

*Claim.*—1st. A trunk-roller journalled between the arms of a swinging frame having a vertical hub and a protecting plate, all solid or integral with each other, the said hub being pivoted to the center of a depressed plate having protecting and downward projecting walls, the journals of said roller being entirely above the protecting-plate which is perforated to allow the roller to project through, but otherwise entirely covering the well or recess within which the roller bearing moves, substantially as set forth. 2nd. A combined trunk-roller and corner-iron, the latter having a corner bumper and a depression or recess in which the roller moves, the latter being journalled between the arms of a swinging frame having a solid hub and solid covering plate cut away to allow the roller to project through, but inclosing the journals of the roller and their bearing-frame, substantially as set forth.

**No. 19,356. Current Wheel.** (*Moulin à Eau.*)

Henry Carre, Brockville, Ont., 15th May, 1883; 5 years.

*Claim.*—1st. In a current wheel, the buckets F attached to the endless cables E passing over the disks D, D<sub>1</sub> which are arranged one behind the other in the direction of the stream and in the same vertical plane, substantially as shown and described. 2nd. In a current wheel, the combination of the pontoons or floats A and tie-beams B with the shafts C journalled in bearings in said pontoons, and the disks D, D<sub>1</sub> fixed on said shafts and carrying the endless cables E which have the buckets F suspended from them, substantially as herein described and shown and for the purpose set forth. 3rd. The combination of the above-described motor, consisting mainly of the pontoons A, tie-beams B, shafts C, disks D, cables E and buckets F, with steam or other power arranged to operate the same reversely, so that it would thereby be available as a steam tug.

**No. 19,357. Gas-Purifying Screen.**

(*Dépurateur à Gaz.*)

Emanuel Provonchar, Vallejo, Cal., U. S., 16th May, 1884; 5 years.

*Claim.*—The gas-purifying screen consisting of the double bevelled slats A, and tie-bolts B having washers C, in combination with the swinging handles or standards D hinged upon the end bolts B, substantially as and for the purpose herein described.

**No. 19,358. Truss Pad.**

(*Tampon de Bandage Herniaire.*)

George L. Gerard, New Haven, Ct., U. S., 16th May, 1884; 5 years.

*Claim.*—1st. As an article of manufacture, the herein described truss pad consisting of a concavo-convex shell of vulcanized rubber formed on its concave side with a tapering stem, a flanged washer to keep the end of the stem from spreading, and fastening-screws for holding the washer in place, as set forth. 2nd. As an article of manufacture, the herein-described bed truss pad consisting of a concavo-convex shell of vulcanized rubber having ventilating opening, and a chamamois, or equivalent covering, and provided on its concave side with a tapering stem, as and for the purpose set forth. 3rd. As an article of manufacture, the herein-described truss pad consisting of a concavo-convex shell having a tapering stem B, a washer to keep the end of the stem from spreading, fastening-screws to hold the washer in place, ventilating-openings J and covering K, as set forth.

**No. 19,359. Soil and Waste Pipe.**

(*Tuyau de Dégorgement.*)

James Barrett, Boston, Mass., U. S., 16th May, 1884; 5 years.

*Claim.*—In a soil or drain pipe, the passage B through its side, having an elongated opening E at the inner periphery of the pipe, and an opening C at the outer periphery of the pipe, constructed for the reception and attachment of a cover thereto, substantially as described for the purpose specified.

**No. 19,360. Vessel for Containing and Transporting Liquids, &c.** (*Vaisseau pour Contenir et Transporter les Liquides, &c.*)

Daniel W. Norris, Elgin, Ill., U. S., 16th May, 1884; 5 years.

*Claim.*—1st. As a new article of manufacture, an incased vessel having a glass body and a top composed of a single piece of sheet metal shaped to form the cover for the mouth of the body, and also the internal and external annular flanges between which the upper portion of the body is placed in attaching the top to the body, and provided with a filling orifice and a pouring spout, and secured to the body by a cemented screw connection, substantially as described. 2nd. In combination, with the glass body, the top composed of a single piece of sheet metal forming a cover for the mouth of the body, the external and internal annular flanges having the groove between them and provided with a filling-orifice and pouring-spout, substantially as described. 3rd. The top composed of a single piece of sheet metal forming the cover for the mouth of the body, and also the internal and external annular flanges, in combination with the supplemental internal annular flange and the glass body, substantially as described. 4th. The top composed of a single piece of sheet metal forming the cover for the mouth of the body, and the external annular flange, in combination with the supplemental internal annular flange having its upper edge turned outward, and the glass body, substantially as described. 5th. A sheet-metal top provided with an internal annular flange, and an external annular screw-threaded flange, in combination with the body of a glass vessel having a screw-shaped upper portion, substantially as described. 6th. The funnel-shaped sheet-metal top provided with a filling-orifice, and a pouring-spout, substantially as described. 7th. A can having a funnel-shaped sheet-metal top which is provided with a filling-orifice at its lowest portion, and a pouring spout near its upper portion, substantially as described. 8th. A can having a funnel-shaped sheet metal top which is provided with a filling orifice, and with a pouring spout, substantially as described. 9th. The combination, with a vessel having a

pouring orifice, of a spring-supported bar or lever carrying a pad or stopper at its outer end for closing the pouring-orifice, and means for first pressing the inner end of the lever to a fulcrum or bearing, and then causing it to turn on said bearing and release the pad from the pouring-orifice, substantially as described. 10th. The combination, with a vessel having a pouring-orifice and a vent, of a spring-supported bar or lever carrying a pad or stopper at its outer end for closing the pouring-orifice, and a valved plunger adapted when pressed to open the vent, force the inner end of the lever to its fulcrum or bearing, and then cause the lever to turn on said bearing and release the pad from the pouring orifice, substantially as described. 11th. The combination, with a pouring orifice, of the spring-supported lever having the pad or stopper at its outer end, of the loop constituting the fulcrum or bearing for the inner end of the lever and of the plunger for operating the lever, substantially as described. 12th. The combination, with the pouring orifice, of the lever having the pad or stopper, the guide loop and its spring, the inner loop or fulcrum and the plunger, substantially as described. 13th. The combination, with the pouring orifice and the vent, of the lever and its pad, the guide loop and spring, the inner loop forming the fulcrum of the lever and the valved plunger working in the vent-opening, substantially as described. 14th. A sheet-metal can-top provided with a pouring orifice and a vent, and having the spring-seated lever provided with the pad, the fulcrum for the inner end of the lever, and the valved plunger for operating the lever, substantially as described. 15th. A glass vessel, in combination with a sheet-metal inclosing case having one or more elongated longitudinal openings showing one or more of the principal units of measure, and one or more elongated vertical opening provided with a scale showing the minor units of measure, substantially as described. 16th. A sheet-metal case having one or more elongated horizontal openings showing one or more of the principal units of measure, and one or more elongated vertical openings provided with a scale showing the minor units of measure, substantially as described.

**No. 19,361. Step Ladder.** (*Echelle à Queue.*)

George McFarlane, Toronto, Ont., 16th May, 1884; 5 years.

*Claim.*—In a step-ladder, the shelf F pivoted, as shown, to the rear leg B, and having its forward ends rebated or notched to clasp the front legs A, in combination with a hinge E, and casting D, having a restraining flange d, as shown and for the purpose specified.

**No. 19,362. Sash Balance.**

(*Contrepoids de Croisée.*)

Samuel Shumard, Richmond, Ind., U. S., 16th May, 1884; 5 years.

*Claim.*—1st. The combination, with an inclosed coiled spring, of a two-part roller or case to contain the same, one part being flanged and serving as a cover to the other part which also has a flange, the two when closed together forming the groove for the suspension tape, all and for the purposes set forth. 2nd. The combination of the two-part spring-containing roller or drum and the brake pressing upon the periphery of the same, said brake being attached to the bent spring-arm which is adjustable from the outside by means of a screw, as and for the purposes set forth. 3rd. The combination of the two-part spring-containing roller or drum and the brake pressing upon the periphery of the same, said brake being attached by means of arm G1, and the pressure of the brake regulated by means of screw H, from the outside, as and for the purpose set forth.

**No. 19,363. Hand Grenade for Extinguishing Fire.** (*Grenade à Main pour Éteindre le Feu.*)

John J. Harden, Chicago, Ill., U. S., 16th May, 1884; 5 years.

*Claim.*—1st. A hand grenade for extinguishing fires, consisting of a receptacle formed of glass or other frangible material, and having an orifice with a stopple fitted therein, the stopple being provided with an interior recess opening into the interior of said receptacle, substantially as and for the purpose set forth. 2nd. A hand grenade for extinguishing fires, consisting of a receptacle formed of glass or other frangible material, and having an orifice provided with a stopple fitted therein, the stopple being provided with an interior recess opening into the interior of the receptacle, said orifice being also provided with an enlargement above said stopple, and ending with an inwardly inclined flange, substantially as and for the purposes set forth. 3rd. In a hand grenade for extinguishing fires, consisting of a receptacle formed of glass or other frangible material, and having an orifice provided with an enlargement ending with an inwardly inclined flange, the combination with said receptacle, of a rubber stopple having an interior recess opening into said receptacle, and an exterior flange at its upper end, substantially as and for the purposes set forth.

**No. 19,364. Means or Apparatus employed in the Manufacture of Iron and Steel.** (*Moyen ou Appareil employé dans la Fabrication du Fer et de l'Acier.*)

Thomas Griffiths, Abergavenny, Eng., 16th May, 1884; 15 years.

*Claim.*—1st. The combination of tube g<sub>1</sub>, plug, stopper, valve, or cover g<sub>2</sub>, grooved collar g<sub>3</sub> and weighted clutch lever h connected to the rod j, by which all the plugs, stoppers, valves or covers g<sub>1</sub> are simultaneously operated, substantially as herein shown and described and for the purpose stated. 2nd. The plug, stopper, valve, or cover g<sub>1</sub>, in combination with the tube g<sub>2</sub> on which it is fixed and by which it is operated, to open and close the passage through the tuyere, substantially as herein shown and described. 3rd. The combination of tubes g, g\* and plug, stopper, valve, or cover g<sub>1</sub>, together with means for adjusting the nozzle of tube g in relation to the tuyere, substantially as herein shown and described, with respect to Fig. 4 and for the purpose stated. 4th. The combination of hinged weighted plug, stopper, valve, or cover g<sub>1</sub>, with rod or pusher n, grooved collar g<sub>3</sub> and weighted lever h for operating the same, substantially as herein