

No. 3674. CHARLES E. PATRIC, Springfield, Ohio, U. S., 20th July, 1874, for 5 years: "Broad Cast Sewing Machine." (Semoir à grain à la volée.)

Claim.—1st. The vertical distributing wheel with a flange or flanges for conveying and discharging the grain in combination with the scatterers O, for preading the grain broad-cast; 2nd. The vertical distributing wheel B discharging the grain laterally or from its side in combination with the scattering tube d'; 3rd. The casing funnels b, provided with the horizontal slits in combination with the pins or spurs on the inner face of the mouth of the tubes d. and retaining lips d'; 4th. The combination of the vertical distributing wheels, the adjustable scattering tubes and the broad cast scatterers; 5th. The scatterer O, made in the double shovel or semi conical form and applied to the adjustable tube d'; 6th. The lifting-roller L in combination with the eccentric pivoted arms M; 7th. The eccentric pivoted arm M, to which the lifting roller is attached provided with pin or spur m, in combination with the cam hook rack and lever, or their equivalent, for throwing the feed mechanism into or out of action when the hives are raised or lowered; 8th. The hoe standards G, pivoted to the drag bars F, in combination with the sustaining links h, locking blocks or links k and spring k, arranged and operating as described.

No. 3675. RICHARD BENNER, Hamilton, Ont., 20th July, 1874, for 5 years: "Process of veneering." (Procédé de placage.)

Claim. A water proof veneering of cloth or other woven material when applied in the manner described.

No. 3676. ALEXANDER McCONNEL, Caledon, Ont., 20th July, 1874, for 5 years: "Self-Opening gate for Railway Crossings. (Barrière automatique pour les passagers des railroutes.)

Claim.—1st. The bars B, pivoted as described and connected together by the T-shaped pieces C, in combination with the levers D, curved lever E, rods G, and gate H; 2nd. The post K, with the bell L, in combination with the wire rope M, crank rod O, and flat spring N, arranged and operating as described; 3rd. The bars B, in combination with the springs J, arranged and operating as described.

No. 3677. LEWIS O. CANTIN, Montreal, Que., 20th July, 1874, for 5 years: "Photograph Burnisher." (Brunissoir de cartes photographiques.)

Claim.—1st. The concave form of heater e; 2nd. The guard plates g, n, of any suitable metal inserted between the burnisher and roller; 3rd. The adjusting screws f, f, under each projecting end of the heater, as set forth.

No. 3678. JOHN ROURK, Kingston, Ont., 20th July, 1874, for 5 years: "Automatic Atmospheric Engine." (Machine atmosphérique automatique.)

Claim.—1st. The combination of the cylinder C, tube G, and valve carrier H, with the piston D, crank N and beam A; 2nd. The combination of the carrier H, and valves O, and P; 3rd. The use of atmospheric air, compressed air, water or steam as a propelling power, in connection with machinery, or as an auxiliary power in connection with boats, cars or other moving apparatus.

No. 3679. JOHN F. STAIRS, Halifax, N. S., 20th July, 1874, for 5 years: "Oakum." (Etope.)

Claim.—The caulking material made from the new stock of staple hemp, flax or similar fibre, in the manner described.

No. 3680. THOMAS J. BLAKE, Pittsburgh, Penn., U. S., 20th July, 1874, for 15 years: "Smooth Back Shovel." (Bêche à dos poli.)

Claim.—1st. The method described of producing shovel blanks, namely: by securing a strap of soft steel or wrought iron in a suitable mould, and casting the steel ingot into the end of the strap, so that the strap and ingot will weld or unite at the time of casting; 2nd. A shovel blank, having a soft metal strap or straps united or welded to the cast steel ingot at the time of casting; 3rd. A shovel, scoop or spade, consisting of a blade and shank with socket and strap for attachment to handles, the whole complete in a single piece of metal composed of steels differing in temper, or composed in part of steel and in part of iron, so formed that in either case the said components shall exist in union independent of the use of welding under pressure, or the use of a rivet or other separate fastening, as specified.

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