

No. 3473. SILAS S. PUTNAM, Boston, Mass., U. S., 28th May, 1874, for 5 years: "Machine for Making Wrought Nails." (Machine à faire le clou forgé.)

*Claim.*—1st. The combination of the hammers with a mechanism for varying the number of their blows as described; 2nd. The combination of the hammers with the arm *n*, and a mechanism for moving the same laterally at the required time as set forth; 3rd. The hammers operated by the cam wheel *E*, in combination with a mechanism for cutting off the finished nail as described; 4th. The combination of the hammers with the arm *n*, and mechanism for operating the same and a mechanism for varying the number of blows of the said hammers as described; 5th. The adjustable outer lever *I*, with its outer *L*, in combination with the outer lever *H*, with its outer *K*, operating as set forth; 6th. The combination of the hammers with the mechanism for varying the number of their blows, the arm *n*, and mechanism for operating the same and the cutters as described; 7th. The hammers, when constructed with projections extending in front of and beyond the plates *d*, in the manner set forth.

No. 3474. THOMAS FOLEY, Brantford, Ont., 28th May, 1874, for 5 years: "Apparatus and Process for Manufacturing Extract for Tanning and other purposes from Hemlock, Oak and Substances Containing Tannin." (Appareil et procédé de fabrication pour le tannage et autres fins, de l'extrait d'écorce de pruche, chêne et autre, et des substances contenant du tannin.)

*Claim.*—1st. The manufacture of extract for tanning and other purposes, the process of evaporating the ooze or liquor obtained from hemlock, oak, or other bark, or substances containing tannin by steam heat without the aid of a vacuum or vacuum pumps in the manner set forth; 2nd. In combination with the cylindrical evaporating vessel *A*, and its internal and external devices, as described, the dome *B*, pipe *C*, circular heating pipes *L*, and *M*, shaft *N*, arms or agitators *O*, air pipe *S*, and funnel tubes *K*, arranged and operating separately or combinedly.

No. 3475. STEPHEN P. LEAKE, London, Ont., 28th May, 1874, for 5 years: "Improvements on Bedsteads." (Perfectionnements aux couchettes.)

*Claim.*—1st. Connecting the head and foot rails *B*, *B*, to the posts *A*, by the rails *B*, *B*, receiving the ends of the posts, and the lower rails *C*, having dowel pins *D*, entering the posts *A*, laterally as set forth; 2nd. Connecting the side rails *E*, to the posts *A*, by the rails entering a mortise in the posts and receiving the dowel pins *D*, laterally as set forth; 3rd. The diagonal brace *E*, *E* applied as set forth; 4th. Securing the slats *I*, to the rails *F*, by pins *H*, as set forth, or by notches as described.

No. 3476. EDWARD P. MORONG, Boston, Mass., U. S., 28th May, 1874, for 5 years: "Method of Laying and Preserving Wood Pavements." (Art de poser et préserver le pavage en bois.)

*Claim.*—The laying of wood pavement, the treatment of the wood with antiseptic applied to the sand form on which the ends of the blocks rest in the manner described.

No. 3477. EDWARD MYERS, New York, U. S., 28th May, 1874, for 15 years: "Improvements on Rotary Pumps." (Perfectionnements aux pompes rotatives.)

*Claim.*—An improved rotary pump formed by the combination with each other of the cylinder *A*, provided with ports *E*, and having circular cavities *B*, formed in its heads concentric with respect to each other, eccentric with respect to the heads of the cylinder, and tangent to the inner surface of the cylinder, between its ports, the hollow cylinder or drum *F*, the slotted cylinder or bearing *C*, the piston *H*, whether made with or without a flange or fluke and the shaft *B*, as described.

No. 3478. MATTHEW WAINMAN, South Orillia, Ont., 28th May, 1874, for 5 years: "Churning Machine." (Machine à baratter.)

*Claim.*—A churning machine having a lever beam *G* oscillating for the working of churn dashers by means of a pitman *F*, connected to a crank disc *D*, driven by the piston *B*, by application of belt *C*, *C*, working over drive wheel *A*, said drive wheel being driven by hand power by using cranks *H*, *H*, by which means two persons can be employed in operating the machine if needed.

No. 3479. JOHN W. ELLIOT, Toronto, Ont., 28th May, 1874, for 5 years: "Improvements in Heating Stoves." (Perfectionnements aux poêles de chauffage.)

*Claim.*—1st. A four way draught passage *F*, with a valve *G*, and radiating pipe *F*, in combination with a stove *A*, *A*, *A*, *A*; 2nd. The men *B*, having a knob *B*, riveted thereon in combination with the vertical ribs *b*, and horizontal ribs *b*, 3rd. The combination of the base *A*, ash pan chamber *E*, grate *D*, fire pot *A*, dome or top *A*, coal reservoir or feeder *A*, cast and fitted together as specified.

No. 3480. JOSEPH TAYLOR, Hamilton, Ont., 28th May, 1874, for 5 years: "Improvements on Railway Freight Cars." (Perfectionnements aux wagons à fret de railroutes.)

*Claim.*—1st. A box freight car for railways, having door *E*, arranged at the sides of the car near either end and opposite to each other. 2nd. A box freight car constructed of a frame work composed of the sill pieces *A*, vertical posts *B*, string pieces *C*, diagonal braces *D*, tension rods *F*, and transverse beams *G*, arranged and combined as described and a door way at each side near the end of the car as set forth.

No. 3491. JOHN A. MOFFAT, Dundas, Ont., 28th May, 1874, for 5 years: "Machine for Stoning Cherries." (Machine à vider les cerises.)

*Claim.*—A frame *A*, hopper *B*, spring *F*, punches *I*, *I*, strippers *J*, *J*, guards *K*, *K*, rubber plates *M*, *M*, metal plates *N*, *N*, and fastening screw *C*, *D*, plate *L*, handle *H*, all arranged as specified.

No. 3482. WARREN T. KELLOGG, Troy, N. Y., U. S., 28th May, 1874, for 5 years: "Improvements on Portable Forges." (Perfectionnements aux forges portatives.)

*Claim.*—1st. The shaft *E*, and pulleys *E*, and *F*, in combination with sliding boxes *E*, and spring *I*; 2nd. The combination of the fan *A*, friction pulleys or gears *E*, *E*, *F*, and *G*, with rod *H*, and lever *a*, as set forth.

No. 3483. WILLIAM QUIST, Mayfield, Cal., U. S., 28th May, 1874, for 5 years: "Tripartite Tie Link for Chains." (Ménille de chaîne tripartite.)

*Claim.*—1st. The U shaped rods *A*, *B*, having the extremities of one arm linked or hooked together, while the extremities of the opposite arm are arranged to buckle or interlock together as described; 2nd. The U shaped rods *A*, *B*, and permanent connecting link *C*, when the long arms of said rods *A*, *B*, are provided with interlocking devices, and bent inwards towards link *C*, as described; 3rd. A flexible chain or link connector consisting of three parts *A*, *B*, *C*, when so constructed as to form a link of the chain which it connects as described.

No. 3484. JOHN BENNETT, Belleville, Ont., 23th May, 1874, for 5 years: "Fanning Mill and Separator." (Tarrare-Séparateur.)

*Claim.*—1st. An adjustable screen capable of being worked at different angles without a groove in the shoe of a fanning mill or separator as set forth; 2nd. The combination of the pivot irons *A*, *A*, cams *D*, *D*, and ratchet iron *G*, as specified.

No. 3485. WILLIAM W. ALLMAND, East Boston Mass., U. S., 28th May, 1874, for 5 years: "Valve Re-Fitting Machine." (Machine à réparer les soupapes.)

*Claim.*—1st. The bearing strips *c*, fitted into the conical recess *C*, of the head *C*, and arranged within the same at points equidistant from each other and from the outer *D*, as specified; 2nd. The frame *A*, head *C*, and *C*, tail stock *H*, centres *G*, and *I*, bar *K*, provided with the square end *K*, and the ratchet *L*, *L*, and *L*, when constructed and combined to operate as set forth; 3rd. The improved machine described as a whole when its several parts are constructed and combined to operate as described.