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No. 11,033. Improvements on Lock Nuts.

(Perfectionnements aux arrête-noix)

Frederick J. Talbot, Sheffield, Eng., 16th March, 1880; for 5 years.

Claim.—1st. A screw fastening device, which consists of two parts, namely: a screw or bolt, and a nut or tapped hole, the formation of a position of the screw threads in the said nut or hole, of too small a diameter (or otherwise unfit) to permit the threads of the screw or bolt to enter them (and either with or without grooving them to form cutting edges), so that when the two parts of the said fastening are secured together, the smaller threads in the nut or bolt hole will have to be forced through or over the thread of the bolt, whereby the threads of the nut or bolt hole will have a close grip or hold upon the threads of the screw or bolt and will ensure the permanent security of the fastening; 2nd. a screw fastening device consisting of two Parts, namely: a screw or bolt, and a nut or tapped hole, the formation of a bortion of the threads of the screw or bolt to too large a diameter (or otherwise loufit) to enter the threads in the nut or bolt hole (and either with or without grooving them to form cutting edges), so that the said threads of the screw or bolt when screwed into the said nut or hole will have to be forced into, and cut their way through the threads thereof and will thereby have a close grip upon the threads of the nut or bolt hole, and will ensure the permanent security of the fastening; 3rd. a nut grooved or slotted in such a manner as to form cutting edges f on its screw threads; 4th. a screw or screw bolt grooved or channeled in such a manner as to form cutting edges on its screw threads.

No. 11,034. Improvements on Mechanical Movements. (Perfectionnements aux mouvements mécaniques.)

Thomas W. Eaton, Chicago, III., U.S., 16th March, 1880; for 5 years.

Vaim.—The combination with the disc or other device, to be intermittently Operated and having appropriately spaced notches of a cam wheel alternately moving and locking said disc, or other device, by the continuous Passage of its cam or cams and plain rim, through such spaces or notches.

No. 11,035. Improvements on Ditching Machines. (Perfectionnements aux machines à fossoyer.)

Alexander (t. Peck, (Assignee of Francis Peck), Raleigh, Ont., 16th March, 1880; for 5 years.

Claim.—1st. The combination of beam A, elevator B, inclined plane C₁, cutter E, wheels F, handles H, shoe N, pulleys K, and belt R, or its equivalent; ad, the combination of beam A, inclined planes P₂, wheels F, cutters E, shoe N, handle H, supports T S and spreaders Q.

No. 11,036. Improvement in House Ventilators. (Perfectionnement aux ventilateurs des

Walter S. Sayers, Guelph, Ont., 16th March, 1880; for 5 years.

Claim.—1st. The combination of the storm guards BBB with the air duct AAA; 2nd. the combination of the storm guards BBB with the air duct AAA and the valve C.

No. 11,037. Improvements on Sash Support-

William W. Sweetland, Edwardsburg, Mich., U. S., 16th March, 1889; for

Syeers.

Claim.—1st. An articulated latch A, in combination with the spring E, lever F, rod C and case B; 2nd. the combination with one or both sashes of

the articulated latch A, spring E, lever F and rod C; 3d, the combination of the lever F with latch A, rod C and case B; 4th, the combination of the latch A with case B, recessed at a, and with rod C

No. 11,038. Improvements on Firearms. (Perfectionnements aux armes à feu.)

James Lee. Bridgeport, Ct., U. S., 16th March, 1880; for 5 years.

Claim—lst. In combination with a gun having its breech block or bolt arranged to reciprocate in line with the barrel, a detachable magazine in cartridge holder arranged to feed or deliver the cartridge into the receiver in such a position that when the breech bolt is moved forward to close the breech it will shove the cartridge into the chamber of the gun; 2nd, the curved sliding plate I, in combination with the receiver having an opening through its bottom, when arranged to operate as set forth; 3rd, the detachable magazine D provided with the cavity m, and the inwardly projecting shoulders o r, or their equivalents; 4th. The extractor v provided with the shoulder s, in combination with the bolt C, having a corresponding recess in tis ribs, and the spring t; 5th, the firing pin P, provided with the loose sleeve or collar R having its projection p, in combination with the tubular breech bolt C, provided with the slot z having an offset for the projection p to engage in; 6th, a detachable magazine or cartridge holder D, having its front and rear ends of different lengths, with one of its sides or edges open for the insertion and removal of the cartridges and provided with a spring follower and cartridge retaining devices.

No. 11,039. Improvements in Fire-Escapes.

(Perfectionnements aux sauveteurs d'incendie.)

Charles Granville and Thomas McNea, Markdale, Ont., 17th March, 1880; for 5 years.

Claim.—ist. The rope A, in combination with the steps B and gay ropes F; 2nd. The clips or brackets C rivetted to the ends of the steps B and provided with a hole or socket for holding the rope A, in combination with the screw stud; 3rd. The bar D and bracket E fastened outside of the window, in combination with a rope ladder; 4th. The rope A provided with steps B and supported by the bar D, in combination with the box G.

No. 11,040. Improvements on Sawing Machines. (Perfectionnements aux scieries.)

W. W. Bostwick, Cincinnati, Ohio, (Assignee of Wesley S. Brewer, Richmond, Ind.), U. S., 19th March, 1880; for 5 years.

Claim.—1st. The combination, in a sawing machine adapted to be operated by human power of the following instrumentalities, namely: a base frame, a vertically vibrating seat lever pivoted thereto, a vertical hand lever pivoted to the seat lever and carrying the saw below, one or more foot levers pivoted directly to the base frame, with rods or pitmen connecting the foot levers with the hand lever and seat lever, and so arranged that the depression of foot levers operate to thrust the saw forward and elevate the seat lever while the depression of the seat lever operates to draw the saw backward and elevate the foot levers; 2nd. The combination of the foot levers E pivoted directly to the base frame connecting rods F (t, hand lever C and pivoted/seat lever B; 3rd. In combination with the seat lever of a sawing machine, a seat S mounted upon the said lever and having an horizontal adjustment thereon by mechanism; 4th. A riding saw machine, the combination of a vertically pivoted saw-lever, a weight lever, a foot lever, a cross head moving on horizontal guides to actuate a horizontal saw, and a pitman connecting the cross head with the said levers: 5th. In combination with a saw for felling timber which is standing, an adjustable frame co-sisting of a cross bar h, slotted arms i i through which the saw moves and is thereby guided and sheaves j j riding upon the back of the saw and holding it to its work; oth. In combination with the horizontal saw D, cross-bar h, slotted arms i and sheaves j j, a cord or its equivalent to connect the saw and holding it to its

No. 11,041. Improvements in Audiphones.

(Perfectionnements aux audiphones.)

Thomas W. Graydon, Cincinnati, Ohio. U.S., 19th March, 1880; for 5 years.

Claim.—1st. A homogeneous or divisible diaphragm B provided with means for placing and retaining the same in a state of tension adjustable to the needs of the user; 2nd. The diaphragm B of an auditory apparatus, composed of sections b, hinged or pivoted together so as to fold or slide