

**No. 17,829. Trace Buckle.** (*Boucle des traits.*)

Ernest Kraft, Hamilton, Ont., 4th October, 1883; 5 years.

*Claim.*—1st. The lever *b* connected with the hame tug *F* by the bar *K* at one end, and hinged to the tongue plate *A*, at the other, to raise or lower the tongue *B*, in connection with the frame *D*, to which the tongue plate *A* is hinged at *J*, as described. 2nd. The bar *K* turned separate from the lever *C* and secured in the tug by a screw at each end, so as to be removable, the whole operating substantially as and for the purposes of a trace buckle, as set forth and described.

**No. 17,830. Cot Bed.** (*Lit pliant.*)

N. P. Chaney, Toronto, Ont., 5th October, 1883; 5 years.

*Claim.*—1st. A cot bed consisting of a rigid frame *A*, having a stuffed or upholstered mattress *C*, rigidly fixed thereto, and provided with folding legs *D*, whereby the mattress is combined with the frame, as set forth. 2nd. In a cot bed having a frame *A*, the legs *D*, pivoted to the inside of the frame, braces *G*, pivoted to said legs, and connected by a bar *H*, the ends sliding in a groove in the frame, whereby the legs follow the outward movement of the braces, and the braces foot against the ends of the frame in setting up the bed, and fold within the frame for compact stowage, as set forth. 3rd. A cot bed, having a stuffed or upholstered mattress *C*, fixed to a rectangular frame *A*, provided with legs *D*, pivoted to the inner side of the frame and to braces *G*, connected by a bar *I*, the ends projecting to slide in a groove *L*, on the inside of the frame, whereby an outward movement of the braces simultaneously sets up the legs, and when folded lie within the frame for close packing, substantially as set forth and shown.

**No. 17,831. Car Wheel, Axle and Spring.** (*Roue, essieu et ressort de char de chemin de fer.*)

J. Findlay, Montreal, Que., 8th October, 1883; 5 years.

*Claim.*—1st. The combination of the axle *H*, having pulley *K*, secured thereon, in which said pulley a set of spring bars *D*, are secured with an annulet forming a wheel *A*, constructed substantially as described, the whole substantially as set forth. 2nd. The combination of the annulets or wheels *A*, with the axle *H*, having an empty space *I*, directly between the said *A* and *H*, with springs *D*, connecting between them, substantially as set forth. 3rd. The combination of the axle *H*, having pulley *K*, secured thereon, said pulley being provided with a periphery forming a friction surface, spring bars *D* and annulets or wheels *A*, the whole substantially as and for the purpose set forth.

**No. 17,832. Double Action Force Pump.** (*Pompe foulante à double effet.*)

N. S. Briggs, Hamilton, Ont., 8th October, 1883; 5 years.

*Claim.*—The combination and arrangement of the several parts, namely: the double flat valves *F* and *G* working alternately over the ports which bring the water from the cylinder, in connection with the chamber *H*, the cover *I* and the neck *K* which forms part of the cylinder cover *J* only separately, from the cylinder itself, substantially as set forth in connection with the holes *M* in the cover *L*, as described.

**No. 17,833. Spring Hoe.** (*Houe à ressort.*)

J. O. Wisner Son &amp; Co., Brantford, Ont., (assignees of J. S. Heath.) 8th October, 1883; 5 years.

*Claim.*—1st. A drill hoe or cultivator tooth having a notch formed in it to fit on to the pin upon which it is pivoted to the drag-bar, and a notch or notches formed in it to receive the pin connecting it to the brace, substantially as and for the purpose specified. 2nd. In a drill hoe or cultivator tooth pivoted to the drag-bar, the combination of a projection formed on the hoe or tooth below the pivot and having a notch or notches formed in it to receive the pin connecting it to the brace, substantially as and for the purpose specified. 3rd. In a drill hoe or cultivator tooth having a projection to fit within the drag-bar, and a notch formed on the top side of the said projection to fit on to the bottom side of the pivot pin, the combination of a strap bolted or otherwise fastened to the drag-bar and extending below the notched projection for the purpose of holding it against the pivot pin, as specified. 4th. In a spring hoe, a locking lever pivoted to the drag-bar in combination with a brace, the upper end of which is connected to the locking lever above its pivot while the portion of the locking lever extending below its pivot forms a support for the brace, substantially as and for the purpose specified. 5th. In a spring hoe, a locking lever provided with a hooked end to receive the brace. 6th. In a spring hoe, a locking lever provided with pivot pins to connect it to the drag-bar, and a hooked end to connect it to the brace, in combination with a step formed on or by the top edge of locking lever for the purpose of supporting the brace between the point where it connects with the lever and the point where it is attached to the hoe. 7th. In a spring hoe, a locking lever pivoted to the drag-bar and connected at its upper end to the hoe brace, in combination with a spring arranged to exert an upward pressure on the lower end of the locking lever, substantially as and for the purpose specified. 8th. In a spring hoe, a brace having a pin fixed at one end to fit into a notch or notches formed on the hoe as specified, in combination with a hole made in the opposite end of the brace to fit over the hooked end of the locking lever. 9th. In a spring hoe, a lever having a pin fixed at one end to fit into a notch or notches formed on the hoe and a corresponding pin fixed at its other end to fit into a notch formed in the locking lever, substantially as and for the purpose specified. 10th. In a spring hoe in which the upper end of the hoe brace is connected to the locking lever above its pivot while the portion of the locking lever extending below its pivot forms a support for the brace, the combination of a hole or pin made in or formed upon the upper end of the brace at a point on one side of the longitudinal centre line of the said brace, substantially as and for the purpose specified. 11th. In a spring hoe, the combination of the lifting chain connected directly with the drag-bar.

**No. 17,834. Eye Glasses.** (*Lunettes.*)

The Southbridge Optical Company, (assignees of W. C. Barnes,) Southbridge, Mass., U.S., 9th October, 1883; 5 years.

*Claim.*—1st. The combination, with a pair of spring connected eye glass frames, of a compound or double acting nose piece spring consisting of a main portion connected at one end with the frame, and having its other end free to yield or move, relatively to the frame, and a secondary portion connected at one end with the free end of the main portion and having its other end guided in the said main portion and free to yield with relation thereto, substantially as described. 2nd. The eye-glass frame, provided with guiding studs combined with compound or double acting nose-piece springs, each consisting of a downwardly extending portion, connected at its upper end with the frame and slotted near its upper end and an upwardly extended portion having a guide finger at its upper end, co-operating with the slot near the upper end of the other portion and the compound spring, being slotted near its lower end to engage the guiding stud on the frame, substantially as described.

**No. 17,835. Apparatus for Forming and Shaping Corsets.** (*Appareil pour faire et façonner les corsets.*)

J. C. Fallman, (assignee of J. A. House,) Bridgeport, Conn., U.S., 9th October, 1883; 5 years.

*Claim.*—1st. In an apparatus for shaping corsets, the form *a* and holders *c* to engage the opposite edges of the corsets, combined with the rods *m* and springs *n*, composing yielding link *l* and mechanism to operate said links and holders to stretch the corset snugly about the form, substantially as described. 2nd. The holder *c*, composed of the bar having the attached forks to hook over the studs *f* of the corset steel or busk, substantially as described. 3rd. The holder *c* composed of the grooved or flanged bars having between them a space *4* to receive the cyclotted edge of the corset thickened at its edge by a steel or piece *g*, as and for the purpose set forth. 4th. The holders, substantially as shown and described, of the form *a*, holders *c* on opposite sides thereof, to engage opposite edges of the corset to be operated upon, rods *m* and springs *n*, consisting yielding links *l*, depressing mechanism for said holders and links, and the guides *o* for the said links, arranged to operate as set forth. 5th. In an apparatus for stretching corsets, the holder *c* and the series of stud-engaging forks made adjustable thereon, substantially as and for the purpose described.

**No. 17,836. Apparatus for Shaping Corsets.** (*Appareil pour façonner les corsets.*)

J. C. Fallman, (assignee of J. A. House,) Bridgeport, Conn., U.S., 9th October, 1883; 5 years.

*Claim.*—1st. The form and the holders adapted to engage the edges of the corset, combined with a straining device applied directly to the holders independently of and separately from the form, to cause the holders to approach each other and draw and fit the corset to the form, substantially as described. 2nd. The form and the holders and the fulcrum *c*, combined with a straining device carried by the holders in rocking bearings, substantially as described. 3rd. The form, the lever-like holders *C* *D* pivoted at *b*, the fulcrum *c*, and spring to act against the holders, combined with a straining device to move the holders toward and from each other to draw the corset about the form, substantially as described.

**No. 17,837. Apparatus for Transmitting and Receiving Telephone Signals.** (*Appareil pour recevoir et transmettre les signaux téléphoniques.*)

A. F. St. George, London, Eng., 10th October, 1883; 5 years.

*Claim.*—1st. The resonant disc or plate *a* of carbonized organic material, arranged and operating, substantially as and for the purpose set forth. 2nd. The method of manufacturing the disc or plate *a* of carbonized organic material, by submitting it to heat in contact with animal charcoal and between metal plates under pressure, substantially as set forth. 3rd. The resonant disc or plate *a* of carbonized organic material, in combination with one or more contact pieces *b* and conducting wires *g* and *h*, arranged and operating substantially as and for the purpose set forth. 4th. The telephone *p* in combination with transparent sensitive plate *i*, the axis and bearings *k*, slide *m*, aperture *n* and shutter *o*, constructed, arranged and operating, substantially as and for the purpose set forth. 5th. The transparent plate *i*, the axis and bearing *k*, slide *m*, aperture *n* and shutter *o*, in combination with apparatus capable of producing electrical disturbances by the varying action of light and connected with a conducting wire having one or more telephones at any desired position, all constructed, arranged and operating substantially as and for the purposes set forth. 6th. The parallel wires insulated *v*, in combination with the telephone wire *s* and telegraph wires *t* in the cable *z* arranged and operating, substantially as and for the purpose set forth.

**No. 17,838. Lathe for Turning Lasts.** (*Tour de tournure des formes.*)

H. H. Bennis, Chicago, Ill., U.S., 10th October, 1883; 5 years.

*Claim.*—1st. In lathes for turning lasts from models, the box frame *A* *B*, constructed narrower than the space between the vertical bars of the bracket, in combination with the reversing gear and mechanism, the two arbors *E* *F* and the rods *G*, whereby the box frame and its gearing may have a lateral movement, substantially as and for the purpose therein and the arbors set forth. 2nd. The collar *D* placed over the inner ends of the arbors and between the gearing *J* *I* to hold the left-hand gear in position, as and for the purpose specified. 3rd. The combination of the gearing *J* *I*, arbors *E* *F*, collar *D*, cam-clutch *C* and the left hand arbor and the pins *a*, as and for the purpose set forth. 4th. The combination of the cam-clutch *C*, construct-