

No. 21,382. Metal Drawing Dog.*(Tenaille pour Etirer le Métal.)*

Philip M. Haas and Meshach C. Williams, Youngstown, Ohio, U.S., 7th April, 1885; 5 years.

Claim.—1st. The combination, with a suitable drawing-die, of grasping-dog, suitable holders therefor, pivoted couplings for the inner ends of said holders, and pivoted operating connections for their outer ends connected to the draw-head, whereby the dogs are adapted to operate upon the article, being drawn by a compound movement of their biting points toward each other at right angles to the line of draft, and by a deflection from a right line in their biting action in a direction opposite to that of the draft, substantially as described for the purpose specified. 2nd. In a metal drawing machine, the grasping and drawing device consisting of the dogs *b, b*, their pivoted holder *c, c*, their coupling-plates *c₂*, their coupling arms *h*, their yoke *i*, provided with the nuts *m*, the draw head *a* and the screws *e, f*, for adjusting and supporting the dogs, substantially as described. 3rd. The combination, with a suitable drawing-die, of the dogs *b, b*, their holders *c, c*, the coupling-plates *c₂*, to which said holders are pivoted across the line of draft, the pivoted coupling-arms *h, h*, the draw-head, and means, substantially such as described, connected with the draw-head and with the coupling-plates, whereby the biting action of the dogs into the article being drawn is automatically limited. 4th. The combination, in a metal-drawing machine, a suitable drawing-die, the draw-head *a*, the dogs *b, b*, their pivoted holders *d, d*, *c, c*, the coupling-plates *c₂*, *c₂*, the coupling-arms *h, h*, the adjustable yoke *i*, and the lever *r* connected therewith and with the draw-head, substantially as described for the purpose specified. 5th. The dogs *b, b*, their holders and suitable pivoted coupling-connections for the inner ends, in combination with suitable operating-connections pivoted to the outer ends of said dog-holders, and a suitable draw head to which said operating-connections are also pivoted, substantially as described for the purpose specified.

No. 21,383. Machine for Drawing Bars.*(Machine pour Etirer les Barres Métalliques.)*

Philip M. Haas and Meshach C. Williams, Youngstown, Ohio, U.S., 7th April, 1885; 5 years.

Claim. 1st. The combination, in one machine, of appliances for pushing and for drawing bars or shafts of metal into and through a gauging-die, adapted to be shifted in relation to fixed abutments, whereby the said die is placed upon the bar as a preparatory operation of drawing the bar through it, substantially as described for the purpose specified. 2nd. In a metal drawing machine, the combination of a trough-shaped bed or way, with a fixed abutment *E*, a removable gauging die *K*, a pushing abutment *M* adapted to slide upon and within said trough, and means, substantially such as described, for drawing said pushing abutment within said trough against the bar to place the die upon its end, for the purpose specified. 3rd. The combination, in a metal drawing machine, of a trough-shaped bed, or way, with a fixed abutment *G*, a removable gauging-die *K*, an abutment *M* adapted to slide upon said trough, a suitable dog or grasping device carried by said sliding abutment, and means, substantially such as described, for operating the driving device. 4th. The combination, with suitable drawing mechanism and removable gauging die, of a trough-shaped bed or way, abutments having fixed relations thereto, forming supports for said gauging-die, and an abutment having a nose adapted to slide within said trough, to push the bar therefrom into said die, and carrying a suitable dog or grasping device adapted to draw the bar through said die, both the pushing and drawing operations being in the same direction, substantially as described. 5th. In a metal drawing machine, the combination of a trough-shaped bed, or way, having a concave line of support for the bar in the line of the drawing action, with the abutment *M*, having a nose adapted to travel in said trough, an abutment *E* fixed at the end of said trough, a removable gauging-die, and suitable drawing mechanism for said abutment *M*, substantially as described for the purpose specified.

No. 21,384. Tape Measure. (Ruban-Mesure.)

Frank M. Slagle, Alton, Iowa, U.S., 9th April, 1885; 5 years.

Claim.—1st. The combination, with a casing, having one side provided with reference tables, of the annular band for securing the side walls, having the overlapping flange, and the disk of mica adapted to have its annular edge spring under the said flange in the recess and secured thereto, substantially as specified. 2nd. The tape measure described, consisting of the tape line, spaced on one side into inches, and the opposite side into feet, the casing having the reference tables, the filling mica disk, annular band connecting the sides and mica disk, and the bail adapted to fold over the edge wall of the case, substantially as specified. 3rd. A tape measure case, composed of an outer covering of leather, a filling of wood, and an annular metallic band having edge grooves for engaging and securing the side walls of the case, substantially as specified. 4th. In a tape measure, the combination of the line having one side spaced into inches only, and the opposite side spaced into feet, and the casing provided with a reference table, as set forth. 5th. A tape measure, having a side provided with one or more fixed reference tables. 6th. A tape measure, having a side provided with one or more fixed reference tables, and protected by a transparent disk, substantially as specified.

No. 21,285. Compound for Coating Metals.*(Composition pour Plaquer les Métaux.)*

Josiah H. Legge, Pittsburg, Penn., U.S., 9th April, 1885; 5 years.

Claim.—The herein-described compound for coating metals, composed of lead, zinc, tin and borax, the borax being in the proportion of one-half of one per cent. to five per cent. of the lead and zinc employed, substantially as and for the purposes set forth.

No. 21,386. Manufacture of Bottle Stoppers.*(Fabrication des Bouchons de Bouteilles.)*

John M. Lewin, Toronto, Ont., 9th April, 1885; 5 years.

Claim.—1st. The method of securing the flexible disk to the wire, which consists in casting one metallic disk onto the wire, then placing the flexible disk on the metallic disk and wire, and then casting the second metallic disk upon the wire, while the flexible disk is compressed. 2nd. The block *D*, arranged to support the wire and flexible disk, and placed below the plate *E*, in combination with an eccentric *I*, arranged to actuate the block *D*, substantially as and for the purpose specified.

No. 21,387. Automatic Fire Alarm.*(Avertisseur d'Incendie Automatique.)*

Charles H. Judson, Greenville, S.C., U.S., 9th April, 1885; 5 years.

Claim.—1st. In a fire alarm, the combination, with a series of wires having fusible connections, of a spring *D* at one end of each wire, a loop *W* at the opposite end of the wire, the spring *T* connected with the loops, a lever passed through the loops, a latch for holding the lever, and an alarm mechanism connected with the latch, which alarm mechanism is released when the lever drops, substantially as herein shown and described. 2nd. The combination, with wires having fusible connections, of a spring *D* at one end of each wire, the loops *W* at the opposite ends of the wires, the springs *Y* connected with the loops, the pivoted lever *V*, the pivoted hook *U*, the catch *F*, the elbow lever *O*, the wire *I* and an alarm mechanism connected with the wire *I*, substantially as herein shown and described. 3rd. In a fire alarm, the combination, with a wire having fusible connections, of the spring *D* at one end of the same, a less powerful spring *F* at the opposite end, a mechanical bell-ringing mechanism, a gong or bell *H*, the trigger lever *M* formed with two arms, one of which engages the alarm mechanism and the other of which projects outward therefrom, and the projection *N* formed on the wire and adapted to act on the said outwardly-projecting arm of the trigger lever *M*, substantially as herein shown and described. 4th. The combination, with the bell-wire *A*, the elbow lever *O* and the cord or pull *P*, of a spring connected at the upper end with the elbow lever, and with a wire having a fusible connection, and holding the upper end of the spring and preventing it from pulling or turning the elbow-lever, substantially as herein shown and described. 5th. The combination, with the bell wire *A*, the elbow-lever *O* and the cord or wire pull *P*, the spring *B* secured to the wall and the elbow lever, and the wire *R* having a fusible connection and secured to the ceiling or wall, and to the upper end of the spring *Q* to prevent it from contracting, substantially as herein shown and described.

No. 21,388. Lock for Railroad Switches.*(Arrête-Aiguille de Chemin de Fer.)*

Philander L. Pettengill, Elmira, N.Y., U.S., 9th April, 1885; 5 years.

Claim.—1st. The combination of a switch-lever, two catch-lugs projecting upward from the base-plate of the lever, one upon each side of the fulcrum of the same, a lock casing having slots in its sides adapted to fit over the catch-lugs, and means for engaging said lugs, and a casing sliding upon the lock-casing and covering the slot at the time facing upward, as and for the purpose shown and set forth. 2nd. The combination of a switch lever, a lock-casing secured upon the end of the same, having slots in its sides at the opposite ends of the same, and having lock-bolts inside the said slots, two catch lugs projecting upward from the base plate of the lever, one upon each side of the fulcrum of the same, and adapted to enter and be held in the slots of the casing by the lock-bolts, guide lugs projecting from the base parallel with the catch-lugs adapted to bear against the outer side of the lock-casing, and a sliding casing, as much shorter than the lock-casing as the distance from the inner end of one of the slots to the nearest end of the lock-casing, as and for the purpose shown and set forth. 3rd. The combination, in a lock for railroad switch, levers, of the casing having slots upon the opposite sides, near the opposite ends of the same, and having transverse key holes or slots in the opposite ends near the sides opposite to the slots provided with dividing lugs, as described, two pairs of shouldered bolts pivoted at their ends at the inner ends of the slots, and bearing with the rear sides of their free ends against the ends of two pairs of springs, a key having bifurcated end and catch-lugs secured upon the base of the switch, each having an inwardly-projecting shoulder upon its upper end adapted to engage one of the shouldered bolts, as and for the purpose shown and set forth.

No. 21,389. Tubular Lantern.*(Lanterne Tubulaire.)*

John H. Stone, Hamilton, Ont., 9th April, 1885; 5 years.

Claim.—1st. In a tubular lantern, a double or triple jointed hinge *K*, consisting of the links *h, i*, the former secured to the base *A* and the latter link *i* hinged to the perforated disk *C* and to the link *h*, thus forming two or three hinge joints to allow the globe to be tilted over easily for lighting, trimming or filling, substantially as specified. 2nd. In a tubular lantern, the combination of the guards *D, D*, and double or triple-jointed hinge *K*, substantially as specified. 3rd. In a tubular lantern, the catch *c* and eye *f*, in combination with the base *A* and disk *C*, substantially as specified. 4th. In a tubular lantern, the body of the air chamber *E*, and the flange *c*, being crimped together and forming a recess *d* under the bottom *a*, substantially as and for the purpose specified.

No. 21,390. Ear Muffler. (Oreillère.)

Andrew L. Britton, Philadelphia, Pa., U.S., 9th April, 1885; 5 years.

Claim.—1st. An ear muffler, having pad frames and a head piece, said frames being formed with eyes integral with the same, and the head piece connected therewith, substantially as and for the purpose set forth. 2nd. An ear muffler, consisting of an adjustable head piece