

No. 3097. **FREDERIC W. RHINELANDER**, New York, U. S., 11th February, 1874, for 5 years: "Improvements on Boot and Shoe Tips. (Perfectionnements aux garnitures des bouts de chaussures.)"

Claim.—The enamelled metal shoe tip as a new article of manufacture.

No. 3098. **WILLIAM H. LUNT**, Cambridge, Mass., U. S., 11th February, 1874, for 5 years: "Improvements on Filters." (Perfectionnements aux filtres.)

Claim.—The combination of filtering valve D, and the sleeve C, and pitman d, (connected as described) with the case A, and its educt or discharging nose B, all arranged to operate as set forth.

No. 3099. **ELSWOOD SMART**, Brockville, Ont., 11th February, 1874, for 5 years: "Improvements on Oil Gates." (Perfectionnements aux robinets à l'huile.)

Claim.—The stem c, having a cam or inclined rear face a, and projection or swell b, attached to a curved or bent tube A, in combination with the lever D, having a gib or notched projection E, engaging therewith and operating as set forth; 2nd. The lever D, so designed and constructed that the gib E, in casting bore its own core in the sand in moulding; 3rd. The valve plate F, having a loose connection with the lever D, centrally, and adjustable to the washer c, surrounding the outlet, by a screw I; 4th. The combination of the cam faced stem c, lever D, having a gib E, engaging therewith and valve plate F, for bringing a graduated pressure to bear on the washer C, to prevent leakage as set forth.

No. 3100. **EDMUND P. HANNAFORD**, Montreal, Que., 11th February, 1874, for 5 years: "Improvements on a Signal Lamp." (Perfectionnements à une lampe à signal.)

Claim.—1st. The arms B, B, attached to revolving or partially revolving shaft A, carrying or moving the coloured transparent glasses over the openings of the white glasses L, I; 2nd. The cutting or slotting of the apertures D, D, in the bottom of the lamp to allow the arms B, B, to move as may be necessary.

No. 3101. **HIRAM A. HOLMES**, Epsom, N. H., U. S., 11th February, 1874, for 15 years: "Improvement on Clapboard Machines." (Perfectionnement des machines à douves.)

Claim.—The combination of the saw-mill carriage A, and separate stationary cam w, with a machine for supporting and intermittently revolving the log while being sawed into clapboards.

No. 3102. **WILLIAM FULLER**, Montreal, Que., 11th February, 1874, for 5 years: "Plastic Compound." (Composition plastique.)

Claim.—A plastic compound of gluten or other matrix in combination with the dust of stone or wood and with or without glue size as described.

No. 3103. **WILLIAM X. STEVENS**, East Brookfield, Mass., U. S., 11th February, 1874, for 5 years: "Improvements on Shears for Cutting Bars of Iron." (Perfectionnements aux cisailles pour couper les barres de fer.)

Claim.—1st. The movable arm or lever B, provided with a trunnion b, outside of its die D, in combination with the stationary socket c, stationary arm A, with its die C, and the collar E, with its adjusting bolts, F; 2nd. The combination with the arms or lever A, B, having cutting dies or portions C, D, of the shaft I, the crank or eccentric pin H, the pawl G, and the teeth upon the lever B; 3rd. The cast arms or levers A, B, or either of them having its die C or D, fitted to it, by first shaping the perimeter of the die or shearing blade and subsequently casting the metal of the lever upon it.

No. 3104. **CHARLES E. BLAKE**, San Francisco, Cal., U. S., 11th February, 1874, for 5 years: "Filling for Teeth." (Composition dentaire.)

Claim.—A filling for teeth consisting of the usual base covered with a stratum of platinum or other metal approximating to the colour of the enamel of the teeth; 2nd. The chemical admixture of alloy of platinum and gold for the purpose of providing an improved dental gold; 3rd. As a new article of manufacture in platinum foil or leaf coated with gold either upon one or both sides.

No. 3105. **GEORGE J. WILSON**, Ottawa, Ont., 11th February, 1874, for 5 years: "Improvements on Clothes Racks. (Perfectionnements aux séchoirs à linge.)"

Claim.—The combination of adjusting rack A, A, and centres B, B, with extended rails C, C.

No. 3106. **GEORGE YOUNG**, Oshawa, Ont., 11th February, 1874, for 5 years: "Improvements on Sewing Machine Shuttles." (Perfectionnements aux navettes des machines à coudre.)

Claim.—The bar C, pivoted within the shuttle A, and bent to bear on the opposite journal of the bobbin B, with or without the provision of a segment plate C, and the pin or hook D, and arranged to operate for regulating the tension of the thread and keeping the bobbin in place as described, the same being a winding tension.

No. 3107. **FRANCIS CULHAM**, Widder Station, Ont., 11th February, 1874, for 5 years: "Improvements on Nut Fasteners of Railway Rails." (Perfectionnements aux machines à assujettir les noix des rails des voies de fer.)

Claim.—The combination of the fastener C, and the nuts D, D, D, in the manner specified.

No. 3108. **PETER MUNSINGER**, Mitchell, Ont., 11th February 1874, for 5 years: "Improvements on Pumps." (Perfectionnements dans les pompes.)

Claim.—The tube F, combined with the piston G, for performing the combined offices of a piston rod and eduction tube; 2nd. The piston G, constructed with open sides, and provided with a packing M, to expand laterally by the pressure of water within the piston, as set forth.

No. 3109. **WILLIAM H. CUTLER**, Buffalo, N. Y., U. S., 11th February, 1874, for 5 years: "Improvements in Portable Inhaling Tubes. (Perfectionnements aux tubes inhalateurs portatifs.)"

Claim.—1st. A core for inhaling instruments formed of paper; 2nd. A core for inhaling instruments formed of a tube or tubes of bibulous paper or analogous material as specified.

No. 3110. **ROBERT B. TAIT**, Oakville, Ont., 11th February, 1874, for 5 years: "Improvements in Car-Couplings." (Perfectionnements dans les attelages de Wagons.)

Claim.—1st. The draw head A, having the cavity a, sunk in the bottom of the bell mouth A1, the hinged tongue B, with lip b, working in a slot cut out east in A, by means of which not only can the pin D, be adjusted to drop automatically within the link E, when the latter strikes the tongue B, but the link can also be adjusted to suit different elevations of draw heads without the operator having to place his hands between approaching drawheads; 2nd. The draw head A, having the bellmouth A1, in combination with the hinged tongue B, rod or shaft C, and weights c, or their equivalent; 3rd. The drawhead A, with bellmouth A1, cavity a, in combination with the hinged tongue B, with lip b, rod or shaft C, and weights c, or their equivalent arranged and operating as described.

No. 3111. **HENRY MCKENZIE**, Marquette, Mich., U. S., 11th February, 1874, for 5 years: "Improvements on Leaching Apparatus." (Perfectionnements aux appareils à lessive.)

Claim.—1st. A leach tub provided with a rim or flange E, and stays F; 2d. A leach tub provided with wheels F; 3rd. A leach tub having the upper side of the bottom grooved as described and pierced with conical perforations D; 4th. The combination with a leach frame A, of pawls, or catches arranged at proper heights to sustain the tubs; 5th. The spring track L, arranged to allow of the upward passage of the tubs; 6th. The combination with a leach frame of an upper track L, leading to dump and lower track K, from filling place to leach frames A; 7th. The catch pit G, arranged to sustain the leach tubs and provided with filter H; 8th. The combination of the catch pit G, with press I; 9th. The leach tubs arranged vertically above each other in the frames and carried by the pawls K; 10th. The combination of a leach frame A, provided with tracks K, and L, and having spring track L, with the leach tub platform G, and press I, all arranged and working together as set forth.