No. 25,130. Tubular Case Mortise and other Locks and Latches. (*Serrure et Loquet Cachés à Palastre Tubulaire et autres.*)

Frederick J. Biggs, London, Eng., 15th October, 1886; 5 years.

Claim.—1st. In a mortise lock, an inner frame carrying the lock mechanism, and having an opening in same extending from the upper side to the lower side, in combination with an outer case formed of a drawn tube in one piece into which the said inner frame fits, substantially as hereinbefore described. 2nd. In a mortise lock, the combination, with an inner frame carrying the lock mechanism, and having an opening in same extending from the upper side to the lower side, and with an outer case formed of a drawn tube in one piece into which the said inner frame fits, of means, substantially as described, whereby the said inner frame and outer case are secured together and rotation of the one relatively to the other prevented. 3rd. The projection *i* at the rear end of the inner frame *e*, *e*, in combination with a hole or recess in the rear end of the outer case *a*, as and for the purpose described. 4th. In a mortise lock, an inner frame carrying the lock mechanism and having an opening in same extending from the upper side to the lower side, said frame being rounded at top and bottom but flat at the sides, substantially as represented in Fig. 8 for the purpose set forth. 5th. The combination of *a swivelling latch and a removable face or end plate*, said latch being free to be reversed when said plate is detached, but prevented by said plate from reversing when the latter is in position, substantially as herein described. 6th. The combination, with the swivelling latch *d*, of the face plate *f* having a latch hole large enough to allow the latch to turn, and of the face or end plate *s* having a latch hole not large enough to allow the latch to turn, substantially as and for the purpose herein described.

No. 25,131. Combined Latch and Lock.

(*Loquet et Serrure Combinés.*)

George B. Underwood, Toronto, Ont., 15th October, 1886; 5 years.

Claim.—1st. The combination of the bolt 5 having a notch 8 provided with the converging sides 9, 9, and the spindle socket 6 having a trippet 7 provided with converging sides 10, 10, whereby the bolt is expelled when the convergent sides of the bolt and trippet are in frictional contact, substantially as set forth. 2nd The combination, with bolt 5 and spindle socket 6 having trippet 7, of the gravitating lever 11, gravitating weight 22, dog 14 and tumblers 21, as set forth for the purpose described. 3rd. The slide 25, in combination with the gravitating lever 11, and gravitating weight 22 to simultaneously lock the bolt and close the key holes, as set forth.

No. 25,132. Process of Manufacturing Beer.

(*Procédé de Fabrication de la Bière.*)

John C. O'Mullin, Halifax, N.S., 15th October, 1886; 5 years.

Claim.—The process of manufacturing beer by running the malt liquid from the fermenting tub at temperature of frame 62°, Fah. to 72° Fah. into cask while fermentation is actually going on, and by the addition of liquid sugar for the purpose feeding of the beer in the proportion above mentioned, substantially as above described.

No. 25,133. Door Hanger.

(*Poulie de Porte en Coulisse.*)

John Braun, Philadelphia, Penn., U.S., 15th October, 1886, 5 years.

Claim.—1st A door hanger having a frame with fixed boxes, a rising and falling box, a door plate connected with the latter, and a movable wedge, said wedge passing through the several boxes, and having its upper edge bearing against the movable box, substantially as described. 2nd. A frame with fixed boxes, a plate attachable to a door connected with *a rising and falling box*, and a movable wedge passing through the several boxes and bearing against the movable box, said plate having a boss, and said wedge a threaded end or shank on which is fitted an adjusting nut which bears against the boss, substantially as and for the purpose set forth. 3rd. In a door hanger, a frame having depending boxes fixed thereto, a rising and falling box and means for moving the latter, said box being connected with the door plate and located between the fixed boxes, whereby the space below the frame is closed and the displacement of the sheaves thereby prevented, substantially as described.

No. 25,134. Tedder. (*Faneuse.*)

J. O. Wisner, Son & Co., (assignees of James S. Heath,) Brantford, Ont., 15th October, 1886; 5 years.

Claim.—1st The prongs A having a coiled loop B, in combination with the tedder arm D, and spring F, substantially as and for the purpose specified 2nd The prongs A, having loop B coiled around the ferrules C, and secured to the tedder arm by means of the bolt E, in combination with a spring arranged to connect the loop B to the arm D, substantially as and for the purposed specified. 3rd. The prongs A having a loop coiled on either side of the arm D to which it is connected, in combination with the bracket I and spring F, substantially as and for the purpose specified.

No. 25,135. Jar Cover. (*Couvercle de Jarre.*)

John Doherty, Thomas Conroy and Henry Kuffer, Lockport, N. Y., U.S., 15th October, 1886; 5 year.

Claim.—1st. The combination, with the main portion of a cover, said portion being formed with flanges *c* and D, a shoulder *d* being formed on the flange D, of packing rings B and *f*, and an auxiliary cover, substantially as described. 2nd. A fruit jar cover formed with the flanges *c* and D, the flange *c* being formed with the ridges *b*, *b*, and the flange D having a shoulder *d*, said cover being provided with an auxiliary cover E, with ridges *i*, *i* and grooves *h*, *h*, substantially as described.

No. 25,136. Automatic Car-Coupler.

(*Attelage de Chars Automatique.*)

John D. Ripson and Robert Watson, Toronto, Ont., 15th October, 1886; 5 years.

Claim.—1st. A draw-head A having a block C fitted within it, and a loop D formed in the said block to receive the conical head *a* of the link-pin J, and a spindle E to pass through the bottom of the draw-head A, in combination with the pivoted lever F actuated by the spring H, substantially as and for the purpose specified. 2nd. A draw-head A having a recess or slot formed in it to receive the block C and a shoulder *b*, in combination with the said block C having a shoulder *d* formed in it, and a loop D attached to it from which loop a spindle E extends to be actuated on by a spring, substantially as and for the purpose specified. 3rd. A draw-head A having a block C fitted within it, and a loop D formed in the said block to receive the conical head *a* of the link-pin J, and a spindle E to pass through the bottom of the draw-head A, in combination with the pivoted lever F, actuated by the spring H, and crank-rod I, substantially as and for the purpose specified.

No 25,137. Nail Plate Feeder.

(*Alimentateur de Machine à Clou.*)

Randolph Hersey, Montreal, Que., 16th October, 1886; 5 years.

Claim.—1st. In combination with a nail-cutting machine, the swinging frame a^1, partially rotated cylinder c^1, segmental lever i^1 having segmental rack h^1, segment m^1 and cam projection n^1, slide l^2 having pawls l^3 and m^3, and nipper rod or tongs r^2, the whole substantially as described. 2nd. The combination, with a nail-cutting machine, of the vibrating lever *l*, operated by the nail machine, as described, *connecting rod* p^1, segmental lever *i*, connecting rod t^1, arm v, rock shaft s, arm l^2 and connecting rod c^2, with the frame a^1 having its pivot point *t*, located as described, the whole substantially as described. 3rd. In combination with the slide l^2, operated as described, and having pawls l^3 and m^3, the rest g^2 having gripping and friction heads p^2, nipper rod or tongs r^2 having serrations s^2 and jaws q^1, the whole constructed and arranged substantially as described and for the purposes set forth 4th. In combination, with *the slide* l^2, *operated as described, and having pawls* l^3 *and* m^3, *the rest* g^2 having gripping and friction heads p^2, nipper rod or tongs r^2 having serrations s^2 and jaws g^1, blank space t^4 and collar t^3, the whole constructed and arranged substantially as described. 5th. The improved construction of the nipper rod or tongs, consisting of the combination of the jaws q^3, rod r^2, serrations s^2, blank space t^4 and collar t^3, with an actuating pawl mechanism, constructed and arranged for operating the same, substantially as described. 6th. The combination of the segmental lever i^1, operated as described, having segment m^1, cam projection n^1, slide l^2, spring d^3, pawls l^3, and m^3 and nipper rod or tongs r^2, the whole substantially as described.

No. 25,138. Steam Trap. (*Trappe de Vapeur.*)

John Morehead, Detroit, Mich., U S., 16th October, 1886; 5 years.

Claim.—1st, A steam trap consisting of a chamber provided with an inlet and outlet pipe at one side of the centre of gravity, said inlet pipe axially connected with a steam pipe, and the outlet pipe axially connected with a discharge pipe, a valve located in the outlet pipe arranged to open when the vessel is tilted and *vice versa*, said vessel having an upwardly-extended interior pipe to admit condensed water, and a channel to carry the water from the chamber into the *outlet pipe, said chamber with said interior pipe and said channel*, all constructed in an integral casting, substantially as described. 2nd The combination, with a chamber communicating with an inlet pipe and an outlet pipe at one side the centre of gravity, and constructed with an upwardly-extended interior pipe to admit condensed water, a channel to carry the water from the chamber to the outlet pipe, of a pipe to return the condense water to the boiler, a steam pipe D communicating with the the inlet pipe, check-valves located in the steam pipe and the return pipe, a steam pipe G connected with the steam space of the boiler and with the inlet pipe between its check-valve and the chamber, said steam pipe provided with a valve arranged to be closed when the chamber is in a horizontal position and *vice versa*, said chamber having an oscillatory connection with the steam pipe D and the return pipe, all arranged to operate substantially as and for the manner described. 3rd. In a *steam trap, a chamber constructed to communicate* with an inlet and outlet pipe at one side, the centre of gravity having an interior pipe to communicate with the inlet pipe upwardly extended, said chamber provided with a channel to carry the water from the chamber to the outlet pipe having end openings, and a hand-hole to facilitate cleansing the same, and a vent orifice all constructed of an integral casting, substantially as described. 4th. The combination, with a tilting chamber, of inlet and outlet pipes connected therewith at one side the centre of gravity, said pipes *axially connected with a* steam-pipe and a waste pipe, a valve located in the outlet pipe arranged to open automatically when the chamber is tilted and *vice versa*, an automatic air valve connected with said chamber, said chamber provided with an interior pipe to admit condensed water to the chamber and carry the steam above the surface of the water and a channel to carry the water from the lowest point of the chamber when the same is tilted to the discharge-pipe, substantially as described. 5th. The combination, with a chamber having an inlet and outlet pipe communicating therewith at one side the centre of gravity, of a valve located in or connected with said outlet pipe, said valve and inlet pipe having a oscillatory union with journal bearings in the manner specified, supports for said bearings, and a bar secured upon said support having an adjustable roller thereon for tripping the valve, substantially as described. 6th. The combination, with a chamber *having an inlet and an outlet pipe communicating with the* inlet pipe between the check valve and trap, and with the steam space of the boiler, a valve heated in said steam pipe provided with an operating lever, said chamber having connected therewith an arm provided with an adjustable weight, and an adjustable bar I to tilt said lever as the chamber tilts, substantially as and for the purpose described.