

No. 32,200. Sled. (Traineau.)

Adolph Tode, Monroe, N. Y., U. S., 6th September, 1889; 5 years.

Claim.—1st. A sled, having its runners turned upward and backward at their forward ends to form a pair of foot-receiving recesses above the foot board, substantially as specified. 2nd. The combination of mortised runners *b*, with foot boards *a* received by the mortises, the runners *b* being turned upward and backward at their forward ends to form the lips *b*¹, and the recesses *b*² above the foot board, substantially as specified.

No. 32,201. Process of and Apparatus for Treating Hides, Skins or Scraps in Liquids. (Procédé et appareil de traitement des peaux ou déchets par les liquides.)

Charles W. Cooper, Brooklyn, N. Y., U. S., 6th September, 1889; 5 years.

Claim.—1st. The method of agitating or treating hides in liquids, which consists in treating said hides in a receptacle, through the sides and bottom of which the liquid has egress and ingress respectively, by alternately elevating said hides therein by the introduction of gaseous fluid beneath them, and permitting them to sink by the action of gravity, as specified. 2nd. The method herein described, of agitating hides and liquids contained in a vat, which consists in alternately causing said hides to rise therein by means of a current of air entering the bottom of said vat beneath them, and by the cessation of such current of air, permitting them to descend by gravity, substantially as set forth. 3rd. The method herein described, of agitating hides and liquids contained in a vat, which consists in inducing an upward current of said hides and liquid by means of a gaseous fluid introduced into said tank beneath them, permitting part of said liquid to escape from above said hides, and to re-enter the vat at a lower point and beneath the hides, and by interrupting the flow of said gaseous fluid and permitting said hides to sink by gravity through the liquid, as specified. 4th. In an apparatus for treating hides in water or other liquid, in combination, a tank adapted to contain the hides, having liquid outlet orifices formed therein at or near the top thereof, and provided with a slatted bottom, an exterior tank enclosing said hide containing tank, means for supporting said inner tank within said enclosing tank and clear of the walls thereof, and air pipes discharging into said hide containing tank at or near the base thereof, substantially as set forth. 5th. In an apparatus for treating hides in water or other liquid, a tank adapted to contain the hides, liquid inlet and outlet orifices formed therein, at or near the bottom and top thereof respectively, an exterior tank enclosing said hide containing tank, and an air pipe furnished with outlet provided branches situated at the base of the hide containing tank, all said outlets discharging within a space co-extensive and coincident with the slatted or perforated bottom of said hide containing tank, substantially as set forth. 6th. In an apparatus for treating hides in water or other liquid, a tank adapted to contain the hides, liquid inlet and outlet orifices formed therein, at or near the bottom and top thereof respectively, an exterior containing tank between the walls of which and the perforated walls of the inner tank are liquid spaces, an air pipe discharging into the base of said hide containing tank, a liquid supply pipe and a drawing-off cock, as specified. 7th. In an apparatus for treating hides in water or other liquid, a tank adapted to contain the hides, liquid inlet and outlet orifices therein at or near the bottom and top thereof respectively, and which open exteriorly into a common reservoir, an air pump, an air pipe leading from said air pump to and discharging into the base of the hide containing tank, a valve applied to the air pipe, and a reservoir in communication with the air pipe, at a point between the engine and the air pipe valve, as specified. 8th. In an apparatus for treating hides in water or other liquid, a tank adapted to contain the hides, liquid inlet and outlet orifices formed therein at or near the bottom and top thereof respectively, and which open exteriorly into a common reservoir, an air pump, an air pipe leading from said air pump to and discharging into the base of the hide containing tank, a valve applied to said air pipe, a lever arm attached to said valve by the raising and lowering of which the valve is operated, a wheel having a pin projecting from its face, adapted in the rotation of the wheel to operate said lever, and means for rotating said wheel, as specified. 9th. In an apparatus for treating hides in liquor, in combination, a tank adapted to contain the hides having liquid outlet orifices formed therein, at or near the top thereof, and provided with a slatted bottom, an exterior tank enclosing said hide containing tank, means for enclosing said inner tank within said enclosing tank, so as to leave spaces between the opposing walls thereof, an air pipe discharging into said hide containing tank at or near the base thereof, a valve adapted to open and close said pipe, means for automatically operating said valve, an air pump and a reservoir in communication with said air pump, as specified.

No. 32,202. Watch Stand. (Porte-montre.)

Richard Bresch, Leipzig, Germany, 6th September, 1889; 5 years.

Claim.—A portable watch stand, comprising, in combination, a frame, a slotted holder adapted to receive the neck of the bow of a watch, and two legs adapted to be protruded from the frame for supporting a watch, substantially in the manner described.

No. 32,203. Ballot Box. (Boîte à scrutin.)

Charles M. Taylor, Toronto, Ont., 6th September, 1889; 5 years.

Claim.—1st. A ballot box, having a ball chamber provided with a transparent face, whereby the result of the ballot can be seen through said transparent face. 2nd. In a ballot box, the combination, with a suitable case, of a ball chamber having a transparent face, a removable covering for said face, and a hinged or removable bottom for said ball chamber, substantially as and for the purpose specified. 3rd. In a ballot box, the combination with the case, of the glass front *F*, flap *L*, mouth or funnel *G*, ball chamber *H*, hinged bottom *K* and catch *K*, substantially as and for the purpose set forth.

No. 32,204. Wire Working Apparatus.

(Tréfilerie.)

David Rawson, Pittsburgh, Penn., U. S., 6th September, 1889; 5 years.

Claim.—1st. In a wire-working apparatus, the combination of a delivery drum mechanism for operating on the wire, a mechanism for exerting a pull on the wire, and a continuously rotating drum having a surface speed equal to or greater than the speed of the pulling mechanism, and having one or more coils or turns of the wire thereon, substantially as set forth. 2nd. In a wire drawing apparatus, the combination of a delivery drum, a drawing die, a mechanism for exerting a pull on the wire, a continuously rotating drum, having a surface speed equal to or greater than the pulling mechanism, and having one or more coils or turns of the wire thereon, substantially as set forth.

No. 32,205. Nail Feeding and Distributing Machine. (Machine d'alimentation et de distribution du clou.)

Freeborn F. Raymond, 2nd, Newton, Mass., U. S., 6th September, 1889; 5 years.

Claim.—1st. In a nail feeding and distributing machine, the combination of a delivery reel for holding a nail-carrying strip, a nail strip feeding device, comprising a feed roll or rolls, having teeth to mesh with projections upon the strip, and a feed-way provided with holes through its bottom, through which nails are forced from the strip, and a gang or group of reciprocating ejectors to simultaneously enter the pockets or holders of said strips, and force nail therefrom through said holes, as and for the purposes specified. 2nd. The combination of a nail strip feeding device, comprising one or more feed-rolls, having spur teeth adapted to engage projections upon the side of a nail-carrying strip, and means for rotating it or them, a plate or roll for holding a nail strip in the feed way, and in contact with the teeth of the feed roll or rolls, a block or plate *B* having holes *b* of the same arrangement as the pockets or holders of the nail-carrying strip, and a reciprocating gang or group of ejectors, substantially as described. 3rd. The combination of the reciprocating gang of ejectors *C*, the delivery reel *A*, the feed-rolls *a*, *a*¹, having spur-teeth *a*², the feedway *a*³, the pressure roll *a*⁴, the block *B* having the holes *b*, the tubes *b*¹ having the distributing passages *b*², the gear *a*⁵ and the ratchet wheel carried thereby, and lever *d* having a pawl to engage the ratchet, as and for the purposes described. 4th. The combination of a feed having teeth to engage the strip and feed it and a gang of ejectors.

No. 32,206. Automatic Valve for Steam and Air Engines. (Soupape automatique pour les machines à vapeur et atmosphériques.)

Henry C. Sergeant, New York, N. Y., U. S., 6th September, 1889; 5 years.

Claim.—1st. In a reciprocating engine, means for opening and closing the supply ports thereof, comprising a pair of valve-actuating pistons driven by the motive fluid, independently of the movement of the main piston, substantially as described. 2nd. In a reciprocating engine, the combination, with the main supply ports and cylinders, of two valves arranged to move in alternation and to control the necessary supply ports, and passages to produce said alternating motion independently of the movement of the main piston, substantially as described. 3rd. In a reciprocating engine, valve-operating mechanism therefor, consisting of two similar reciprocating pistons, the first of which is connected to and moves the main valve of the engine, and the second of which operates a similar valve controlling the movements of the first one independently of the movement of the main piston, substantially as described. 4th. In a reciprocating engine, the combination, with the main supply valve thereof, and a steam-actuated or air-actuated piston for reciprocating the same, of an auxiliary valve and a steam-actuated or air-actuated piston for operating the same, and ports and passages in the steam chest, whereby the first-mentioned valve is made to control the movements of the last-mentioned piston, the whole operating independently of the movement of the main piston to control the movement of the latter, substantially as described. 5th. A reciprocating engine, having a steam-actuated or air-actuated piston, and a valve operated thereby to open and close the main supply and exhaust ports independently of the movement of the main piston, an auxiliary piston which controls ports and passages for actuating the main valve piston, and a valve or valves for contracting one or more of the passage or passages for regulating the speed of the valve piston, substantially as described. 6th. In a reciprocating engine, the combination of pistons *M*, *N*, main valve *m* attached to piston *M*, and an auxiliary valve *n* attached to piston *N*, main supply ports and an auxiliary set of ports controlled by the piston *N*, and valve passages leading from said auxiliary ports, to actuate the piston *M*, and passages leading from the main ports to give motion to the piston, substantially as described. 7th. In a reciprocating engine, the combination of cylinders *D*, *E*, *E*¹ and pistons *M*, *N*, main valve *m* attached to piston *M*, and an auxiliary valve attached to piston *N*, main supply ports and an auxiliary set of ports controlled by the piston *N*, and valve passages leading from said auxiliary ports to actuate the piston *M*, and contractible passages leading from the main ports to the cylinders *E*, *E*¹, substantially as and for the purpose herein described. 8th. The valve-actuating pistons *M*, *N*, in combination with the steam chest *J*, having oppositely located cylinders to receive the pistons, and an enlarged or open central portion to permit the free passage of steam or air to the ports, substantially as described.

No. 32,207. Running Gear for Vehicles.

(Train de voiture.)

Frank Dupee, Helena, N. Y., U. S., 6th September, 1889; 5 years.

Claim.—1st. In a vehicle gear, the combination of the frame, the transverse bars *F* journaled in bearings secured to said frame and