projecting laterally therefrom and having grooves or ways, a plate moving in the grooves thereof, a rigid link projecting from the plate, and means for holding the latter at either end of the frame-work, substantially as and for the purpose hereinbefore set forth. 2nd. The herein-described draw-head for car-couplings, the same consisting of a draw-head having an open mouth, a pin-support within said draw-head, a grooved frame-work projecting laterally from the mouth of the draw-head, a plate half the length of said frame-work, and moving in the grooves thereof, a link projecting from the centre of said plate, and means for holding the plate removable at either end of the frame-work, substantially as and for the purpose hereinbefore set forth. 3rd. The herein-described draw-head for car-couplings, the same consisting of a draw-head having an open mouth, a frame work projecting laterally therefrom and having grooves or ways, a plate moving in the grooves thereof, a rigid link projecting from the plate, and a vertical pin removably inserted through the centre of the frame-work for holding the plate at either end thereof, substantially as and for the purpose hereinbefore set forth.

No. 38,392. Foot Warmer. (Chauferette.)

Albert Augustus Hesser, Scuylkill, Pennsylvania, U. S. A., 3rd March, 1892; 5 years.

Claim.—A water-bag of triangular or wedge shape formed with filling-opening E, and side folds deepest where united to end piece B, and vanishing near meeting edge of the two sides, and also with a fold in the flat end D, thus permitting the bag when filled to stand upon said end D, and to lie flat when empty, all as and for the purpose described.

No. 38,393. Cloth Finishing Machine. (Machine pour finir le drap.)

William Hebdon, Boston, Massachusetts, U. S. A., 3rd March, 1892; 5 years.

Claim.—In a cloth finishing apparatus, a horizontal rotary perforated cylinder fitted to receive steam, and provided with journals c, c^i , bearings for said journals arranged at different heights to give the cylinder an inclined axis, whereby the lower internal surface of the cylinder is given a continuous incline from one end to the other, said cylinder being also provided with inwardly projecting tubes having bent or hooded inner ends and with an outlet for the escape of water, combined with a perforated cone or cone frustum having guard tubes g^i , and outlet orifices i, located at the lower end of the cylinder, and a steam supply pipe entering said cone frustum as set forth.

No. 38,394. Cooler and Acrator for Milk.

(Garde-lait.)

Henry Fowelf, Belleville, Ontario, Canada, 3rd March, 1892; 5 years.

Claim.—In a milk cooler and aerator, the combination of the funnel shaped hopper a, the strainer C, having an inwardly turned wall provided with perforations a, said strainer supporting said hopper, the conical cooler B, provided with perforations W, and D, and having an exterior rim E, around the base, and legs L, said cooler at the apex supporting the strainer, as and for the purpose set forth.

No. 38,395. Method of Producing Lithographic Stippling. (Méthode de production du pointillage lithographique.)

Charles Hamilton Gordon, East Orange, New Jersey, U.S.A., 3rd March, 1892; 5 years.

Claim.—1st. The herein described method of producing lithographic stippling, consisting in first forming by transfer an even stipple on the stone or plate by an acid resisting ink, and then etching the unprotected part of the stone or plate, after which the ink stipple is removed from the stone, substantially as set forth. 2nd. The herein described method of producing lithographic stippling, consisting in first forming by transfer an even stipple on the stone or plate by an acid resisting ink, then etching the unprotected part of the stone or plate, after which the ink stipple is removed from the stone, and then graining the stone with fine sand, substantially as set forth. 3rd. The herein described method of producing lithographic stippling, consisting in first forming by transfer an even stipple on the stone or plate by an acid resisting ink, then etching the unprotected part of the stone or plate, after which the ink stipple is removed from the stone, then graining the stone with fine sand, and then forming the picture on the points of the stipple with the ordinary lithographic crayon, the solids being made with ink, substantially as set forth.

No. 38,396. Brake and Cleaner for Hemp.

(Machine à broyer et nettoyer le chanvre.)

John Daniel Shely and John Henry Shely, both of Lexington, Kentucky, U. S. A., 3rd March, 1892; 15 years.

Claim.—1st. In a hemp brake, the combination, with a reciprocatory breaker frame, of front stationary guides and rear stationary guides located on different horizontal planes adjacent to the opposite sides of said breaker frame, to afford a clearance for the stalks, substantially as described. 2nd. In a hemp brake, the combination,

with a reciprocatory breaker frame, of guides adjacent to the front and rear sides of said breaker frame, for holding the stalks to the stroke of said frame, the rear upper guide being located below the horizontal plane of the front upper guide to afford a clearance for the stalks, substantially as described. 3rd. In a hemp brake, the combination, with a reciprocatory breaker frame, of guides adjacent to the front and rear sides of said breaker-frame, for holding the stalks to the stroke of said frame, the lower rear guide being located below the horizontal plane of the lower front guide, substantially as described. 4th. In a hemp cleaning machine, a frame provided with longitudinal slats, in combination with driving mechanism for effecting a vibratory movement of said frame in an elliptical path in a plane paralell with the slats, substantially as described. 5th. The combination of a reciprocatory breaker frame having a passage for stalks, stationary guides in front and rear of the breaker frame for holding the stalks to the action of said frame, and a cleaner having a vibratory frame provided with slats arranged longitudinally in the direction of the path of the fibre or stalks for removing hurds from lint, substantially as described. 6th. In a hemp brake, the combination of feed rollers, a breaker device, and a cleaner having a vibratory frame for removing hurds from the lint and dividing the gavel longitudinally as it passes lengthwise of said cleaner, substantially as described. 7th In a hemp brake, the combination, with a cleaner, of a reciprocating breaker, and stationary guides in front and rear of said breaker, for holding the stalks to the action of the breaker, said front and rear guides being located in different horizontal planes, substantially as and for the purpose described. 8th. In a hemp cleaning machine, the combination, with a cleaning mechanism, of a shield located above said cleaning mechanism to receive the hurds which are thrown out from the upper side of the lint, substantially as described. 9th. A combined hemp brake and cleaner consisting of hemp breaking and cleaning devices, and a series of dividers located between the hemp breaking and cleaning devices, substantially as described. 10th. A combined hemp brake and cleaner, consisting of hemp breaking device, a cleaner having a vibratory frame for removing hurds from the lint and dividing the gavel longitudinally as it passes lengthwise of said cleaner, and means for vibrating said frame in a plane intersecting and in line with the movement of the fibre, substantially as described. 11th. In a hemp brake, the combination, with the obliquely reciprocating breaker frame supported in an oblique rearwardly inclined plane, of guides at the front and rear of said breaker frame for holding the stalks to the stroke of said frame, the lower rear guide being located below the plane of the front guides and below the limit of stroke given to the breaker frame to afford a clearance for the broken stalks, substantially as described. 12th. In a hemp brake, the combination, with the obliquely reciprocating rearwardly inclined breaker frame, the cleaners and the feed rollers, of the front stationary guides between said rollers and breaker frame, and the rear stationary guides between the breaker frame and cleaners, and located below the plane of the corresponding front guides, to afford a clearance for the broken stalks, substantially as described. 13th. In a hemp brake, the combination of the feed rollers, the breaker frame, the stationary and vibratory cleaner frames, the front stationary guides between the feed rollers and breaker frame, and the rear stationary guides between the breaker frame and cleaner frames, and located below the plane of the corresponding front guides, substantially as described. 14th. In a hemp cleaning machine, the combination, with the feed rollers and breaking device, the series of stationary dividers 19, placed between the breaking and cleaning device for dividing the hemp longitudinally in its passage to the cleaners, substantially as herein specified. 15th. In a hemp cleaning machine, cleaner frames separated from each other throughout their entire length, to afford a space for the gavel to be fed in at one end and discharged at the other, each of said frames comprising parallel longitudinal slats for removing the hurds from the lint and dividing the gavel longitudinally as it passes lengthwise between the frames and parallel with the cleaner slats, substantially as described. 16th. In a hemp cleaning machine, the stationary frame 21, provided with longitudinal slats 22, in combination with the vibratory frame 24, provided with longitudinal slats 25, with driving mechanism for moving the vibratory frame in the path, a,d, substantially as here in specified. 17th. A combined hemp brake and cleaner, consisting substantially of the feed rolls, the reciprocating breaker frame 4, stationary guides on each side of the breaker frame, and the stationary and vibratory cleaner frames provided with longitudinal cleaning slats, substantially as described. 18th. A combined hemp brake and cleaner, consisting of the hemp breaking device, the cleaner frames, a series of dividers located between the hemp breaking and cleaning devices, and means for actuating one of the cleaner frames, substantially as described. 19th. In combination with the cleaner frame 21, the conveyor M, and the shield O, substantially as specified. 20th. The combination, with an upper cleaner frame and a lower cleaner frame, each provided with longitudinal slats for removing hurds from lint, of a breaker frame having a slot for the passage of stalks, and stationary guides in front and rear of the breaker frame for holding the stalks to the action of said frame, the rear guides being located below the plane of the front guides to afford a clearance to the cleaner frames, substantially as described. 21st. The combination of the longitudinally slatted cleaner frames, the rearwardly inclined breaker frame, the feed rolls, the front stationary guides, the rear stationary guides located below the plane