No. 14,408. Improvements on Nut Locks.

(*Perfectionnements aux arrête-écrous.*)

Dudley E. Jones, (Assignee of Marshall Wallace,) Little Rock, Ark., U.S., 13th March, 1882; for 5 years.

Claim.—1st. The combination, with the screw bolt A, of the tapering nut B having incisions C from the smaller end, and sleeve D fitting thereon and turning therewith, whereby the sleeve compresses the incised parts against the threads of the bolts, when in contact with the material to be bolted, to lock the nut from working loose. 2nd. A screw bolt A having a tapering nut B, with incisions C from the smaller end, and entering a sleeve D into which the nut is forced by turning the sleeve when in contact with the material to be bolted, whereby the threads of nut and bolt are compressed together.

No. 14,409. Improvements in Knitting Machines. (*Perfectionnements aux machines à tricoter.*)

William Esty, Laconia, N.H., U.S., 13th March, 1882; for 5 years.

Claim.—1st. A needle carrier formed of the flat plate A having a portion of its top edge cut away and provided with a groove in its side, in which the needle moves. 2nd. A needle carrier formed of the flat plate A, having a portion of its top edge cut away and provided with a groove in its side to carry a needle, and having its edges formed and adapted to work in grooves in the guide bars. 3rd. The combination, with the guide bars N N provided with vertical grooves in their inner sides, of the needle carriers formed of the metallic plates A, having the grooves in their sides for the reception of the needles, and the plate I, the said carriers being arranged in two series, the grooves of each series facing toward the centre of the machine, and the plate I being disposed between the two series in the centre of the machine. 4th. The combination with the guide bars N N having vertical grooves R formed in their inner sides and pattern mechanism, of the needle carriers formed of flat plates A having portions of their top edges cut away and provided with grooves for the needles, and the needles. 4th. The combination, with the guide bars N N having vertical grooves R formed in their inner sides, and the cam bar O, of the series of needle carriers, the needles and pattern mechanism, whereby the said carriers are raised and the needles caused to engage with the said cam bar at predetermined periods.

No. 14,410. Improvements in Dredging and Derrick Machines. (*Perfectionnements aux machines de dragueurs et de chèvres.*)

Ralph R. Osgood and James McNaughton, Albany, N.Y., U.S., 14th March, 1882; (Extension of Patent No. 7701.)

No. 14,411. Improvements in Dredging and Derrick Machines. (*Perfectionnements aux machines de dragueurs et de chèvres.*)

Ralph R. Osgood and James McNaughton, Albany, N. Y., U.S., 15th March, 1882; (Extension of Patent No. 7701.)

No. 14,412. Apparatus for Acetifying Alcoholic Wash and Maturing Spirits. (*Appareil pour acidifier les eaux alcoholisées et vieillir les spiritueux*)

Edward Luck, London, Eng., 15th March, 1882; for 5 years.

Claim.—1st. In apparatus for acetifying alcoholic wash or liquids, and for maturing spirits, the use of springs, cords or tapes, or textile fabrics suspended in the acetifying or maturing vessel, so as to form surfaces down which the wash, or alcoholic liquid, or spirit passes, while being subjected to the action of air or gas. 2nd. The combination of springs, cords, tapes or textile fabric forming surfaces for the cylinder to pass along, with upper and lower bars for support from which the said strings, cords, or their equivalents are suspended.

No. 14,413. Improvements in the Manufacture of Explosives. (*Perfectionnments dans la fabrication des matières explosibles.*)

Walter F. Reid, Stowmarket, and David Johnson, Chester, Eng., 15th March, 1882; for 5 years.

Claim.—Hardening grains of explosive powders containing nitrocellulose, or other solid organic nitro-compounds.

No. 14,414. Improvements on Apple Parers.

(*Perfectionnements aux peleurs des pommes.*)

John Clark, Pontiac, Mich., U.S., 15th March. 1882; for 5 years.

Claim.—1st. A rotating fork shaft, carrying a fork at each end, and adapted to reciprocate in suitable bearings. 2nd In combination with a hollow rotating shaft carrying a fork upon each end of the plunger I, reciprocating and extending entirely through said shaft, and provided at each end with a head working within the forks. 3rd. A rotating shaft, carrying a fork at each end and adapted to reciprocate in suitable bearings, and to reverse its rotary movement with each reciprocation. 4th. In combination with a rotating and reciprocating hollow fork shaft, the plunger H, sliding within said fork shaft, and adapted to be operated by the act of placing an apple on the fork shaft. 5th. In an apple-holder having a rotary and a forward motion, the bifurcated standard *n*, in combination with the thin sheet metal knife O, having its end securely bolted to the standard, while the two arms of said standard are pressed together, whereby the knife is tightly strained in the standard, when the pressure is removed. 6th. In combination with the fork shaft C, provided with a key seat *c* and cut away portions *d e*, the bevel pinion D provided with a hollow hub E and a slip-key *a*. 7th. The shaft C having a fork at each end and provided with a screw thread C, a key seat *c* and cut away portions *d e*, in combination with the threaded bearing E, the hub E provided with the slip pin *a*, the knives O O and suitable devices for rotating the shaft C. 8th. The rotating and reciprocating shaft C, having a screw-thread at one end, and provided with a key seat C and cut away portions *d e*, in combination with the hub E, the pin *a* sliding in a hole in said hub, and the spring band *b*, for holding the pin towards the shaft. 9th. An apple parer, wherein the knife swings upon a plane parallel with the fork shaft.

No. 14,415. Improvements on Pocket Hangers for Hats and Coats. (*Perfectionnements aux porte-manteaux de poche.*)

Thomas McDonald, Austin. Texas, U. S., 15th March, 1882; for 5 years.

Claim.—As a new article of manufacture, a hat holder composed of the two parallel plates A, connected at each end by a rivet, and the two hooks B B^1 pivoted on said rivets and turned in opposite directions.

No. 14,416. Improvements on Telephones.

(*Perfectionnements aux téléphones.*)

James A. Lakin, Westfield, Mass., U. S., 15th March, 1882: for 5 years.

Claim.—The combination, in an electric telephone system having no magnet, of an induction coil and a transmitter, and battery inclined in the primary circuit of said coil, and a receiver having two diaphragms with a condensing chamber between, inclined in the secondary circuit of said coil, and two sound tubes extending out from the sound chamber of said receiver and adapted to be applied to the ears while speaking into the transmitter, said receiver, with its sound tubes and the transmitter, being all arranged in the same enclosing case.

No. 14,417. Improvements in Trusses. (*Perfectionnements aux bandages herniaires.*)

John R. Alexander, Montreal, Que., 15th March, 1882; (Extension of Patent No. 7259.)

No. 14,418. Improvements in Trusses. (*Perfectionnements aux bandages herniaires.*)

John R. Alexander, Montreal, Que., 16th March, 1882; (Extension of Patent No. 7259.)

No. 14,419. Improvements in Car-Couplings. (*Perfectionnements aux accouplages des chars.*)

Milton R. Thurber and James E. Carmalt, Scranton, Penn., U. S., 16th March, 1882; for 15 years.

Claim.—1st. The combination, with the drawhead, of the hinged latch and the pivoted angular lever having the arms b^1 b^2, and carrying the pin C, said arm b^2 being arranged at an acute angle to the pin C. 2nd. The combination, with the draw-head having the recess A^1 in its upper part of the latch D, constructed and hinged in the lower part of the draw-head, and the pivoted angular lever carrying the pin, whereby the pivoted latch is adapted to operate within the draw-head and is protected from the weather. 3rd. The combination, with the draw-head having the elongated openings in its sides and the latch and angular lever carrying the pin, of the cross bolt *e*, the lever plate and its cams, and the stops on the sides of the draw-head. 4th. The draw-head having the angular lever pivoted to it, and provided with the shoulders $a\ a^1$ for protecting the arm b^2 of said lever frame being jammed by the link. 5th. The pin C, provided with the projection on its rear side, near its base, for the purpose of holding the link so that it will be presented properly to the draw-head of an adjacent car of the same or different height.

No. 14,420. Improvements in Reverting Dampers for Stove Pipes and Drums. (*Perfectionnements aux régistres à retour pour les tuyaux de poêles et les poêles sourds.*)

Samuel G. Searight and William H. Seagright, Butler, Ind., U. S., 16th March, 1882; for 5 years.

Claim.—1st. A damper for stove pipes and drums consisting of a box or chamber having valves at its ends, which, when closed, prevent direct passage through the chamber and also cut off direct passage through the pipe or drum in which the device is located, and having openings in its opposite sides, by means of which an indirect passage is afforded through the box or chamber when the valves are so closed. 2nd. A chamber adapted to be inserted within the pipe or drum valves, adapted to close the ends of the chamber and to project laterally on opposite sides against the inside of the pipe or drum, and openings in opposite sides of the chamber near the valves. 3rd. A chamber adapted to be inserted within the pipe or drum valves which operate to close the ends of the chamber, and which project laterally on opposite sides against the inside of the pipe or drum openings in opposite sides of the chamber near the valves, and means for opening and closing the valves simultaneously. 4th. The combination, with the chamber B having the opening b^3 b^4 in its opposite sides, of the hinged valves C D and means for connecting and operating them simultaneously. 5th. The combination, with the box or chamber B having the side openings, of the valves C D, the arms $f f^1$ and the connecting arm f^2. 6th. The chamber or box B formed of the flanged end sections, and the flat side sections rivetted to the flanges of the