

with plauer running from the deepest parts of the recesses to the periphery of *a*, the friction rolls *b, b*, playing in the recesses *m, m*, and the peripherally flanged wheel *D*, so formed that the flange *g* shall form a hoop extending over and around *a*, and the rolls *b, b*, the whole operating so that when *D* revolves in one direction the rolls *b, b*, will wedge between the planes of the recesses *m, m*, and the inner surface of the hoop *g*, causing the wheel *E*, to be revolved in the same direction, but when *D*, is reversed and revolved in an opposite direction, the rolls retire and allow *D*, to be revolved without carrying *E*, in the same direction, all as described.

No. 1505. JOSHUA COLLINS, Montreal, Que., 16th March, 1875, for 5 years: "Bag Tie and Fastener." (Courroie agrafe de Sac.)

*Claim.*—A Bag tie or fastener consisting of a piece of metal so cut, stamped or cast, of wire so bent as to form shoulders or loops *A, A*, at the end of arms *D, D*, between which a notch is placed to hold the cord *F*, securely, as specified.

No. 4506. JOHN C. PEACOCK, London, Eng., 16th March, 1875, for 5 years: "Non Conducting Material Applicable where Exclusion of Heat is required." (Conduit anti-calorique.)

*Claim.*—The combination of cork soot with apparatus for the retention or exclusion of heat either alone or mixed with lime, Portland cement or ash, or substances having a hardening or setting power as described.

No. 4507. JAMES F. WILLIAMS, Niagara, Ont., 17th March, 1875, (Extension of Patent No. 289), for 5 years: "Buckle for Fastening Straps and Bands." (Boucle pour joindre les courroies et les bandes.)

*Claim.*—The uniting of two complete and distinct levers, fig. 1, one of the first order of lever *A*, and one of their second order of lever *B*, hinged together at their fulcrums *A, A*, and pressing upon each other at the points *B, B*, where the lever is usually applied to

the object to be moved so as to form the buckle or fastener fig. 1, for the purpose of fastening by pressure and friction bands, straps, &c., by passing the object *C*, to be held between the levers above mentioned through at the point *B, B*, of pressure.

No. 4508. LUTHER J. HOUSE, and ALBERT C. HOUSE, Stanstead, Que., 18th March, 1875, for 5 years: "Stump Extractor and Stone Puller." (Appareil pour arracher les souches et enlever les pierres.)

*Claim.*—1st. The combination of the pivoted working lever *C*, as provided with guide stay straps *E*, with the adjustable standard *B*, and platform *a*; 2nd. A lever *C*, provided with straps *D*, and two rows of lever sockets, formed by pins *I, I*, for the purposes set forth; 3rd. A lever *C*, provided with guide straps *E*, and straps *D*, for the support of bearings *I, I*, of the adjustable hand spike *F*, in combination with a supporting and pivoted standard *B*; 4th. The Standard *B*, having a vertical adjustment by means of the rack and pinion, as set forth, in combination with the posts *L, L*.

No. 4509. CHRISTOPHER C. JONES, Fredericton, N. B., 18th March, 1875, for 15 years: "Improvements in Pumps." (Perfectionnements dans les pompes.)

*Claim.*—1st. The combination of the wooden top *A*, with the metal cylinder *m*, and the metal tube *n*; 2nd. The combination of the wooden top *A*, with the metal cylinder *m*; 3rd. The combination of the wooden top *A*, with the metal tube *n*; 4th. The use in applying this combination of the plate, table or flange *c*, surmounted by the rim, crown or hoop *d, d*, by means whereof the wooden part is prevented from splitting and leaking,

No. 4510. STEPHEN E. FOSTER, Minneapolis, Ma., U. S., 18th March, 1875, for 5 years: "Spring for Vehicles." (Ressorts de voitures.)

*Claim.*—In combination with the rubber springs *d*, the hook *f*, and clasp *c*, as described.