in the open front of the upper chamber, and a removable fastening covering the open front, as and for the purpose shown and set forth. 2nd. A draw-head having a recess in the bottom of the link chamber, a transverse rib in the rear end of the chamber forming two recesses, and an inclined upper side, as and for the purpose shown and set forth. 3rd. The combination of a draw-head having a bevelled shoulder at the lower forward end of its link chamber, with a pin having the forward edge of its lower end bevelled and pivoted at the upper forward end of the draw-head, as and for the purpose shown and set forth. 4th. The combination of a draw-head forming a link chamber having a slot at its top, an upper chamber having a longitudinal slot at its top forming a circular aperture, and a bearing at the open end of the upper chamber, a T-shaped pin having arms at the ends of its T head, and a fastening pivoted over the open end of the upper chamber having a rearwardly extending plate forming a circular plate, as and for the purpose shown and set forth.

No. 18,434. Clothes Washer.

(*Laveuse à linge.*)

John B. Bell, Pittsburg, Penn., U.S., 15th January, 1884; 5 years.

Claim.—1st. The beater frame consisting of side pieces connected at their upper ends by a cross-bar, and having, at their lower ends, a series of parallel rings and weighted rings having solid ends or heads provided with flanges and bolts adapted to be nutted to the beater frame, substantially as set forth. 2nd. The improved clothes-washer shown and described, consisting of a suds-box having inclined sides, a concave bottom strips, and rungs forming open spaces at opposite sides of the machine, in combination with a beater-frame consisting of sides having trunnions, a handle-bar, parallel rungs and fixed weighted bottom rungs, substantially as set forth. 3rd. The beater-frame, comprising side pieces connected at their upper ends by a cross-bar and extending above said bar, adjustable weights on said extensions, and rings connected to the side pieces at the bottom of the frame, substantially as set forth.

No. 18,435. Apparatus for Treating Incandescents.

(*Appareil de traitement des incandescents.*)

Charles G. Perkins, New York, N. Y., U. S., 15th January, 1884; 5 years.

Claim.—1st. In combination, with an apparatus for treating carbon filaments, an oil reservoir having a delivery tube with stop cock and internal concentric delivery jet D, said delivery tube being adapted to enter a heated chamber or carbonizing box and having a stop cock thereon, one of said tubes enters a chamber wherein the oil drops when producing hydro-carbon vapours, the aforesaid outer tube having a projecting tube connected therewith leading into a condenser provided with a stop cock on the base thereof, and having an extending tube on its top and extending horizontally therefrom, and provided with one or more condensers, said extension connected with a pipe leading into a chamber, wherein carbon filaments are placed for final treatment. 2nd. The combination, substantially as shown and described, the oil reservoir A, stop cock C, tapering tube D, tubes B and E, chamber E1, tubular projection F, condenser G, stop cock G1, tubular extension H, condensers I, I, I, stop cocks 1, 2, 3, tubes L and L1, chamber M, or their equivalents, for the purpose set forth.

No. 18,436. Waterproofing Fabrics.

(*Imperméabilisation des tissus.*)

William H. Horner and Francis Hyde, Baltimore, Md., U. S., 15th January, 1884; 5 years.

Claim.—1st. The improved method of treating textile fabrics to render them acid-proof, which consists in saturating and impregnating the fabric with a composition consisting principally of rosin and paraffine, or other mineral oils, which are reduced to a proper consistency, with a volatile liquid, and in removing the surplus quantity of the composition from the fabric, for the purpose set forth. 2nd. A composition for treating textile fabrics having as a base paraffine oils and rosins, assimilated or mixed with each other, substantially as described. 3rd. An improved textile fabric coated or impregnated with a composition consisting of paraffine, or equivalent mineral oils, and rosin, substantially as described.

No. 18,437. Commode Attachment.

(*Lavabo-siège d'aisance.*)

Charles B. Basford, Malden, Mass., U.S., 15th January, 1883; 5 years.

Claim.—1st. A commode attachment consisting of a holder for a chamber vessel having an apertured seat at the top, legs or supports at the bottom, brackets for attachment to interior of the wash stand, two links pivotally connected at each side to the holder and brackets, as set forth, whereby the holder may be placed within the wash stand or withdrawn for use, and the legs afford a support for it in either position, as and for the purposes stated. The combination, with a wash stand or similar article of furniture having a receptacle as *r*, of a commode attachment consisting of a holder *f*, a chamber vessel having an apertured seat at the top, legs or supports at the bottom, brackets for attachment to the interior of the receptacle, and two links pivotally connected at each side to the holder and brackets, as described, whereby the holder may be placed within the receptacle or withdrawn for use, and the legs afford a support for it in either position, substantially as described. 3rd. The combination, with the vessel holder having the apertured seat, of the links pivotally connected to the holder, and brackets for attachment to a cabinet or other article pivoted to the links, said links being adjustable as to their length, as described, and provided with means for keeping their parts at any length which they may be caused to assume.

No. 18,438. Hand Washing Rubber.

(*Machine pour laver à la main.*)

Rabin L. Hitchcock, Cornwall, Ont., 15th January, 1884; 5 years.

Claim.—A hand washing rubber composed of parallel sides A, A1, hand-bar B, stay-bars C, C1, and two or more fluted rollers D, D1 journalled to run below the lower edge of the sides A, A1, as set forth.

No. 18,439. Farm Gate.

(*Barrière.*)

Rubin L. Hitchcock, Cornwall, Ont., 15th January, 1884; 5 years.

Claim.—1st. In combination with the pivoted bars B and styles A A1, the diagonal and parallel braces C, pivoted to the lower bar of the gate and engaging with a notch or notches in an upper bar, as set forth for the purpose described. 2nd. The combination, with the bar B, having slot K, of the latch-bar G, and diagonal bars H pivoted to the top bar of the gate, whereby the gate is fastened, as set forth. 3rd. The hinge portion L having a diagonal yoke M, connecting the inner ends, as set forth.

No. 18,440. Shell Dovetail for Use to Produce Soft Metal Lining for Dovetail Sockets in Stove Plates.

(*Queue d'aron le creuse employee pour produire une doublure en métal doux pour les mortaises en queue d'aronde des plaques de poêles.*)

Norman Burdick and James A. Sandford, Albany N. Y. U. S., 15th January, 1884; 5 years.

Claim—1st. A sheet metal shell A formed with portions a, a^1 and a^2, and having perforations a^3, whereby the shell is adapted to form a part of the pattern for forming the cleat prints of dovetail sockets in the mold, when the pattern is being molded, and the lining of the overhanging inclined sides of the cleats of the cast dovetail sockets, when produced, substantially as described. 2nd. The combination, in molding for producing molds for dovetail sockets, of fixed cleats C^1, made with pattern C and provided with projections on guiding pins c^2, with the separate or disconnected sheet metal shells A provided with perforations a^3, substantially as and for the purpose set forth.

No. 18,441. Manufacture of Lactic Acid and Lactates.

(*Fabrication de l'acide lactique et des lactates.*)

Thomas S. Nowell, Boston, Mass., (assignee of Charles O. Thompson Terre Haute, Ind.,) U.S., 15th January, 1884; 5 years.

Claim.—1st. The improvement in the method of forming neutral calcium lactate crystals described, consisting in first digesting cornmeal or other amylaceous matter in warm water, then converting a portion of the same into glucose and adding to this glucose, liquor still mixed with the nitrogenous matters and other residues of the meal, etc., pure white glucose dissolved in water without increasing the nitrogenous matter fermenting the same, with lactic ferment and neutralizing the lactic acid as it forms with carbonate of lime, substantially as set forth. 2nd. The method of obtaining acid crystals from neutral calcium lactate crystals, consisting in digesting the latter with hot water, mechanically filtering this solution, adding sulphuric acid thereto, again filtering and concentrating the last solution, and next setting the concentrated solution in a cold chamber to crystallize, substantially as set forth.

No. 18,442. Railroad Torpedo.

(*Torpille de railroute.*)

Walter S. Phelps, Wortendyke, N. J., U. S., 15th January, 1884; 5 years.

Claim.—In a railway-signal torpedo, the combination, with the plate A provided with the slot C and the ridge D on its upper surface, of the caps or cartridges B, B secured on its said plate, substantially as herein shown and described and for the purpose set forth.

No. 18,443. Fog Signal for Railways.

(*Signal de brume des chemins de fer.*)

Walter S. Phelps, Wortendyke, N. J., U. S., 15th January, 1884; 5 years.

Claim.—1st. In a safety fog signal for railways, a box for containing torpedoes provided with a spout, having a slotted bottom, in combination with a sliding-bar provided with a downwardly projecting prong, substantially as herein shown and described. 2nd. In a safety fog signal for railways, a box for containing torpedoes provided with a spout, having a slotted bottom and a gate for closing said spout, in combination with a sliding-bar provided with a downwardly projecting prong, and means for automatically locking the gate, substantially as herein shown and described. 3rd. In a safety fog signal for railways, the combination, with a box for containing torpedoes, of a bar for carrying the torpedoes out of the box and holding them on the rail, a spring in front of the end of the said bar, and of devices for automatically raising the said spring before the bar is projected out of the box, substantially as herein shown and described and for the purpose set forth. 4th. In a safety fog signal for railways, the combination, with the box A, of the sliding bar E for carrying the torpedoes out of the box and holding them on the rail, the gate Q, the bail R pivoted to the same, and the hook *e* on the end of the bar E, substantially as herein shown and described and for the purpose set forth. 5th. In a safety fog signal for railways, the combination, with the box A, of the guide casing J for receiving the torpedoes, the spring M and the sliding-bar E, for grasping the torpedoes, carrying them out of the box and holding them on the rail, substantially as herein shown and described, and for the purpose set forth. 6th. In a safety fog signal for railways, the combination, with the box A, of the bar E for carrying the torpedoes out of the box and holding them on the rail, of the spring O and the sliding-bar P, for raising the spring *o* before the bar E is moved out of the box, substantially as herein shown and described and for the purpose set forth. 7th. In a safety fog signal for railways, the combination, with the box A, of the bar E for carrying the torpedoes out of the box and holding them on the rail, of the sliding plate C, the shaft D, provided with the nib D1 and