

No. 16,172. Improvements in Hose Connections. (*Perfectionnements aux joints des boyaux.*)

Edward F. Gilbert, Lyons, N.Y., U.S., 23rd January, 1883; for 5 years.

Claim.—1st. In a flexible hose, the main reel length *c* provided with two short pieces one for each end, one having female couplings at both ends and the other having male couplings at both ends, whereby connections may be made with either a male or a female coupling on another length of pipe, a hydrant or a fire engine *b*; screwing the outer section thereto, or by removing the outer section and screwing the inner section thereto.

No. 16,173. Improvements on Axle Boxes. (*Perfectionnements aux boîtes des roues.*)

Orril R. Chaplin, Boston, Mass., U.S., 23rd January, 1883; for 15 years.

Claim.—1st. An anti-friction bearing composed of the necked bearing rolls *C* and separator rolls *D*, the rings *F* and *G* for holding them together, the outer ring *G* having an outer diameter no greater than the outer diameter of the circle of bearing rolls, and the inner ring *F* having an inner diameter greater than the inner diameter of the circle of bearing rolls. 2nd. In an axle box with anti-friction rolls *C* *D*, the ring *G* of a diameter that will allow it to be inserted through the end of the box, in combination with the groove *a* in the box to prevent contact of ring *G* with the box when in use. 3rd. The hardened seat *K* so grooved as to form a lip in front of the ball and retain it in position in the groove.

No. 16,174. Improvement in Mop-Holders. (*Perfectionnement des manches de torchons.*)

Jcnas T. B. Lee, Toronto, Ont., 23rd January, 1883; for 5 years.

Claim.—1st. A mop-holder composed of two bars pivoted to each other and provided with a device for locking them together. 2nd. The combination, with the bars *A* and *D*, of the links *I* pivoted to both, and of a device for locking the bars together. 3rd. The combination, with the bars *A* and *D*, of the links *I* pivoted to both, the links *G* pivoted to the bar *D*, and the disk *E* pivoted eccentrically to the link *G* and provided with a handle *F*. 4th. The combination, with the bar *D* and the bar *A* provided with a recess *a*, of the links *I* pivoted to the bars *A* and *D*, the links *G* pivoted to the bar *D* and the disk *E* pivoted eccentrically to the links *G*.

No. 16,175. Improvements in Roofing Cement. (*Perfectionnements au ciment à toitures.*)

William L. Maltby, Montreal, Que., 23rd January, 1883; for 5 years.

Claim.—A roofing cement or paint composed of actinolite mica, and soap stone powdered and mixed with coal tar or other liquid bituminous substance.

No. 16,176. Improvements on Open Links. (*Perfectionnements aux maillons ouverts.*)

Soiomon Shetter and Hiram G. Filson, New Cumberland, W.V., U.S., 23rd January, 1883; for 5 years.

Claim.—In a connecting link, the combination, with the part *B* provided with the hook *b* and the upturned end *c*, of the part *A* provided with the hook *a* and the eye *e*, the said hooks being flattened diagonally.

No. 16,177. Improvement on Water Indicators. (*Perfectionnement des indicateurs d'eau.*)

Deanis McCarly and George R. Davis, St. John, N.B., 23rd January, 1882; for 5 years.

Claim.—The dial *a*, hand *a*, shaft *x* and cord *E* provided with the foot *G* and counterbalance *H*.

No. 16,178. Improvements on Connections for Electric Circuits. (*Perfectionnements aux raccordements des circuits électriques.*)

Edward H. Johnson, New York, N.Y., U.S., 23rd January, 1883; for 5 years.

Claim.—1st. The combination of crossing electrical circuits, a block of insulating material having grooves in opposite surfaces in which the wires of the circuits are laid, and multiple arc connections between such circuits within the block. 2nd. The combination, with the wires of a main circuit laid in grooves in a block of insulating material, and the wires of derived circuits therefrom laid in other grooves in said block, of means within said block for connecting said main circuits with said derived circuits, and a removable circuit breaker controlling both the main and derived circuits. 3rd. The combination, with a main circuit and one or more derived circuits therefrom, of a single safety catch included in all such derived circuits and adapted to connect the derived and main circuits. 4th. The combination, with the wires of a main circuit and those of derived circuits therefrom laid in grooves in a block of insulating material, of means within said block for connecting the main circuits and derived circuits a removable circuit breaker controlling all the circuits and a safety catch carried by the circuit breaker. 5th. The combination, with a block having a socket provided with circuit terminals, of the hollow plug *B* of insulating material having two exterior terminals connected by a safety catch, or fusible conductor with the interior of the plug. 6th. The combination, with the block of insulating material provided with interior terminals, of the plug having corresponding terminals and fitting the interior of the block, the terminals of the plug being connected by a safety catch.

No. 16,179. Improvements on Fire-Extinguishers. (*Perfectionnements aux extincteurs d'incendie.*)

William Morrison, Toronto, Ont., 23rd January, 1883; for 5 years.

Claim.—1st. In a chemical fire extinguisher, two or more rods extending from and rigidly secured to the main plug of the extinguisher and connected together at this lower end by one or more cross pieces provided with an angular, or pointed projection upon which the base of the acid bottle shall rest, in combination with an adjustable cap arranged to fit over the top of the acid bottle and vertically adjusted by a screw passing through the main plug. 2nd. In a chemical fire extinguisher in which the body of the acid bottle is incircled by a ring horizontally pivoted between the two rods extending from, and rigidly secured to the main plug of the extinguisher, which rods are connected together at the base by a cross piece having a pointed projection arranged to come in contact with the bottom of the acid bottle, in combination with a fracturing device, operated from the exterior of the extinguisher and arranged to compress the bottle against the pointed projection, for the purpose of breaking the lower portion of the bottle. 3rd. In a chemical fire extinguisher in which the acid bottle is supported between two rods extending from and rigidly secured to the main plug of the extinguisher, a cross head working upon guides, forming part of, or attached to the rods, the said cross head being vertically adjusted by a screw passing through the main plug in combination with a cap arranged to fit over the top of the bottle and upon a neck extending from the cross head, the said cap being arranged so that it may be adjusted to permit the insertion of the bottle or secured to the cross head so that its downward movement shall cause the cap to compress the bottle, thereby producing the desired fracture. 4th. In a chemical fire extinguisher in which the bottom of the acid bottle rests upon a pointed projection, the combination of a cap fitting over the neck of the bottle and provided with a washer of rubber, leather or other soft material, to prevent direct contact between the cap and the bottle, the said cap being provided with adjusting mechanism for the purpose of compressing the bottle between the cap and pointed projection and thus causing the bottle to fracture at its bottom. 5th. In a chemical fire extinguisher in which the acid rests upon a stationary pointed projection, an adjustable cross head with a downwardly projecting neck having a feather key formed upon one side of it, in combination with a cap arranged to fit over the top of the bottle and onto the projecting neck, a slotted passage way being made in the cap to admit the feather key, and a spring arranged to hold the cap in its proper relative position.

No. 16,180. Improvements on Tonguing and Grooving Machines. (*Perfectionnements aux machines à rainures et languettes.*)

Warren S. Mayo, Ottawa, Ont., 23rd January, 1883; (Extension of Patent No. 8362.)

No. 16,181. Improvements on Lamp Heaters. (*Perfectionnements aux chauffeuses à lampe.*)

Angus McKenzie, Toronto, Ont., 23rd January, 1882; (Extension of Patent No. 8434.)

No. 16,182. Improvements on Pumps. (*Perfectionnements aux pompes.*)

Tromson Draper, Petrolia, Ont., 23rd January, 1883; (Extension of Patent No. 8627.)

No. 16,183. Improvements in Plashed Hedges. (*Perfectionnements aux haies vives.*)

Wesley Young, Dayton, Ohio, U.S., 23rd January, 1883; for 5 years.

Claim.—1st. A hedge fence composed of live plants bent down in the plane of the fence and held in place by suitable fastenings, and having a line of wire extending along the base of the plants near the ground, said wire being secured to the plants and operating to prevent the passage through the spaces between the plants of small stock before said spaces have become closed or protected by the growth of the shoots. 2nd. A hedge fence composed of live plants bent down in the plane of the fence and held in place by suitable fastenings, and having a horizontal line of wire extending along the upper portion of the plants and secured thereto to give increased lateral strength, and having also a horizontal line of wire extending along and secured to the bases of the plants, for preventing the passage through the spaces, between the plants, of small stock before said spaces have become closed or protected by the growth of the side shoots.

No. 16,184. Improvements on Smut and Polishing Machines. (*Perfectionnements aux cylindres émolteurs.*)

Hiram P. Edwards, Hamilton, Ohio, U.S., 23rd January, 1883; for 5 years.

Claim.—1st. The sliding sleeve *f* arranged on the rotary shaft *D* and provided with the inclined spider arms, and the inclined wings *G* carrying brushes and movably connected with the spider arms, in combination with mechanism connected with the sliding sleeve, and under control of the attendant from the exterior of the machine, whereby the sleeve can be moved vertically on the rotating shaft to radially adjust the brushes at any time during the operation of the machine. 2nd. The sleeve *f* having the inclined spider arms *F* and the inclined arms *G* carrying brushes and movably connected with spider arms, in combination with the pivoted lighter bar *J*, connected with the sleeve *f*, and devices for adjusting said lighter bar, whereby the sleeve can be automatically moved vertically, to readily adjust the brushes at any time during the operation of the machine. 3rd. The sleeve *f* having the inclined spider arms *F* and the inclined