

No. 3920. WILLIAM G. ENTREKIN, Philadelphia, Pa., U. S., 21st September, 1874, for 5 years: "Machine à polir les photographies." (Machine à polir les photographies.)

*Claim.*—1st. A burnishing machine, provided with an oscillating burnishing tool, and a feed pressure mechanism, by which a polished surface is given to the article burnished; 2nd. The combination of a pressure feed-roll, with a yielding burnishing tool; 3rd. The combination of an oscillating burnishing tool, with a friction feed roll; 4th. The plate D, provided with a clamping device in combination with the removable burnisher C; 5th. The combination of a pressure feed-roll, yielding burnishing tool, having a universal joint, with a yoke-wedge lever; 6th. The combination of the plate D, provided with the flange *e*, and the gas jet feed-roll B, and burnisher C; 7th. The burnishing plate D, in combination with adjustable pins *n*; 8th. The plate D, pivoted by a universal joint, in combination with the wedge-yoke lever *E*, fulcrum *J*, thumb screw *e*, and spring; 9th. The combination of the feed-roll B, oscillating burnisher C, and pins *n*, with the adjusting apparatus; 10th. A hot burnished finished photograph produced by the combined action of a heated, yielding, burnishing tool, and a pressure feed-roll as described.

No. 3921. JOHN T. WARING, Yonkers, N. Y., U. S., 21st September, 1874, for 5 years: "Treatment of Felted, Woven and Spun Fabrics." (Traitement des étoffes feutrées, tissées et filées.)

*Claim.*—The treatment of felted and woven fabrics, also of woolen yarns, by means of an acid solution.

No. 3922. JAMES H. L. WILSON, Sherbrooke, Que., 21st September, 1874, for 5 years: "Crib Attachment to Bedsteads." (Ajustage des berceaux aux couchettes.)

*Claim.*—The back A, ends B, D, and frame C, C, also the clamps E, E, with the followers F, F, bent iron arms *x*, *x*, with faces *x*, *x*, and screws or thread G, G, all combined for the purposes set forth.

No. 3923. DANIEL DODGE, Keesville, N. Y., U. S., 21st September, 1874, for 5 years: "Cold Finishing Nail Machine." (Machine à finir le clou à froid.)

*Claim.*—1st. The combination of the two pairs of rectangularly arranged dies C, D, and E, F, having their faces made to correspond with the sides and edges of the nail and the one die overlapping the other in either pair and the dies of the one pair overlapping the dies of the other pair when closed to form the matrix; 2nd. The combination of the levers B, G, having overlapping dies C, D, and E, F, for operation in relation with each other as described; 3rd. The combination of the intermittently revolving grooved table K, the reciprocating feeder M, the grooved guide L, and the overlapping dies C, D, E, F, as specified.

No. 3924. WILLIAM A. SPRINGER, Marlborough, Mass., U. S., 21st September, 1874, for 15 years: "Improvements on Sewing Machines." (Perfectionnements aux machines à coudre.)

*Claim.*—1st. The combination of an intermittently acting rotating trimming cutter with the mechanism of a sewing machine for the purposes stated; 2nd. The rotating and vibrating shaft F, with its cutter I; 3rd. The combination from the top of the sewing machine frame or arm, whereby an open space is left between the shaft and its front bearing and the table upon which the work is placed, whereby the work can be passed over the table, under the front bearing shaft F, and rocking arm or piece I, of rods G, F, eccentric C, hub J, cam piece A, and spring *t*; 5th. The cam piece A, provided with projection S; 6th. The slotted hub piece *f*; 7th. The combination with racking piece I, and shaft F, of rods G and J, and eccentric C; 8th. The combination with the trimming cutter I, of an automatic sharpening device *p*, *m*, operating as set forth.

No. 3925. WILLIAM H. H. BOWERS, Franklin, Ky., U. S., 21st September, 1874, for 5 years: "Apparatus for propelling Street Cars by compressed Air." (Appareil à air comprimé pour propulser les voitures des chemins de fer urbains.)

*Claim.*—1st. The tanks or cylinders A and B, arranged as described, in compartments, and provided with valves and pipes as set forth; 2nd. The combination of the supply tanks A, B, and working tank C, constructed, arranged, and connected together as set forth.

No. 3926. JOSIAH L. CLARK, and JOHN STANFIELD, Westminster, Eng., 21st September, 1874, for 5 years: "Improvements on Floating Docks and Pontoons." (Perfectionnements aux bassins de radoub et aux pontons.)

*Claim.*—1st. Forming the sides or ends of floating docks of a series of vertical circular or nearly circular tubes; 2nd. Forming

the horizontal platform of floating docks or pontoons of a series of parallel circular tubes or of flat box shaped chambers in connection with vertical circular or nearly circular tubes at the sides; 3rd. The forming of floating docks of a series of transverse circular or nearly circular tubes having at their ends vertical tubes rising up from them to form sides to the dock as herein described; 4th. The construction of floating docks or pontoons in such manner that water may be expelled from the tubes or chambers of which they are composed by introducing into them air under pressure to be then excluded by valves at the bottom as described; 5th. The use of a reservoir of air under compression to enable the dock to be rapidly lifted as described; 6th. The use of pontoons constructed of closed tubes and from which the water may be pumped out or expelled by means of air under pressure in combination with floating docks or hydraulic lift docks for lifting vessels of a weight greater than the dock or lift is capable of raising by itself.

No. 3927. THOMAS P. FORD, Brooklyn, N. Y., U. S., 21st September, 1874, for 5 years. "Improvements on Ships' Berths." (Perfectionnements aux hamacs de vaisseaux.)

To limit and control the motion of the berth, to support it on a supporting carriage, so that an equilibrium shall always be maintained in the berth whether the vessel move longitudinally or laterally.

*Claim.*—1st. The described method of limiting and controlling the motion of and maintaining an equilibrium in Ships' Berths, &c.; 2nd. The combination of the berth or balance frame A, guide frames E, and the transverse moveable carriage C; 3rd. The system of levers and connecting rods combined with the hand lever F, and with the hinged foot levers H, for stopping or releasing the berth; 4th. In combination with the berth, the broad thin metallic guide frames E, E, secured by a joint to the bottom of the berth at points or lines between its ends and also jointed or hinged at or near the ends of the berth, and operating as described; 5th. The berth constructed with its bottom inclined gently upwards from at or near its centre, towards its ends, and with its sides and ends also inclined upwards.

No. 3928. MARTIN L. BARCLAY, Williamsburgh, Ont., 21st September, 1874, for 5 years: "Washing Machine." (Machine à laver.)

*Claim.*—1st. The employment of the roller I, to prevent friction of the band G, against the base C, of the washer as set forth; 2nd. The application of the angle plates J, to strengthen the connection of the Standard F, and base C, as set forth.

No. 3929. JOHN R. WHITTEMORE, Chicopee Mass., U. S., 21st September 1874, for 5 years "Horse Rake." (Rateau à cheval.)

*Claim.*—1st. The adjusting rod *f*, in combination with the perforated L-shaped arms G, G, bar H, and teeth D; 2nd. The casting B, extended above the axle in combination with the levers J, J, hinged bar K, and casting G; 3rd. The teeth B, D, provided with the projections X.

No. 3930. DAVID ROUSSEAU and WILLIAM C. SMITH, New York, U. S., 21st September, 1874, for 5 years: "Electric Railway Signal." (Signal électrique de railroute.)

*Claim.*—1st. The signal stem C, provided with arms or projections *b*, which lock it against the armature F, both in its displayed and concealed position, as specified; 2nd. The cams or projections *f*, and *g*, on the stem C, arranged in combination with the springs *i*, and *h*; 3rd. The signal connected metallically with one electromagnet and alternately with one or two operating instruments as specified; 4th. A lamp guard I, locked to a signal apparatus so that the said guard cannot be opened without the previous winding of the signal operating clock-work as described; 5th. The combination of the rotary pin *r*, with the lever J, hook *n*, and guard I, as set forth; 6th. The combination of the top and bottom plates B\*, D\*, cushion C\*, and metallic conductor F\*, with each other, to constitute an electric circuit closer beneath a railroad rail as described; 7th. The combination of the adjustable spring E\* with the metallic conductor F\*, and with the cushion C\*, and plates B\*, D\*, for operation as set forth.

No. 3931. JACOB LAWRENCE, Palermo, Ont. 21st September, 1874, for 5 years: "Shoe for Mowers and Reapers." (Sabot de faucheuse-Moissonneuse.)

*Claim.*—In combination with a reaping and mowing machine the arrangement of the lugs B, B, on the shoe A to receive the lifting rod C, which may be of any form as specified.

No. 3932. WILLIAM C. STONE, Almonte, Ont. 21st September, 1874, for 5 years: "A Duster." (Un époussetoir.)

*Claim.*—A brush for dusting, the brush portion thereof being of sheep's pelt or the hide or pelt of other animal, tanned or dressed, either alone, or combined with hair, wool or other fibrous material secured to a suitable handle as set forth; 2nd. The manner of forming the brush portion, by going the piece of skin and closing together the edges of the gore by sewing or other means, to receive the handle as set forth.