

No. 28,437. Flush Valve for Water Closets.*(Valve de lavage pour cabinets à Eau.)*

Thomas Campbell and James H. McPartland, Saint John, N. B., 2nd February, 1888; 5 years.

Claim.—1st. The combination of the cylinder C and the piston A, substantially as and for the purpose hereinbefore set forth. 2nd. The combination with the cylinder C and the piston A, of the rod F and the down-pull G, substantially as and for the purpose hereinbefore set forth.

No. 28,438. Door Knob. (Bouton de porte)

Joseph Bardsley, Brooklyn, N. Y., U. S., 2nd February, 1888; 5 years.

Claim.—The knob shank, having the open slot at its inner end, and the flat plate contained in said slot, combined with the wooden knob having a socket to receive the inner end of said shank, one longitudinal edge of said plate being embedded in the knob when the parts are in operative position, while the other longitudinal edge of same remains in said slot, substantially as set forth.

No. 28,439. Safe Lock. (Serrure de coffre-fort.)

Harry Stanynght, Brooklyn, N. Y., U. S., 2nd February, 1888; 5 years.

Claim.—1st. A safe, having its lock and combination contained in the body at one side of the door-opening, the bolts of which lock are arranged to extend bodily from the jamb within the said opening and have engagement with the door, substantially as set forth. 2nd. The combination, with a safe, having a door opening and a lock, and its combination fitted in said safe at one side of the door opening, of a door fitted to said opening, provided with slotted edges adapted to receive the bolts of the lock, and means for manipulating said lock, substantially as herein shown and described. 3rd. The combination, with a safe, having a door opening and a lock, and its combination fitted in the body of the safe at one side of said opening, said lock provided with upper and lower angular bolts, arms carrying posts adapted to reciprocate said bolts, and a hinged locking plate adapted to secure said bolts in an open or closed position, of a door provided with a slot in the edge adapted to receive said bolts, substantially as shown and described, and for the purposes herein set forth. 4th. The combination, with a safe and a lock, and its combination fitted in the body of the safe, said lock provided with an upper and lower angular bolt, provided with stop plates upon the outer face, and carrying posts adapted to reciprocate said bolts, a hinged locking plate carrying blocks upon its inner face adapted to engage the stop plates upon the bolts, and means for manipulating said lock plate, of a door fitted in said safe, provided with a slot in the edges thereof, substantially as shown and described and for the purposes herein set forth. 5th. The combination, with a safe and a lock, and its combination fitted in the body of the safe, said lock provided with an upper and lower angular bolt, having stop plates upon the outer face, arms carrying posts adapted to reciprocate said bolts, a hinged finger carrying locking plate, having blocks upon its inner face adapted to engage said stop plates, a series of rotary disks slotted to receive the fingers of the locking plates, headed pins adjustably attached to said disks, having slots cut in said heads adapted to register with a given figure of the combination, of a door fitted in said safe, provided with slotted edges, substantially as herein shown and described. 6th. A safe, provided with a lock and its combination within the body, dials upon said body, and knobs revolving upon said dials, provided with a notch in their periphery, adapted to register with a given number upon said dials, and a door fitted within the safe, having a slotted edge adapted to receive the bolts of the aforesaid lock, substantially as shown and described. 7th. In a combination lock, the combination, with a safe and a door fitted thereto, having a slotted edge, of the reciprocating angular bolts 14 and 15, adapted to enter the slots in said door, the key posts 17, having an arm 18 adapted to engage pins 19 upon the said bolts, and means for securing the bolts in an unlocked or locked position, substantially as herein shown and described. 8th. In a combination lock, the combination, with a safe and a door fitted thereto, having a slotted edge, of the reciprocating angular bolts 14 and 15, adapted to enter the slots in said door, the key posts 17 having an integral arm 18 adapted to engage pins 19 upon said bolts, the hinged finger carrying locking plate 27, the revolving disks 33, provided with a transverse peripheral slot 34 and a longitudinal peripheral slot 35, headed pins 36, provided with a notch 46, in the periphery of said heads, adapted to register with a predetermined figure produced upon the safe body, all arranged to operate substantially in the manner and for the purposes herein set forth.

No. 28,440. Steam Boiler. (Chaudière à vapeur)

Miles L. Clinton, Ithaca, N. Y., U. S., 2nd February, 1888; 5 years.

Claim.—1st. The combination, with the horizontal boiler sections provided with ascending flues N, descending flues O and ascending flues P, of a base ring B provided with compartments b₁ connecting the lower ends of the flues O and P, substantially as set forth. 2nd. The combination, with the horizontal boiler sections G, H, I, II and dome L, of the central water column E communicating with the water and steam spaces of the boiler, substantially as set forth. 3rd. The combination, with the horizontal boiler sections G, H, I, II and the dome, of the central water column E, communicating at its upper end with the dome, and water pipes p connecting the lower portion of the water column E with the boiler section G, substantially as set forth. 4th. The combination, with the horizontal boiler sections, provided with flues N, O, P, of the base ring B, provided with compartments b₁, having openings b₂ and manholes g₁, h₁, substantially as set forth. 5th. The combination, with the boiler sections and the central water column E, of the metallic protector F surrounding the water column within the fire chamber, substantially as set forth. 6th. The combination, with the boiler sections, having ascending flues N, of the pendant metallic plates r, arranged in the mouths of said flues, substantially as set forth. 7th. The combination, with the boiler sections and the central water column E, of the

circular grate frame G surrounding said column, and the grate sections d resting on said frame, substantially as set forth. 8th. The combination, with the boiler sections, of the smoke-box J resting on the ann. a fuel magazine Q provided with an opening q₁, a cover q₂, and a valve q₃ connected with the cover q₂, substantially as set forth. 9th. The combination, with the grate provided with a rack bar u₂, of the shaking lever u provided with a gear segment u₁ meshing with said rack bar, substantially as set forth.

No. 28,441. Door Bell. (Timbre de porte.)

Charles L. Livingstone, Battle Creek, Mich., U. S., 2nd February, 1888; 5 years.

Claim.—1st. In a door bell or gong, the combination, with the central post E and with its toothed wheel affixed to and turning therewith, of a pivoted pallet J carrying the armings J₁, one arm being connected with a reacting spring, and the other carrying the clapper, substantially as shown and described. 2nd. In combination with the base plate and a striking mechanism, with a handle for operating the same, the central post carrying the toothed wheel F, such post terminating at its outer end about flush with the outer face of such plate, and provided with a square socket, as set forth, for receiving the square end of the spindle, and having its other end interiorly threaded, as described, for securing the bell thereto, all substantially as shown and described. 3rd. In combination with a striking mechanism, the base plate, the control post and its coated wheel, such post terminating with the outer face of this plate, and a spindle on the knob or handle adapted to extend through the door frame and into a socket in said post, and having secured to it, before it is so applied, the outer shield or plate q, as and for the purposes set forth. 4th. In combination, a bell and clapper, the central post E carrying the bell and toothed wheel, the opposite uprights I and L, and the plate M serving to connect together this post and the uprights, the pallet engaging said toothed wheel, and the reacting spring for such pallet, all substantially as and for the purposes set forth.

No. 28,442. Journal Bearing.*(Cousinet de tourillon.)*

Mahlon Randolph, New York, N. Y., U. S., 2nd February, 1888; 5 years.

Claim.—1st. In an anti-friction journal bearing, a metallic shell or housing provided with re-entering lugs or retaining ribs of the same length as the rotating shell, and adapted to receive the end thrust of the axle, substantially as described. 2nd. An anti-friction journal bearing formed of a bushing or wearing part made of a self-lubricating compound of plumbago, a strengthening fibre and a strongly cementing size pressed into a suitable metallic shell for holding the bushing in place and form, and held in the shell by suitable retaining lugs of a length equal to the length of the bearing, so that their ends shall act as longitudinal stops, substantially as described. 3rd. The combination of an anti-friction bushing for journal and similar bearings of machinery, and a metallic shell provided with retaining lugs made to overlap circumferentially the end faces, or collars of the journal, and of the same length as the shell, so as to form longitudinal stops against the displacement or injury of the bushing, substantially as described.

No. 28,443. Journal Bearing.*(Cousinet de tourillon.)*

Mahlon Randolph, New York, N. Y., U. S., 2nd February, 1888; 5 years.

Claim.—1st. A journal or other machine bearing formed of vulcanized fibre, and an anti-friction compound composed of plumbago and an adhering cement combined together, so as to form the bearing surface partly of vulcanized fibre and partly of the lubricating plumbago compound, substantially as described. 2nd. In an anti-friction journal or machine bearing having a lubricating surface of a compound of plumbago and an adhesive mixture, bearing strips of vulcanized fibre imbedded in the anti-friction material, substantially as described.

No. 28,444. Photograph Burnisher.*(Calandre de photographie.)*

Warron H. Boles, Syracuse, N. Y., U. S., 2nd February, 1888; 5 years.

Claim.—1st. In a photograph burnisher, a tubular burnishing or polishing tool open from end to end and having an opening to receive the chimney of the heating lamp, and a hinged fender or hood, to permit ingress and egress of the lamp, combined with such lamp, substantially as described. 2nd. In a photograph burnisher, a tubular burnishing or polishing tool open from end to end and having an opening to receive the chimney of the heating lamp, and a hinged fender or hood to permit ingress and egress of the lamp, and a stationary fender co-operating with the hinged fender, to inclose the upper end or outlet of the lamp chimney, combined with such lamp, substantially as described. 3rd. In a photograph burnisher, a burnishing tool provided with fulcrum arms and adjustable pivot or fulcrum screws on which said arms rest, and an intermediate temper-screw, substantially as described. 4th. In a photograph burnisher, the burnishing or polishing tool and a heater therefor, combined with a temperature indicating device, such as a thermometer, substantially as described. 5th. In a photograph burnisher, the tubular feed-roll d, open from end to end to ventilate the same, combined with a burnishing tool, and means to heat the latter, substantially as described. 6th. The feed-roll of a burnishing machine, the acting or feeding surface of which is knurled as distinguished from draw-filed, substantially as described.

No. 28,445. Hinge. (Charnière.)

Joseph Strachan, Brooklyn, N. Y., U. S., 2nd February, 1888; 5 years.

Claim.—1st. A hinge, substantially as shown and described, consisting of a circular slide adapted to be attached to the lid or object