

**No. 6411. Improvements on Wood Screws.***(Perfectionnements aux vis à bois.)*

Charles D. Rogers, Providence, R. I., U. S., 5th August, 1876, for 15 years.

*Claim.*—A pointed wood screw having the outer periphery of the thread upon its body cylindrical, while a portion of the body below the thread and near the neck is conical, the remainder of the body to the point being cylindrical and jet having all the threads brought to an edge of a constant angle without jogs in the paths between the threads.

**No. 6412. Soap Boiling Apparatus,***(Appareil à cuire le savon.)*

Archibald O. Glass, Detroit, Mich., U. S., (Assignee of Milton J. Palmer) 5th August, 1876, for 5 years.

*Claim.*—The combination of a horizontal boiler A, mixing chamber B, tube b, inlet C, and agitator H provided with concave floats h and slats i set diagonally across.

**No. 6413. Improvements in Weaving Temples.***(Perfectionnements aux temples de tissans.)*

James B. Paton, Sherbrooke, Que., 5th August, 1876, for 5 years.

*Claim.*—1st. The box and cap a; 2nd. The projections or lugs c; 3rd. The swaged teeth on the roller u; 4th. The spring shaft b; 5th. The support guides e.

**No. 6414. Waggon Seat Lock.***(Arrête-siège de voiture.)*

Joseph Hill, Wabash, Ind., U. S., 5th August, 1876, for 5 years.

*Claim.*—The box C having recess D, coiled spring F and catch plate E H, the latter pivoted in box C, so as to form a close fitting cover for the recess or aperture wherein it works, in combination with the seat iron A having bevelled point d, notch b and shoulder e.

**No. 6415. Improvements on Mowers and Reapers.***(Perfectionnements aux faucheuses-moissonneuses.)*

Louis H. Hébert, Grande Ligne, Que., 5th August, 1876, for 5 years.

*Résumé.*—1o. La combinaison du levier M, de la canne à dents de rochet N, de la chaîne O, du bras P ayant un ressort R, avec la roue S par laquelle on baisse la table A d'une faucheuse-moissonneuse; 2o. La combinaison du poteau mobile D, portant le dévidoir E, avec le poteau fixe C boulonné au devant de la table A; 3o. La combinaison du poteau fixe C de la branche latérale F, du levier H, de la poignée I, de la tige J avec le poteau mobile D, la poulie L, la chaîne K et le levier M pour soulever ou baisser le dévidoir E.

*Claim.*—1st. The combination of lever M, ratchet toothed rod N, chain O, arm P having a spring R with the wheel S to raise or lower the table A of a mower and reaper; 2nd. The combination of the movable post D, carrying the reel E with the fixed post C bolted in front of the table A; 3rd. The combination of the fixed post C, side arm F, lever H, handle I, rod J with the movable post D, block L, chain K and lever M to raise or lower the reel E.

**No. 6416. Improvements in Weather Strips.***(Perfectionnements aux bourrelets de portes.)*

Joshua Johnston, Toronto, Ont., 7th August, 1876, (Extension of Patent No. 1095), for 5 years.

*Claim.*—1st. The construction and application of the weather strips Figs. 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27 and 29; 2nd. The application of the weather strip Fig. 28.

**No. 6417. Improvements on Centrifugal Pumps.***(Perfectionnements aux pompes centrifuges.)*

William D. Andrews, Brook Haven, N. Y., U. S., 11th August, 1876, for 5 years.

*Claim.*—1st. A centrifugal pump having a cylindrical case A, the discharge branch or nozzle D of an enlarged rectangular construction at its junction with the case and coincident with the sides thereof, but terminating externally in a contracted orifice B and arranged so that the interior surface s of its outer side is in tangential relation with the inner periphery of the case and with the circular path by the outer ends of the propelling wheel or its wings; 2nd. The discharge branch or nozzle D having the interior surface s of its outer side in tangential relation with the cylindrical case A, and constructed or provided with a relief opening s having a curved surface s arranged to connect with the inner periphery of the case and with the tangential surface s of the discharge branch or nozzle D; 3rd. The wings N of the propelling wheel constructed of reverse curve constituting a volute for the greater portion of the length of the wings but having outer radial terminations; 4th. The combination of the wings N N, irrespective of their shape having their inner edges terminating at distance from the centre of the wheel so as to provide an unobstructed central space within them with a bulb N' on one side only of the wheel of a diameter approximating to that of said central space and with re-enforcers O O, the said hub and re-enforcers extending equally into the cylinder; 5th. The removal head B of the pump case provided an arbor G for the wheel shaft, and constructed to independently carry the propelling wheel shaft and driving pulley; 6th. The combination of the pulley H, arranged on the arbor G, projecting from the removable head with the shaft I and the coupling J; 7th. The combination with the removable head B constructed to independently carry the driving pulley and wheel shaft, having an attached clutch of the pump

case A and its attached head C, induction nozzle M and discharge branch D; 8th. The circularly adjustable case A formed with circular extensions on the opposite sides or flues to form broad or distant bearings in the support of the case by the stand U beyond opposite side of the discharge pipe D.

**No. 6418. Combined Hame and Horse Collar.***(Attelles et collier de cheval combinés.)*

Ezra Stroud, Riceford, Min., U. S., 11th August, 1876, for 5 years.

*Claim.*—The hames A having holes a, the bow rods M having a series of holes N in their end portions and supporting the neck pad D.

**No. 6419. Screw Machine.***(Machine à vis.)*

Charles D. Rogers, Providence, R. I., U. S., 11th August, 1876, for 15 years.

*Claim.*—1st. The cans Y and M, combined with the ordinary mechanism for operating the chaser, for the purpose of accelerating, retarding and limiting the sidewise cuts of the chaser over the conical and cylindrical body of the screw proportionately to the depth of the cut of the chaser towards the axis of the screw so as to bring the threads to an edge of a uniform angle over those parts without changing the outer periphery of the screw.

**No. 6420. Portable Engine.***(Machine portative.)*

Martin W. Shapley, Binghamton, N. Y., U. S., 11th August, 1876, for 5 years.

*Claim.*—1st. The combination of the boiler and the conical fire-box with the cross and upright tubes, and jacket and chamber; 2nd. The combination of the boiler composed of parts a m and the cross and upright tubes opening into the chamber k with the removable jacket, whereby the tubes may be quickly and easily cleaned by removing the jacket; 3rd. A portable engine and boiler provided with a conical fire-box and tubes j n, and jacket and heater b and pump c, all arranged on a base d.

**No. 6421. Improvements on Stoves.***(Perfectionnements aux poeles.)*

James R. Armstrong, Toronto, Ont., 11th August, 1876, for 5 years.

*Claim.*—The plate A, divided into two sections A1 and A2, pivoted to the apron or earth plate in such manner that either section separately may be opened without disturbing the other or both may be opened simultaneously.

**No. 6422. Improvements on Switch Rails.***(Perfectionnements aux rails mobiles.)*

Joseph Huggas, Uxbridge, Ont., 11th August, 1876, for 5 years.

*Claim.*—The tubes E, in combination with the rods B B' and rails A.

**No. 6423. Improvements on Stoves.***(Perfectionnements aux poeles.)*

William Doyle, Albany, N. Y., U. S., 11th August, 1876, for 5 years.

*Claim.*—1st. A heating stove having an oven at its rear, and the base flues b b and c, bottom horizontal flue with dampers e e between it and the said base flues and an ascending flue between the oven and the stove proper; 2nd. The combination with the ascending flue f of the blast flue h leading from the combustion chamber to the horizontal flue or chamber g and through said ascending flue whereby the hot gases passing through the said blast flue may reheat the gases of reduced temperature in the said ascending flue and stimulate the draft of the same; 3rd. The combination with the stove proper of the blast flue h, horizontal flue or chamber g, direct return flues m and ascending flue j; 4th. The combination with the blast flues h and k, one or more return flues m m and horizontal top flue g of the rings carrying damper plates s s.

**No. 6424. Combined Portmanteau and Shawl Straps.***(Portmanteau avec courroies pour enlver les châles.)*

Diana S. Mathews, Adrian, Mich., U. S., 11th August, 1876, for 5 years.

*Claim.*—1st. The combination of a portmanteau, satchel, case or other receptacle, with two or more shawl straps applied to the bottom of the same; 2nd. The combination of the portmanteau, or other receptacle of soft leather, with detachable shawl straps and with shorter additional straps buckled to the bottom to admit the secure strapping on any article whether the portmanteau is filled or empty state.

**No. 6425. Ironing Machine.***(Machine à repasser.)*

James Martin, Goliad, Texas, U. S., 15th August, 1876, for 5 years.

*Claim.*—1st. The combination of a smoothing iron (without regard to the form of such smoothing iron) and a rotary and adjustable ironing bed; 2nd. A rotary ironing bed applied to a frame, which is adjustable horizontally back and forth under a smoothing iron; 3rd. The combination of a swinging frame adapted to be worked by a foot treadle and carrying a rotary ironing bed, provided with a hand crank for turning it, a standard for supporting said frame and its ironing bed and a portable bracket, carrying a smoothing iron; 4th. The rotary ironing bed having its outer cloth covering on surface fastened by expanding cut ring; 5th. The adjustable clamp for holding the rotary ironing bed in its place, in combination with the ball bearing, for the shaft of the ironing bed and an ironing bed.

**No. 6426. Improvements on Plough Harness.***(Perfectionnements aux harnais de charrues.)*

Edwin Coleman, Castleton, Ont. (Assignee of Ambrose B. Coleman) 12th August, 1876, for 5 years.

*Claim.*—The combination of the draw lever A, the four lugs B B B B and the circular stretch bars C C.