

made vertically adjustable by means of screw threads on the shanks of the said feet, substantially as described. 8th. The combination of the plate or frame E, ring G, clamping bars H and thumb-screws J, substantially as and for the purpose herein described. 9th. The vertical post S, interchangeably fitted to holes *t* in the top annular frame G, the said holes acting as centres in which the said vertical post may rotate, and in combination with said post, a longitudinally adjustable rod carrying at its inner end a pencil head with pencil, the whole acting so as to mark or centre the picture which is secured to the stretcher P, and rests on the frame G, the whole combined and arranged substantially as described.

No. 22,581. Fireproof Non-Conducting Covering. (*Couverture Réfractaire Non-Conducteur.*)

John F. Torrence, Montreal, Que., 2nd October, 1885; 15 years.

Claim.—A compound, composed of infusorial earth, with wood or other vegetable pulp, and asbestos fibre, substantially as in the proportions and for the purposes set forth.

No. 22,582. Snow Shovel. (*Pelle à Neige.*)

Hamilton D. Waite, Watertown, N. Y., U. S., 3rd October, 1885; 5 years.

Claim.—1st. A snow-shovel, comprising a broad, flat blade, and a double curved handle having its ends extending under and across the blade, and fastened thereto close to its sides, whereby an unequally-distributed load may be readily lifted, substantially as shown and described. 2nd. A snow-shovel, comprising a flat blade, a bent handle having divergent ends which extend under and across the blade, so as to support the same, and a cross-bar or rod close to the blade and extending from one branch to the other of the bent handle, substantially as described.

No. 22,583. Cut-Off Valve.

(*Soupage de Détené.*)

Bernard Topmiller, Simon Obermayer and Jacob H. Heinsheimer, Cincinnati, Ohio, U. S., 3rd October, 1885; 5 years.

Claim.—1st. The combination of a steam chest, a valve to open the steam ports, operated directly by the eccentric rod, and independent cut-off valves at each end of said main valve, and yoked together with suitable mechanism, to alternately close said cut-off valves against the opposite ends of the center valve, substantially as specified. 2nd. The combination of the steam chest, valves A, B, B, and yoke D, with spring actuated lever C, to suddenly close the cut-off valves B against the following end of valve A, when the lever is thrown from its centre by the yoke D. 3rd. The combination, substantially as specified, of the steam chest, valves A and B, yoke D, and screw-threaded rods *b*, the said rods passing through the ends of the yoke and having nuts upon each side to expand or contract the valves B, to regulate the cut-off. 4th. The steam chest, the valve A, actuated by rod *a*, the valves B, B, connected by yoke D and rods *b*, in combination with frame F, lever C, links *c*, and springs G, to operate the said valves B, during part of their stroke independent of valve A. 5th. The combination of a steam chest, a slide valve, intermediate two cut-off valves which are yoked together outside of the steam chest and actuated by mechanism, such as shown, actuated by the regulator, to automatically expand or contract said cut-off valves for the purpose of controlling the admission port and cut-off according to the pressure of steam or duty required of the engine. 6th. The steam chest, the valves A, B, yoke D, and its actuating mechanism, in combination with yoke I, L, connected to and controlled by the governor, to automatically control the admission of steam to the cylinder, substantially as described. 7th. A steam chest having a slide valve within it actuated by the eccentric rod, and two expandible cut-off valves operated during part of their stroke independent of the main valve, in combination with the yoke connecting said valves, and a vertically-sliding yoke having diagonally-slotted slides *l*, to engage pins upon the rods of the cut-off valves, said yoke being controlled by the governor or engineer, as shown and described. 8th. In a cut-off for engines, the combination of the main valve, the independent laps at the opposite ends of said valve, yoked together as shown, and arranged to be moved during part of the stroke independent of the main valve, with a rod attached to the lap and spring cushions acting upon the rod to resist the steam pressure and prevent the laps closing too rapidly. 9th. The combination, substantially as specified, of valve A, laps B, B, upon each end of said valve, and yoked together, as shown, with crank-rod *a* and lap rod *b*, the frame or yoke D *a*, *d*, and springs S to cushion the laps.

No. 22,584. Attachment to Car Axle Boxes.

(*Appareil pour Boîtes à Graisse.*)

William H. Cooper, Wayne, Mich., U. S., 6th October, 1885; 5 years.

Claim.—1st. In combination with a car axle box, a removable oil receptacle having a roller journalled in proper bearings in the same, and adapted by contact with the under face of the car axle journal and rotating therewith by such frictional contact, to lubricate such journals, substantially as described. 2nd. In combination, a car axle box, a removable oil receptacle provided with a roller journalled in proper bearings and arranged to lubricate the journal by frictional contact therewith, with suitable bearing and end springs arranged to compel such frictional contact between the journal and the roller, substantially as set forth. 3rd. In combination with a car axle box A, a removable oil receptacle B, carrying a lubricating roller C, when constructed, arranged and operating substantially as described. 4th. In combination, a car axle box A, a removable oil receptacle B, lubricating roller C and springs G, H, when constructed, arranged and operating substantially as described.

No. 22,585. Printer's Quoins.

(*Coin d'Imprimerie.*)

John McConnell and Julius R. Drodzewski, Erie, Pa., U. S., 6th October, 1885; 5 years.

Claim.—1st. The combination in a printer's quoin, of a central wedge-shaped section, having a longitudinal slot therein, with two side sections, the inner faces whereof are inclined to fit the wedge-shaped section, and having countersunk rivet holes therein, substantially as shown, and a loose rivet passing through said countersunk rivet holes and said slot, substantially as and for the purpose set forth. 2nd. The combination in a printer's quoin, of the central wedge-shaped section C, provided with the longitudinal slot E, and notches *c*, and the side section A and B, provided with countersunk rivet holes I, I, and notches *b*, with the loose rivet H, substantially as and for the purpose set forth. 3rd. The combination in a printer's quoin, of the three sections, substantially as shown, connected together by a loose rivet, the central of which sections rests and moves longitudinally upon slides or guides on the outside sections, so that in its longitudinal movement it is supported thereby, so that it does not touch the composing stone, substantially as and for the purpose set forth. 4th. The combination in a printer's quoin, of two outside sections, provided with countersunk rivet holes, and having their inner faces longitudinally inclined and provided with longitudinal grooves or guides, substantially as shown, with a central wedge-shaped section having a longitudinally slot therein, and longitudinal fins on either side thereof, above said slot, and having the lower edge thereof cut away, substantially as shown, and a loose rivet passing through the countersunk rivet holes in the outside sections, and through the slot in the central section, substantially as and for the purpose set forth.

No. 22,586. Stone and Stump Lifter.

(*Arrache-Souche.*)

Samuel Burbank, Knowlton Landing, Que., 6th October, 1885; 5 years.

Claim.—1st. The combination of the tripod A having pulley C, hoisting chain D, dog chain E and lever F having hooks *c*, *s*, to operate as described, whereby the load is lifted by depression of the lever and held at successive steps by the dog-chain. 2nd. The lever F, provided with a claw hook *c*, hinged to one end and having an adjustable claw fulcrum hook *s*, as set forth for the purpose described.

No. 22,587. Tubular Axle. (*Essieu Tubulaire.*)

The Lake Shore Tubular Axle Co., Cleveland, Ohio, (assignee of Edgar Peckham, Syracuse, N. Y.,) U. S., 6th October, 1885; 5 years.

Claim.—1st. The within-described tubular axle consisting of a plain wrought metal tube of uniform dimensions internally from end to end thereof, and having the exterior of its end portions turned off or cut down gradually to a uniform taper and smooth surface, substantially as specified. 2nd. A tubular axle composed of a plain wrought metal tube of uniform dimensions internally from end to end thereof and having the exterior of its end portions cut down gradually to a uniform taper and reinforced by bushings inserted in the end of the tube, substantially as described and shown. 3rd. An axle composed of a metal tube having its exterior of uniform dimensions from end to end thereof, and its spindles tapered externally, lubricating ports in the spindles, a dam at the inner end of the interior of the spindles, a dam at the outer end of the spindles, and provided with lubricant induction ports or channels, and a wheel-retaining nut attached to said dam and closing the channel thereof, all constructed and combined substantially in the manner specified and shown.

No. 22,588. Indicating Poise for Lever Scales. (*Poids Indicateur pour Romaines.*)

Louis C. Irving, Oregon, Mich., U. S., 6th October, 1885; 5 years.

Claim.—As an improvement in scales, in which the beam is provided with a longitudinal rack, to engage a gear wheel upon a shaft, to operate a pointer over a graduated dial, the combination of the beam A, having the rack B, let into the said beam longitudinally thereof, the slide-weight G, having the recess *e*, open at opposite ends, the vertical shaft *g*, carrying the gear *h*, to engage the said rack, and the pinion to engage the gear wheels at the upper portion of the shaft *k*, which shaft has a pointer *m*, whereby the said pointer may be moved over the indicating dial F, on the upper face of the said slide weight, substantially as shown and described.

No. 22,589. Target Dart. (*Trait à Cible.*)

Thomas J. Shears, Detroit, Mich., U. S., 6th October, 1885; 5 years.

Claim.—1st. As a means of discharging an arrow, a catapult, consisting of the staff A, having the rubber spring secured by means of a screw in a kerf cut, or formed in one end of the staff, substantially as described. 2nd. The arrow B, having the spike *c* and staple *f* secured to the head *d*, in combination with the herein-described catapult, as set forth.

No. 22,590. Dust Guard for Railway Car Axles. (*Garde-poussière pour Essieux de Chars.*)

Jackson, R. Baker, Jersey, N. J., U. S., 6th October, 1885; 5 years.

Claim.—A dust guard for railroad car axles, consisting of a single solid piece of wood having a circular opening provided with the annular groove C, in the circumference of said opening, combined with an annulus of packing material D in said groove, having its inner edge projecting beyond the walls of the groove, substantially as described.