

the said levers by means of the keys, as explained. 2nd. The combination of the mutes, their operative levers and the series of oblique fingers and their depressing wires, all being arranged and adapted substantially to operate as set forth.

No. 18,783. Means of Preventing the Withdrawal of Draw-Bars for Coupling Cars. (*Moyens d'Empêcher la Retraite des Barres d'Attelage en Accouplant les Chars.*)

George J. Johnson and Eugene H. Thomas, LaCrosse, Wis., U. S., 5th March, 1884; 5 years.

Claim.—In a draw-bar for connecting cars together, the sills A, A having the lugs C, C, the pieces I, I connected by straps or plates II, II forming rectangular slots, in combination with the sliding cross-pieces H, H and spring F, the cap-piece E connected to the top and bottom of the draw-bar, the rod or bolt G and the lugs D, D, all substantially as described and for the purpose set forth.

No. 18,784. Composition of Matter for the Manufacture of Soft Soap. (*Composition de Matières pour la Fabrication du Savon Mou.*)

Alexander Lafontaine, St. Albans, Vt., U. S., 6th March, 1884; 5 years.

Claim.—The compound composed of common soap, salsoda, starch-salammonia, glycerine and cantharides, in the proportions and in the manner set forth, to produce a cheap washing and erasive soap.

No. 18,785. Detachable Steps for Waggon. (*Marchepied Mobile pour Wagons*)

James Hallett, Hannibal, Mo., U. S., 6th March, 1884; 5 years.

Claim.—The herein described detachable and adjustable wagon-step, consisting of shank and step formed in one piece, the shank having shoulders H, and the supporting or attaching plate having substantially recesses D and F, all combined, arranged and operating substantially as shown and for the purposes set forth.

No. 18,786. Combined Easy Chair and Sofa Bed. (*Bergère et Lit-Canapé Combinés.*)

Wesley P. Bean, San Francisco, Cal., U. S., 6th March, 1884; 5 years.

Claim.—1st. In combined easy-chair and sofa bed, the lever pivot composed of the pivot plate N, the lever-arm O, the journal O, the wrist P, with head P, to operate in the socket R of the plate Q, in combination with the back F and projection or hook piece F, and seat H, pivoted to the bolt T, and having the foot piece L, with the upholstered part G, for the purpose of securing the back and seat firmly in position, constructed substantially as and for the purposes set forth. 2nd. In combined easy-chair and sofa bed, the lever pivot composed of the pivot plate N, the lever arm O, the journal O, the wrist P, the head P pivoted on the bolt T, in combination with the back F, having the spring S, and step molding X, and the seat H, having the spring S, and rest molding Y, and the pivot bolt T, for the purpose of forming an elastic spring bed, constructed and operated substantially as and for the purposes set forth. 3rd. In combined easy-chair and sofa-bed, the pivot bolt T, with right and left binding threads and lock notch V, and lock screw V, for the purpose of substantially as and for the purposes set forth. 4th. In combined easy-chair and sofa-bed, the lock plate L, the guide-groove K, the head-piece K, combined and operated for the purpose of adjusting the purpose set forth. 5th. In combined easy-chair and sofa-bed, the arm I, with leaf J, and depressions N, C, D, and E, for the purpose of forming an invalid or night table, constructed and operated as and for the purposes set forth. 6th. In combined easy-chair and sofa-bed, the cam leaf support C, with knob K, in combination with the kerf C, for the purpose of locking and supporting the leaf J, constructed and operated substantially as and for the purposes set forth. 7th. In combined easy-chair and sofa-bed, the back F, with spring S, and lever pivot composed of the parts O, O, P, P, the seat H, with pivot bolt T, arranged to swing the front of the seat H above and back of the front rail D, and having the foot piece L with upholstered part G, or sofa or ornamental foot-board and a subsidiary part of the chair or sofa back, the projection or hook F, the head piece K, with the screws K, and lock plate L, and groove K, and adjusting or lock screws M, the whole being combined and operated substantially as and for the purposes set forth.

No. 18,787. Machine for Planting Corn and Beans. (*Machine pour Semer le Blé d'Inde et les Fèves.*)

Luther M. Bissell, Addison, Ont., 6th March, 1884; 5 years.

Claim.—The vibrating slides A and F, in connection with the spring C, and the mode of operation of the cord or string d, attached to slide A, running through eye E on box B, which has blocks i, i, one on each side of passage J.

No. 18,788. Washboard. (*Planche à Savonner.*)

Charles Boeckh, Toronto, Ont., 6th March, 1884; 5 years.

Claim.—1st. A wash-board having its rubbing surface pivoted within a frame, so that the rubbing surface can be reversed without moving the wash-board. 2nd. A wash-board having on one side a corrugated zinc rubbing surface, and on the other side a rubbing surface composed of bristle or any other flexible material, the back of the wash-board, substantially as and for the purpose specified. 3rd. The wash-board frame A, braced together by the rails B and C, and

having pivoted within it a back F holding the rubbing surfaces D and E, in combination with the catch O arranged to hold the pivoted back in position, substantially as and for the purpose specified.

No. 18,789. Street Lamp. (*Réverbère.*)

Leonard Henkle, Rochester, N. Y., U. S., 6th March, 1884; 5 years.

Claim.—1st. A lamp having side pipes C, C, through which air flows to supply the flame, said pipes opening at their respective upper or outer ends into a space covered or inclosed by a screen or perforated sheet I, substantially as shown and described. 2nd. A street lamp having side pipes C, C, through which air flows to supply the flame, said pipes opening at their respective upper or outer ends into a space inclosed between the chimney of the lamp, and an outer perforated sheet or screen I, substantially as and for the purpose set forth. 3rd. A street lamp having side pipes C, C, each having two openings *at*, *at* at their respective upper or outer ends, one of said openings opening into a space covered or inclosed by a screen or perforated plate I, and the outer opening into the outer air, substantially as shown and described. 4th. The combination, in a street lamp, with the side pipes C, C, of the screen I, horizontal plate *p* and vertical plates *r* crossing the openings or communications between the interior of said side pipes and screen, substantially as described and shown. 5th. The combination of the screen I and chimney *d* of a lamp, enclosing an air-space V₁ and an oil chamber D, with air supply pipes C, C, leading from said space V₁ through the oil chamber, substantially as and for the purpose set forth. 6th. In a lamp, the air chamber F around the burner, having an outer perforated wall *d* and an inner perforated wall *h*, with a space *u* between the wall *h* and the outer tube of the burner, through which to allow the air to flow to the flame, substantially as shown. 7th. A lamp having an air chamber B beneath the oil chamber, and an air chamber F above the oil chamber, with tubes or passages *g*, for the air communicating between said air chambers passing through the oil chamber, substantially as specified. 8th. The combination of the side pipes C, C, of a lamp, with the air chamber B and F and oil chamber D provided with tube *g* for the air, connecting said air chambers, substantially as set forth. 9th. In a street lamp, the combination of the rests *v* and *r*, with the transmitter for the light consisting of a sheet *f* of mica, strengthened or supported at its ends with metallic bands *c*, substantially as described. 10th. The combination, in a lamp, of the chimney *d* and screen or plate I inclosing the same, with an annular head *f* to cover the annular space between said chimney and screen, annular plate *g* and canopy *h*, said head *f*, and plate *g* and canopy *h* arranged one above the other and above the top of the chimney, substantially as shown and described. 11th. A burner G for a lamp, provided with a perforated tube *p* extending into the oil chamber, and a wick *b* lying against said tube, in combination with a tube or wall *b* separated from the perforated tube *p* so as to allow oil to be carried up the space between them by the force of the capillary attraction, substantially as set forth.

No. 18,790. Car-Coupler. (*Accouplage de Wagons.*)

Albert A. Dailey, Wilson, N. Y., U. S., 6th March, 1884; 5 years.

Claim.—1st. The draw-head having elongated recess, and provided with automatic tumbler and coupling-pin having projection for engagement therewith, substantially as and for the purpose set forth. 2nd. The transverse horizontal lifter and the vertical lifter, connecting with each other and the coupling-pin, substantially as and for the purpose set forth. 3rd. The rock-shaft having looking cam or trigger, substantially as and for the purpose set forth.

No. 18,791. Car-Coupling. (*Accouplage de Wagons.*)

Thomas C. Jones, Woodland, Cal., U. S., 6th March, 1884; 5 years.

Claim.—1st. A car-coupling constructed, substantially as herein shown and described, and consisting of the draw-head A, the U-shaped draw-bar D, the spring-pressed coupling-hook J, the bow and yoke N O and a mechanism for raising the coupling-hook, as set forth. 2nd. In a car-coupling, the combination, with the draw-head A, the U-shaped draw-bar D, the spring coupling-hook J, the bow N and the yoke O, of the lifting bar Q and the bar Y, substantially as shown and described. 3rd. In a car-coupling, the combination, with the draw-head A and the U-shaped draw-bar D, of the coupling-hook J provided with a recess at its rear end, spring M, bow N, yoke O, draw-rod E, cross-bars F, slides G, and springs H, substantially as shown and described. 4th. In a car-coupling, the combination, with the draw-head A, the U-shaped draw-bar D, the coupling-hook J, the bow N and yoke O, of the lifting-bar Q, the lever T, the catch-bar X, keeper W, glotted bar Y and foot-lever *b*, substantially as shown and described.

No. 18,792. Electric Railway Signal.

(*Signal Electrique de Chemin de Fer.*)

John P. Rogers, Elmsdale, N. S., and James C. Upham, North Sydney, C. B., 6th March, 1884; 5 years.

Claim.—1st. The paddle-wheel contacts *f*, having sharp edges, in combination with the supporting frames S hinged at *f*, and insulated from the upper frames R, as shown and described. 2nd. The combination, on locomotives, with the instruments W, W, and circuit closers *f*, of the lever L connected to the axle segments *n*, *p* and connections *n*, *p*, substantially as described, for bringing these instruments in direct connection with the axle, as set forth.

No. 18,793. Lubricator for Steam Cylinders and their Valves. (*Graisseur pour Cylindres de Vapeur et leurs Soupapes.*)

Allen W. Swift, Elmira, N. Y., U. S., 6th March, 1883; 5 years.

Claim.—1st. The combination, with a steam cylinder and its valve, of a steam-duct communicating therewith, and a partly choked throat, and a lubricant cup having its delivery connected with said duct at a point between the choked throat and steam receiving end