

No. 9845. Improvements on Pantaloen Suspenders. (*Perfectionnements aux bretelles de pantalons.*)

Henry Turner and William Turner, Montreal, Que., 12th April, 1879, for 5 years.

Claim.—The combination of the shoulder strap A provided with rear and side loop G H connected together with a single ended front loop E.

No. 9846. Improvements on Hollow Augers. (*Perfectionnements aux visdairs.*)

Ryerson Porter, Bothwell, Ont., 16th April, 1879 (Extension of Patent No. 3298), for 5 years.

No. 9847. Improvements on Vises and Anvils. (*Perfectionnements aux étaux-enclumes.*)

William J. Clukey, Newcastle, Ont., 17th April, 1879, for 5 years.

Claim.—The combination of the V-slide E travelling through the anvil A, the screw G working in journals at each end of the V-slide E and the ball nut J on the anvil A.

No. 9848. Improvements on Sink Fittings. (*Perfectionnements aux garnitures des éviers.*)

Lemuel W. Scott, Montreal, Que., 17th April, 1879, for 5 years.

Claim.—In combination with any sink or waste outlet, the apparatus composed of receptacle A with cover, spout and perforated bottom, and stand or vessel D with outlet for liquid.

No. 9849. Improvements on Steam Radiators. (*Perfectionnements aux radiateurs à vapeur.*)

John H. Mills, Boston, Mass., U. S., 17th April, 1879, for 5 years.

Claim.—1st A steam or water heating chamber or section, composed of a thin oblong main body crossed at regular distances by a vertical chamber and encircling ribs and having a central passage, the main body and side chamber being formed of elliptical lines. 2nd. A steam or water heating chamber or section, having but one vertical and central passage which being screw threaded and provided with a tubular nipple, constitutes the means of uniting and combining such sections into radiators, and thus employing but a single joint between each pair of sections; 3rd. In combination with one or more heating chambers, the employment of a hollow foot or pedestal connected to the steam piping from which the radiator is supplied, and to which the water of condensation is returned, a central supply and return passage being effected through the foot and chambers; 4th. In combination with but one general supply pipe to a building and branch piping, conveying the steam downwards, the connection of the radiators to such vertical supply and return lines by a single pipe and valve, through which the steam enters the radiator and the waters of condensation also find exit; 5th. In combination with water heating sections, the employment of a hollow foot or pedestal having two chambers into the centre, one of which a supply pipe is screwed conducting the water to the top of the radiator, the other and surrounding chamber being the one to which the return pipe is connected; 6th. In combination with heating sections arranged as indirect surface and enclosed in boxes, the employment of two drums for combining and working such sections; 7th. In combination with a suitable hot air chamber the radiators G G and drums H I, the drum H having the openings 7 8, and I the drum I the opening 8. 8th. The arrangement of radiators with the inlet and outlet pipes v w and hollow pedestal or support K; 9th. The hollow foot B, as constituting the valve chamber for admission of steam and to permit of escape of condensed water, and as constituting the only steam supply of the radiator. 10th. The construction of each section, as composed of the main chamber A, auxiliary or supplemental chambers m, at right angles to the first fins or ribs n and channels e.

No. 9850. Improvements on Middlings Purifiers. (*Perfectionnements aux épurateurs des gruuux.*)

William J. Fender, Minneapolis, Minn., U. S., 17th April, 1879, for 5 years.

Claim.—1st. In a middlings purifier, the combination of the chambers D; G divided by partition F and conveyor H with the suction fan B; 2nd. The chambers D; G, partition F, having pivoted slats f and air spaces i between them, in combination with the suction fan B, whereby much of the light dust is taken from the middlings. 3rd. The spring hangers K, attached to the shaker frame by the stud j5 or j2, washers 2 3 4 and bolt 1, in combination with the plate L, having studs b c and bolt k1. 4th. The eccentrics j, vibrating eccentric straps j1, having arms or shanks j11, and eyes j4, in combination with the attaching stud j5, projecting guide stud j6 and the shaker frame I. 5th. The combination of cords U, pulleys t b, of unequal diameters and the brush N. 6th. In a middlings purifier, the brush N operating across the under side of the screen, one end moving faster than the other and obliquely to the direction of the flow of middlings on the screen; 7th. The combination of cords U, pulleys t t of equal diameters and the brush N. 8th. The combination of the worm wheel P, toothed wheel Q, connecting rod R, segmental gear S, pinion T, shaft T, pulley - t t and cords U with the brush N; 9th. The series of pivoted valves v, inclined partition w and regulating rod y, in combination with the suction fan M. 10th. In a middlings purifier, the combination of a suction fan M, shaker I, screen b and brush N, screwing the under side of the screen at an obtuse angle with the flow of the middlings on the screen and reversing its movement while off the cloth.

No. 9851. Improvements on Watch Barrels. (*Perfectionnements aux barils des montres.*)

Frederic Pitt, Ottawa, Ont., 17th April, 1879, for 5 years.

Claim.—1st. A closed watch going barrel A provided with dogs a a and central annular recess d, with the flanged great wheel B having bevelled perforations b b b and central raised cylindrical boss e.

of the closed watch going barrel A, having dogs a a and central annular recess d, with the flanged great wheel B having bevelled perforations b b b and central raised cylindrical boss e.

No. 9852. Improvements on Railway Draw-bars. (*Perfectionnements aux ressorts de traction des railvoies.*)

John F. Crackett, Laconia, N. H., U. S., 17th April, 1879, for 5 years.

Claim.—As an improved article of manufacture, a cast-iron draw bar for locomotives and cars, provided with horizontal opening b extending transversely through said draw-bar, into which opening is placed, during the process of casting, a wrought-iron flake.

No. 9853. Improvements on Hitching Bars. (*Perfectionnements aux arènes.*)

Amos Whitney, Hartford, Conn., U. S., 17th April, 1879, for 5 years.

Claim.—1st. A hitching bar composed of the fixed plate A for attachment to a post, house or other object and the hinged part B D E turning vertically through about ninety degrees of arc. 2nd. The combination of the plate A, the socket B, the bar D and the chain E; 3rd. In a hitching bar, the socket and disk B D, whereby a slight lateral movement is allowed to the outer end; 4th. A hitching bar, furnished at one end with a device for attaching it to a post or other object, to which it is jointed so as to control its movement to nearly a vertical arc, and provided at the other end with a means of attachment to the bridle of a horse.

No. 9854. Improvement on Photographic Studios. (*Perfectionnement aux ateliers photographiques.*)

Edwin C. Thompson, Williamsburg, N. Y., U. S., 17th April 1879 for 5 years.

Claim.—1st. In combination with a photographic studio B, having as open end or slide D, a movable background E or K, arranged to be interposed or removed from between the sitter or sitters, and an open air screen chosen for background at the will of the operator. 2nd. In combination with a photographic studio or gallery B provided with a skylight C and having an open end D the curtain F; 3rd. In combination with a photographic studio or gallery B, provided with a skylight C and having open end or rear, the sliding door K having its vertical slot L.

No. 9855. Connector for Battery Carbons. (*Communicateur pour les carbones des batteries.*)

Adrian C. Kreis, New York, U. S., 17th April, 1879, for 5 years.

Claim.—In an improvement in connectors for battery carbons, the non-corroding non-conducting blocks a a, interposed between the battery carbons B and the corroding metal attachments of the battery, in combination with carbon B; copper conducting disk c, screw clamp C and connecting strip d of good conducting non-corroding metal.

No. 9856. Improvements on Photographic Negatives. (*Perfectionnements aux négatifs photographiques.*)

John J. Woll, Columbus, Ohio (Assignee of George W. Singlema), Richmond, Ind., U. S., 17th April, 1879, for 10 years.

Claim.—1st. Coating photographic negatives, with a gelatine or other varnish, insoluble in balsam of fir or equivalent substance, and attaching to the varnished and untouched surface of said negative a plate of clear glass, by heating both negative and clear glass to prevent breakage, and pouring upon one or the other of them, a quantity of balsam of fir, or equivalent substance, and pressing and retaining said plates together, while kept heated, to exclude air bubbles, remove unevenness between them and dry the varnishes. 2nd. A photographic negative, prepared by coating an ordinary negative with a gelatine or other varnish, insoluble in balsam of fir, or equivalent substance, and attaching to the varnished and untouched surface a plate of clear glass, by heating both negative and clear plate to prevent breakage, and pouring, upon one or the other of them, a quantity of balsam of fir, or other equivalent substance, pressing and retaining said plates together, while kept heated, to exclude air bubbles, remove unevenness and dry the varnish.

No. 9857. Improvements on Washboards. (*Perfectionnements aux planches à savonner.*)

Ezra B. Eddy (Assignee of George H. Millen), Hull, Que., 17th April, 1879, for 5 years.

Claim.—A washboard plate having a rubbing surface, broken by alternate depressions A, and raised portions B, forming square sided channels and sharply indented cross-ribs thereon to the lines a b, a hereby parabolic transverse sections d are produced, having rounded edges, both sides of the plate being uniformly alike.

No. 9858. Improvements in Circular Saws. (*Perfectionnements aux scies circulaires.*)

George F. Simonds, Daniel Simonds and Alfred A. Marshall, Fitchburg, Mass., U. S., 17th April, 1879, for 5 years.

Claim.—The improved circular saw made firm with reference to its teeth, but loose with reference to its diameter.

No. 9859. Improvements on Fences. (*Perfectionnements aux clôtures.*)

Peter Fraser, Frederickburgh, Ont., 17th April, 1879, for 5 years.

Claim.—The construction of standards b e having mortises e, braces a having mortises e' and notch d bent g, key board d having pin holes f, rails H H H, locking rail H, and stake I having wire hook K.