

No. 14,625. Improvements on Lifting Jacks.*(Perfectionnements aux crics.)*

William N. Higgins, Wicklow, Ont., 20th April, 1882; for 5 years.

Claim.—1st. The block C, having a slot F extending inwardly toward the middle, in combination with a lever E pivoted to the hollow casing A receiving the block C slidingly. 2nd. The hook I, looped around the top of the block C and provided with an angularly bent termination, in combination with casing A and lever E.

No. 14,626. Improvements on Tables.*(Perfectionnements aux tables.)*

James Plenkharp, Columbus, Ohio, U. S., 20th April, 1882; for 5 years.

Claim.—The combination of a table leg having vertical grooves which incline transversely toward each other, rails having grooves which incline towards each other vertically, and a clamp piece having end flanges which enter the grooves in the rails, and flanges intermediate of its end which enter the groove in the leg.

No. 14,627. Improvements on Fish Hook Extractors. *(Perfectionnements aux extracteurs des hameçons.)*

Jeremiah W. Foard, San Francisco, Cal., U. S., 20th April, 1882; for 5 years.

Claim.—The shaft C having overlapping flanges A, at the point and adjacent sides, forming recesses B.

No. 14,628. Improvements on the Construction of Running Gears for Vehicles. *(Perfectionnements dans la construction des trains de voitures.)*

Robert McLaughlin, Oshawa, Ont., 20th April, 1882; for 5 years.

Claim.—1st. In a metal plate extending in one solid piece from the front axle to the rear, and having a T-shaped end on its back end, the combination of the shackle C arranged to fit over the axle, and provided with clamping plates b to fit over the T-shaped end. 2nd. In a metal reach plate extending from the front axle to the rear axle, and having its front end fork-shaped, the lower prong having an eye-hole in its end to fit over the king bolt, while the end of the upper prong is T-shaped and set so as to fit against the back of the head block, the combination of a rubber washer g placed on the king bolt D between the eye-hole d and nut h. 3rd. In the running gear of a vehicle in which the front head block is pivoted to the front axle on a king bolt, the combination of a metal reach plate having a bifurcated end, one portion of which is bolted to the head block, and the other portion pivoted upon the king bolt.

No. 14,629. Improvements on Fence Wire Stretchers. *(Perfectionnements aux appareils à tendre le fils des clôtures métalliques.)*

Sidney M. Stevens, DeKalb, Ill., U. S., 20th April, 1882; for 5 years.

Claim.—1st. The fence wire stretcher consisting of an arm F carrying a gripping device, and provided with a trunnion E, a winding drum mounted on said trunnion and secured directly thereto, and provided with an operating crank and a cord provided with a hook or griper. 2nd. The combination of arm F, hollow conical trunnion E, drum A, ratchet a, crank D, bolt or rivet f, griper F, pawl J and cord B. 3rd. The combination, with the drum mounted on a trunnion at one side of the grip carrying arm, of a handle G projecting from the opposite side the crank, the ratchet, the cord, the pawl and gripping device. 4th. The stretcher consisting of the griper arm, the winch, revolvably secured thereto, and the double crank arm. 5th. The combination of the double crank arm, drum and ratchet cast in one piece, and the griper provided with a trunnion cast thereon.

No. 14,630. Improvements on Swinging Lever Engines. *(Perfectionnements des machines à levier oscillant.)*

Joseph Von Zách, Budapest, Hungary, 20th April, 1882; for 5 years.

Claim.—1st. The swinging lever and the direct or indirect application of the same for actuating machinery. 2nd. The suspension of the swinging lever by a plate resting in a groove cut out in an axle. 3rd. The employment of the two yokes for actuating the two ratchet wheels. 4th. The use and application of the yokes and of the ratchet wheels belonging to the same for the transformation of a reciprocating motion into a rotary one.

No. 14,631. Explosive Compound.*(Composé explosible.)*

Eugène Turpin, Paris, France, 20th April, 1882; for 5 years.

Claim.—An improved explosive having hyponitric anhydride (nitrogen tetroxide or piroxide) as a base.

No. 14,632. Improvements on Lacing Hooks. *(Perfectionnements aux crochets pour lacer.)*

Mellen Bray, Newton, Mass., U. S., 20th April, 1882; for 5 years.

Claim.—1st. A hook for lacing boots, gloves and other articles, provided with a flat disk-like portion adapted to rest upon the material when applied for use, and a hook bent outward and backward from said disk in a plane parallel, or nearly so, to the body of the disk. 2nd. Lacing hook for boots, gloves, or other articles, having its neck bent in a plane parallel, or nearly so, with the flat surface of the portion which rests upon the material when secured thereto, and also bent at right angles to said surface, to form the arch d and depressions f. 3rd. As a means of lacing boots, gloves or other articles of wearing apparel,

the combination, with a single lacing cord secured by one end to the article to be laced, of two series of hooks, having their necks bent in planes parallel, or nearly so, to the material to which they are secured and arranged in pairs with their open sides all in the same direction, whereby the boot, glove or other article may be so laced that the draft upon the lacing cord shall tend to press the ends, or points of said hooks, close upon the article being laced.

No. 14,633. Improvements in Button Hole Casings. *(Perfectionnements aux boutonnières.)*

Thomas Dann, Montreal, Que., 30th April, 1882; for 5 years.

Claim.—A button hole casing consisting of a single blank, sewn face downward to the right side of the boot, shoe, garment or other article, and then turned over, passed through the button hole and secured by stitching.

No. 14,634. Improvements in Expanding Mandrels. *(Perfectionnements des mandrins à expansion.)*

William H. Nicholson, Wilkes Barre, Penn., U. S., 21st April, 1882; for 5 years.

Claim.—The combination of the plain conical arbor A, adapted to be held between the centres of a lathe, the short sleeve B having longitudinal slots a and the dogs C tapered on their inner edges to conform to the taper of the arbor, and provided with integral end lugs b which extend beneath the sleeve and limit their outward projection.

No. 14,635. Improvements on Horse Powers. *(Perfectionnements aux manèges.)*

James Smirl, Finch, Ont., 21st April, 1882; for 5 years.

Claim.—The combination, with the master wheel E mounted on spindle C, of the lever H fulcrumed to fixture I and provided with weight J and shaft G journaled in said lever, and carrying friction roller F and disk or pulley K, whereby the shaft yields to permit the friction roller to slip to overcome a jerking motion incident to too sudden a start of the animal.

No. 14,636. Improvements on Electric Lamps. *(Perfectionnements aux lampes électriques.)*

Tom E. Gatehouse, London, Eng., 21st April, 1882; for 5 years.

Claim.—1st. The combination, in electric lamps or apparatus, of a material, the electrical resistance of which decreases by heating with a metal filament, the electrical resistance of which increases by heating in parallel series, or alternative circuits, for purposes of control or regulation. 2nd. In electric light lamps, the combination, with the above claimed parallel circuits, of a sliding contact S on the carbon shunt C to regulate its length and at the same time the degree of light from the lamp. 3rd. In electric light lamps, the combination, with claim 1, of a solenoid M or electro magnet to automatically regulate the carbon C in one lamp or in a series of lamps, according to the strength of current. 4th. In electric light lamps, the combination, with claim 1, of a resistance R for the purpose shown in figure 8. 5th. In incandescent electric lamps, the combination of the carbon filament C with the resisting platinum wires P P as to figure 11. 6th. In electric light lamps with exhausted globes, the construction of the air-tight joint with an elastic carbonaceous, fusible, volatilizable material F as in figures 2 and 3. 7th. The construction and general arrangement of the lamps in figures 4 5 6 7 9 consisting of a parallel circuit, (claimed in No. 1) in combination with alternative subsidiary.

No. 14,637. Improvements on Cultivators. *(Perfectionnements aux cultivateurs.)*

James E. Weller, Kalamazoo, Mich., U. S., 21st April, 1882; for 5 years.

Claim.—1st. In a sulky barrow, the hinged share beams of graduated lengths, provided with the graduated springs, the bar connecting said springs with the lifting lever, and the weight arm. 2nd. The combination, with the cluster of independently hinged share beams and the weight arm, of springs and the means for connecting them with said weight arm so constructed and arranged that the bearing down of the wheel will affect all the share beams alike.

No. 14,638. Improvements in Cushion Protectors for Bottles and Jars. *(Perfectionnements des protecteurs de bouteilles et jarres.)*

James M. Thorpe and Joseph A. Belloli, San Jose, Cal., U. S., 21st April, 1882; for 5 years.

Claim.—1st. A bottle or jar having rubber or elastic rings fitted around it. 2nd. A bottle or jar provided with a series of suitable cushion seats, in combination with elastic rings or bands fitting said seats. 3rd. A bottle A having the series of circumferential grooves a and a, in combination with the elastic rings or cushions b. 4th. The jar B having the series of circumferential beads c c, in combination with the cushion rings or bands d.

No. 14,639. Improvements on Smoke-Consuming Furnaces. *(Perfectionnements aux foyers fumivores.)*

Cyrus Smith, Irwin's Station, Penn., U. S., 21st April, 1882; for 5 years.

Claim.—1st. The combination, with a boiler fire-place, of the ash-pit E, provided with adjustable dividing partition F, covered passage