

No. 2968. JOHN McLARTY, Strathroy, Ont., 5th January, 1874, for 5 years: "Flexible Ladder." (Echelle élastique.)

Claim.—The combination and adjustment of the lines *a, d, d', h,* and *m, o,* to the hooks *b, c,* and *e, f,* and to the ladder *c, f, j, i,* the combination of the hooks *b, c,* and *e, f,* with the brace *n, p,* and the wheels and axle *i, k,* with the ladder *c, f, h, i,* for the purposes set forth.

No. 2969. FREDERICK R. BUTCHER, St. John, N. B., 5th January, 1874, for 5 years: "Improvement on Spring Bed Bottoms." (Perfectionnement des fonds de lits à ressorts.)

Claim.—The combination of slats *D,* and the hinged-joints *E, E,* as set forth.

No. 2970. WILLIAM T. RAND, Fitch Bay, and TIMOTHY B. RIDER, Magog, Que., 5th January, 1874, for 5 years: "Saw Arbour." (Un essieu de scie.)

To centre saws upon their arbours when the central openings of the saws are of greater diameter than the arbours on which it is desired to mount them.

Claim.—1st. The combination of the radial pins or dogs *E, E,* and the sharply pointed and tapering screw *H;* 2nd. The combination with the radial pins *E, E, E,* and the sharply pointed and tapering screw *H,* of the springs *F, F, F,* and the spring caps *G, G, G.*

No. 2971. JOHN T. POOLE, JOHN S. ALLEN, CHARLOTTE M. N. ALLEN, wife of J. S. Allen, JOHN WILLIAMSON, GEORGE N. CLARK, DAVID B. JONES and ELISHA MOORE, Canterbury, N. B., 5th January, 1874, for 5 years: "Life Preserving Dresses and Air Buoys Combined." (Vêtements et bouées à air de sauvetage combinés.)

Claim.—1st. A life dress of undivided parts, having an elastic opening in the hood and closed by outer and inner hoops *B, B,* the latter provided with a tympan furnished with a flat oval rubber ring *E;* 2nd. The hoops *B, B,* receiving intermediately the edge of the hood around the opening and secured together by screws or other contrivance for excluding water; 3rd. In combination with the undivided dress *A,* the air buoys *H,* arranged two in front and two in rear and provided with inflating tubes *I,* and straps *J, K, L, M, N,* as set forth for maintaining the buoys in position.

No. 2972. CHARLES H. BILLINGS, Cleveland, Ohio, U. S., and JEFFERSON T. RAPLEE, Montreal, Que., 5th January, 1874, for 5 years: "Automatic Railway Car-coupler." (Attelage de voiture de railroute automatique.)

Claim.—1st. The bunter head *A,* with recess *E,* in combination with catch block *C;* 2nd. The catch block *C,* with flap *D,* in combination with bell crank *I,* and apparatus for actuating the same; 3rd. The combination of the catch block *C,* and flap *D,* with link or chain *H,* and rod *G,* with elbow *G';* 4th. The combination of the catch block *C,* and flap *D,* with link or chain *K,* rod *L,* with eye *L',* and rod *M,* with crank *M'.*

No. 2973. HARVEY L. LOWMAN & ROYAL M. BASSETT, Birmingham, Ct., U. S., 5th January, 1874, for 15 years: "Swaged Shanks for Shovels, Spades, Hoes, &c." (Douilles estampées pour les pelles, bêches, houes, &c.)

Claim.—1st. The combined process described for making shovels, spades, hoes, scoops, or other analogous articles in one piece from sheet metal by cutting the sheet for the body of the shovel and with a projection from the rear edge thereof which is to form the hollow shank and at one swaging operation between dies giving the form required for the shovels and the half form to the projecting part which is to form the projecting hollow socket and then by the second swaging operation completing the hollow tubular projecting socket for the reception of the handle; 2nd. Shovels, spades, hoes, scoops and analogous articles, such as are made from sheet metal and with a hollow shank when the said shank and blade or body are formed from a single piece of sheet metal.

No. 2974. WILLIAM O. GROVER, Boston, Mass., U. S., 5th January, 1874, for 5 years: "Bird Cage." (Cage d'oiseau.)

Claim.—A bird cage, having the subchamber *b,* covered by the top-plate *c,* in which is formed the passage *f.*

No. 2975. GEORGE CALCOTT, Thorold, Ont., 5th January, 1874, for 5 years: "Base Burner Stove." (Poêle à foyer de base.)

Claim.—1st. The outer cylinder *F,* surrounding the stove above the combustion chamber *A,* and secured in position by the flanged ring *c,* and top *G;* 2nd. The air duct *K,* arranged to combine the base of the stove and ring *C,* for conveying cold air from below the base; 3rd. The close drawer *M,* arranged to slide within the base and resting thereon, for receiving ashes; 4th. The employment of the hot air oven *J,* with a stove having a jacket cylinder for distributing heat as described.

No. 2976. NORMAN P. SLADE, Rockford, Ill., U. S., 5th January, 1874, for 5 years: "Writing Fluid." (Encre à écrire.)

Claim.—A writing fluid composed of water, borax, extract of log-wood, bichromate of potash, prussiate of potash, glycerine, and alcohol, in the proportions set forth and compounded as described.

No. 2977. VINCENT C. MEYERHOFFER, Rutland, Vt., U. S., 8th January, 1874, for 5 years: "A Mail Bag." (Une valise à lettres.)

Claim.—1st. The frame *C,* composed of two long and two short sections connected by the hinges *J, J, J;* 2nd. The cap or apron *B,* composed of one long and one short section connected by the hinge *J;* 3rd. The use of rivets applied to the frame *C;* 4th. Construction of tag plate strap *E,* and spring *I,* which secures the address in place *H.*

No. 2978. JAMES A. WELCH, Hamilton, Ont., 8th January, 1874, for 5 years: "A Flat Brush." (Un pinceau plat.)

Claim.—1st. The double bevel or wedge-shaped ferrule *a,* constructed and stamped out by dies in one piece; 2nd. The arrangement of the two rows of nails *d, d,* on the sides, and the end nail *c,* as specified.

No. 2979. WILLIAM H. PORTER, Bradford, Ont., 8th January, 1874, for 5 years: "Dental Plate." (Plaque dentaire.)

Claim.—The bead or rib *B,* formed upon the surface of dental plates below the ordinary vacuum chamber, and connected at its ends with the rim *c,* formed upon the back edge of the said plates.

No. 2980. WILLIAM FERRIS, Pleasant Plain, Ohio, U. S., 8th January, 1874, for 5 years: "Knife and Pitman Connection for Harvesters." (Manière d'ajuster la lame à la bielle des moissonneuses.)

Claim.—The tapering hole formed through the eye *a,* of the sickle bar *A,* and the branched end *b,* of the pitman *B,* having a screw thread cut in the said hole in one or both of said branches and the wooden pin *C,* to form the connection between the cutter bar and pitman of a harvester and mower.

No. 2981. JOHN O. JONES, Boston, Mass., U. S., 8th January, 1874, for 15 years: "Reversible Rake." (Rateau réversible.)

Claim.—A hand rake head formed of metal in one casting or piece, consisting of the two rows of teeth *A, B,* the one fine, the other coarse, the central bar *C,* and the shank *D,* the same being constructed and adapted to be applied to a suitable handle, as set forth.

No. 2982. JEAN B. GULLY, Montreal, Que., 8th January, 1874, for 5 years: "Method of Preparing Steel Belts for Curing Rheumatism." (Méthode de confection des ceintures d'acier pour guérir les rhumatismes.)

Claim.—Constructing a belt of cast steel forged or laminated and annealed to the blue tint for alleviating and curing rheumatic pains.

No. 2983. WILLIAM DUNLOP, Toronto, Ont., 8th January, 1874, for 5 years: "Stench Trap for Sewers." (Clapet d'égout.)

Claim.—The trap or door *c,* constructed in one piece or with a lower sub-trap *c',* hinged to the end of the drain pipe *a.*

No. 2984. JACKSON RICHARDS, GEORGE W. WAITT, EZEKIEL C. SHAPLEY & CHARLES FENNER JONES, Philadelphia, Penn., U. S., 8th January, 1874, for 5 years: "Locomotive Chimney." (Cheminée de locomotive.)

Claim.—1st. The combination with a locomotive chimney of an obstruction *F,* for contracting the interior of the body of the chimney above the exhaust pipe; 2nd. The combination of an obstruc-