

No. 3461. FREDERICK E. SMITH, Montpelier, Vt., U. S., 19th May, 1874, for 5 years: "Improvements on Washing Machines." (Perfectionnements aux machines à laver.)

*Claim.*—1st. The cleat M, attached to the bottom of a tub and provided with the button T, and pin U; 2nd. The cleat M, provided with the button T, and pin U, in combination with the end piece F, provided with the cleat L; 3rd. The cleat U, secured to the side of a tub, and having a recess for the reception of the pin P, upon the side of the end piece F, in combination with the cleat M, button T and pin U, for securing the machine removably in a tub; 4th. The band roller C, with flanges as described; 5th. The band, belt or apron D, in combination with two rollers B, B, and roller C; 6th. The combination of the gudgeons G, G, holder K, and spiral spring I, for obtaining a variable pressure on the roller A; 7th. The combination of the clutch-head R, having a diagonal slot receiving the gudgeons G, G, elastic ring S, and pin Q, for exerting a variable pressure of the roller A, as set forth.

No. 3462. STEPHEN C. GARDNER, Mansfield, Ct., U. S., 19th May, 1874, for 5 years: "Vehicle Wheel." (Roue de voiture.)

*Claim.*—1st. The combination with the tire A, and wooden or other material felloe d, of an inner tire b, having threaded or plain sockets at intervals around it and a series of spokes B, and thereon or plain, and screwed or driven into said sockets as described; 2nd. The combination with spokes B, of felloe E, caps E', and a hub consisting of three sections D, relatively grooved on their opposite faces, as specified.

No. 3463. ROBERT L. WALKER, Boston, Mass., U. S., 19th May, 1874, for 5 years: "Railway Car Window." (Store de voiture de chemin de fer.)

*Claim.*—The combination of the sash D, with the springs S, attached to its face and running grooves G, against the corrugated surface of the fillet E, said springs operating by their reaction to press the sash tightly against the window casing and to hold the sash at whatever height in the casing it may be placed, all in the manner described; the interposed double faced corrugated fillet E, in combination with the springs S, the slotted sash C, and window sash D, constructed and arranged to operate as set forth.

No. 3464. THOMAS H. CARRUTHERS, Cincinnati, Ohio., U. S., 19th May, 1874, for 5 years: "Horse Shoe Bar." (Blanc de fer à cheval.)

*Claim.*—1st. A horse shoe bar formed upon its outer edge with a sloping curve d, for the reception of the nail crease as specified; 2nd. A horse shoe bar formed at its outer edge with a guiding crease e, for facilitating the accurate formation of the nail crease as specified.

No. 3465. ADRIAN O. ABBOTT, Adrian, Mich., U. S., 19th May, 1874, for 5 years: "Hub Borer." (Machine à percer les moyeux.)

*Claim.*—1st. The fixed bearing A, consisting of a large narrow ring so that a portion of the hub shall project therethrough to facilitate centering the wheel, and that a steady support shall be formed close to the spokes of the wheel for the wheel carrier to revolve on; 2nd. The feeding nut L, constructed with the swivel socket and flange q, p, in combination with the guide box d, having the cylindrical grooved neck r, to receive the same as described; 3rd. In the arm M, m, and radial slot m, in combination with the swivelled feeding nut L, as means for revolving the same, as set forth; 4th. The knife or cutter I, constructed with the outwardly curved main blade h, and straight terminal blade or lip o, as described for cutting end enlargements in the hub bore as set forth; 5th. The knife or cutter I, constructed with the outwardly curved main blade h, and straight terminal blade o, in combination with the non-rotary cutter shaft H, adapted to be fed longitudinally and laterally as described; 6th. The three equidistant screws v, for truing the wheel as described; 7th. The combination of the foundation ring E, the face ring F, carrying the attaching grips w, v, and the three equidistant right and left adjusting screws u, with their nuts x, for supporting and truing the wheel in the manner set forth.

No. 3466. GEORGE C. BOVEY, Chillicothe, Ohio, U. S., 19th May, 1874, for 5 years: "Brick Machine." (Machine à brique.)

*Claim.*—1st. A brick machine consisting of the frame A, A, guiding grooves B, B, 1, 2, 3, 4, 2', 3', 4', vertically acting plungers C, c, reciprocating carriage E, E', V, with its moulds D, flanges G, G, racks g, g', shafts H, H', H'', hopper I, pressure rollers L, and driving pinions h, h', h'', when arranged to operate with reference to one another as described; 2nd. The pivoted and loaded belt crank M, m, for the purpose of maintaining the inclined and oblique self-sharpening knife m, in contact with the face of the moulds, for the object explained; 3rd. The provision in a brick machine of the pressure roller J, having radial channels whose inner surfaces slope towards the axis of said roller as shown at j', j'', j''', j'', for the purpose described.

No. 3467. ISAAC A. SINGER, New York, U. S., 19th May, 1874, for 5 years: "Chest Protector." (Plastron hygiénique.)

*Claim.*—A chest protector made up of two or more thicknesses of cloth or other suitable material and provided with buttons and button holes or equivalent devices for uniting said thicknesses together as set forth.

No. 3468. JOHN W. McGLASHAN, Montreal, Que., 19th May, 1874, for 5 years: "Apparatus for Manufacturing Drain Pipes from Cement, Clay, &c." (Appareil de fabrication des tuyaux de drainage en ciment, terre, &c.)

*Claim.*—1st. The trough C, and shaft d, in combination with mixing blades i, and K; 2nd. The hinged bar p, with roller q, and hook or catch r, combined as set forth; 3rd. The tamping bar V, discs a, cam sleeve s, and wedges t, all combined and working together as described; 4th. The tamping bar V, with projections a', and carriage b', combined as set forth; 5th. The bar V, with sliding carriage b', crank t'-o'-c, either rigidly secured by nut d, or actuated by spring e', 6th. The table n, interchangeable plates O, cranks or cams u, and t, and mould f, combined as described; 7th. The mould f, constructed with lugs h, and s', and pins l, combined as set forth; 8th. The mould f, base plate l', and removable core g', combined as described; 9th. The cranks or cams, and u, cranks a', and b', connecting rod c', combined and working together as described.

No. 3469. DANIEL ASHWORTH, Wappinger's Falls, N. Y., U. S., 19th May, 1874, for 5 years: "Hose and Pipe Coupling." (Assemblage de tuyaux élastiques et autres.)

*Claim.*—1st. The combination of the discs B, each having one or more hook-shaped lugs C, notches D, and inclined surfaces E; 2nd. The abutments e, on the inclined surfaces E, as described; 3rd. The two internally flanged gaskets I, in combination with each other and with the discs B, of the coupling as shown and described.

No. 3470. JOHN MCGUIRL and HUGH MCGUIRL, Merrickville, Ont., 19th May, 1874, for 5 years: "Chill-mould for Casting Plough-points." (Coquille pour couler les socs des charrues.)

*Claim.*—1st. A metallic mould for casting plough points composed of two parts A, B, hinged together and combinedly closing to form a cavity of the desired shape of casting to receive the molten metal as set forth.

No. 3471. MATHIAS MOORE, Sarnia, Ont., 19th May, 1874, for 5 years: "Apparatus for Preserving Fruits, Vegetables, Fish or Meats in Sealed Cans or Jars." (Appareil de conservation des fruits, légumes, viandes et du poisson dans des boîtes ou pots étanches.)

*Claim.*—1st. In a machine for preserving articles in cans, the tray or carrier B, in combination with the chamber C, constructed and operating as described; 2nd. The tray or carrier B, chamber C, and tramway F, in combination with the chamber D; 3rd. The vertically sliding table or platform B'', and cold water bath B'; 4th. The combination of the bent lever b, pivoted to arms v, and d', with the table or platform B''; 5th. The combination of the tray or carrier B, the steam or hot air chamber C, and D, tramway F, cold water bath B', and a reciprocating or sliding platform or table B; 6th. The combination of the fixed or standing table or platform B', sliding table or platform B'', with a cold water bath B', as described.

No. 3472. WILLIAM H. BECKWITH, Ottawa, Ont., 26th May, 1874, for 5 years: "Heating, Cooking and Ventilating Apparatus." (Appareil de chauffage, de cuisine et de ventilation.)

*Claim.*—1st. The fuel box E, having an endless apron or carriage F, for receiving long or short lengths of wood for feeding the fire chamber A; 2nd. In combination with a fire chamber and chimney, the air tube H, air chamber, provided with registers J, passaxe K, and ash pit L, arranged as set forth; 3rd. The cylindrical revolving ovens O, operating as described; 4th. In combination with the smoke flues Q, Q, the intermediate air flue P, having inlet operations R, and outlets V, as set forth.