

**Claim.**—1st. The combination of the stopper having a yoke, with the bail having side bars, and a top loop bearing on the stopper, and projecting in advance of the side bars of the bail, as set forth. 2nd. The combination of the stopper having a yoke, with the bail having side bars, and a top bearing loop projecting in advance of said side bars, and having that portion in advance of the bearing bent upward, as specified. 3rd. The combination of the stopper having a yoke and a recess *m*, with the bail having side bars, and a top bearing loop projecting in advance of said side bars, and having projections *h*, adapted to the recess *m*, as set forth. 4th. The combination of the stopper having a yoke, with the bail having side bars, a top bearing loop projecting in advance of the bars, and opposite return bends, as specified. 5th. The combination of the stopper having a yoke, with the bail having side bars, a top bearing portion projecting in advance of said bars, and opposite projections *i* extending above the bearing portion, so as to engage with the yoke and retain the stopper centrally on the bail, as specified.

### No. 22,399. Gang Cheese Press.

(*Presse à Fromage.*)

David Hamlin Burrell, Edward J. Burrell and Walter W. Whitman Little Falls, N. Y., (Assignees of Robert Wilson Jacobs, Rome, N.Y., U.S., 4th September, 1885; 5 years.

**Claim.**—1st. A gang cheese press, having its opposite sides arranged for pressing a series of large cheese and a series of small cheese respectively, substantially as described. 2nd. In a gang cheese press, the combination with the frame A, having ways C, C, bulkhead M, and removable pins K, K, of the troughs B, B, adjustable platens D, D, adjustable head blocks E, E, power screws F, F, and actuating mechanism, the opposite sides of said press being of unequal size, substantially as described.

### No. 22,400. Thill Coupling. (*Armon de Limonière.*)

Elisha W. Randall (Assignee of Timothy P. Randall), Adrian, Mich., U.S., 4th September, 1885; 5 years.

**Claim.**—1st. The combination, with a draw-iron of a detachable plate carrying a journaled thill-iron, and a spring actuated thumb-piece to engage in openings in the draw-iron and plate, and adapted to be turned, substantially as described, to hold the parts in an unlocked position, as set forth. 2nd. The combination, in a thill-coupling, with the draw-iron and a detachable plate located therein, of a bushing located in an opening in the draw-iron, a thumb-piece working in said bushing and a spring located on the thumb-piece, as set forth. 3rd. The combination with a draw-iron and a detachable plate carrying the journaled thill-iron, of a bushing located in an opening in the draw-iron, a thumb-screw having a head, an elongated lug, and adapted to engage openings, substantially as described, in the draw-iron, and a recess in the detachable plate, and a spring on the thumb-piece, as set forth. 4th. In a thill-coupling, the draw-iron, in combination with the detachable plate carrying the thills, and a catch for holding the plate to the draw-iron, as set forth. 5th. In a thill-coupling, the draw-iron, in combination with the detachable plate carrying the thills, and a spring plate for holding the parts in position, as set forth. 6th. In a thill-coupling, the draw-iron having a dove-tailed recess, of a dove-tailed plate carrying the thill iron, and a catch, thumb-piece, spring plate, or equivalent device, for holding the parts in position, as set forth.

### No. 22,401. Fish Plates for Railway Rail Joints. (*Eclisses pour Rails de Chemin de Fer.*)

Thomas A. Davies, New York, U.S., 5th September, 1885; 5 years.

**Claim.**—1st. A fish-plate C, made substantially as herein shown and described, with a flange D upon its inner side, near its upper edge, whereby the said fish-plate will always adjust itself to three distinct bearings, as set forth. 2nd. The combination, with the rails A, B, and the fish-plates C fitting between the heads and base flanges of the rails, and having flanges D along their inner sides, near their upper edges, resting against the webs of the rails of the angular spring washers G and the bolts and nuts E, F, substantially as herein shown and described, whereby the ends of the rails will be held rigidly from vertical and lateral movement, as set forth.

### No. 22,402. Barbed Metallic Fencing.

(*Clôture Métallique Barbelée.*)

James B. Oliver, Pittsburg, Penn., U.S., 5th September, 1885; 5 years.

**Claim.**—1st. A flat metallic fence strip, having flat narrow-pointed barbs wrapped closely around it, with their pointed ends extending from the opposite edges and the whole galvanized or painted, substantially as and for the purposes described. 2nd. A twisted flat metallic fence strip, having flat narrow-pointed barbs wrapped closely around it, with their pointed ends extending from the opposite edges and the whole galvanized or painted, substantially as and for the purposes described.

### No. 22,403. Signalling Apparatus for Railway Crossings. (*Signal de Traversée de Railroute.*)

William Nelson, Bath, Mich., U.S., 5th September, 1885; 5 years.

**Claim.**—1st. The combination of a locomotive rack I, shaft N carrying spokes *l* or friction wheel O and pinion M and spur sector *h* carrying the vibrating signal rod *a*, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the flag gates G, signal flags G<sub>1</sub>, signal lamps J rigidly fixed to rods *d*, with two cross wires *d*, arranged to operate substantially as and for the purpose hereinbefore set forth. 3rd. The combination of the pivoted rods *c* carrying the wire *c* by means of the cranks *c*<sub>1</sub>, and having the cranks *c*<sub>2</sub> at top, and flat spring cranks *c*<sub>3</sub> at bottom, adapted to be

operated substantially as and for the purpose hereinbefore set forth. 4th. The combination with a lateral projection in a locomotive tender or car, of the spring levers *e* and the spring spokes *l*, or the friction wheel O adapted to respectively ring the bell F, display signals, close gates and open gates and restore signals and the whole device to its normal condition, substantially as and for the purpose hereinbefore set forth. 5th. The lateral projection of a ladder I on a locomotive tender or car adapted to operate an alarm bell, display lamp and other signals, close crossing gates and to open said crossing gates and restore said lamp and signals to their normal condition, as set forth. 6th. The lateral projection of a spring on a locomotive tender or car, adapted at the highest speed to display signals, close crossing gates and to re-open said gates, and restore the signals to their normal condition after the train has passed the crossing, substantially as and for the purpose hereinbefore set forth.

### No. 22,404. Binding for Carpets.

(*Bordure de Tapis.*)

Charles E. Knapp, New York, N. Y., U. S., 5th September, 1885; 5 years.

**Claim.**—1st. A binding for carpets, rugs and mats, consisting of two portions of rubber, or other similar material, joined together at one of their edges, substantially as and for the purpose set forth. 2nd. In combination with a strip of carpet, or with a rug or mat, the elastic binding composed of the parts B and C and cap E, the parts being constructed and arranged substantially as and for the purpose set forth.

### No. 22,405. Instrument for Slaughtering Animals. (*Instrument à Abattre les Animaux.*)

Joe Blackburn Stringer, Lancaster, Ont., 7th September, 1885; 5 years.

**Claim.**—The combination, with a slaughtering punch, of a punch holder provided with elastic springs or other attachment, substantially as shown and described for the purpose set forth.

### No. 22,406. Shovel. (*Pelle.*)

Henry M. Whitney, Oswego, N.Y., U.S., 7th September, 1885; 5 years.

**Claim.**—In combination with a shovel-blade having integral therewith an outwardly-depressed, of a handle fitted to the inner face of said blade, and seated within the depression formed in its back rim and secured in place, substantially as shown and described.

### No. 22,407. Devices for Suspending Machinery. (*Appareil à Tenir le Machinery en suspens.*)

Joseph D. Huntington, Chicago, Ill., U. S., 7th September, 1885; 5 years.

**Claim.**—1st. The combination, with the shaft bearing boxes independent of each other and springs or rods for suspending the same, of the vertical rod or rods connecting the same directly or indirectly to the floor. 2nd. The combination of the shaft A, the bearing boxes independent of each other in which said shaft is journaled, of frame E, one or more cross-bars C and one or more vertical rods F, substantially as described. 3rd. The combination with the shaft bearing boxes independent of each other, and springs for suspending the same, of the links-cross-bars and vertical rod or rods, as set forth. 4th. The combination with a shaft and bearings thereof, of a frame E between the legs of which said bearing is cushioned and a vertical rod or rods for connecting said bearings to the floor. 5th. The combination in a grinding or polishing machine, with the bearings of a shaft having a cylindrical boss extending therefrom, the outer edges of which are bevelled, of a collar having the annular edges of the central aperture or bore counter-sunk and universally bevelled. 6th. The combination with a shaft and bearings thereof suitably suspended and independent of each other, having recess *a*, of the spring cross-bars, the ends of which enter said recesses, and cores having elongated eyes through which the bolt securing them passes and the vertical rod or rods for connecting said cross-bar to the floor. 7th. The combination with the shaft and bearings, of the stirrups suitably suspended, of the vertical rod or rods for connecting said bearings to the floor. 8th. The combination with the shaft bearings in which said shaft is journaled, of the stirrups supporting the same, the springs by which said stirrups are cushioned, and the rod or rods for connecting the same directly or indirectly to the floor. 9th. The combination with the shaft and bearings in which the same is journaled, of frame E, spring *d*, and a rod of rods connecting said bearings to the floor. 10th. The combination with a shaft and bearings thereof, of frame E, both passing transversely through said frame and bearings which is suitably cushioned at or near its ends, and a vertical rod or rods for connecting said bearing to the floor. 11th. The combination with a shaft and bearings in which the same is journaled, of a frame *d* resting thereon and supporting said bearings and a vertical rod or rods F, as and for the purpose set forth.

### No. 22,408. Dynamo-Electric Machine.

(*Machine Dynamo-electrique.*)

Josiah S. DuBois, Philadelphia, Pa., U.S., 7th September, 1885; 5 years.

**Claim.**—1st. A dynamo-electric machine, having its armature enclosed within a case in which a partial vacuum is maintained, substantially as and for the purpose specified. 2nd. A dynamo-electric machine, having its armature and poles, of its field magnets enclosed within a stationary case in which a partial vacuum is maintained, substantially as and for the purpose specified. 3rd. A dynamo-electric machine, having its armature enclosed within a case in which a partial vacuum is maintained, in combination with