

No. 31,069. Milk Purifier. (*Garde-lait.*)

Richard H. Casswell, Ingersoll, Ont., 9th April, 1889; 5 years.

Claim.—1st. A milk purifier, comprising a vessel A having an internal strainer B, and provided with a neck C having a disk D suspended therefrom, offset from the outlet, whereby the milk will escape in an annular thin film, as set forth. 2nd. The adjustable deflector H, in combination with the tubular neck C, having a disk D offset from the outlet, and connected to a straining vessel A, for the purpose set forth.

No. 31,070. Plough. (*Charrue.*)

John J. Collins, Ottawa, Ont., 9th April, 1889; 5 years.

Claim.—1st. Revolving wheels B, arms D and spades C, all arranged and combined substantially as and for the purpose hereinbefore set forth. 2nd. In a revolving plough dumpers E, for reversing the spades D, substantially as and for the purpose hereinbefore set forth.

No. 31,071. Portable Steam Boiler.*(Chaudière à vapeur portative.)*

Edward S. Winnett, London, Ont., 9th April, 1889; 5 years.

Claim.—The mud collector C attached under the front part of a portable steam boiler beneath the fire-box, and provided with hand holes covering plates and blow-off pipe, substantially as shown and specified.

No. 31,072. Pipe Wrench. (*Clé à tuyaux.*)

Daniel R. Porter, Chelsea, Mass., U.S., 9th April, 1889; 5 years.

Claim.—1st. In a pipe wrench, the combination of the shank *a* having the jaw *b* projecting from one side, and the ratchet-teeth *c* formed on its back or opposite side, the movable jaw *d* having the arm *e* and yokes *f, g*, the dog *i* pivoted to the yoke *g* at the opposite side of the shank *a* from the jaws *b, d*, and a spring whereby the dog is normally held yielding in engagement with the ratchet teeth of the shank *a*, the arrangement of the pivot connecting the yoke of the movable jaw with the dog *i*, being such that said jaw in swinging inwardly is also moved toward the fixed jaw, as set forth. 2nd. In a pipe wrench, the combination of the shank *a* having the jaw *b* projecting from one side, and the ratchet teeth *c* formed on its back or opposite side, the movable jaw *d*, having the arm *e* provided with a bevelled seat *e'* and yokes *f, g*, the dog *i* pivoted to the yoke *g* at the opposite side of the shank *a* from the jaws *b, d*, and a spring whereby the dog is normally held yielding in engagement with the ratchet teeth of the shank *a*, and the bevelled seat *e'* is held against the front edge of the shank, thereby holding the arm *e* in an inclined position with the jaw *d* thrown outwardly, as set forth.

No. 31,073. Steam Heater.*(Calorifère à vapeur.)*

Henry Sperl, Susquehanna, Penn., U.S., 9th April, 1889; 5 years.

Claim.—1st. In a steam heater, the combination, with the tubular base and crown rings, of pipes connecting and communicating with said rings, a reservoir E mounted above the said base ring, said reservoir being provided with a central opening and a series of flues, a series of pipes E₁ connecting the reservoir and pipes aforesaid, and a furnace, substantially as described. 2nd. In a steam heater, the combination, with the tubular base and crown rings, of pipes connecting said rings and communicating therewith, a reservoir mounted above said base ring, said reservoir being provided with a central opening and a series of flues, a series of pipes E₁, E₂ connecting the reservoir and pipes aforesaid, and a furnace, substantially as described. 3rd. In a steam heater, the combination, with a tubular base and crown rings, of pipes connecting and communicating with said rings, a reservoir, provided with a central opening and a series of flues, a series of pipes E₁, E₂ connecting and communicating with the reservoir and pipes aforesaid, a magazine and a furnace, substantially as described. 4th. In a steam heater, the combination, with the tubular base and crown rings, of pipes connecting and communicating with said rings, a reservoir provided with a central opening and a series of flues, a series of pipes E₁, E₂ connecting and communicating with the reservoir and pipes aforesaid, an inner and outer jacket, a series of dampers, a magazine and a furnace, substantially as described.

No. 31,074. House Door.*(Vantail de porte.)*

John Ettles, Bridgen, Ont., 9th April, 1889; 5 years.

Claim.—The construction and arrangement of the several parts of the frame-work of a door, so as to permit of the free removal and exchange of the panels.

No. 31,075. Harness Pad.*(Coussinet de harnais.)*

John Pendergast, Franklin, Mass., U.S., 9th April, 1889; 5 years.

Claim.—1st. A pad or cushion A for a harness, made of felt, and an open and elastic knitted covering B surrounding and enclosing all sides of the felt, substantially as described for the purpose specified. 2nd. The combination of the abutments E with the pad or cushion A, substantially as and for the purpose set forth.

No. 31,076. Car Coupling.*(Attelage de chars.)*

James M. Mason, Glasgow, N.S., 9th April, 1889; 5 years.

Claim.—1st. A car coupling, comprising a flaring mouth, draw-head A, having a longitudinal slot *b* in the top, and cheeks *a*, behind the front flange, the gravitating latch *c* in said slot and pivoted to said cheeks, and having a downwardly and inwardly inclined edge *c* and the lever D connected to the rear of said latch, as set forth. 2nd. The coupling bar E, having a half arrow-head *f* at both ends, as set forth.

No. 31,077. Composition of Matter to be used in the Cure of Rheumatism. (*Composition de matières pour guérir les rhumatismes.*)

David Scott, Eastford, Me., U.S., 9th April, 1889; 5 years.

Claim.—A compound, composed of the above-named materials, in the proportions and for the purposes set forth.

No. 31,078. Railway Evolving Light and Indicating Hand Target for Railway Switch Signals. (*Feu tournant et cible à main indicatrice pour les signaux des aiguilles de chemin de fer.*)

Michael Hurly, Quebec, Que., 9th April, 1889; 5 years.

Claim.—1st. The combination of stationary lamps *c* and revolving jacket lantern *g*, substantially as and for the purpose hereinbefore set forth. 2nd. In a railway switch, indicator hand *n*, substantially as and for the purposes hereinbefore set forth.

No. 31,079. Organ Pedal. (*Pédale d'orgue.*)

Edward G. Thomas, Woodstock, Ont., 9th April, 1889; 5 years.

Claim.—1st. The combination of the folding platform C, and the hinged pedals E, substantially as and for the purpose hereinbefore set forth. 2nd. The combination, with the folding platform C and hinged pedals E, of inclined planes G, substantially as and for the purpose hereinbefore set forth.

No. 31,080. Car Coupling. (*Attelage de chars.*)

John M. Clark, Hebron, N.Y., U.S., 9th April, 1889; 5 years.

Claim.—1st. In a car coupling, the hollow draw-bar 1, formed with projection 11 extending upward from its outer end, and having hole 12 in line with hole 13 in casing 1, the slide 3, having friction roller 10, and guide rod 4 and spring 8 located in said draw-bar, a bar 17 adapted to move in slot 18 and connected by pivoted link 16_r, with lever 16, having teeth 15_r and pivoted to bracket 15 on draw bar 1, post 18_r, having pawl 17_r, engaging teeth 15_r, and the casing 22 having slots 23, through which projects lever 16 and hinged to draw-bar 1, substantially as described. 2nd. In a car coupling, the combination of hollow drawheads 1, 2 with links 19, having projections 20 and coupling pins 14, the drawheads having upward projection 11 with hole 12 and coupling pin hole 13, and containing slide 3, guide-rod 4, spring 8 and perforated end 6 containing the end of rod 4 and the drawhead 1, having slot 18 near its forward end, bar 17 adapted to slide in said slot, lever 16 pivoted to bracket 15 on draw-bar 1 and connected by link 16_r with bar 17, and hinged casing 22 having slot 23, substantially as described.

No. 31,081. Fire Escape. (*Sauveteur d'incendie.*)

Leonard J. Mesner, Buffalo, N.Y., U.S., 9th April, 1889; 5 years.

Claim.—1st. In a fire escape, consisting in part of a system of pivoted levers or arms in the form of a lazy tongs, the lower pairs of the pivoted arms pivoted to the main shaft in bearings in the supporting frame, their curved or semi-circular sliding bars and curved holding ribs and gear-teeth, in combination with correspondingly grooved semi-circular guide-ways, in which the curved holding ribs move or slide, gear wheels on the shafts 49 and 50 for gearing in with the teeth on the curved sliding bars, and a means, consisting of hand wheels on said shafts for operating them, whereby all the parts are securely held in place while free to be easily moved, substantially as described. 2nd. In a fire escape, consisting in part of a system of pivoted lever arms in the form of a lazy-tongs, the two lower pairs of arms pivoted to the main shaft in bearings in the supporting frame, in combination with their curved or semi-circular sliding bars, curved holding ribs and gear teeth, corresponding semi-circular slide-ways, and holding the said sliding bars and mechanism for gearing in with the teeth on the curved sliding bars, a means, consisting of hand wheels for operating them, and a means, consisting of the ratchet wheels and detent pawls for holding the apparatus at any point it may be elevated, substantially as described. 3rd. In a fire escape, the pairs of pivoted bars composing the extensible frame, in combination with the strengthening and wearing plates 68, 69 and 70, the plate 70 having the projecting portion 71 and the plate 69 having the projecting rim 72, as and for the purposes described.

No. 31,082. Door Bell. (*Timbre de porte.*)

Charles L. Livingston, Battle Creek, Mich., U.S., 9th April, 1889; 5 years.

Claim.—1st. The combination and relative arrangement of parts, as shown and described, of a door bell or gong adapted to be operated by means of a push button, and wire connection serving to wind a spring which imparts motion to a rotating spindle, and an escapement mechanism, actuated by such rotating spindle, whereby a rapid vibration is imparted to the hammer, for the purpose specified. 2nd. In a door bell, the combination of the base A, rotating spindle D, spring S, lever N, rack *c*, spring pawl *p*, gear O, lantern wheel and escapement pallet K, hammer and gong or bell, arranged to operate as and for the purpose specified. 3rd. In a door bell, the gear O, rack *c* and spring pawl *p*, the escapement mechanism, the arm, having on its end the hammer M, the spring S, the spindle D passing through the door B and having on its outer end, the wheel or disk C, by means of said disk the spindle D may be rotated, as and for the purpose specified. 4th. The small coil spring *e* and extended arm *d*, said parts arranged to operate in conjunction with the bell mechanism, as herein described and for the purpose specified.