No. 3749. AUGUSTIN S. TRUDEL, St. Antoine de Tilly, Que., 13th August, 1874, for 5 years: "Mode of Propelling Barges." (Système de propulsion des bateaux).

Réclame.—1mo. Les coques cylindriques F, F; 2mo. Les quilles en spirales telles que décrites.

Claim.—1st. The cylindrical hulls F. F., 2nd The spirally formed keels as described.

No. 3750. CHARLES BUCHNER, Tilsonburg Ont., 13th August, 1874, for 5 years: "Machine for Washing Clothes." (Machine à laver le linge).

Claim—1st. The combination of the cylinder A, with the flexible bottom B as set forth, 2nd The mode of suspending on pivots in vertical grooves C, the cylinder A as set forth.

No. 3751. RAPHAEL GADONAS, Montreal, Que., 13th August, 1874, for 5 years: "Improvements on Gauge for Centre-Bits." (Perfectionnements aux jauges de vilebrequins).

Claim.—1st. A gauge A made of a tube in two pieces having butts C, C, to open and to shut the same, two lugs F, F1, and a clamping screw D, as set forth; 2nd. The combination with the gauge of two pieces of leather E, E, to narrow the gauge's inside diameter and squeezing the bit as set forth.

No. 3752. LYMAN S. COLBURN, Oberlin, Ohio, U. S., 13th August, 1874, for 5 years; "Improvements on files." (Perfectionnements aux limes).

Claim.—File, having the angle or oblique direction of teeth thereof pointing the same way on both sides as set forth.

No. 3753. EZRA CASWELL, Lyons, N. Y., U. S., 13th August, 1874, for 5 years: "Hub-Boring Machine." (Machine à percer les moyeux).

Claim.—The tram T, hooks *h*, screws *s*, and the adjustable removable plate O, in combination with the shank M, tube F, plate L, and cuttor *k*, all constructed and arranged as specified.

No. 3754. JULES A. SAVARD, Quebec, Que., 13th August, 1874, for 5 years: "Improvements on Clocks." (Perfectionnements aux horloges).

Réclame.—La prolongation de arbre B de la roue de centre C, la combinaison des roues du centre C et d'engrenage D, avec la roue de champ centrale E, le tambour G qui reçoit les pivots des tiges à pignons H, H, la disposition des pignons I, I, et de la roue de champ J, J, de chaque cadran, le support recourbé à équerre L, et l'arbre K, qui communique aux rouages de la minuterie N, N, le mouvement imprimé par l'arbre B du mouvement de la pendule ordinaire tel que décrit.

Claim.—The prolongation of the arbour B of the centre wheel C, the combination of the centre wheel C with the gearing D and the central cog wheel E, the cylinder G, which receives the pivots of the pinion rods H H, the arrangement of the pinions I I, and the cog wheels J J, of each dial, the bent support of the square L, and the arbour K communicating with the wheel hub of the dial to movement N N; the motion given by the arbour B from the escapement of the ordinary pendulum as described.

No. 3755. JOSEPH BURNS, Anamosa, Iowa, U. S., 13th August, 1874, for 10 years: "Well Boring Machine." (Machine à percer les puits).

Claim—The three-part auger consisting of the square shanked centering bit B, the spiral cutting blade C, adapted to be adjusted relatively to the centering bit and the spiral carrier D, resting upon and continuous with the blade C as described; 2nd. The vibrating levers R, R, provided with carrying pawls S, S, and pivoted loosely on auger shaft, in combination with the ratchet-nut T, as described.

No. 3756. HENRY G. THOMPSON, and BROR F. BERGH, 13th August, 1874, for 15 years: "Tack Driving Machine." (Machine à chasser la broquette).

Claim.—1st. A magnetic hammer for the purpose of receiving, holding, and driving a tack combined with automatic machinery, constructed for operating and feeding the same as set forth, 2nd. A magnetic hammer in combination with non-magnetic feeding devices as described, 3rd. *An incline H for receiving and delivering* the tack when made of more than one angle as set forth; 4th. An adjustable rod I for connecting the incline H, with the cam levers J, as set forth, 5th. A rattler, 6th. The stationary head G of the feeding cylinder C, E, when made funnel shaped within said cylinder, 7th. One or more spring pins *s*, arranged in the incline, 8th A non-magnetic feeding incline, 9th. Hardened steel seat *h*, or its equivalent inlaid into a non-magnetic incline; 10th. A hardened steel pointer *k* or its equivalent; 11th. A recess or cup *m* at the foot of the incline, 12th. The combination of cam-movement for operating, and the separator for delivering the tack for presentation to the hammer; 13th. A stationary head in a revolving cylinder and a brush *n* arranged as set forth; 14th. The tack channel *a* extending through the bottom of the incline H, and made tap ring as set forth; 15th. Giving an intermittent motion to the feeding cylinder by means of a bolt, when used in combination with clutch pulley whereby tacks are fed upon an incline only when machine is operated for presenting tacks to the hammer; 16th. The combination of the clutch pulley for setting the mechanism of the machine in motion 17th. The wheel D1, with recess *h1*, and notches *i1*, in combination with the pulley G1, arm *m1* with projection *n1*, spring *n2*, and stop *p1*, *p2*. 18th. The bottom of the feed motion constructed to form a guard to prevent the displacement of the tacks as set forth; 19th. For lasting boots and shoes, a guide or rest to enable the operator to drive tacks at any desired distance from the outer edge of the last as described; 20th. For lasting boots and shoes, a ball and socket joint in combination with a jack for holding the last as described; 21st. For lasting boots and shoes a slip joint in the rod that supports the jack in combination with the ball and socket joint as set forth, 22nd. For last ng boots and shoes a "Bailey's Jack" in combination w th hammer for driving tacks, said hammer being operated by automatic means as set forth; 23rd. An adjustable sleeve on top of the hammer; *24th. For lasting boots and shoes a spiral spring on top of the hammer* in combination with an adjustable sleeve enclosing said spring as set forth; 25th. The sleeve N, with spring S within the same in comb nation with the hammer used for driving tacks as set forth; 26th. The combination of a spiral spring on top of hammer with spiral spring when used in sleeve of hammer as set forth; 27th. Compressing spring on top of hammer by means of spiral spring in sleeve of hammer in advance of the regular movement of the parts, as set forth; 28th. Feeding or operating the separator so as to cause the tacks to slide down incline to receiver on backward movement of cylinder as described; 29th. The combination with the stationary head G, and revolving cylinder E of the pivoted brush *n*, spring *n1*, and pins *n2*, as set forth, 30th The combination of three spiral springs when applied to one hammer for driving tacks for the purpose of accomplishing three different functions as set forth.

No. 3757. ROBERT SCOTT and SILAS L. COOK, Côte St. Paul, Que., 13th August, 1874, for 5 years: "Improvements in the Manufacture of Spades." (Perfectionnements dans la fabrication des bêches).

Claim.—1st. *Spade, shovel or like implement or tool forming* the part for the reception of the handle by welding to a shank B, left on the blade A, a sheet iron or steel strap, the lower part of which is formed into a socket C and the upper into two straps D, E, as described; 2nd. Spade, shovel &c. formed with a socket C, and straps D, E, for the reception of the handle F, as described.

No. 3758. GEORGE W. HARRISON, Lansing Mich., U. S., 13th August, 1874, for 5 years: "Pitman Connection." (Raccordement des bielles).

Claim.—1st. The combination with a pitman or connecting rod, metallic boxes and elastic blocks, 2nd. In combination with the recessed end of the pitman, the shouldered metallic boxes J, which together form an enclosed chamber to receive the elastic blocks O, as set forth; 3rd. In combination with the pitman having recessed end, the recessed cap P, elastic blocks O, metallic boxes J, and strap B, as set forth.

No. 3759. THOMAS E. MULLINS, Hopewell Corner, N. B., 13th August, 1874, for 5 years: "Steam Cooking-Apparatus." (Appareil de cuisine à vapeur.)

Claim.—1st The steaming chamber A, to receive the food pans, having a condensing jacket C, and provided with tube E, as set forth; 2nd. Providing steaming chamber A, and water chamber B with an annular raised ring I, and legs J, as set forth.

No. 3760. JAMES W. HERINGTON and JAMES W. STOAKES, Mill Point, Ont., 13th August, 1874, for 5 years: "Horse-Collar." (Collier de cheval.)

Claim.—1st. A horse collar fashioned of iron, steel or other suitable metal, either uncovered, covered with leather or other material or padded and consisting of the upper rights A, A, joined by the base A1, in combination with the neck strap B, as specified; 2nd. The pivoted staples C, with eyes c1, in combination with the socket C1, with shoulders c, attached to the collar A, as described.

No. 3761. ROBERT CHRISTIE, Hamilton, Ont., 13th August, 1874, for 5 years: "Improvements in Reaping and Mowing Machines." (*Perfectionnements aux faucheuses-moissonneuses.*)

Claim.—1st. The arrangement and combination of the lever C, rod E, tilter hinge A, lever stand B, operating the cutter-bar M, as specified; 2nd. The arrangement of the steady rod, *k*, attached to lugs *b*, *b1*, as specified, 3rd. The arrangement of the opening *h*, in the tilter hinge A, for the bar H, to allow oscillation as specified; 4th. The arrangement of the push bar D, pivoted by pin *d*, in the slot N, of the tilter hinge A, as specified; 5th The metallic guard G, cast to the frame of the machine for protecting the pitman head *f*, as specified.