No. 2206. JOHN F. L. HOLMAN & EDWIN HENWOOD, Hamilton, Ont., 1st April, 1873, for 5 years: "A Car-Coupler." (Un attache-char.)

Being automatic in its action.

Claim.—1st. The weighted movable tooth or pin C, operated as shown in combination with the bumper-head B; 2nd. The recess D^1, in the bumper head, 3rd. The arrangement of the opening M, for the tooth or pin to play in; 4th. The arrangement of the bell-crank F, operated by the rod H; 5th. The arrangement of the chain L, from the ball to pulleys I, I.

No. 2207. JOHN GRANT, Gananoque, Ont., 1st April, 1873, for 5 years: "Combined Pot Tilter and Cover Holder." (Machine à pencher les ustensiles de cuisine et en maintenir les couvercles.)

Claim.—1st. The combination of the pot-tilter and cover-holder, hammer, tack-puller, and stove-cover-lifter in one tool, 2nd. The crank-pin C, or its equivalent for entering the ear of the pot and for holding the pot in place while in the act of tilting the pot; 3rd. The crank D, (or set-off); 4th. The application of the arm F, or its equivalents, for holding the cover of the pot in place while tilting the pot.

No. 2208. ISAAC GALIPO, Montreal, Que., 1st April, 1873, for 5 years: "A Horse Shoe." (Un fer à cheval.)

Consists in the construction of a shoe that can be attached or removed at will without the aid of a farrier.

Claim.—The shoe A, with side pieces *c*, *c*, and front piece *g*, for holding the hoof; in the side pieces C, with serrations *d*; in the links E and E^1, pin f^1, and eye g^1, of piece *g*, in the shoe A, in combination with caulks *b*.

No. 2209. JASPER BATES & THOMAS MCKENNY, Thornbury, Ont., 1st April, 1873, for 5 years: "Churn Operating Attachment." (Appareil à faire mouvoir les barrattes.)

Consists of a frame removably secured to the outside of the churn in which to operate the dasher shaft by means of a pitman and lever.

Claim.—1st. The combination and arrangement of the standard C, brackets E, guide-pieces F, dasher-shaft I, pitman G, and lever H, applied to a churn A, and operating as set forth; 2nd. The slats J, arranged inclinedly in the beam K, of the dasher.

No. 2210. PETER JACOB & JAMES JOLLIFFE, Toronto, Ont., 1st April, 1873, for 5 years: "A Flask for Moulding Stove-Pipe Stones." (Châssis pour le moulage des pierres à trous de tuyaux.)

Consists in hinging all the sides together so that each will open or close separately like the lid of a box and when closed they are secured by clamps. The core is made of metal, or other suitable material, tapered so that it can be readily withdrawn when the casting has been made.

Claim.—1st. In hinging the sides A, B, C, D, and E, of a moulding flask as described and binding the same together by the clamps L, 2nd In the combination of the core G, with one or more core supporters F.

No. 2211. PIERRE E. JAY, St. Jean Baptiste, Que., 1st April, 1873, for 5 years: "Process of Smelting Iron Ore." (Procédé pour fondre le minérai de fer.)

Claim.—The treatment of iron ore before being placed in the cupola or furnace by wetting it with a solution composed of sugar, nitrate of soda, carbonate of lime and water in the proportions specified.

No. 2212. WILLIAM WILMINGTON, Toledo Ohio, U. S., 1st April, 1873, for 5 years: "A Car Wheel." (Une roue de voiture de chemin de fer.)

Consists in making the wheel with a chill extending only over a portion of the tread of the wheel and over the inner portion of the flange where the latter is curved to unite with the tread.

Claim.—A car wheel having the portion A, chilled, and the portions B, and C, homogeneous with the rest of the wheel.

No. 2213. ARTHUR C. KENT, Janesville, Wis., U. S., 1st April, 1873, for 5 years: "A Corn Planter." (Un semoir à blé-d'Inde.)

Claim.—1st. The spiral or operating rod I, 2nd. The conical stud or agitator M, secured upon and combined with the dropper H 3rd The revolving dropper H, on which the conical stud M, is secured.

No. 2214. JOSEPH A. FOURNIER, Ottawa, Ont., 1st April, 1873, for 5 years: "A Hand Propelling Carriage." (Une voiture à bras.)

Claim.—1st. The arrangement of the wheel E, shaft D, cog-wheels K, and pinions L, shafts M, chain-wheels N, chains O and chain-wheels P, in combination with the hubs of the wheels A, carriage-body B, and axles C; 2nd The arms H, sleeves I, and standards J, in combination with the shaft D, for maintaining the same as specified; 3rd. The arrangement and combination of the curved spring-bar V, bifurcated pivot-shaft P1, tiller R, tiller-ropes S, and treadles T, in combination with the guide-wheel Q, for directing the course of the carriage.

No. 2215. GEORGE WIGHTMAN, Elksley Notts, Eng., 1st April, 1873, for 5 years: "Improvements in the Pumps of Hydraulic, Steam, and other Engines." (Perfectionnements aux pompes et aux machines à vapeur, hydrauliques et autres.)

Consists in the construction and arrangement of the pumps and cylinders of engines in such manner as to render the valves ordinarily employed in, or applied to same unnecessary.

Claim.—1st. The sliding barrel A, with its ports a^1, and plunger B, also the crank C, outer cylinder E, pipes D^1, D^2, and d^2, flanges e^2, eccentrics F, eccentric-rods f^1, connecting-rods f^2, cross-head a^3, and stuffing-box a^4, constructed, arranged, combined and operating as and for the purpose set forth and illustrated by figures 1 and 2, of the drawings; 2nd. The cylinder A, with its ports a^1, a^1, sliding within the flanges E^2, E^3, of the outer cylinder E, so as to develope the said ports for the passage of water or other fluid into and from the said cylinder A; 3rd The inner sliding cylinder or barrel A, with its ports a^1, plunger B, outer cylinder E, induction passage b^2, nozzle b^3, dished-covers b^9, stuffing boxes b^{10}, and a^2, discharge-nozzle e^1, discharge-pipe D^1, and air-vessel D^2, arranged, constructed and combined as described and illustrated by figures 3, 4, and 5; 4th. The open ended sliding-barrel A, outer cylinder E, covers b^9, stuffing-boxes a^2, and b^{10}, cross-head a^4, and nozzles e^1, e^1, and b^3, constructed, arranged and combined as described and illustrated by figures 6, and 7.

No. 2216. WILLIAM PAINTER & LEWIS R. KEIZER, Baltimore, Md., U. S., 7th April, 1873, for 5 years: "A Gauge Cock for Steam Boilers." (Un robinet-jauge de machine à vapeur.)

Relates to the use of a hollow sliding sleeve fitting the barrel of the cock and provided with a gasket of rubber or other material held against the valve seat by means of a weight.

Claim.—The sliding-sleeve D, with its nozzle E, and gasket F, in combination with the barrel c, having an annular groove L, and the weight H, 2nd. The lugs K, K, and cam grooves J, J, for actuating the sliding-sleeve, all constructed and operating as described.

No. 2217. CHARLES E. PATRIC, Springfield, Ohio, U. S., 7th April, 1873, for 5 years: "A Seeding Machine." (Un semoir.)

Claim.—1st. In combination with the rocking bars C, C^1, and drag-bars D^1, of a grain drill a right and left hand-screw for shifting the position of the hoes; 2nd. The combination with the seeding devices of a grain drill and adjustable cone of sprocket-wheels or pulleys for varying the delivery of the grain; 3rd. Combination with the gearing for driving the seeding devices of a grain drill the angular or curved sliding-bar N, and sliding-bar O; 4th. The combination of the cone F, disc G, bar O, plate or fork O^1, bar N, plate M, and wheel A, provided with a pin *g*; 5th. The combination of the cones F, and F^1, chain I, shaft P, provided with grooves *p*, p^1, and latch h^1, 6th. Combination of the cones F, F^1, chain I, pulley I^1, vibrating-arm I^2, provided with the return-arm *s*, spring J, and bracket J^1, arranged and operating as described; 7th. The divided distributor casing R, provided with the outlet-funnel or spout R^1, in combination with a vertical distributor-wheel Q, adapted to deliver the grain on either side from the hopper into the said outlet funnel; 8th. The divided distributor casing R, in which the distributor wheel Q, has its bearings provided with lugs *r*, having the tubular interlocking spurs *s*, and sockets S^1; 9th. In the pivoted lifting-lever L^1, provided with the tripper-arm L^2, in combination with the lifting-roller L; 10th. The rocking-shaft or lever T, in combination with the grass-seed agitator slide T, and the wave-cam V, and spring V^1, for operating the said slide T^1; 11th. The open loop or staple stirrers T^2, in combination with the agitator-slide T^1; 12th. The inclined delivery board X, in combination with the grass-seed hopper H^1, for regulating the delivery of the seed; 13th. The peculiar arrangement and construction of the hoes D; 14th The link or spring R^2, arranged and constructed as specified.

No. 2218. CHAUNCEY O. CROSBY & NATHAN A. BALDWIN, Milford, Conn., U. S., 7th April, 1873, for 10 years: "Machine for Sewing the Soles of Boots and Shoes." (Machine à coudre les semelles de chaussures.)

The invention consists in the peculiar construction of what is termed the work plate whereby a shuttle carrying a second thread to make the lock-stitch in welted work is employed