

ing arms G¹, G², the arm G¹ having pawl G³, and tripping bar J and spring J² for retracting it, the pawl G³ striking the tripping bar as the lever G is moved by rod F, the arm G² carrying the tablet I, substantially as and for the purposes specified. 2nd. The combination of the push-rod F and lever G, having arms G¹, G², the arm G¹ having pawl G³, and tripping bar J and spring J² for retracting it, the pawl G³ striking the tripping bar as the lever G is moved by rod F, the arm G² carrying the tablet I, the tripping bar J carrying the bell hammer Z, and the bell Z, substantially as and for the purposes specified. 3rd. In combination with a paper supply roller, and the winding roller N², and floor or platen K, the ink ribbon stretched over the paper, and a series of type, each carried by a resilient lever, and the push-rods each carrying a projection R, which bears on its adjacent said resilient lever, and depresses the latter as said rod is pushed toward the rear of the machine, substantially as and for the purposes specified. 4th. In combination with a paper supply roller, and the winding roller N², and floor or platen K, the ink ribbon stretched over the paper, and a series of type, each carried by a resilient lever, and the push-rods each carrying a pawl R, which depresses its adjacent resilient lever as the rod F is pushed toward the rear of the machine, and the winding roller N², and floor or platen K, the ink ribbon stretched over the paper, and a series of type, each carried by a resilient lever, and the push-rods each carrying a pawl R, which depresses its adjacent resilient lever as the rod F is pushed toward the rear of the machine, and ratchet wheel turning shaft N⁴, and lever E having tongue E², cash drawer, and spring for opening it, the drawer when closed engaging said tongue, the lever carrying pawl N⁶ engaging the said ratchet wheel, thus compelling the paper each time the drawer is opened to be moved forward the distance of one of the teeth of ratchet wheel N⁶, substantially as and for the purposes specified. 5th. In combination with a paper supply roller, and the winding roller N², and floor or platen K, the ink ribbon stretched over the paper, and a series of type, each carried by a resilient lever, and the push-rods each carrying a pawl R, which depresses its adjacent resilient lever as the rod F is pushed toward the rear of the machine, and ratchet wheel turning shaft N⁴, and lever E having tongue E², cash drawer, and spring for opening it, the drawer having opening receiving the tongue E², and the lever E provided with pawl N⁶, and automatically drawn toward the drawer, substantially as and for the purposes specified. 6th. The push-rod F, and the ink ribbon and paper, and type substantially as described, and the inclined spring lever or arm Q², the push-rod carrying a projection substantially as R, for depressing the type as the push-rod is advanced, and register wheels, and the push-rod having the spring pawl or arm F⁴, engaging the teeth of a register wheel as the push-rod is moved toward the rear of the machine, and partially rotating said wheel, substantially as and for the purposes specified. 7th. The push-rod F and the inclined spring lever or arm Q², the push-rod carrying a projection substantially as R, for depressing the type as the push-rod is advanced, and register wheels, and the push-rod having the spring pawl or arm F⁴, engaging the teeth of a register wheel as the push-rod is moved toward the rear of the machine, and partially rotating said wheel, and the angle lever G¹, G², and the tablet operated by the latter, the push-rod F moving the said lever G¹, G², to operate the tablet, substantially as and for the purposes specified. 8th. In a cash register, the register wheel as L, and pawl L², and wheels M and pawl M², and elevating rod L³, the wheels having the studs L¹, and pawls L², and the lever L⁴, and its pawl L⁵ thereof, and ratchet wheel L⁶ fixed to a wheel L, and engaged by said pawl L⁵, substantially as and for the purposes specified.

No. 37,796. Composition for Removing Scales from Steam Boilers and for Preventing their Formation. (*Composition pour l'enlèvement et la prévention des incrustations dans les chaudières.*)

William Blackburn, Eber Ashbel Gurley, and John Ezra Rayl, all three of Marion, and Charles Henry Ness and Walter Shull, both of Galion, all in Ohio, U.S.A., 14th November, 1891; 5 years.

Claim.—The herein described composition of matter consisting of hydro-carbon oil, starch, and rice, in approximately the proportions specified.

No. 37,797. Skate. (*Patin.*)

Michael Weber, Zurich, and George Hofmann Tabler, Oerlikon, both in Switzerland, 14th November, 1891; 5 years.

Claim.—1st. In a skate, the combination, with a sole-plate having downwardly-projecting slotted lugs, of pins in said lugs, a runner provided with notches adapted to receive the pins in the lugs when the upper part of the runner is placed into said lugs, and of a pivoted latch on the sole-plate for locking the runner in the slotted lugs of the sole-plate, substantially as set forth. 2nd. In a skate, the combination, with a sole-plate having lugs, a runner, parts of which are adapted to pass into the lugs in the sole-plate, and a latch pivoted on the under side of the sole-plate and adapted to engage the part of the runner in one of said lugs of the sole-plate, substantially as set forth. 3rd. In a skate, the combination, with a sole-plate having lugs, a runner having parts adapted to pass into the lugs of the sole-plate, and a latch pivoted in the under side of the sole-plate and projecting through said sole-plate, which latch serves for locking said runner in the lugs of the sole-plate, substantially as set forth. 4th. In a skate, the combination, with a sole-plate having lugs, a runner having parts adapted to pass into the lugs of the sole-plate, a latch pivoted on the under side of the sole-plate and adapted to engage part of the runner in one of the lugs of the sole-plate, which latch is adjustable toward and from one of said lugs, substantially as set

forth. 5th. In a skate, the combination, with a sole-plate having lugs, a runner having parts adapted to pass into the lugs of the sole-plate, a pin projecting from the under side of the sole-plate and adjustable toward and from one of the lugs, and a locking-lever pivoted to said pin and passing through an opening in the sole-plate, and having a plate on the end projecting through the sole-plate, substantially as set forth. 6th. In a skate, the combination, with a sole-plate provided with heel-caps, of a bar adapted to slide on the longitudinal axis of the sole-plate, and having one surface serrated, a heel-clamp provided with a bottom-wing having its under side serrated, a screw engaging said sliding serrated bar and the serrated wing of the heel-clamp, for the purpose of locking the two parts together after they have been adjusted, and a locking-lever engaging said sliding-bar, substantially as set forth. 7th. In a skate, the combination, with a sole-plate, of sliding clamps provided with upwardly-projecting lugs for clamping the sole, heel-caps, a lever for operating the sole-clamps, a bar guided to slide longitudinally on the sole-plate and pivotally connected with said lever, a heel-clamp guided in a slot of the sole-plate, and a screw for locking the heel-clamp on the sliding-bar, substantially as set forth. 8th. In a skate, the combination, with a sole-plate, of sole-clamps mounted to slide on the sole-plate and provided with slots, pins passed through said slots in the clamps into the sole-plate, which pins have elongated heads of such length that they can extend across the slots in the sole-clamp, and of such width that they can pass through said slots when parallel therewith, substantially as set forth.

No. 37,798. Combination Tool.

(*Outil à combinaison.*)

Christopher Columbus Reynolds, Henry William Hooton and Matilda Matsey Merov Buhv, all of Salt Lake City, Utah, U.S.A., 14th November, 1891; 5 years.

Claim.—1st. In a combination tool, the combination of the straight lever bar, having a section provided with a series of adjustable holes, and having a sharpened chisel point adapted to cut into the bolt head, the bifurcated hooked bar, the pin for connecting said bar to the straight lever bar, all combined to operate as set forth. 2nd. In a combination tool, the combination of the straight lever bar having the handle A, the flattened section A¹, provided with a series of holes a, the sharpened chisel point A² of hardened steel, the hooked bar B having hooked end B¹ extending beyond the end of the straight lever bar, said hooked bar being bifurcated to enclose the flat section A¹ of the straight lever bar, the pin for connecting the bifurcated hooked bar to the lever bar, said device being adapted especially for use with the countersunk heads of bolts, as specified.

No. 37,799. Saw Teeth. (*Dent de scie.*)

American Saw Company, assignees of William Edward Brooke, all of Trenton, New Jersey, U.S.A., 14th November, 1891; 5 years.

Claim.—1st. The combination with the saw-plate having a recess and a tongued shoulder at the outer end of said recess, and at an angle thereto, of a saw-tooth having a grooved angular shoulder bearing against the aforesaid tongued shoulder at the outer end of the recess, and the locking plate having a tongued lug at its upper end adapted to engage a suitable groove on the front edge of the tooth, there being a recess in the locking plate, into which the foot of the tooth enters loosely without touching, substantially as described. 2nd. The combination with the saw-plate A, having recess a, with a V-tongue, and an angular shoulder a¹, with the right-angled tongue, of the tooth B, having a grooved angular shoulder b¹, which engages the tongued shoulder a¹, and having the plain-faced foot D and the curved recess E, with the right-angled groove, and the locking plate C, having the rearwardly curved upper end provided with a right-angled lug that enters the grooved recess on the front edge of the tooth, and having a plain-faced recess within which the plain-faced foot on the tooth loosely lies without touching, substantially as described. 3rd. The combination with the saw-plate A, having recess a, and angular shoulder a¹ having right-angled tongue a², the tooth B, having an angular shoulder b¹, provided with the right-angled groove b², and a right-angled front groove e, and the locking plate having lugs f at its upper end that enter the groove e, substantially as described. 4th. The combination of the saw-plate A, having recess a, and provided with the V-shaped tongue a², and the shoulder a¹, having tongue a², the tooth B, having the convex rear edge provided with groove b, and shoulder b¹, having groove b², said tooth having plain-faced foot D and front recess E, provided at e, and the locking plate C having the lower edge grooved at c, and having the rearwardly-curved upper end F, formed with l, g, f, and likewise the recess d, all the parts being combined, substantially as described.

No. 37,800. Door Hanger. (*Coulisse de porte.*)

Edward Y. Moore, Milwaukee, Wisconsin, U.S.A., 16th November, 1891; 5 years.

Claim.—1st. In a door-hanger, the combination, with a frame consisting of recurved legs and opposite parallel rider-bars secured to the legs of an independent sheet-metal cover, secured in the frame over the wheel and its bearings, substantially as described. 2nd. In a door-hanger, the combination, with a frame having recurved legs, and wheel-bearing bars secured to the legs opposite to and parallel with each other, and projecting inwardly beyond the inner surfaces of the opposing parts of the legs, of a sheet-metal cover resting at its edges on the bars and bearing at its ends on its outer surface against the inner recurved portions of the legs, substantially as described. 3rd. In a door-hanger, the combination, with a frame having recurved legs and wheel-bearing bars secured to the legs opposite each other, of a curved sheet-metal cover resting at its edges on the bars and bearing at its ends on its outer surface against the inner surfaces of the recurved portions of the legs, and bosses raised on the outer surface of the cover near the legs of the frame to prevent the movement of the cover endwise, substantially as described.