

No. 3909. SPENCER B. PEUGH, Salem, Ind., U. S., 6th October, 1874, for 5 years: "Plough Carriage." (Porte-charrue)

*Claim.*—1st. The arrangement of the wheels B, rocking posts C, connecting rods E, and lever F; 2nd. The wheels B, when arranged under the carriage A, so as to run the said carriage either straight forward or obliquely; 3rd. The arms b, when arranged so as to be adjustable to height, as described.

No. 3910. JOHN SANDALL, Charlottetown, P. E. I., 6th October, 1874, for 15 years: "Link Motion." (Lever de renversement.)

*Claim.*—A link made of two parts and forming a flexible whole, the combination of the flexible link A, and the eccentric rod E, as described.

No. 3911. ALBA WYMAN, Barnston, Que., 6th October, 1874, for 5 years: "Horse Hoe, Weed Cutter and Potato Digger Combined" (Houe à cheval, sarcler et extracteur à patates combinés.)

*Claim.*—1st. The combination of the braces H, screw or pin I, and standard G, with the frame pieces A, and C, C, for adjusting the extension of the pieces C, C, laterally as set forth; 2nd. The combination of the arms L, L, and diagonal braces M, with the shafts B, and piece A, for securing the shafts to the frame by a pivot bolt; 3rd. The nosing O, sliding P, and wings Q, applied removably as a vestment to the cultivator frame A, C, C; 4th. The rake head attachment S, combined with the pieces C, C.

No. 3912. FREDERICK LEADBETER, Detroit, Mich., U. S., 6th October, 1874, for 5 years: "Grain Separator." (Séparateur des grains.)

*Claim.*—The combination of the endless riddle K, with the chute D, and screen H, as specified.

No. 3913. ELWOOD GRIMSHAW, Minneapolis, Ma., U. S., 6th October, 1874, for 5 years: "Carriage and Waggon Spring." (Ressort de voiture et de wagon.)

*Claim.*—The bar B, having one arm of the springs A, A, fastened to its ends by the clips C, C, in combination with the bar B, having the other arms of the springs A, A, fastened to its ends with one end resting on the rear axle and the other end on the head-block, all constructed to operate in the manner set forth.

No. 3914. JAMES W. McPHERSON, McGillivray, WILLIAM GRUNDY, and CYRUS COSENS, Lucan, Ont., 6th October, 1874, for 5 years: "Movable Fence." (Clôture portative.)

*Claim.*—1st. The driving of square pickets a, a, a, in round holes. 2nd. The hinging of the several sections together by the use of rounded pickets r, r, with square tops. 3rd. The attaching the movable fence to posts C, C, set firmly in the ground by the use of slots d, d, and cleats c, c, as represented in the diagram.

No. 3915. FRIEDRICK WEGMANN, Naples, Italy, 6th October, 1874, for 5 years: "Machine for Preparing Meal." (Machine à traiter la farine.)

*Claim.*—1st. In one or more rolls a, and c, and corresponding rolls d, and e, the latter being pressed against the former as set forth; 2nd. The application of squeezing rolls having a surface consisting of material containing so much silica as not to colour the meal or flour and so as to have the hardness required for the purpose set forth; 3rd. The scrapers as shown in figure 5.

No. 3916. WALTER J. F. LIDDELL, Milwaukee, Wis., 6th October, 1874, for 5 years: "Horse Power." (Manège.)

*Claim.*—1st. The enclosing case H, provided with an internal gear and a centre shaft or axle upon which the frame carrying the gearing revolves, constructed, arranged and operating as set forth; 2nd. The revolving frame composed of the plate C, made as described, connected with an upper plate in such manner that an intermediate space is formed for gearing, and the mounting of the same in suitable bearings, the said gearing and frame with connections travelling together around one common centre, by the direct application of the power applied to the levers when used in connection with a stationary master wheel, as described; 3rd. The movable circular bearings provided with lugs to prevent displacement secured in position and adjusted as described; 4th. The adjustable hanger or bracket in which the driving shaft is mounted in combination with the casing when arranged and operating in the manner described; 5th. The combination of the revolving frame C, C, case B, with gear attached, spur wheels and pinions D, D, pinion F, and shaft F, all working together for the purpose of

driving machinery, in the manner set forth; 6th. The novel combination of the plates C, C, gear wheels D, D, case B, circular plate H, with hangers attached, bearings E, made and secured as described, pinion F, shaft F, bevel wheel pinion G, G, and shaft H, all working together in the manner set forth.

No. 3917. ELLIS ROWLAND and GEORGE E. ROWLAND, Manchester, Eng., 8th October, 1874, for 5 years: "Furnace Bars" (Barres de fourneau.)

*Claim.*—The combination of the "bell crank" shaped oscillating fire bars b, b, with the ordinary fixed fire bars carrying snugs c, c, when mounted, operated, or arranged as described.

No. 3918. ORVILLE M. MORSE, CLARK, S. FULLER and HARVEY J. BURDICK, Oswego, and SIMEON HOWES, ALPHEUS BABCOCK, NORMAN BABCOCK, and CARLOS EWELL, Silver Creek, N. Y., U. S., 8th October, 1874, for 5 years, "Middlings Purifier." (Épurateur des gruaux.)

*Claim.*—The combination with the case A, communicating at its top with the eye of a fan of an elevating wheel composed of extended open buckets d, which successively elevate the material and discharge the same from one bucket to the other, whereby the material is repeatedly subjected to the separating action of the air current as set forth.

No. 3919. WILLIAM H. BENNETT, New York, U. S., 8th October, 1874, for 5 years: "Paper Fyle and Binder." (Serre-papier.)

*Claim.*—1st. The head A, constructed as described and secured to the base B, in the manner specified and provided with detachable face and end plates c, and d, as described; 2nd. In combination with the head A, and base B, both being constructed and attached in the manner specified, the flanges f, as set forth; 3rd. The needles E, constructed as described in combination with the binding bar H, and bar J, for the purpose specified; 4th. The head A, and spring C, both being constructed as described in combination with the clamping bar E, as set forth; 5th. The combination of the strips a, elastic band L, and plate M, as set forth.

No. 3920. OLIVER A. HOWLAND, Toronto, Ont., 8th October, 1874, for 5 years: "Mode of Carriage on Allied Land and Water Routes." (Mode de transport par voie mixte de terre et d'eau.)

*Claim.*—1st. The system of carriage on allied land and water routes, consisting of a method of carrying freight on vessels over water, and upon railway trucks on railway overland, wherever obstructions interrupt the navigation; the cargo being first placed in or upon a series of uniform boxes or platforms, which will be proportioned in shape and size, so as either to form the platform, box or body of the car resting directly on the trucks, or a platform, frame or box resting on a platform attached to the trucks forming uniform segments of such boxes or platforms, such boxes, frames or platforms being transferred from boat to trucks and from trucks to boats by hoisting tackle. 2nd. The crane A, with arms A, and A1, mounted on a turntable B, and travelling car B1, arranged and operating as described; 3rd. The revolving drums C, C, cables a, a, chains a, and Bars A2, attached, friction rollers I, and D1, in combination with and driven from the revolving drums F, F, by the bolts G, and G1, arranged and operating as described; 4th. The sliding shaft F1, with drums F, and bevel gearing F1, attached in combination with the bevel wheel F2, attached to the upright revolving shaft R; 5th. The friction brakes I1, operated by the lever and screw I, in combination with the revolving drums F; 6th. The pivoted levers F, in combination with the sliding shaft F3; 7th. The sliding friction wheel C, W, in combination with the drums A, W, B, W; 8th. The bevelled wheel T, on the revolving shaft R, in combination with the friction brake Q, and lever B4, arranged, operating as described; 9th. The endless travelling belt x, in combination with the drums A, W, and B, W., as described.

No. 3921. JOSEPH L. JOYCE, New Haven, Ct., U. S., 9th October, 1874, for 10 years: "Improvements on Boots and Shoes." (Perfectionnements aux chaussures.)

*Claim.*—1st. A recess formed between the sole, upper and insole into which the insole and upper are imbedded, so that the edge which forms the said recess will extend up around the edge of the insole and upper for the protection of the same as described; 2nd. The welt a, for the protection of the upper of boots and shoes formed from a strip of material, rabbetted or recessed on the upper side and made to conform to the shape of the sole as set forth; 3rd. The insole bevelled from the lower side back toward the top, and from the upper, so as to form a space between the edge of the insole and the upper as described; 4th. In combination with the insole bevelled so as to form a space between the edge and upper as described, the outsole formed with a recess or upwardly projecting edge as described; 5th. A boot or shoe having the sole of full thickness except in the channel a2, and upper sunk in said channel, and an insole overlapping the channel as described.