially as and for the purpose set forth. 8th. A grinding and polishing attachment for sewing machines, comprising a disc or wheel provided with a peripheral band of emery, adjustably clamping jaws adapted to engage an annular object on the sewing machine shaft, and a polishing ring having a telescoping connection with said disc, substantially as described. 9th. A grinding and polishing attachment for sewing machines, comprising a metal disc provided with adjustable clamping jaws adapted to engage an annular object on the sewing machine shaft, the disc being formed with a peripheral flange, a band of emery moulded upon said flange, and a ring telescoping inside of said flange and provided on its side with some suitable polishing material, substantially as described. 10th. A grinding and polishing attachment for sewing machines, comprising a metal disc formed with a peripheral flange, a band of emery moulded upon said flange, adjustable clamping jaws sliding in guide ways formed upon the side of said disc, the jaws being adapted to engage the periphery of an annular object on the sewing machine shaft, a rotatable cam plate seated in an offset formed around the edge of a central opening in said disc, the cam plate having suitable connection with said jaws, and a ring telescoping inside of said flange and provided on its side with polishing material, substantially as described.

No. 69,539. Machine for Drawing in Warp Threads.

(Machine pour faire le fil.)



Richmond Haywood Ingersoll, Biddeford, Maine, U.S.A., 29th November, 1900; 6 years. (Filed 12th June, 1900.)

Claim.—1st. In a machine for drawing in warp threads, the combination with a handle supporting device and a rock shaft extending longitudinally between the cords of the heddle, of a spindle or projection sliding on, but vibrating with said rock shaft, and having a conical or pointed end adapted when said spindle or projection is vibrated, to produce a tension on the heddle cords, whereby the cords of the foremost heddle-eye are caused to slide to the end of the point of said spindle or projection, and be thereby separated from the cords in the rear, substantially as described. 2nd. In a machine for drawing in warp threads, the combination with a heddle supporting device and a rock shaft extending longitudinally between the cords of the heddle, of a sleeve sliding on, but rocking with said shaft, a spindle or projection mounted on said sleeve, and having a conical or tapering front end, and adapted when said shaft is rocked, to produce a tension on the heddle cords, whereby the

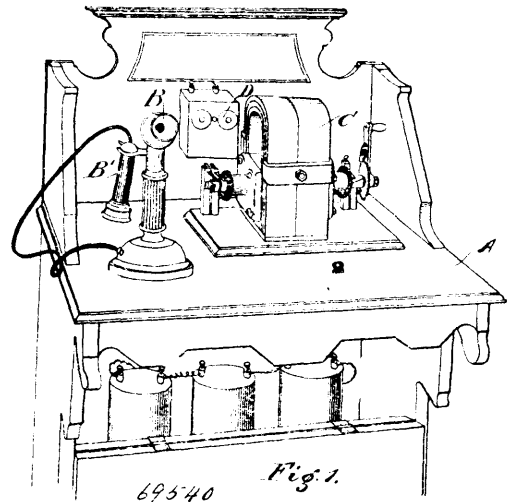
cords of the foremost heddle eye are caused to slide to the end of the point of said spindle or projection, and be thereby separated from the cords in the rear, substantially as described. 3rd. In a machine for drawing in warp threads, the combination with a heddle supporting device, of an oscillating and traversing separating arm provided with a spindle or projection having a conical or pointed end, and adapted when said arm is oscillated, to produce a tension on the heddle cords on the side opposite to the direction of movement of said arm, whereby the cords of the foremost heddle eye are caused to slide to the end of the point of said spindle or projection, and be thereby separated from the cords in the rear, substantially as described. 4th. In a machine for drawing in warp threads, the combination with a heddle supporting device and a rock shaft extending longitudinally between the cords of the heddle, of an oscillating and traversing heddle cord separating arm provided with a sleeve sliding on, but rocking with said shaft, a spindle or projection mounted on said sleeve, and having a conical or tapering front end, and adapted when the separating arm is oscillated to produce a tension on the heddle cords on the sides opposite to the direction of movement of said arm, whereby the cords of the foremost heddle eye are caused to slide to the end of the point of the spindle or projection, and be thereby separated from the cords in the rear, substantially as described. 5th. In a machine for drawing in warp threads, the combination with heddle supporting device, of a rock shaft supporting device, of a rock shaft extending longitudinally between the cords of the heddle, an oscillating and traversing heddle cord separating arm slide on, but vibrating with said shaft, and being provided on the opposite side of the same with a spindle or projection parallel with said shaft, and having a conical or tapering front end, and adapted when said arm is oscillated to produce a tension on the heddle cords with which it contacts, whereby the cords of the foremost heddle eye are caused to slide down to the end of the point of the spindle or projection, and be thereby separated from the cords in the rear, and means for actuating the rock shaft, and traversing the separating arm and pointed spindle or projection thereon, substantially as described. 6th. In a machine for drawing in warp threads, a traversing and oscillating heddle eye separating arm provided on the inner of its lower edge with a lip or flange, tapered or inclined at each end to form a wedge adapted to act on and force back the line of heddle cord in the rear of the same at the commencement of each vibration of the separating arm, substantially as described. 7th. A heddle eye separating device consisting of an oscillating and traversing flattened arm provided on the inner side of its lower edge with a lip or flange tapered or inclined at each end to form a wedge adapted to force back the line of heddle cords in the rear of the same, said oscillating arm being provided with a spindle or projection having a tapering or cone shaped end, and adapted when said arm is oscillated to produce a tension on the heddle cords, whereby the cords of the foremost heddle eye are caused to slide to the end of the point of said spindle or projection, and be thereby separated from the cords in the rear, substantially as described. 8th. In a machine for drawing in warp threads, the combination with an oscillating and traversing heddle cord separating arm, of a pair of bifurcated reciprocating carriers adapted to receive said arm between their branches as it is vibrated from side to side, and means for alternately reciprocating said carriers to withdraw them out of the way of the line of heddle cords, substantially as described. 9th. In a machine for drawing in warp threads, the combination with the heddle eye separating arm, and means for supporting, oscillating and traversing the same, of a pair of bifurcated reciprocating carriers for receiving and traversing said separating arm, said carriers being provided at the outer ends of their branches with anti-friction roll between which the said separating arm passes as it is vibrated from side to side, and means for alternately reciprocating said carriers to withdraw them out of the way of the heddle cords, substantially as described. 10th. In a machine for drawing in warp threads, the combination of a heddle supporting device, a traversing carriage, platforms supported by moving with said carriage, and having a space or channel between them, a pair of eye holding jaws at the end of said channel, an oscillating traversing heddle eye separating arm, a rock shaft for supporting the same, a pair of reciprocating bifurcated carriers arranged on opposite sides of said channel, and adapted to receive said separating arm and traverse the same on its supporting shaft, said carriers being alternately drawn back out of the way of the adjacent line of the heddle cords, and means for reciprocating the carriers, substantially as described. 11th. In a machine for drawing in warp threads, the combination with the traversing carriage, the reciprocating warp drawing needle, and the platforms mounted on the said carriage, and having a space or channel between them, and the eye holding jaws at the end of said channel, of the oscillating heddle cord separating arm, the reciprocating carriers for receiving said arm and traversing the same, means for alternately withdrawing said carriers out of the way of the heddle cords, the wedge-shaped slides moving simultaneously in opposite directions, and adapted when closing together, to engage the heddle eye between them, and force it outward into the path of the needle, and the oppositely arranged pairs of fingers for holding the heddle eye against the outer edges of the wedge-shaped slides and in the path of the needle while being threaded, and subsequently forcing said eye out of the path of the needle, and holding it in the ends of the jaws while the wedge-shaped slides are being drawn back, and means for actuating said slides and fingers,

substantially as described. 12th. In a machine for drawing in warp threads, the combination of the oscillating and traversing heddle eye separating arm and its bifurcated reciprocating carriers, the reciprocating wedge-shaped slides adapted when closing together, to engage the heddle eye between them, and carry it outward into the path of the needle, and the two oppositely arranged pairs of reciprocating fingers coupled together to move simultaneously in the same direction, one pair of said fingers operating to hold the heddle eye against the wedge-shaped slides while the needle is passing through said eye, and the opposite pair of fingers having inwardly inclined pointed ends adapted to pass behind the heddle eye, and force the same to the outer ends of the eye holding jaws, and hold it in position during the withdrawal of the wedge-shaped slides, substantially as described. 13th. In a machine for drawing in warp threads, the combination with the platform having a space or channel between them, and eye holding jaws at the end of said channel, and the reciprocating wedge-shaped slides arranged on opposite sides of said channel, and adapted when closing together, to engage the heddle eye between them and carry it outward into the path of the needle, of the two oppositely arranged pairs of reciprocating fingers coupled together to move simultaneously in the same direction, one pair of said fingers operating to hold the heddle eye against the wedge-shaped slides while the needle is passing through said eye, and the opposite pair of fingers having inwardly inclined pointed ends adapted to pass behind the heddle eye and force the same to the outer ends of the eye holding jaws and hold it in position during the withdrawal of the wedge-shaped slides, substantially as described. 14th. In a machine for drawing in warp threads, the combination with the platforms having a space or channel between them, and eye holding jaws at the end of said channel, of the reciprocating wedge-shaped slides arranged on opposite sides of said channel and moving simultaneously toward and from each other, said slides when closing together engaging the heddle eye between their angular faces and forcing it outward between the eye holding jaws into the path of the reciprocating needle, substantially as described. 15th. In a machine for drawing in warp threads, the combination with the platforms having a space or channel between them, and eye holding jaws at the ends of said space, of the reciprocating wedge-shaped slides arranged on opposite sides of said channel, the front angular ends of the slide on one side of the channel being mortised, and the front ends of the opposite slide having tongues adapted to enter said mortises as the slides are closing together, substantially as described. 16th. In a machine for drawing in warp threads, the double wedge-shaped reciprocating slides, each composed of two members spaced apart, and secured to a block sliding in a slot in the adjacent platform, the two members of the slide on one side being mortised or grooved horizontally, and the two members of the opposite slide having tongues adapted to enter said mortises or grooves as the ends of the slides are closing together, substantially as described. 17th. In a machine for drawing in warp threads, the combination with the platforms having a space or channel between them, and eye holding jaws at the end of said channel, of the reciprocating wedge-shaped slides arranged on opposite sides of said channel, and moving simultaneously toward and from each other, said slides when closing together, engaging the heddle eye between their angular faces, and forcing it outward between the eye holding jaws in the path of the reciprocating needle, and the oppositely arranged pairs of fingers for holding the heddle eye against the outer edges of the wedge-shaped slides and in the path of the needle while being threaded, and subsequently forcing said eye out of the path of the needle and holding it at the ends of the jaws while the wedge-shaped slides are being drawn back, and means for actuating said slides and fingers, substantially as described. 18th. In a machine for drawing in warp threads, the combination with the platforms and the reciprocating wedge-shaped slides, of the two oppositely arranged pairs of reciprocating fingers coupled together to move simultaneously in the same direction, one pair of said fingers operating to hold the heddle eye against the wedge-shaped slides while the needle is passing through said eye, and the opposite pair of fingers having inwardly inclined pointed ends adapted to pass behind the heddle eye, and force the same to the outer ends of the eye-holding jaws, and hold it in position during the withdrawal of the wedge-shaped slides, substantially as described. 19th. In a machine for drawing in warp threads, a detachable warp-holding frame mounted on an independent swinging support, whereby it may be swung outward from the main portion of the machine, substantially as described. 20th. In a machine for drawing in warp threads, a detachable warp-holding frame mounted upon an independent swinging support and joined thereto, whereby it may be inclined at an angle to said support, means for holding the frame in its inclined position, and a fastening device for securing said warp-holding frame to the main frame when swung up into place, against the same, substantially as described. 21st. In a machine for drawing in warp threads, a detachable warp-holding frame mounted upon a swinging support and joined thereto, whereby it may be inclined at an angle when swung outward away from the machine, a lever for inclining said warp-holding frame, and means for holding said frame when inclined, substantially as described. 22nd. In a machine for drawing in warp threads, the swinging supporting frame Q¹ pivoted at its lower end, and provided at its upper end with a horizontal rock shaft having arms secured thereto, the warp holding frame secured to said arms, a lever secured to the rock shaft, whereby the warp-holding frame

may be inclined at an angle, a ratchet wheel fast on the rock shaft, and a retaining pawl engaging said ratchet wheel to hold the frame in position when inclined, substantially as described. 23rd. In a machine for drawing in warp threads, the combination with the warp-holding frame and its clamping devices, of a warp-straightening device, consisting of a horizontal shaft journaled in the lower portion of the frame, and having a longitudinal rib or strip projecting radially therefrom, a U-shaped clamp fitting over said rib to hold the warp-threads thereon, a ratchet fast on said shaft, and a retaining pawl engaging said ratchet wheel to hold the shaft in place when turned to draw down the warp threads, substantially as described.

No. 69,540. Telephone Apparatus.

(Appareil téléphonique.)



David H. Wilson, Chicago, Illinois, U.S.A., 29th November, 1900; 6 years. (Filed 18th April, 1900.)

Claim.—1st. The combination in a telephone system of an induction coil provided with a primary and secondary coil wound upon a core, a permanent magnet provided with opposed pole pieces between which the core of the said coils is interposed so as to form part of the magnetic circuit of said permanent magnet, a transmitter, a receiver, and suitable electrical connections whereby the induction coil, transmitter and receiver are connected in circuit. 2nd. A telephone system comprising an induction coil, consisting of a core of magnetic material provided with two separate coils wound one on top of the other, a permanent magnet provided with opposed pole pieces, said core of magnetic material being mounted between said pole pieces so as to form part of the magnetic circuit of the permanent magnet, a transmitter, a receiver, an alarm device, and suitable electrical conductors connecting the parts in circuit. 3rd. An induction coil for telephone circuits and the like, comprising a permanent magnet having opposed pole pieces, two separate coils, one a primary coil and the other a secondary coil, wound upon a core of magnetic material, said core and coils mounted between said opposed pole pieces so as to form part of the magnetic circuit of the permanent magnet. 4th. An induction coil for telephone circuits and the like, comprising a permanent magnet formed with opposed pole pieces, two separate coils wound upon a core of magnetic material, said core and coils movably mounted between said opposed pole pieces so as to form part of the magnetic circuit of the permanent magnet, means for connecting one of said circuits with a telephone circuit and the other with a source of electric supply, and a switch interposed between the source of electric supply and the coil connected therewith. 5th. The combination in a telephone system of an induction coil consisting of a core of magnetic material having two separate coils wound thereon, a permanent magnet provided with opposed pole pieces between which said core and coils are rotatably mounted so as to form part of the magnetic circuit of the permanent magnet, a transmitter adapted to be connected in circuit with one of said coils, an alarm device adapted to be connected in circuit with the other coil, a receiver also adapted to be connected in circuit with said latter coil, and means associated with the circuits so that the alarm device may be connected in a circuit including said latter coil either with or without said receiver. 6th. The combination in a telephone system of an induction coil consisting of a core of magnetic material having two coils wound thereon, a permanent magnet provided with opposed pole pieces, between which said core and coils are rotatably mounted so as to form part of the magnetic circuit of the permanent magnet, one of said coils adapted to be connected with the source of electric supply and a telephone transmitter, the other coil adapted

to be connected with an alarm devices and a telephone receiver, and means for rotating both of said coils when the alarm is in circuit so as to generate a current in one of the coils and actuate the alarm device. 7th. An induction coil, comprising a permanent magnet having separated and opposed pole pieces, two separate coils of different sized wire wound upon a suitable core, one acting as a primary coil and the other as a secondary coil, said core and coils movably mounted between said opposed pole pieces, so as to form part of the magnetic circuit of the permanent magnet, and means for connecting said respective coils with a primary and a secondary circuit. 8th. A telephone system, comprising at least two instruments located at different points, each comprising a receiver and a transmitter, means for connecting the two instruments together by an electric circuit, an induction coil associated with each instrument, comprising a permanent magnet having opposed pole pieces, with two separate coils wound upon a core of magnetic material mounted between said opposed pole pieces, so as to form part of the magnetic circuit of the permanent magnet, one of said coils being the primary coil and the other the secondary coil, the primary coil of each induction coil being connected in the main circuit between the two instruments when the talking circuit is completed. 9th. A telephone system, comprising at least two instruments located at different points, each comprising a receiver and a transmitter, means for connecting the two instruments together by an electric circuit, an induction coil associated with each instrument, said induction coil comprising a permanent magnet having opposed pole pieces, with two separate coils wound upon a core of magnetic material mounted between said opposed pole pieces, so as to form part of the magnetic circuit of the permanent magnet, one of said coils being the primary coil and the other the secondary coil, the primary coil of each induction coil being connected in the main circuit between the two instruments when the talking circuit is completed, the secondary coil of each induction coil connected in a local secondary circuit with its associated receiver. 10th. A telephone system, comprising at least two instruments located at different points, each comprising a receiver, a transmitter, an induction coil and a signalling device, a main line connecting said instruments normally arranged so that the signalling devices and the secondary coils of said induction coils are in circuit, a switching device associated with each instrument and adapted to vary the circuits so as to connect the secondary coil of each instrument in a local circuit with its associated receiver and to connect the two primary coils and transmitters in the main line so as to form the talking circuit. 11th. A telephone system, comprising at least two instruments located at different points, each instrument comprising a receiver, a transmitter, a signalling device and an induction coil, a main line circuit between the two instruments normally connected in circuit through the signalling devices, a source of electric supply in the transmitter circuit, a local secondary circuit connected with the secondary coil of each instrument normally open, a switching device associated with each instrument and adapted when operated to disconnect the signalling device from the main circuit and connect the transmitters and the primary coil of the induction coils in said main circuit and close the local secondary circuit. 12th. A telephone system, comprising at least two instruments located at different points, each instrument comprising a receiver, a transmitter, a signalling device and an induction coil, a main line circuit between the two instruments normally connected in circuit through the signalling devices, a source of electric supply in the transmitter circuit, a local secondary circuit connected with the secondary coil of each instrument normally open, a movable arm upon which each receiver is supported, a series of contacts associated with each arm, said arms adapted to move when the receivers are taken therefrom, so as to disconnect the signalling devices from the main circuit, close the local secondary circuit and connect the transmitters and the primary coils of the induction coils in said main circuit, substantially as described.

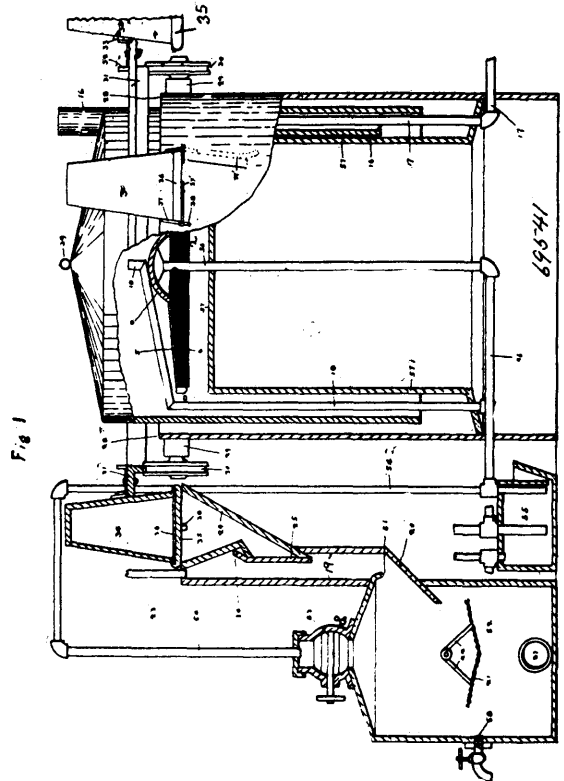
No. 69,541. Acetylene Gas Generator.

(Générateur de gaz acétylène.)

Timothy Byron Rider, Fitch Bay, Quebec, Canada, 29th November, 1900; 6 years. (Filed 10th September, 1900.)

Claim.—1st. The combinations with a casing, of a partition therein, a tube extending through the partition to a point thereabove and having slots within the lower end thereof, a slotted valve within the lower end of the tube, means for revolving the valve within the tube, and a bell within the upper portion of the casing, as shown and described. 2nd. The combination with a casing having a partition therein forming a generator thereunder and a gasometer thereover, of a bell within the gasometer, a tube extending through the partition into the bell, said tube having slots within the lower end thereof, a slotted valve revoluble within the lower end of the tube, an arm to the valve, a toothed strip thereto, a shaft journaled within the casing, a pinion thereon engaging the strip, and means for revolving the shaft, as shown and described. 3rd. The combination with a casing having a partition therein forming a generator thereunder and a gasometer thereover, of a bell within the gasometer, a tube extending through the partition and into the bell, said tube having slots within the lower end thereof, a slotted valve within the lower end of the tube, means for revolving the valve within said tube, and bringing the slots thereof, into or out of register with the slots of the tube, a tube depending from the top of the gasometer,

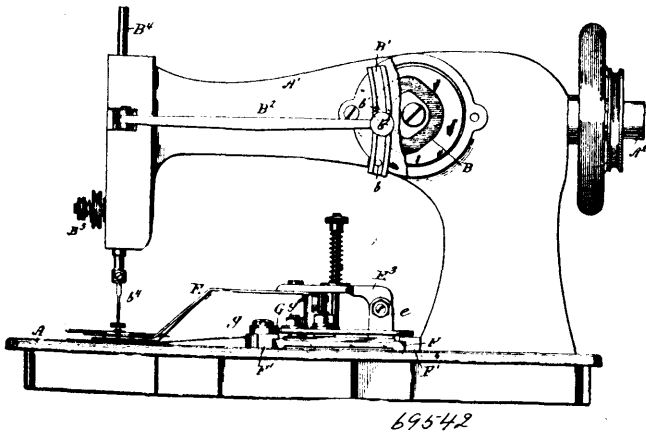
an exhaust pipe therein a supply pipe within the generator, and a flexible floating cap filter extending over the top of said central



riage mounted upon the wheels and enclosing the gasometer, brackets upon the carriage, carbide receptacle detachably secured to the brackets and adapted to automatically discharge their contents into the hopper when registering therewith, a bell crank lever, a dog pivoted thereto and engaging a bracket, and an arm extending to the centre of the bell of the gasometer adapted to contact with the bell crank lever and force the dog against the bracket, as shown and described. 9th. The combination with a generator and a gasometer having a bell therein, of a hopper, a receptacle connecting said hopper with the interior of the generator, studs projecting from the casing of the gasometer, grooved wheels journaled thereon, a carriage mounted upon wheels and enclosing the gasometer, brackets upon the carriage, carbide receptacle detachably secured to the brackets and adapted to automatically discharge their contents into the hopper when registering therewith, a bell crank lever, a dog pivoted thereto and engaging a bracket, an arm secured to the bell of the gasometer, and adapted to contact with the lever and impart motion to the carriage through its dog, a bracket to the gasometer, spring strip mounted thereon and insulated therefrom and from each other, said strip lying in the path of the alarm index, an alarm, and means for sounding the alarm when the spring strips are forced into contact with each other by said index, as shown and described. 10th. The combination with a generator and a gasometer having a bell therein, of a hopper, a receptacle connecting said hopper with the interior of the generator, studs projecting from the casing of the gasometer, grooved wheels journaled thereon, a carriage mounted upon the wheels and enclosing the gasometer, brackets upon the carriage, carbide receptacles detachably secured to the brackets and adapted to automatically discharge their contents into the hopper when registering therewith, a bell crank lever, a dog pivoted thereto and engaging a bracket, an arm upon the bell adapted to contact with the lever and impart motion to the carriage through the dog, a lever pivoted to the generator and engaging a second bracket of the carriage, and an arm to the bell crank lever adapted to contact with and release said lever from engagement with the carriage soon after the operation of the bell crank lever, as shown and described. 11th. In an acetylene gas generator of the character described, a carbide receptacle having a bottom hinged thereto, an elastic surface to said bottom adapted to form an air tight seal when closed, and a catch hinged to the receptacle and adapted to lock the bottom in closed position, a tongue to said catch extended below the bottom, and a spring strip secured to the bottom, as shown and described.

No. 69,542. Machine for Sewing Buttons on Fabrics.
(*Machine pour coudre les boutons aux tissus.*)

Fig. 1.



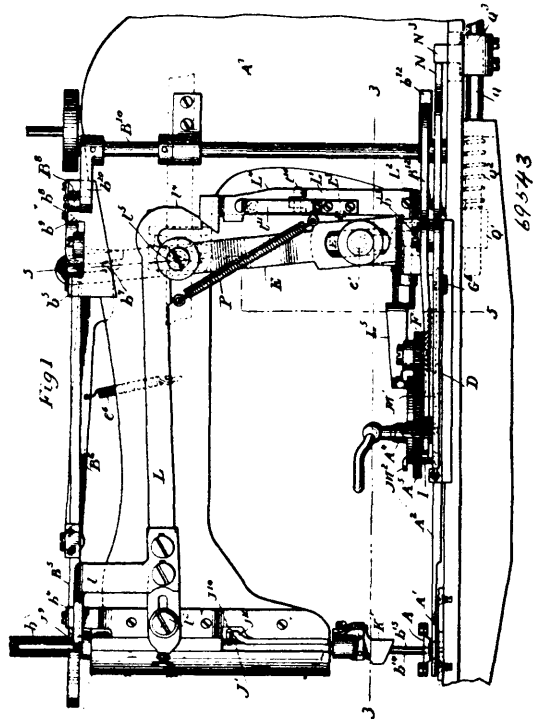
The National Machine Company, New York City, New York, assignee of James T. Hogan, Jersey City, New Jersey, U.S.A., 29th November, 1900; 6 years. (Filed 24th April, 1900.)

Claim.—1st. In a button sewing machine, the combination with a stitch forming mechanism and a button clamp, of means for imparting to the needle bar a vibratory movement, means for imparting to the button clamp a vibratory movement in a plane at substantially a right angle to the plane of vibration of the needle bar, and simultaneously with the vibratory movement of the needle bar, and means to suspend the vibratory movement of the button clamp during the sewing operation at predetermined periods, substantially as described. 2nd. In a button sewing machine, the combination with a stitch forming mechanism and a button clamp, of means for imparting a vibratory movement to the needle bar, a cam and means actuated thereby to impart a vibratory movement to the button clamp in a plane at substantially a right angle to the plane of vibration of the needle bar and simultaneously with the vibration of the needle bar, said cam having dwells at opposite points to suspend the vibratory movement of the button clamp, whereby a button may be

sewed with lines of stitches crossing each other, substantially as described. 3rd. In a button sewing machine, the combination with a stitch forming mechanism and a button clamp, of means to impart a vibratory movement to the needle bar, a slide plate secured to the button clamp, a cam for imparting to said plate and clamp a vibratory movement in a direction at substantially a right angle to the plane of movement of the needle bar and simultaneously with the vibratory movement of the needle bar, and means to suspend the vibratory movement of the button clamp during the sewing operation at predetermined periods, substantially as described. 4th. In

a clamp for holding buttons, the combination of plates between which a button may be held, adjusting devices projecting through slots in one of the plates, and movable independently of said plates, and means for simultaneously shifting said adjusting devices, substantially as specified. 5th. In a clamp for holding buttons, the combination of plates between which a button may be held, adjusting devices projecting through slots in one of the plates and movable independently of said plates, and means, comprising a bodily moving piece connected with one of the adjusting devices, and levers connected with other adjusting devices, for the purpose of centering a button, substantially as specified.

No. 69,543. Buttonhole Sewing and Cutting Machine.
(*Machine à couper et coudre les boutonnières.*)

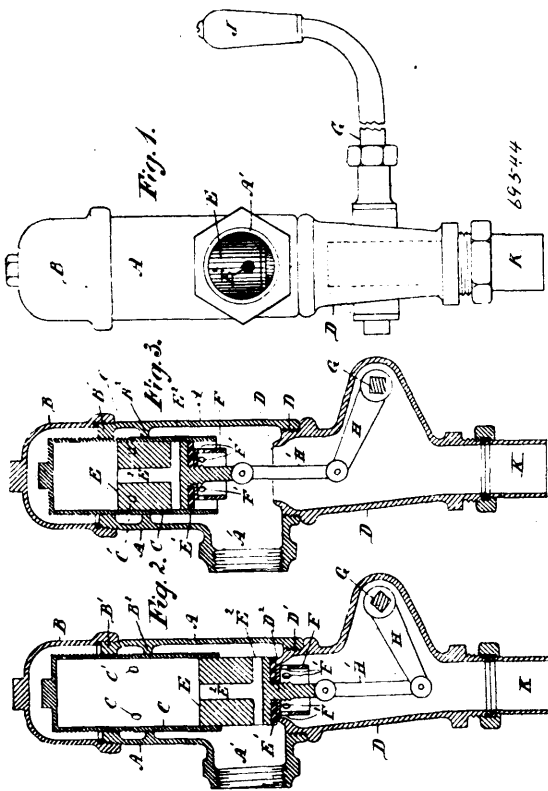


The National Machine Company, New York City, New York, U.S.A., assignee of James T. Hogan, Jersey City, New Jersey, 29th November, 1900; 6 years. (Filed 24th April, 1900.)

Claim.—1st. The combination, substantially as described, with a stitch forming mechanism comprising two needles and two sets of complementary parts, of a work support and mechanism for producing between said stitch forming mechanism and work support, one relative feeding and jogging movement suitable for forming two independent rows of stitches for the sides of a buttonhole, and another relative movement for forming, opposite the centre line of the buttonhole stitches beyond the end of the aforesaid two rows of stitches. 2nd. The combination, substantially as described, with a stitch forming mechanism comprising two needles and two sets of complementary parts, of a work support and mechanism for producing between said stitch forming mechanism and work support, one relative feeding and jogging movement suitable for forming two independent rows of stitches for the sides of a buttonhole, another relative movement for forming opposite the centre line of the buttonhole, stitches beyond the end of the aforesaid two rows of stitches, and an automatic stop motion. 3rd. The combination, substantially as described, with a stitch forming mechanism comprising two needles and two sets of complementary parts, of a work support and mechanism for producing between said stitch forming mechanism and work support, one relative feeding and jogging movement suitable for forming two independent rows of stitches for the sides of a buttonhole, another relative movement for forming, opposite the centre line of the buttonhole, stitches beyond the end of the aforesaid two rows stitches, and for reversing these operations in the

direction of the length of a buttonhole for each succeeding buttonhole for each succeeding buttonhole. The combination, substantially as described, with a stitch forming mechanism comprising two needles and two sets of complementary parts, of a work support and mechanism for producing between said stitch forming mechanism and work support, one relative feeding and jogging movement suitable for forming two independent rows of stitches for the sides of a buttonhole, another relative movement for forming, opposite the centre line of the buttonhole, stitches beyond the end of the aforesaid two rows of stitches, and means for causing a relative swinging movement between the needles during the forming of the barring stitches. 5th. The combination, substantially as described, with stitch forming mechanism comprising two needles and two sets of complementary parts, of work support, mechanism for producing between said stitch forming mechanism and work support, a relative feeding and jogging movement suitable for forming two independent rows of stitches for the sides of a buttonhole, a stitch regulating mechanism which normally acts momentarily to and fro a certain distance transversely to the length of the work support, and a stitch changing mechanism which will automatically alter the extent of action of said stitch regulating mechanism during the formation of the barring stitches. 6th. The combination of suitable stitch forming mechanism and a work support, means for producing relative movements between the stitch forming mechanism and work support for sewing a buttonhole, two cutters, and mechanism for operating those cutters a ternately, so as to cause them to cut alternate buttonholes during successive operations of the machine, substantially as described. 7th. The combination of sewing mechanism comprising a needle bar, means to reciprocate said bar, two buttonhole cutters, and means for bringing said cutters alternately into operation at predetermined periods, substantially as described. 8th. The combination of sewing mechanism, a work support, feed mechanism for producing a relative feed between the sewing mechanism and work support, two bars each carrying a suitable buttonhole cutter, mechanism intermediate said bars and the feed mechanism actuated by the latter to bring these cutters alternately into operative position for cutting a buttonhole, and means to actuate said bars, substantially as described.

No. 69,544. Water Closet Flush Valve.
(*Souape de latrines.*)

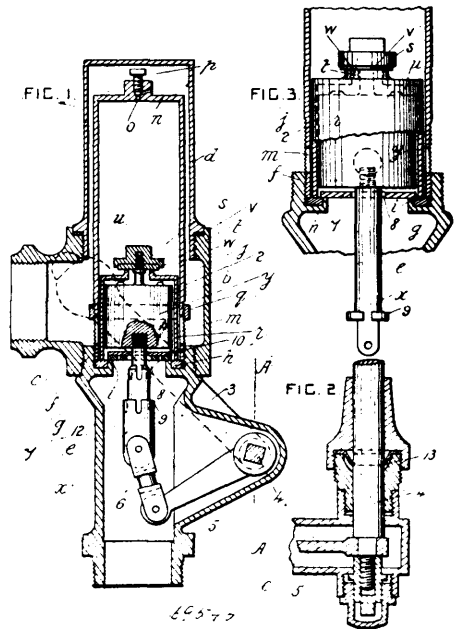


John Alexander McAvity, St. John, New Brunswick, Canada, 29th November, 1900; 6 years. (Filed 27th October, 1900.)

Claim.—1st. A flushing valve having a shell section A, provided with a main port or inlet A', an inverted cup or valve chamber C, screwing through the top of said shell section to adjust said cham-

ber higher or lower, a plunger valve E, reciprocating in said chamber or cup, a removable dome A, to give access to said cup or chamber for adjustment, a perforated inverted cup F, connected to the lower end of the plunger, an outlet section D, connecting with the lower end of said shell section A and having a valve seat D', seating the plunger valve, links H, H', connecting the plunger valve to a rock shaft G, journaled in a cavity of the lower section D, and a handle J, to operate the valve, as set forth. 2nd. A flushing valve having a shell comprising a lower section D, the top edge forming a valve seat D', a middle section A, screwing on said lower section and having a main port or inlet A', a top section or dome D, screwing on the middle section A, and an inverted cup or valve chamber C, screwing adjustably into the top end of section A, as set forth.

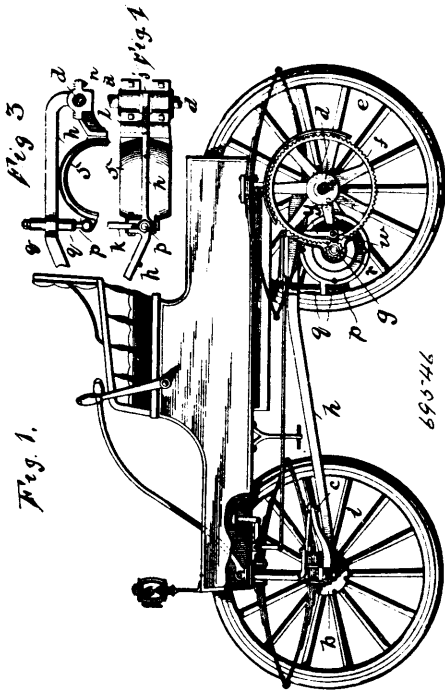
No. 69,545. Water Clo- et Valve. (*Souape de latrines.*)



David Thomas Kenney, North Plainfield, New Jersey, U.S.A., 29th November, 1900; 6 years. (Filed 9th November, 1900.)

Claim.—1st. The combination, with a chamber having a valve seat and a support for a controller arranged in substantially the same plane, of a valve and a controller, and means for lowering the controller onto its said support before the valve is seated, substantially as set forth. 2nd. The combination, with a chamber having a valve seat and a support for a controller, of a valve, two controllers arranged one above the other on the discharge side of the said valve, and means for lowering the said controllers onto their support one after the other before the valve is seated, substantially as set forth. 3rd. The combination, with a chamber having a valve seat and a support for a controller, of a valve, a lower controller provided with a water passage, an upper controller provided with a water passage of smaller area than the lower controller, and means for lowering first the lower controller and then the upper controller onto the support before the valve is seated, substantially as set forth. 4th. The combination, with a chamber provided with a valve seat, and a valve which normally rest on the said seat, of two controllers arranged one above the other on the discharge side of the valve and operating successively to diminish the flow of water through the valve seat, said controllers being movable independent of each other and of the said valve, and means for lowering the controllers into an operative position one after the other before the valve is seated, substantially as set forth. 5th. The combination, with an outlet chamber having an upwardly projecting lip and an upwardly projecting nozzle which is screw threaded both externally and internally of an inlet chamber screwed onto the said nozzle, a valve casing screwed into the nozzle, a valve slidable in the said casing, and a controller which normally rests on the said lip, substantially as set forth. 6th. The combination, with a chamber having a support for a valve seat, and having also a nozzle and a lip which project upwardly from the said support of a valve seat carried by said supports between the nozzle and lip in substantially the same plane as the lip, a valve which normally rests on the seat, a controller which normally rests on the said lip, and means for lowering the controller onto the lip before the valve is seated, substantially as set forth.

No. 69,546. Automobile. (Automobile.)

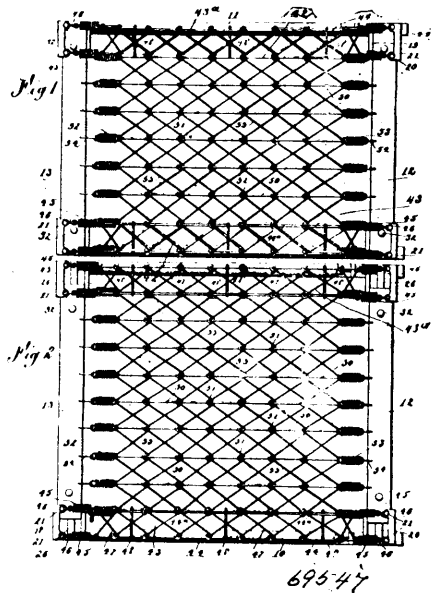


The Hewitt Lindstrom Motor Company, assignee of Charles August Lindstrom, all of Chicago, Illinois, U.S.A., 29th November, 1900; 6 years. (Filed 2nd June, 1900.)

Claim.—1st. In a motor vehicle, the combination of the front and rear axles, and two perch members, each united with the front axle by a swivel or universal joint, and with the rear axle by a connection which will permit vertical swing of the perch on the rear axle, but prevent lateral movement thereof, substantially as described. 2nd. In a motor vehicle, the combination of the front and rear axles, two perch members, each united with a front axle by a swivel or universal joint and with the rear axle by a connection which will permit vertical swing of the perch on the rear axle, but prevent lateral movement thereof, and a transverse bar pivotally connected to the said perch members at a point intermediate the axles, substantially as described. 3rd. In a motor vehicle, the combination of the front and rear axles and the reach connecting said axles, of the motor hinged to the rear axle beneath the reach member so as to be capable of swinging vertically, and a suspension device connected to the front part of the motor and suspending the same from the overlying reach, and cushions on said suspension device above and below the reach, for the purpose and substantially as described. 4th. The combination in an electric vehicle, with a front and rear axle, longitudinal perches on side bars having their front ends pivotally connected to the front axle and their rear ends independently supported on the rear axle, of motors, casings therefor which have their rear ends independently and loosely mounted on the rear axle, and devices for suspending the forward ends of said casings to said perches on side bars. 5th. In a vehicle, the combination with a non-rotatable axle, of individual wheel shafts mounted upon the ends thereof, two perch members, each united with said stationary axle by universal joints, and an additional axle, said perch members having at their other ends a rotatable or swinging connection with the latter axle. 6th. The combination with a non rotatable axle, of individual shafts for the steering wheels supported upon said axle, a perch member having connection at one end with said axle by means of a universal joint and journalled to the driving axle at the other end, and a motor having pivotal connection with said driving shaft and having a yielding connection with said perch. 7th. The combination in an electric vehicle, with the front axle, the rear axle and a supporting frame consisting of two longitudinal side bars, having their forward ends swivelled to the front axle, and their rear ends loosely mounted on the rear axle, of the motors, means for imparting the motion thereof to the rear wheels and casings within which said motors are housed, which have their rear ends independently supported on the rear axle and their forward ends supported by the said side bars. 8th. In a motor vehicle, the combination of the axle, the wheels thereon, the independent motors beside each wheel and gearing between said motors and the wheel, each motor being suspended from the axle by a hinged joint, so as to be capable of a swinging movement around the axle with the reach members hinged to the rear axle, and a suspension device attached to the front side

of each motor and suspending the same from the adjoining reach member, for the purpose and substantially as described. 9th. The combination in an automobile of the axle and a suitable motor frame, with a bracket rigidly connected to said motor frame and having a bifurcated outer end pivotally connected or hinged to said axle, and a reach pivotally connected at one end to said axle between the bifurcations of said bracket and to which reach the opposite side of said motor frame is secured. 10th. The combination in an automobile of the axle, and a motor frame, with a bracket rigidly connected at one end to said motor frame and having its opposite end bifurcated and pivotally connected to said axle, and a reach to which the opposite side of said motor frame is suitably secured, and one end of which is pivotally connected to said axle at a point between the bifurcations of said bracket. 11th. The combination in an electric vehicle, of the front axle, the rear axle, and the supporting frame consisting of two corresponding longitudinal perch bars, the forward ends of which are independently swivelled to the front axle, and the cross bar having its ends pivoted to and connecting said perches with the motors, means for imparting the motion thereof to the rear axle, and casings within which said motors are housed, said casings having their rear ends independently supported on the rear axle and their forward ends independently supported by said perches.

No. 69,547. Bed Spring. (Resort de lit.)

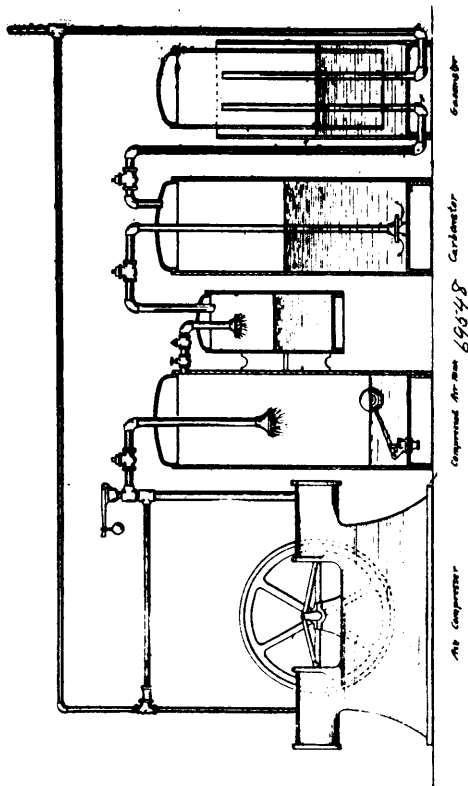


Guay & Co., a firm composed of (Georgiana Guay, of Maxwell and Thomas Monroe, Alexandria, assignees of Alfred Guay, of Maxwell aforesaid, all in Ontario, Canada, 29th November, 1900; 6 years. (Filed 7th November, 1900.)

Claim. 1st. A spring bed comprising a frame having its members slidably connected together, means for adjusting certain members with respect to the other members, and a bed bottom carried by the adjustable members, substantially as described. 2nd. A spring bed comprising a frame having its cross and side rails slidably connected together, means for adjusting the side rails relative to the cross rails, a bed bottom carried by the cross rails and one or more auxiliary bed bottom sections arranged to fill the spaces between the side rails and the edges of the bed bottom, substantially as described. 3rd. A spring bed comprising a frame, a bed bottom, means for shifting the side and cross rails relative to each other, and auxiliary bed bottom sections arranged to fill the spaces between one or both edges of the bed bottom and the side rails, substantially as described. 4th. A spring bed comprising the side rails, the cross rails, corner irons connecting said rails together adjustably, means for shifting the rails of one set with respect to the rails of the other set, a bed bottom carried by the cross rails, and an auxiliary bed bottom section shiftable with the side rails, substantially as described. 5th. A spring bed comprising side rails, the cross rails, the corner irons connecting said rails, means for shifting the side rails with respect to the cross rails, a bed bottom on the cross rails, and auxiliary bed bottom sections attached to two of the corner irons and supported thereby in shiftable relation to the main bed bottom, substantially as described. 6th. In a spring bed, a corner iron comprising a slotted base plate, a back plate, and a front flange, combined with a side rail to which the corner iron is secured, a cross rail shiftable fitted in the corner iron, a bed bottom connected to the cross rail, and an auxiliary bed bottom section connected to the corner iron, substantially as described. 7th. In a spring bed, a corner iron fashioned to embrace a cross rail and provided with a

dovetailed rib which is arranged to fit in the recess of the cross rail, combined with means for securing the corner iron upon a side rail, and means for adjusting one rail relative to the other, substantially as described. 8th. In a spring bed, the combination of a corner iron provided with a slotted base plate, a side rail, a cross rail slidably fitted in the base plate, a bolt attached to the cross rail and arranged to play in the slotted base plate of said corner iron, an adjusting spindle connected to said bolt, and a nut held against endwise movement by the corner iron and having threaded engagement with the spindle, substantially as described. 9th. In a bed spring, the combination of the corner irons, the side and cross rails, a bed bottom attached to the cross rails, means for shifting the side rails laterally with respect to the cross rails, and auxiliary bed bottom sections each attached to two of the corner irons and comprising the longitudinal strands, the springs attached to the strands, links connecting the strands and a filling or weaving crossing the strands and attached to the latter, substantially as described. 10th. In a bed spring, an elastic bottom comprising the longitudinal strands, springs attached to opposite ends of each strand, and the filling or weaving wires crossing one another between the strands and attached to the latter, substantially as described. 11th. In a spring bed, an elastic bottom comprising the longitudinal strands each having a plurality of loops or eyes arranged in positions corresponding to the loops of adjacent strands, the coiled springs attached to opposite ends of each strand, and the filling wires crossing each other between the strands and threaded through the loops or eyes thereof to form a weaving which gives an increased effective area to the bed bottom, substantially as described.

No. 69,548. Process of Carbureting Aeriform Fluids.
(*Procédé pour carburer les fluides aéiformes.*)



Edgar Ardeine McAllister and John Wesley Gilroy, both of Baltimore, Maryland, U.S.A., 29th November, 1900; 6 years. (Filed 1st May, 1900.)

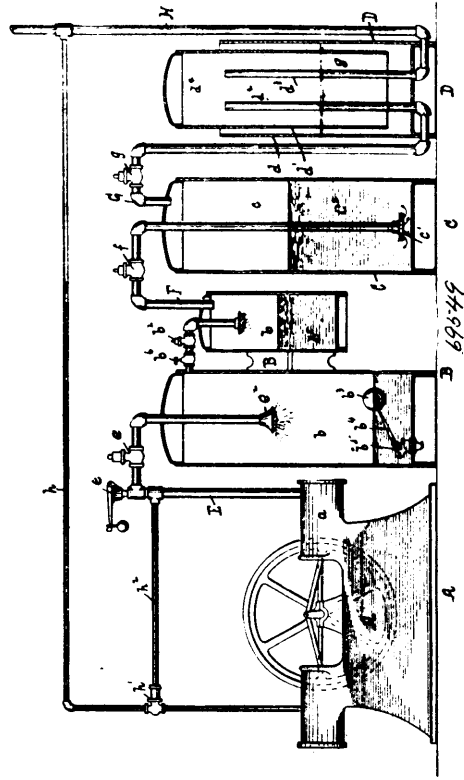
Claim.—The process of carbureting aeriform fluids, consisting of, first:—compressing the fluid to eliminate the humidity, and then subjecting the compressed fluid to hydrocarbon while it is expanding.

No. 69,549. Carburetor. (*Carburateur.*)

Edgar Ardeine McAllister and John Wesley Gilroy, both of Baltimore, Maryland, U.S.A., 29th November, 1900; 6 years. (Filed 1st March, 1900.)

Claim.—1st. In an apparatus for carbureting aeriform fluids, the combination of a carburetor, an air compressor, and a compressed air tank having means for removing the water of condensation therefrom. 2nd. In an apparatus for carbureting aeriform fluids,

the combination of a carburetor, an air compressor, a compressed air tank, and an automatically-controlled discharge valve for remov-



ing the water of condensation from the said tank. 3rd. In an apparatus for carbureting aeriform fluids, the combination of an air compressor, a compressed air tank having means for removing the water of condensation therefrom, an auxiliary tank communicating with the compressed air tank, and a carburetor. 4th. In an apparatus for carbureting aeriform fluids, the combination of an air compressor, a compressed air tank having means to remove the water of condensation therefrom, a regulating valve between the compressor and compressed air tank, and a carburetor. 5th. In an apparatus for carbureting aeriform fluids, the combination of an air compressor, a compressed air tank having means to remove the water of condensation therefrom, a regulating valve between the compressor and compressed air tank, a carburetor, and a regulating valve between the compressed air tank and the carburetor. 6th. In an apparatus for carbureting aeriform fluids, the combination of an air compressor, a compressed air tank having means for removing the water of condensation therefrom, a carburetor, a gasometer, and a regulating valve between the carburetor and gasometer. 7th. In an apparatus for carbureting aeriform fluids, the combination of an air compressor, a compressed air tank having means for removing the water of condensation therefrom, a regulating valve between the compressor and compressed air tank, a carburetor, a regulating valve between the compressed air tank and carburetor, a gasometer, and a regulating valve between the carburetor and gasometer.

No. 69,550. Fruit Drying Apparatus.

(*Appareil à sécher les fruits.*)

Mahlon A. Smith, Leamington, Ontario, Canada, 30th November, 1900; 6 years. (Filed 22nd June, 1900.)

Claim.—1st. In a drier for fruit and other materials, the combination of the drying chamber, the main conveyer located therein, the elevating conveyers located at the rear of the main conveyer, the upper conveyers adapted to remove the fruit from the elevating conveyers and means for imparting movement to said conveyers, as substantially set forth. 2nd. In a drying apparatus, the combination of the drying chamber, means for supplying hot air to said chamber, the main conveyer located in said drying chamber, the return conveyer located above the main conveyer, the elevating conveyers at the rear of the upper and lower conveyers, said elevating conveyers adapted to receive the fruit from the lower conveyer and deposit it upon the upper conveyer, and means for imparting movement to said conveyers. 3rd. In a drying apparatus, the combination of a drying chamber and means for supplying hot air thereto, a conveyer in said chamber apertured or perforated to allow of the passage of air therethrough and adapted to support the

substance to be dried, said conveyer consisting of a plurality of sections having over-lapping ends and adapted to be driven to

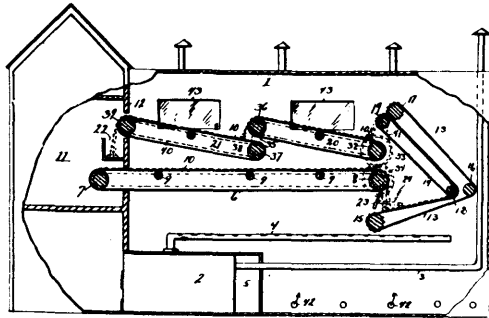


Fig. 1.

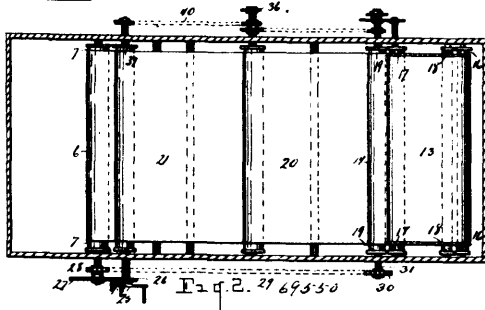


Fig. 2.

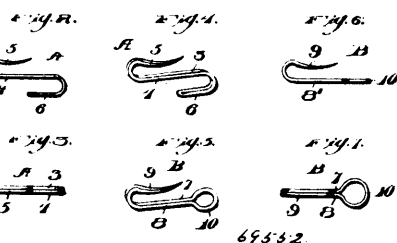
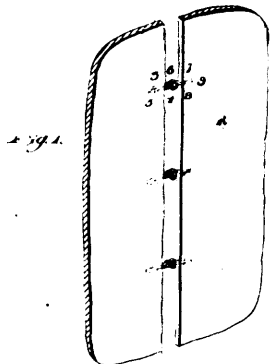
carry the substance thereon from one section to another. 4th. In a drying apparatus, the combination of a drying chamber, a lower conveyer located therein extending horizontally, an upper conveyer located above the lower conveyer, consisting of a plurality of independent sections having overlapping ends, an elevating conveyer for carrying the substance from the lower conveyer to the upper conveyer and means for imparting movement to said conveyers.

No. 69,551. Ore Reduction. (*Réduction de minerais.*)

Eugen Sechilz, Stone Street, Jeppetown Extension, Johannesburg, South African Republic, 30th November, 1900; 6 years. (Filed 30th June, 1899.)

Claim.—The additional use of Per-oxide of Barium in the known method of treating crushed ores with cyanide solution to extract the precious metals therefrom as hereinbefore described.

No. 69,552. Hook and Eye. (*Crochet et œillet.*)

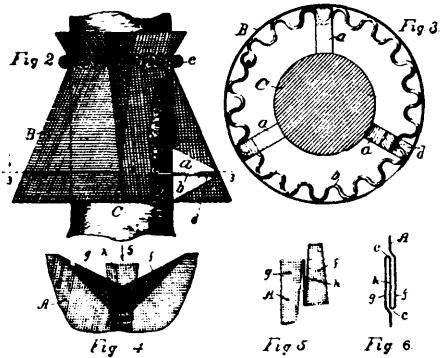
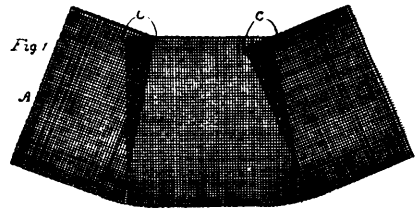


69552

Thomas Alker, Pittsburg, Pennsylvania, U.S.A., 30th November, 1900; 6 years. (Filed 14th November, 1900.)

Claim.—1st. In a garment connecting device, combination of a hook member A provided with a curvilinear fastening portion formed integral therewith, and a hook portion likewise formed integral therewith, and an eye member B having a curvilinear fastening portion formed integral therewith and a loop portion likewise formed integral therewith adapted to receive the hooked end of the hook member. 2nd. In a garment connecting device, the combination of a hook member formed of a suitable piece of wire bent upon itself and then bent in a substantially S-shape manner one portion of said hook member tapering towards its outer end and bent in a curvilinear manner forming a fastening portion and another portion of said hook member forming a hook, and an eye member formed of a suitable piece of wire bent upon itself and then bent in a substantially U-shaped manner having one side thereof tapering towards its outer end and bent in a curvilinear manner to form a fastening portion and the opposite side thereof formed with a loop to receive the hooked portion of the hook member, substantially as described.

No. 69,553. Tree Protector. (*Protecteur pour arbres.*)



69553

Jacob Schlaefler, Mendon, New York, U.S.A., 30th November, 1900; 6 years. (Filed 14th November, 1900.)

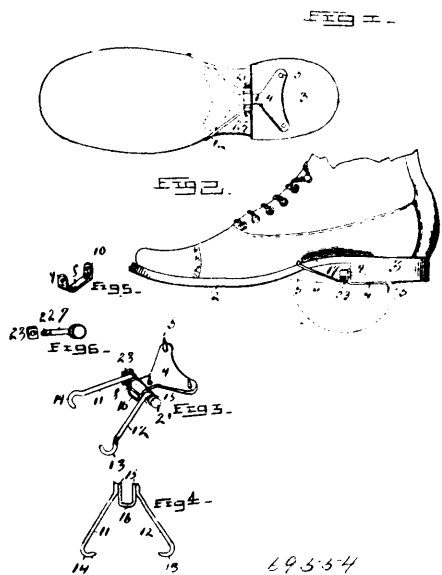
Claim.—1st. A protector for trees, comprising a sheet of wire cloth transversely folded or overlapped at its edge and bent to encircle the tree, with a fastener or holder near the upper edge of the protector to secure it to the tree, the sheet or protector being flared above and below said holder, substantially as set forth. 2nd. A protector for trees, comprising a sheet of wire cloth transversely folded at intervals at its edge, and severed at the edges of the folds, said sheet being bent to encircle the tree, in the form of a protector, with flaring ends, and a holder for the protector, and a corrugated spring held in blocks resting against the tree to press the lower end of the protector outward substantially as described. 3rd. A protector for trees, comprising a sheet of wire cloth and a sheet of fabric placed one upon the other and both transversely folded together or overlapped at intervals at the edge, and bent to form a protector to encircle the tree, and means for holding the protector in place upon the tree, the protector being flared at the ends, substantially as described.

No. 69,554. Ice Creeper. (*Grappin.*)

Lewis P. Wentzell, Greentury, Pennsylvania, U.S.A., 30th November 1900; 6 years. (Filed 14th November, 1900.)

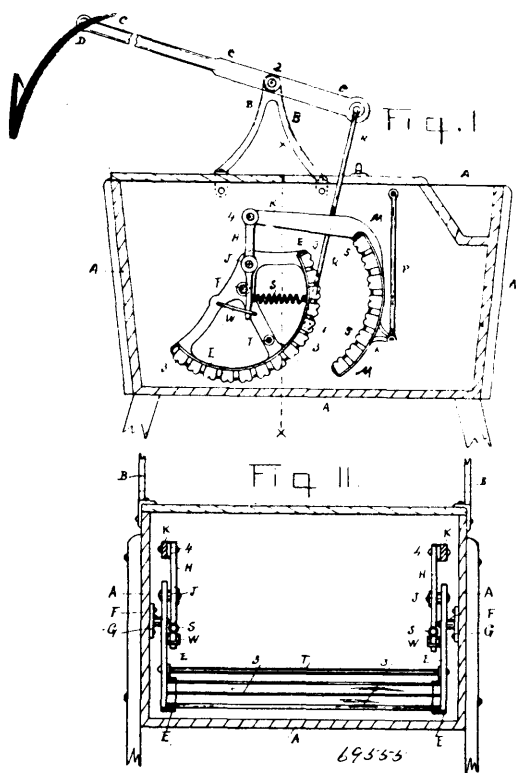
Claim.—1st. In an ice creeper consisting of a calk plate provided with downwardly extending barbs on the lower face thereof, a spring clip, a shaft arranged in the said clip and suitably connected to the plate, connecting arms suitably mounted on the said shaft, and a cross bar connected to the said arms adapted to receive a suitable fastening means for securing the creeper to the heel of a shoe, substantially as set forth. 2nd. An ice creeper consisting of a calk plate provided with downwardly extending barbs in the lower face thereof, an extension formed integral with the said plate

having its free end coiled to form an eye, a shaft mounted in the said eye, a spring clip suitably connected to the said shaft, connecte



ing arms suitably mounted on the said shaft adapted to engage the sole of a shoe, a cross bar connected to the said arms, and means operating through the said cross bar for securing the creeper to the heel of the shoe, substantially as set forth.

No. 69,555. Washing Machine. (Machine à laver.)

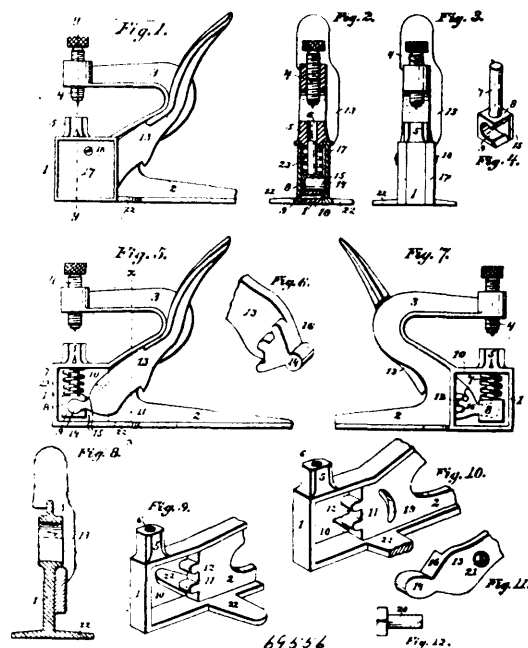


(George B. Dowswell, Hamilton, Ontario, Canada, 30th November, 1900; 6 years. (Filed 14th November, 1900.)

Claim.—1st. In a washing machine, an oscillating semi-circular washer journaled to the sides of a box, a brace rod connecting the sides of the washer, a concaved clothes compressor, with arms, to compress the clothes to the washer, pendulum rods pivoted to the box, and to rear extensions of said compressor, to support the same,

levers pivoted to the upper part of the washer, the upper end of said levers pivoted to said arms of the compressor, spiral tension springs connected to the lower part of said levers and to the sides of the washer to allow equalization of strain to washer and compressor, guides secured to the sides of the washer for the lower part of said levers to operate in and mechanism to oscillate said washer, substantially as described. 2nd. In a washing machine, an oscillating washer journaled to the sides of a box, a stay rod connected to the sides of said washer, levers pivoted to the upper part of said sides, tension springs attached to the lower part of said levers, and to the sides of the washer, a concaved clothes compressor with arms, the upper part of said levers pivoted to said arms, and pendulum rods to support the compressor, and mechanism to oscillate the washer, substantially as described. 3rd. In a washing machine, a semi-circular washer journaled in a box, a stay rod connecting the sides of the washer, levers pivoted to the sides of the washer, a concaved clothes compressor with arms, said levers pivoted to said arms, pendulum rods to support said compressor, tension springs attached to the lower part of the levers and to the washers, guides secured to the sides of the washer for the lower part of said levers, and means for oscillating the washer, substantially as described.

No. 69,556. Riveting Tool. (Outil à river.)



Warren J. Ball, Canton, Ohio, U.S.A., 30th November, 1900; 6 years. (Filed 4th April, 1900.)

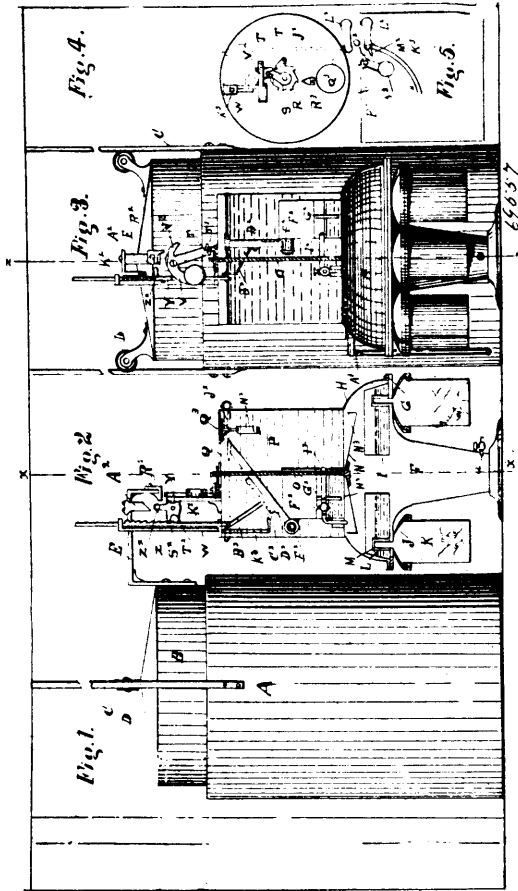
Claim.—1st. In a riveting tool, the combination with a frame and a die supported thereby, of a plunger adapted to reciprocate toward and from said die, an operating lever connected at one end of said plunger, a gear segment on said lever, and a rack on the frame with which the gear segment engages, substantially as described. 2nd. The combination of a frame or head provided with an integral handle, an opening located within the frame or head, an operating lever provided with a rearwardly extending gear segment, and rack teeth arranged to engage with the gear segment, a plunger carried by the operating lever and an arm formed integral with the frame or head and provided with an adjustable die located above the plunger, substantially as and for the purpose specified.

No. 69,557. Acetylene Gas Generator. (Générateur à gaz acétylène.)

(John Sharpe and Harry Frost Williams, both of Ottawa, Ontario, Canada, 30th November, 1900; 6 years. (Filed 2nd June, 1899.)

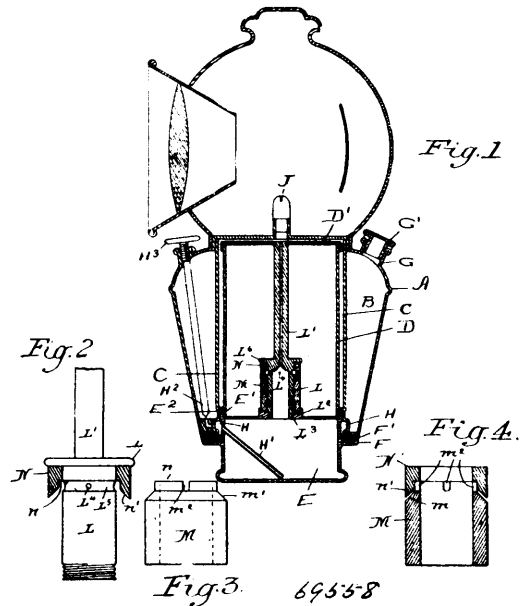
Claim.—1st. The combination in a gas generating machine, a bell, a reservoir, a divided water cup within the reservoir, an automatic step by step water regulating device, a series of supplemental water cups with water seals within each cup, a series of generating cells, a condensing chamber in common with the generating cells, a hollow supporting base or overflow cup, substantially as specified. 2nd. The combination in a gas generating machine a bell, a reservoir, a divided water cup within the said reservoir, and a water seal within the said cup, an outlet from the said cup to the water distributor, a series of generating cells and water seals above the said

generating cells, a series of supplemental water cup within the condensing chamber, substantially as specified. 3rd. The combination



in a gas generating machine, an automatic water device, a bell serving to give motion to the latter, a water intake with step by step movement, a water distributor in common with the water intake, a series of supplemental cups successively used to convey the water from the distributor to the generating cells, substantially as herein specified. 4th. In combination with a bell, a reservoir, an escapement device co-acting with a ratchet bar, and producing thereby a downward step by step movement to an adjustable intake pipe within the reservoir, an automatic revolvable water distributor conveying water successively is a series of gas generating cells, a series supplemental cups interposed between the said water distributor and the generating cells, and serving as a waterway between the said water distributor and generating cells, as and for the purpose herein specified. 5th. In combination with a reservoir, a step by step water feeding device operating simultaneously with a revolvable water distributor and deriving their motion from a movable bell, a ratchet bar as indicator showing the amount of water in the reservoir, a lever lifting device to return the said ratchet bar to its uppermost limit simultaneously with the opening of the water trap, substantially as herein specified. 6th. The combination of a reservoir, a step by step water feeding device, a movable bell as prime mover to partially complete the step by step movement, and as an ultimate mover, to complete the said movement, a water cup within the reservoir serving to equalize the pressure of water from the intake pipe, a water seal below the said cup to prevent escape gas from same, a revolvable water distributor in the path of the opening from said cup substantially as and for the purpose herein specified. 7th. In combination with a reservoir a divided cup within the same, a condensing chamber of peculiar construction below the said reservoir, and kept cool by the water in the latter, the space below the said condensing equal to the capacity of water for a full charge of machine, substantially as and for the purpose herein specified. 8th. In combination with a movable bell and its arm E, an escapement or tripping device co-acting with a ratchet bar, and a movable water intake pipe connected thereto and serving to regulate the amount of water to be conveyed to the cup F², and generating cells K, as and for the purpose therein specified. 9th. In the combination with a movable bell and arm E, connected thereto, an adjustable piece P², engaging a weighted lever V, for the purpose of revolving a water distributor, a series of supplemental cups through which the water is conveyed to the generating cells, as and for the purpose herein specified.

No. 69,558. Acetylene Gas Generating Lamp.
(Lampe pour generateurs à gaz acétylène.)



Frederick W. Hedgeland, Chicago, Illinois, U.S.A., 30th November, 1900; 6 years. (Filed 24th August, 1899.)

Claim.—1st. In an acetylene lamp a carbide holder in combination with a gas and water tube or pipe for regulating the generation, such pipe being located centrally of the holder and surrounded by the carbide and having an annular side or branch passage or opening located above the bottom of the holder and serving to admit water to the carbide, the entrance to such passage being of limited height so the water in the regulating pipe may be quickly shut off from the carbide, substantially as specified. 2nd. In an automatically controlled acetylene lamp, an equalizing chamber having an upward portion extending upward into the body of carbide in the carbide holder, the top of such upward portion having a lateral opening for the passage of the water to the carbide, said carbide holder, and a gas passage connected to the gas holding parts of the lamp and joined to the top of said upward portion of the equalizing chamber immediately above the lateral opening, substantially as specified. 3rd. The self controlled acetylene lamp having an upward water feeding device extending into the carbide and having a surrounding ring and thimble, and also provided with a lateral passage discharging the water downwardly, and formed by bevelling the adjacent ends of the ring and thimble, substantially as specified. 4th. The acetylene lamp having an equalizing chamber E detachably joined to the bottom of the generator chamber and connected both with the reservoir and the gas holding parts of the lamp by passages through which the water and gas may enter the chamber, substantially as specified. 5th. The acetylene lamp having an equalizer chamber E detachably joined to the bottom of the generator chamber and connected both with the reservoir and the gas holding parts of the lamp by passages through which the water and gas may enter the chamber, said chamber also supporting the carbide holder, substantially as specified. 6th. The combination in an acetylene lamp of a water reservoir, a generating chamber located centrally of said reservoir, an equalizing chamber threaded in the generating chamber and closing the bottom of the same, and also having a connection to the reservoir, a carbide holder supported upon the equalizing chamber, and a regulating gas and water pipe receiving water from the equalizing chamber and gas from the upper part of the lamp and having a lateral opening to the carbide, substantially as specified.

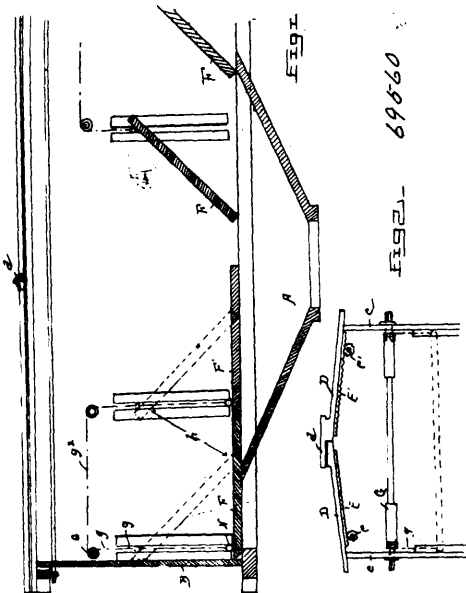
No. 69,559. Manufacture of Mantles to be Used in Incandescent Gas Lighting. (Fabrication de manteaux pour lumières de gaz incandescent.)

Fred Isitt, Sydney, New South Wales, Australia, 30th November, 1900; 6 years. (Filed 8th August, 1899.)

Claim.—1st. A base or carrier for incandescent mantles, consisting of glaucinum aluminate, in combination with an infinitesimal proportion of a metal of platinum group, as herein set forth. 2nd. A base or carrier for incandescent mantles, composed of glaucinum aluminate, or other stable earth or earths of high melting point, in a large proportion, mixed with a much smaller proportion of an oxide or oxides of the incandescent earths, all in combination with an infinitesimal proportion of a metal of the platinum group, as and for the purpose specified. 3rd. Developers that are applied to the

carriers in incandescent mantles, such developers being composed of a mixture of oxides, in which the oxides of indium or gallium are mixed with the oxides or metals of the incandescing earths, approximately in the proportions specified, in combination with a trace of a metal of the platinum group, which causes a catalytic action to be set up as herein set forth. 4th. A mantle for incandescent gas lighting consisting of glucinum aluminate with or without calcium and magnesium oxide or other carriers in which the oxides of gallium or indium are contained, singly or in combination with other oxygen carriers or developers, and with a metal of the platinum group distributed in minute and invisible proportions over the surface of the oxides, whereby a catalytic action is set up, as specified. 5th. A mantle for incandescent lighting consisting of a body of incandescing earth or earths, metal or metals of relatively low light giving capacity, combined with such minerals as indium, gallium, vanadium, as semi-developers, and a metal of the platinum group in exceedingly minute proportions, whereby a catalytic action is secured as herein specified and for the purposes set forth. 6th. In combination, an incandescent earth or earths, metal or metals, of relatively low light giving capacity in itself or themselves, and high melting point, approximately in the proportions specified, as a base, and a metal or metals of the platinum group, in infinitesimal proportion distributed over the base as a developer, thereby causing a true catalytic action as herein specified and for the purposes set forth.

No. 69,560. Freight Car. (Char à fret.)



Franklin O. Cokenour, Allentown, Pennsylvania, U.S.A., 30th November, 1900; 6 years. (Filed 14th November, 1900.)

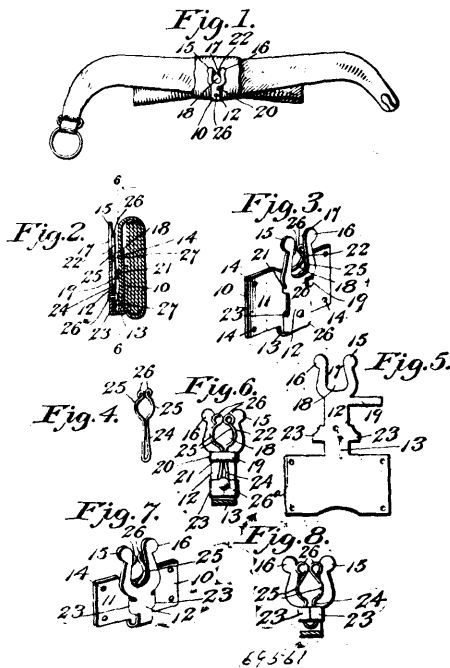
Claim.—1st. In a combined general freight and hopper delivery car, a floor consisting of four adjustable sections arranged in pairs, and means of raising the two sections of each pair at the end nearest the adjacent end of the car, to form separate floor openings and inclines thereto for discharging into the hopper, substantially as set forth. 2nd. In a combined general freight and hopper delivery car, a floor consisting of four adjustable sections arranged in pairs, and means for simultaneously raising the two sections of each pair at the ends nearest the adjacent end of the car, to form separate floor openings, and inclines thereto for discharging into the hopper, substantially as set forth. 3rd. A car having a roof formed in two longitudinal sections parted midway of the width of the car, a running board fixed to one of the said sections and arranged to overlap the other when said sections are in their normal position, and means for moving said sections laterally to open and close the same, substantially as set forth.

No. 69,561. Necktie Fastener. (Attache de cravates.)

Jesse O. Hunt, Cairo, Illinois, U.S.A., 30th November, 1900; 6 years. (Filed 14th November, 1900.)

Claim.—1st. A necktie fastener comprising an attaching plate, a shank parallel therewith and connected at one end thereto and provided at its opposite end with a forked extremity, a spring clasp comprising terminally connected elastic arms normally closed at their free ends across the throat in the forked shank and secured at their connected ends to the inner surface of the shank, and a keeper

loop extending transversely of the shank and attached thereto between the forked end thereof and the point of attachment of the



elastic arms, the said keeper loop embracing the arms just below the button receiving opening and serving to brace said arms at the base of the fork while permitting their extremities to spring freely apart, substantially as described. 2nd. In a necktie fastener, a body struck up from a single piece of sheet metal and comprising a flat plate and a shank which is doubled upon the plate to lie parallel therewith, said shank provided with a forked free extremity and with a laterally projecting arm which lies below said fork extremity and is doubled around the shank to form a keeper on the inner face thereof at the base of the fork, combined with a spring wire clasp fitted against the inner face of the shank within the keeper thereof, and arranged for its bowed arms to be closed normally across the throat of the forked shank, and a fastening for attaching the lower end of the clasp to the shank below the keeper, substantially as described. 3rd. A necktie fastener comprising an attaching plate, an integral shank connected at one end thereto extending parallel therewith and having a fork at its free end, terminally connected spring arms arranged between said plate and shank, and secured at their connected ends to the shank and having their free ends arranged to close across the throat of the fork, and a keeper loop integral with the shank and extending transversely across the inner surface of the shank and embracing the spring arms at the base of the fork, substantially as described. 4th. A necktie fastener comprising an attaching plate, an integral shank connected at one end thereto extending parallel therewith and having a fork at its free end, and terminally connected spring arms arranged between said plate and shank, and secured at their connected ends to the shank and having their free ends arranged to close across the throat of the fork, substantially as described.

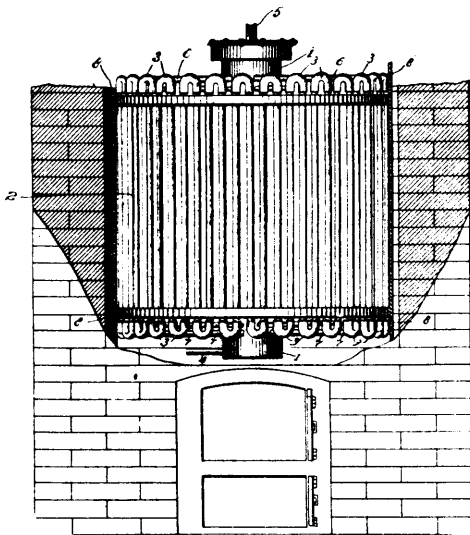
No. 69,562. Boiler. (Chaudière.)

Beverly Waugh Rice, Eldred, Pennsylvania, U.S.A., 30th November, 1900; 6 years. (Filed 13th November, 1900.)

Claim.—1st. A boiler, having a manifolded circulating medium, of which each element is in communication at one end with a supply and at the other end with an outlet conveyer and is also in communication at its opposite ends respectively with adjoining elements, substantially as specified. 2nd. A boiler, having a manifolded circulating medium, comprising a series of parallel elements, of which each is in communication at one end with a supply and at the other end with an outlet conveyer and is also in communication at its opposite ends respectively with adjoining elements, substantially as specified. 3rd. A boiler, having a series of concentric shells, each consisting of a manifolded medium, of which each element is in communication at one end with a supply and at the other end with an outlet conveyer and is also in communication at its opposite ends respectively with adjoining elements, substantially as specified. 4th. A boiler, having a drum, a surrounding manifolded circulating medium forming a continuous passage, and a connecting medium between each end of each fold or element of said circulating medium and the drum, substantially as specified. 5th. A boiler, having a series of terminally connected tubular element

forming a continuous passage, each of said elements being in communication at one end with a water supply medium and at the

Fig. 1.



69562

other end with a steam outlet medium, substantially as specified. 6th. A boiler, having a continuous series of terminally connected communicating tubular elements, forming a continuous passage and each of said elements being in communication at spaced points with inlet and outlet conducting means, substantially as specified. 7th. A boiler, having a manifolded circulating tube forming a continuous passage and of which each fold or element is in communication at one end with a supply and at its other end with an outlet conveyer, substantially as specified. 8th. A boiler, having a central stand pipe or drum, and an encircling shell consisting of a continuous manifolded circulating tube, of which each fold or element is in communication at both ends with the stand pipe or drum, substantially as specified. 9th. A boiler, having a central stand pipe or drum, and an encircling shell consisting of a continuous manifolded circulating tube, and a single connecting tube each bend of the circulating tube and the stand pipe or drum, substantially as specified. 10th. A boiler, having a stand pipe or drum provided with communicating water inlet and steam escape conveyers, and an encircling shell, concentric with the stand pipe or drum, consisting of a continuous manifolded circulating tube, arranged with its folds or elements parallel with the axis of the stand pipe and connected by elbows or bends, and a connecting tube between each elbow or bend and the stand pipe or drum, substantially as specified. 11th. A boiler having a central stand pipe or drum provided with

water inlet and steam outlet conveyers, and a plurality of tubular shells encircling the stand pipe or drum and arranged in separate layers or tiers, each shell consisting of a continuous manifolded circulating pipe arranged with its folds or elements parallel with the axis of the stand pipe, and connecting tubes between each bend of the circulating pipe and the stand pipe or drum, the folds or elements of each shell being of a length greater than those of the adjacent inner shell, whereby the lengths of the folds or elements increase from the innermost to the outermost shell, substantially as specified.

No. 69,563. Electric Lamp. (Lampe électrique.)

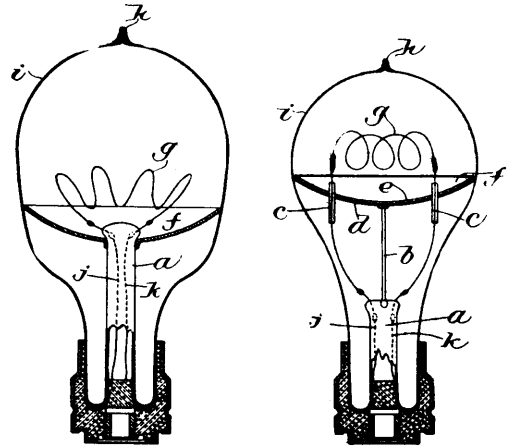


Fig. 2.

69563

Fig. 1.

Samuel Dexter Washburn, Boston, and Clarence Herbert Tinkham, Cambridge, both in Massachusetts, U.S.A., 30th November, 1900; 6 years. (Filed 18th June, 1900.)

Claim.—1st. The improved incandescent lamp above described comprising an exhausted bulb, a disc shaped mirror extending across but separate from the bulb, a glass tube with its outer end sealed in the neck of the bulb supporting the mirror and leading in wires extending through the glass tube and the mirror and connected to the filament. 2nd. In an incandescent electric lamp, in combination, a bulb, a tube of glass closed at its inner end and sealed to the bulb, leading in wires sealed in the tube, a mirror, and a wire one end of which is fast to the tube and the other end to the mirror, substantially as described. 3rd. The improved incandescent electric lamp comprising the exhausted bulb, the glass tube extending into the exhausted bulb and sealed at its outer end to the neck of the exhausted bulb and at its inner end about the wires which support the filament, and a disc of metal within the exhausted bulb and mounted on the glass tube, near its inner end, substantially as described.

TRADE-MARKS

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7535. HERBERT WATSON FLEURY, Aurora, Ont. Ploughs, 2nd November, 1900.
7536. HERBERT WATSON FLEURY, Aurora, Ont. Ploughs, 2nd November, 1900.
7537. MOSES WILDFANG, Listowel, Ont. Readymade Clothing for Men and Boys, 2nd November, 1900.
7538. THE BRITISH COLUMBIA CANNING COMPANY, LIMITED, Victoria, B. C., and London, England. Canned Salmon, 2nd November, 1900.
7539. JOSEPH ROGERS, Toronto, Ont., trading as THE ROGERS ELECTRIC COMPANY. Electric Lamps and Supplies, 2nd November, 1900.
7540. THE ROBERT SIMPSON COMPANY, LIMITED, Toronto, Ont. Men's Boots and Shoes, 2nd November, 1900.
7541. THE CAFOLIN COMPANY, LIMITED, 20 Eastcheap, London, England. Liquid Coffee, 6th November, 1900.
7542. THE PACIFIC COAST CONDENSED MILK COMPANY, Seattle, Washington, U.S.A. Condensed Milk and preparations thereof, 7th November, 1900.
7543. ROBERT ROSE, Toronto, Ont. Preparations for inducing and promoting the growth of hair, 9th November, 1900.
7544. THE CANADA CORUNDUM COMPANY, LIMITED, Toronto, Ont. Corundum, 9th November, 1900.
7545. R. HARRISON BARTLEET & COMPANY, Redditch, Worcestershire, England. Fishhooks and Fishing Tackle, 9th November, 1900.
7546. THE AMERICAN TOBACCO COMPANY, Newark, New Jersey, and New York, New York, U.S.A. Manufactured Tobacco, Cigars and Cigarettes, 12th November, 1900.
7547. JOHN TAYLOR, Toronto, Ont. Soap, 12th November, 1900.
7548. ARBUCKLE BROTHERS, New York, New York, and Pittsburg, Pennsylvania, U.S.A. Coffee and preparations thereof, 13th November, 1900.
7549. L. WURZBURG, Vancouver, B.C. Carabus Meat, 14th November, 1900.
7550. THE UNION FABRIC COMPANY, Ansonia, Connecticut, U.S.A. Dress Stays, 14th November, 1900.
7551. WILLIAM S. RICE, Adams, Jefferson County, New York, U.S.A. Trusses, Electrical Batteries and other Electrical or Mechanical devices or other substances or preparations for the cure of rupture, 15th November, 1900.
7552. JOSEPH TETLOW, Philadelphia, Pennsylvania, U.S.A. A Powder for the Complexion, Toilet and Nursery purposes, 15th November, 1900.
7553. JOSEPH TETLOW, Philadelphia, Pennsylvania, U.S.A. A Powder for the Complexion, Toilet and Nursery purposes, 15th November, 1900.
7554. R. A. LISTER & COMPANY, LIMITED, Dursley, England, and Montreal, Canada. Lubricating Oils, 17th November, 1900.
7555. HAMLYN BROTHERS, LIMITED, Buckfastleigh, County of Devon, England. Worsted and Woollen Serges, Estamenes and Coatings, 17th November, 1900.
7556. DEUTSCHE ROBORIN-WERKE COMMANDIT-GESELLSCHAFT M. DIETRICH & COMPANY, 138 Friedrich Strasse, Berlin, German Empire. Pharmaceutical Preparations, 20th November, 1900.
7557. AGNES CRICHTON, Toronto, Ont. Certain named Family Medicines, 20th November, 1900.
7558. THE ERIE TOBACCO COMPANY, LIMITED, Kingsville, Ont. Chewing Tobacco, 21st November, 1900.
7559. THE BRITISH AMERICA PAINT COMPANY, Victoria, B.C. Paints and Varnishes of all kinds, 21st November, 1900.

7560. ALEXANDRE EDMOND PESQUI, Bouscat-Gironde, France. Vin Urane Pesqui, 22 novembre, 1900.
7561. THE ECLIPSE WHITEWEAR COMPANY OF TORONTO, LIMITED, Toronto, Ont. Ladies' and Children's Cotton Underwear, 23rd November, 1900.
7562. THE BRIDGEPORT BRASS COMPANY, Bridgeport, Connecticut, U.S.A. Wire, 23rd November, 1900.
7563. THE MONTREAL ROLLING MILLS COMPANY, Montreal, Que. Horse Shoes, Horse Shoe Nails, Bar Iron and Bar Steel, 24th November, 1900.
7564. THE MASON & RISCH PIANO COMPANY, LIMITED, Toronto, Ont. Musical Instruments, 26th November, 1900.
7565. HOLMES SAMUEL CHIPMAN, Sydney, New South Wales. Tea, 26th November, 1900.
7566. THE GOLDIE MILLING COMPANY, LIMITED, Ayr, Ont. Flour, 26th November, 1900.
7567. THE CONSUMERS CORDAGE COMPANY, LIMITED, Montreal, Que. Yarns, Twines and Cordages, 26th November, 1900.
7568. THE ERIE TOBACCO COMPANY, LIMITED, Kingsville, Ont. Chewing Tobacco, 27th November, 1900.
7569. HIRAM WALKER & SONS, LIMITED, Walkerville, Ont. Whiskey, 27th November, 1900.
7570. THE ST. LAWRENCE DISTILLING COMPANY, Montreal, Que. Gin, Whiskey and Highwines, 28th November, 1900.
7571. ABBOT AUGUSTUS LOW, New York, New York, U.S.A. Maple Sugar and Maple Syrup, 29th November, 1900.

INDUSTRIAL DESIGNS.

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Copyright and Trade-Mark Branch.

1720. HANNAH DAVIS, Montreal, Que. Embroidery, 2nd November, 1900.
1721. PETER CAMERON, Toronto, Ont. Ash Sifter, 2nd November, 1900.
1722. THE ECKARDT CASKET COMPANY, Toronto, Ont. Handle for Caskets, 3rd November, 1900.
1723. THE ECKARDT CASKET COMPANY, Toronto, Ont. Box Handle, 3rd November, 1900.
1724. FREDERICK CHADWICK, Hamilton, Ont. Hinge, 7th November, 1900.
1725. WILLIAM ALFRED CLARE, Toronto, Ont. Photograph Mount, 29th November, 1900.

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11740. A HAND BOOK FOR TEACHERS OF CHEMISTRY IN SECONDARY SCHOOLS. By J.A. Giffin, B.A., LL.B. James A. Giffin, St. Catharines, Ont., 2nd November, 1900.
11741. AIDS FOR SOCIAL WORSHIP. Being Short Services of Prayer and Praise for the use of Christians. The Westminster Co. (Ltd.), Toronto, Ont., 2nd November, 1900.
11742. IN THE WHIRL OF SOCIETY. Waltzes. By Theodore Brill. Harry H. Sparks, Toronto, Ont., 2nd November, 1900.
11743. THE FOOTSTEPS OF A THRONE. By Max Pemberton. W. J. Gage & Co. (Ltd.), Toronto, Ont., 2nd November, 1900.
11744. KHAKI HEROES' WELCOME HOME; or, THE NATION'S PRIDE. Words and Music by R. L. Werry. Arranged by Prof. H. Holgate. Richard Luther Werry, Montreal, Que., 2nd November, 1900.
11745. HAND BOOK OF HOME EXERCISE. By Charles Wentworth BADGLEY, Ottawa, Ont., 3rd November, 1900.
11746. THE HOUSE OF EGREMONT. A Novel. By Mollie Elliot Seawell. The Copp, Clark Co. (Ltd.), Toronto, Ont., 3rd November, 1900.
11747. THE STICKIT MINISTER'S WOOLING. By S. R. Crockett. George N. Morang & Co. (Ltd.), Toronto, Ont., 5th November, 1900.
11748. RETURN OF THE BRAVE CANADIANS. Waltzes. By Byron C. Tapley, St. John, N. B., 5th November, 1900.
11749. MEMORIAL MARCH. To the Brave Canadian Dead in South Africa. By Ellen Vavasour Noel, Chatham Ont, 5th November, 1900.
11750. MESSIAH'S SECOND ADVENT. A Study in Eschatology. By Calvin Goodspeed, D.D., LL.D., Toronto, Ont., 5th November, 1900.
11751. ILLUSTRATED LONDON, Ontario, Canada. The London Printing and Lithographing Co. (Ltd.), London, Ont., 6th November, 1900.
11752. MEN OF PAARDEBERG. (Poem.) By George Whitfield Grothe, Toronto, Ont., 6th November, 1900.
11753. HOW TO FIT; MÉTHODE DE COUPE. (Livre). Seurs de la Congregation de Notre-Dame de Montréal, Montréal, Que., 7 novembre 1900.
11754. THE OLD REGIME IN CANADA. By Francis Parkman. (Book.) George N. Morang & Co. (Ltd.), Toronto, Ont., 8th November, 1900.
11755. LE DIOCÈSE DE MONTRÉAL À LA FIN DU DIXNEUVIÈME SIÈCLE. (Livre.) Eusébe Sénécal, Montreal, Que., 8 novembre, 1900.
11756. L'ECRIN DU CHANTEUR. Recueil de Romances, Chansons et Mélodies. J. G. Yon, Montréal, Que., 9 novembre 1900.
11757. THE QUEEN'S DEFENDERS. March and Two-Step. By Charles E. Musgrave. The Anglo-Canadian Music Publishers' Association (Ltd.), London, England, 9th November, 1900.
11758. THE HOSTS OF THE LORD. By Flora Annie Steel. (Book.) The Copp, Clark Co. (Ltd.), Toronto, Ont., 10th November, 1900.
11759. IN THE PALACE OF THE KING." A Love Story of Old Madrid. By F. Marion Crawford. The Copp, Clark Co. (Ltd.), Toronto, Ont., 10th November, 1900.
11760. LORD JIM. A Tale of the Sea. By Joseph Conrad. W. J. Gage & Co. (Ltd.), Toronto, Ont., 10th November, 1900.
11761. THE CANADIAN LAW OF PARTNERSHIP. By R. B. Henderson, B.A., and Peers Davidson, M.A. The Snow Law Publishing Co., Montreal, Que., 10th November, 1900.
11762. A MAP OF THE SUDBURY MINING DISTRICT. (Scale Two Miles to One Inch. J. Alfred Robert, Sudbury, Ont., 10th November, 1900.
11763. THE COLOURED MAJOR. Characteristic March and Two Step. By S. R. Henry. The Canadian-American Music Co. (Ltd.), Toronto, Ont., 10th November, 1900.

11764. THE CANADIAN MAGAZINE. (November, 1900.) The Ontario Publishing Co., (Ltd.), Toronto, Ont., 10th November, 1900.
11765. WAGHORN'S SCHOOL AND LOCAL IMPROVEMENT DISTRICT MAP OF THE NORTH-WEST TERRITORIES. Bulman Brothers & Co., Winnipeg, Man., 12th November, 1900.
11766. LATEST MINING MAP OF PART OF THE SIMILKAMEEN, BRITISH COLUMBIA. Frank Bailey, Fairview, B. C., 12th November, 1900.
11767. AFTER THE CAKE WALK. March, Two-Step, Polka, Cake Walk. By Nathaniel Dett. Arranged by Lee Orean Smith. Whaley, Royce & Co., Toronto, Ont., 13th November, 1900.
11768. KING CRAP. Characteristic March, Two-Step, Polka or Cake Walk. By Lee Orean Smith. Whaley, Royce & Co., Toronto, Ont., 13th November, 1900.
11769. OUTLINES OF NATURE LESSONS. For Grade VII and Advanced Pupils in Country Schools. By John Brittain. J. and A. McMillan, St. John, N. B., 14th November, 1900.
11770. QUÉBEC ET LÉVIS À L'AUBRE DU XXIÈME SIÈCLE. Par A. B. Routhier. Alphonse Leclaire, Montréal, Qué., 15 novembre, 1900.
11771. A KENTUCKY CARDINAL AND AFTERMATH. By James Lane Allen. The Copp, Clark Co. (Ltd.), Toronto, Ont., 15th November, 1900.
11772. CLARESSA. Caprice for Pianoforte. By Arthur Wellesley. Whaley, Royce & Co., Toronto, Ont., 16th November, 1900.
11773. THE MAKING OF A CHRISTIAN: STUDIES IN THE ART OF HOLY LIVING. By John Maclean. William Briggs, Toronto, Ont., 16th November, 1900.
11774. HISTORY OF THE UNION JACK: HOW IT GREW AND WHAT IT IS. Illustrated. (Second Edition.) By Barlow Cumberland, Toronto, Ont., 16th November, 1900.
11775. OUR OWN CANADIAN JACK. Words by Florence Liffiton. Music by Eleanore Beach. Mrs. Eleanore Beach, Iroquois, Ont., 17th November, 1900.
11776. FOR BOBS. Words and Music by Charles R. Palmer. Whaley, Royce & Co., Toronto, Ont., 17th November, 1900.
11777. LE GRAND HOROSCOPE; OU ORACLE UNIVERSEL. (Tableau.) Edouard Hartman, Montréal, Qué., 17 novembre 1900.
11778. LE NOUVEL ORACLE DU MARIAGE. (Tableau.) Edouard Hartman, Montréal, Qué., 17 novembre 1900.
11779. MAP OF BRITISH AMERICA: SHOWING ALSO THE BRITISH EMPIRE, WITH MAPS OF AMERICA, EUROPE, AFRICA, ASIA, AUSTRALIA AND THE PACIFIC OCEAN, CHINA, INDIA AND ALASKA, WITH THE KLONDIKE GOLD REGION. The Dominion Publishing Co., Hamilton, Ont., 19th November, 1900.
11780. CIVIC REFORM. March. By Cecil Birkett. W. D. Morris, Ottawa, Ont., 19th November, 1900.
11781. XOPATHIC REMEDIES. (Pamphlet.) James Johnston, Castleton, Ont., 20th November, 1900.
11782. APRIL TIME. Song. Words by E. Teschemacher. Music by Frederic H. Cowen. The John Church Co., Cincinnati, Ohio, U.S.A., 21st November, 1900.
11783. THE LIFE AND DEATH OF RICHARD YEA-AND-NAY. By Maurice Hewlett. (Book.) The Copp, Clark Co., (Ltd.), Toronto, Ont., 21st November, 1900.
11784. A DAY'S SONG. Poems of Sentiment. By John Stuart Thomson. William Briggs, Toronto, Ont., 21st November, 1900.
11785. PIONEERS OF FRANCE IN THE NEW WORLD. By Francis Parkman. George N. Morang & Co. (Ltd.), Toronto, Ont., 22nd November, 1900.
11786. LORDS OF THE NORTH. By A. C. Laut. (Book.) William Briggs Toronto, Ont., 22nd November, 1900.
11787. PASS BOOK OF THE SQUARE COMMISSION ADVERTISING SYSTEM. L. C. Macklem, Toronto, Ont., 23rd November, 1900.
11788. OFFICIAL TELEPHONE DIRECTORY, DISTRICT OF WESTERN ONTARIO. The Bell Telephone Company of Canada (Ltd.), Montreal, Qué., 23rd November, 1900.
11789. GEOGRAPHICAL HANDBOOK OF THE PROVINCE OF ONTARIO. By C. C. James, M. A. The Steinberger, Hendry Co. (Ltd.) Toronto, Ont., 24th November, 1900.

11790. THE CATHOLIC ALMANAC OF ONTARIO FOR 1901. Mrs. Emma O'Sullivan, Toronto, Ont., 26th November, 1900.
11791. DON'T BE ASHAMED TO COME BACK HOME. Words and Music by Monroe H. Rosenfeld. Ilsen & Co., Cincinnati, Ohio, U.S.A., 26th November, 1900.
11792. IN BOHEMIA, AND OTHER STUDIES FOR POEMS. By Mrs. T. Sterry Hunt. ("Canadienne") Anna R. G. Hunt, Montreal, Que., 26th November, 1900.
11793. EXCELSIOR DIVISION, No. 28, SONS OF TEMPERANCE. (Pamphlet.) Phillips & Smith, Toronto, Ont., 26th November, 1900.
11794. THE ONTARIO REPORTS. Volume XXXI. 1900. The Law Society of Upper Canada, Toronto, Ont., 27th November, 1900.
11795. WHEN SOUSA LEADS THE BAND. Words by William Jerome, Music by Horwitz and Bowers. Hill, Horwitz & Bowers, Chicago, Illinois, U.S.A., 27th November, 1900.
11796. GATHERING SHELLS. Yorke. (Music.) The John Church Co., Cincinnati, Ohio, U.S.A., 27th November, 1900.
11797. SWING HIGH—SWING LOW. Waltz. By Edward M. Read. The John Church Co., Cincinnati, Ohio, U.S.A., 27th November, 1900.
11798. THE BUTTERFLY. Waltz. By Edward M. Read. The John Church Co., Cincinnati, Ohio, U.S.A., 27th November, 1900.
11799. THE MERRY-GO-ROUND. Polka. By Edward M. Read. The John Church Co., Cincinnati, Ohio, U.S.A., 27th November, 1900.
11800. THROUGH THE MEADOWS. March. By Edward M. Read. The John Church Co., Cincinnati, Ohio, U.S.A., 27th November, 1900.
11801. UP THE MOUNTAIN. Two-Step. By Edward M. Read. The John Church Co., Cincinnati, Ohio, U.S.A., 27th November, 1900.
11802. THE TALLY-HO. March. By Edward M. Read. The John Church Co., Cincinnati, Ohio, U.S.A., 27th November, 1900.
11803. ON THE BEACH. Schottische. By Edward M. Read. The John Church Co., Cincinnati, Ohio, U.S.A., 27th November, 1900.
11804. RECEIPT FORM OF THE DOMINION TRADING COMPANY, LIMITED. The Dominion Trading Co. (Ltd.), Toronto, Ont., 28th November, 1900.
11805. A. B. C. WALTZ CHARTS. Frank H. Norman, Montreal, Que., 29th November, 1900.
11806. THE LAST FAREWELL. (Picture.) The Globe Printing Co., Toronto, Ont., 29th November, 1900.
11807. CANADIAN GIRLS WALTZ. By Catharine McDonald, Paisley, Ont., 29th November, 1900.
11808. I WAIT FOR THEE. (Absence.) Words by Ida Whipple Benham. Music by C. B. Hawley. The John Church Co., Cincinnati, Ohio, U.S.A., 30th November, 1900.
11809. MOLLY'S EYES. Words by Frank L. Stanton. Music by C. B. Hawley. The John Church Co., Cincinnati, Ohio, U.S.A., 30th November, 1900.