

chest through the air ports on one side, and a suction fan for exhausting air from the chest through the exhaust ports in its other side. 3rd. The combination substantially as before set forth, of a gravity chest having valved ports in opposite sides, and alternating corrugated cant-boards, a blast fan for blowing air into the chest through the air ports on one side, and a suction fan for exhausting air from the chest through the exhaust ports in its other side.

No. 22,218. Combined Crib or Cradle.

(*Hamac ou Berceau.*)

Charles Long, Kingston, Ont., 8th August, 1885; 5 years.

Claim.—A crib or cradle, as a new article of manufactures made up of oval sides A, A, rockers I, ports D, all joined together by wood screws, and provided with netting M, supported by wire B having kinks C, and retaining pins J, the whole substantially as and for the purpose hereinbefore set forth.

No. 22,219. Axle Lubricator.

(*Graisneur d'Essieu.*)

Warren Cole, jr., Keokuk, Iowa, U.S., 8th August, 1885; 5 years.

Claim.—1st. In a vehicle axle, a spindle provided with a slide or plug which fits within a groove, in combination with a wedge for holding said slide or plug in place, substantially as described. 2nd. In a vehicle axle, a spindle having a groove or slot provided with an inclined surface, to raise the end of the slide out even with the outer surface of the spindle, when said slide is shoved in place, substantially as described. 3rd. In an axle lubricator, a spindle containing a flat slot provided with an inclined plane, and headed screw or pin, in combination with a slide having a notched end, substantially as described. 4th. In an axle lubricator, a spindle having a short shallow slot, in combination with a slide provided with a crook or shoulder, substantially as described. 5th. In an axle lubricator, a spindle or skein having a slot entering the frictional surface thereof, through the shoulder, in combination with a slide, substantially as described. 6th. In an axle lubricator, a spindle provided with a flat or level place on the outside of the shoulder band, between the back band and shoulder, substantially as described. 7th. In an axle lubricator, a spindle provided with a slot and slide, in combination with a wedge having a spring on the under side engaging with a lug, whereby the wedge is held in place, substantially as described. 8th. In a vehicle axle, a spindle having a groove or slot, in combination with a slide provided with oil or grease ducts, substantially as described. 9th. In a vehicle axle, a spindle having a slot or groove provided with a thin slide, whereby the same when previously loaded with grease or lubricating material will pass freely into the wheel without dislodging its load on the outside, but displacing it within the wheel, substantially as described. 10th. The combination in an axle lubricator, of a spindle provided with a short, shallow slot *x*, inclined plane *c*, screw or pin *d*, notched and crooked slide B, lug *p*, flat face *n*, wedge *d*, with spring *m*, attached to the outer side, substantially as described. 11th. In a vehicle axle, a spindle having a slot or groove in combination with a slide held in place by a wedge and spring, substantially as described.

No. 22,220. Machine for Cutting Rubber.

(*Machine à Tailler le Caoutchouc.*)

John Murphy, Brooklyn, N.Y., U.S., 8th August, 1885; 5 years.

Claim.—1st. In a machine for cutting rubber, the combination of a reciprocating tool carriage, operated by a transmitting belt, and a table, work-bench or platform, substantially as specified. 2nd. In a machine for cutting rubber, the combination of a double-edged cutting tool, a carriage for controlling the movement thereof, a transmitting belt, and a table, work-bench or platform, substantially as and for the purpose specified. 3rd. In a machine for cutting rubber, the combination of a double-edged cutting tool, a reciprocating tool carriage for controlling the movement and depth of cut thereof, a groove or guide controlling the movement of the reciprocating tool carriage, a transmitting belt, and a table, work-bench or platform, substantially as set forth. 4th. In a machine for cutting rubber, the combination of a double-edged cutting tool, a reciprocating tool carriage for controlling the movement and depth of cut thereof, as well as the angular adjustment of cutting tool, a groove or guide controlling the movement of the reciprocating tool carriage, a transmitting belt, and a table, work-bench or platform, substantially as set forth. 5th. In a machine for cutting rubber, the combination of a reciprocating tool carriage, a cutting tool, a groove or guide controlling the movement thereof, a transmitting belt and its operating mechanism, and a table, work-bench or platform, substantially as set forth. 6th. In a machine for cutting rubber, the combination of a reciprocating tool carriage operated by a transmitting belt, a table, a work-bench or platform, and an adjustable grip or gauge, substantially as and for the purposes specified. 7th. In a machine for cutting rubber, the combination of a reciprocating tool carriage, a double-edged cutting tool, a transmitting belt, a guide or groove controlling the movement of reciprocating tool carriage, an adjustable grip or gauge, and a table, platform or work-bench, substantially as set forth. 8th. In a machine for cutting rubber, the combination with an operating table, bench or platform, of an adjustable grip or gauge, a guide or groove controlling the movement of the reciprocating tool carriage, a double-edged cutting tool, a transmitting belt and power pulleys, substantially as and for the purposes specified. 9th. In a machine for cutting rubber, the combination with an operating table, work-bench or platform, an adjustable grip or gauge, a reciprocating tool carriage, a double-edge cutting tool capable of angular adjustment to perform a draw-cut, and a transmitting belt and power pulleys, substantially as and for the purposes specified. 10th. In a machine for cutting rubber, the combination of an operating table, work-bench or platform, having an adjustable grip or gauge to full length of operating table or platform, a guide or groove *F*, controlling the movement of reciprocating tool carriage, a reciprocating tool carriage *D*, double-edged cutting tool *d*, a transmitting belt *C*, sprocket wheels *B* and *B*₂, and an operating

crank wheel or pulleys, through which power may be applied, substantially as set forth. 11th. In a machine for cutting rubber, the combination of the tool carriage *A*, the adjusting screw *d*₁, the hand wheel *d*₂, having slots *d*₅ and *d*₆ upon its hub, by means of which the cutting tool is adjusted to a vertical or draw-cut, the double-edged knife *d*, adjusting screws and hand wheel *d*₂ and the belt *d*₃, substantially as and for the purposes specified.

No. 22,221. Land Roller. (*Rouleau d'Agriculture.*)

John L. Lehman, Portland, Me., U.S., 8th August, 1885; 5 years.

Claim.—The combination of the beams *A*, *F*, arranged parallel to each other and pivoted together, the hound *B*, braces *b*₁, for the hound, pole *C* pivoted to the hound, brackets *a*, *a*₁ bolted to beam *A*, roller *D*, journaled in said brackets, and brackets *f*, *f*₁ bolted to beam *F*, and roller *H* journaled in said brackets, substantially as described.

No. 22,222. Apparatus for Advertising.

(*Appareil de Publicité.*)

Theodore N. Scott, Toronto, Ont., 8th August, 1885; 5 years.

Claim.—1st. A portable frame *B*, constructed with windows or openings *B*, and carrying the geared rollers *C* and the lower rollers *D*, the former operated and set in motion by means of the crank *d*, in combination with the advertising belt or curtain *E*, substantially as shown, and for the purpose specified. 2nd. The advertising belt or curtain *E*, having attached to its studs *F* engaging with the hammer-lever *c*, of a bell or gong *G*, in combination with the windows or openings *B*, of the frame *A*, whereby the intermittent display of the advertisements or pictures is secured and controlled, substantially as shown, and for the purpose specified.

No. 22,223. Needle for Brush Making.

(*Aiguille de Brosserie.*)

Joseph M. Pickering, Philadelphia, Penn., U.S., 8th August, 1885; 15 years.

Claim.—1st. The brush-maker's needle having a handle in two parts hinged together and provided with grasping or clamping plates, substantially as described, whereby wire is securely held during the operation of wiring tufts of bristles into brush blocks, as set forth. 2nd. The brush-maker's needle having an eye near its point, and its outer end bent or curved in the plane occupied by the eye, and a longitudinal groove on its upper side opposite said bend, substantially as described, whereby a loop receiving space is afforded below the bent portion of the needle, when the wire extends rearwardly from the eye, as set forth. 3rd. In a brush-maker's needle, an eye near the point thereof, having a rounded inner end, and an inclined outer end, substantially as described, whereby tensile strain can be applied to a wire passing along said needle, and forwardly through said eye, without materially bending said wire, as set forth.

No. 22,224. Roadway Footpath Crossing.

(*Pavé de Traverse de Chemin.*)

Edward L. Perkins, Ottawa, Ont., 8th August, 1885; 5 years.

Claim.—1st. A covering for footpath crossings consisting of metallic plates, lap jointed together, and secured to a bedding of wood, or other approved material, substantially as shown and for the purpose set forth. 2nd. A covering for footpath crossings, consisting of the metallic plates *C*, provided with the ribs *a*, *a*, and lap joints *b*, as herein shown and set forth. 3rd. In a roadway footpath crossing, the combination of the bedding *A* and sills *B*, with the plates *C*, having the ribs *a*, or any equivalent device, and the lap joints *b*, substantially as herein shown and described.

No. 22,225. Bit for Wind Sucking and Cribbing Horses. (*Mors pour les Chevaux qui Rotent et qui Rongent.*)

John Blyholder and Henry S. James, St. Louis, Mo., U.S., 8th August, 1885; 5 years.

Claim.—A tubular bit provided with a central tubular arm to lie on the horse's mouth, as shown and described, and for the purposes hereinbefore set forth.

No. 22,226. Post for Wire Fences.

(*Pieu pour Clôtures en Fil de Fer.*)

Thomas E. Nichols, Hamilton, Ont., 8th August, 1885; 5 years.

Claim.—1st. The form of the post *A*, having the ridges *B*, *B* along both edges on both sides of it. 2nd. The combination, with the post *A*, of the flanges *C*, *C*, substantially as and for the purpose hereinbefore set forth.

No. 22,227. Door Bolt. (*Verrou de Porte.*)

John F. Taylor, West Park, N.Y., U.S., 8th August, 1885; 5 years.

Claim.—1st. A door bolt, comprising a locking bar supported to slide in an eye adapted for attachment to the door, and said bar provided with a lever or equivalent means for turning it axially, and also with a cam-lug adapted to lock behind a stop or shoulder on the door to hold the bolt projected, and a spring arranged to offer resistance to the cam-lug as the bolt is turned axially, substantially as herein set forth. 2nd. The combination, in a door-bolt, of a bar *A*, provided with a lever *D*, or equivalent means for turning it axially, and having a cam-lug *F*, a plate *B*, having an eye *b*, to support bar *A*, and a slot at *b*₁ for the passage of lug *F*, and a spring supported by and back of the plate *B*, so as to offer resistance to the cam when the bar *A* is entered into the catch-plate and turned, substantially as herein set forth. 3rd. The combination, in a door bolt, of a bar *A*, provided with a lever *D*, or equivalent means for turning it axially,