

or shoulder F<sub>2</sub> and spring J, in combination with the base A having the integrally cast arms P, B, C, G, the lugs Q and H forming bearing for said trigger and butt and support, the swivel D and upwardly projecting lug B<sub>2</sub>, substantially as specified.

### No. 22,746. Underground Conduit for Electric Wires. (*Conduit Souterrain pour Fils Electriques.*)

Joseph S. DuBois, Camden, N.Y., U.S., 3rd November, 1885, 5 years.

**Claim.**—1st. An underground conduit provided with cylindrical pockets or troughs for supporting the electric wires made of light sheet metal, cylindrical or polygonal in cross section, and having a narrow longitudinal slot in its upper part, the said pockets being arranged side by side in rows in the same horizontal plane, and the rows being arranged one above the other, as shown, substantially as and for the purpose specified. 2nd. Two or more pockets for underground conduits formed of sheet metal, cylindrical or polygonal in cross section, provided with outwardly flanged ends and having a longitudinal slot in their upper surface, in combination with clamping mechanism, substantially as set forth, to clamp said pockets end to end in a continuous line forming a long section made up of small parts and in position to be placed bodily into the conduit, substantially as and for the purpose specified. 3rd. A pocket for underground conduits, consisting of sheet metal tube D, having longitudinal slot d and flanges D<sub>1</sub>, in combination with rings E and bolts or clamps to clamp said rings together, uniting the two sections of tube, substantially as and for the purpose specified. 4th. A pocket for underground conduits, consisting of sheet metal tube D having longitudinal slot d and flanges D<sub>1</sub>, in combination with rings E, bolts or clamps to clamp said rings together, uniting the two sections of tube and brackets formed to receive said rings and tube sections, substantially as and for the purpose specified. 5th. The bracket C having side frames C<sub>1</sub> scalloped as at c, in combination with slotted troughs D having flanges and rings E, substantially as and for the purpose specified. 6th. The bracket C, having side frames C<sub>1</sub> scalloped as at c and cross bars F, in combination with slotted troughs D having flanges and rings E provided with lugs E<sub>1</sub>, substantially as and for the purpose specified. 7th. The bracket C having side frames C<sub>1</sub> scalloped, as at c and cross bars F, in combination with slotted troughs D having flanges, rings E provided with lugs E<sub>1</sub> and bolts G, substantially as and for the purpose specified. 8th. In a conduit for electric wires, a frame provided with supporting brackets, in combination with a series of pockets or troughs to carry the electric wires supported by said brackets close to each other, but insulated from both the brackets and the adjacent pockets or troughs, substantially as and for the purpose specified.

### No. 22,747. Apparatus for the Manufacture of Illuminating Gas. (*Appareil de Fabrication du Gaz d'Eclairage.*)

Theodore Ayers (Assignee of Frederic Egner), St. Louis, Mo., U.S., 3rd November, 1885, 5 years.

**Claim.**—The combination, substantially as before set forth, of the generator bench of retorts, hydraulic seals, valves, pipes and exhauster, connected as herein described and operated as a whole to gather.

### No. 22,748. Automatic Grain Scale and Register. (*Peseur Compteur à Grain Automatique.*)

Moris F. Koch, New York, N.Y., U.S., 3rd November, 1885, 5 years.

**Claim.**—1st. The combination, with the oscillating box and scale beam, of an automatic weighing machine, of oppositely arranged adjustable detent levers e provided with ribs e, whereby the oscillating box is locked in one or the other of the positions in which it is filled, and released by the downward movement of the scale beam and oscillating box, as described. 2nd. The combination, with the oscillating box and scale beam of an automatic weighing machine, of oppositely arranged detent levers e provided with ribs e and adjusting screws or abutments c<sub>1</sub>, whereby the oscillating box is locked in one or the other of the positions in which it is filled and released by the downward movement of the scale beam and oscillating box, as described. 3rd. The combination, with the oscillating box and scale beam of an automatic weighing machine, of oppositely arranged detent levers e provided with ribs e, hangers a<sub>1</sub> and adjusting screws or abutments c<sub>1</sub>, whereby the oscillating box is locked in one or the other of the positions in which it is filled and released by the downward movement of the scale beam, and oscillating box, as described. 4th. The combination, with the oscillating box and scale beam of an automatic weighing machine, of oppositely arranged adjustable detent levers e provided with ribs e, whereby the oscillating box is locked in one or the other of the positions in which it is filled and released by the downward movement of the scale beam and oscillating box, as described. 5th. The combination of the oscillating and vertically movable box L, provided with the rigid central longitudinal bar O having bevelled edge on its upper surface, with the roller r hung in the stationary part of the weighing machine for preventing the said oscillating box from resting in a central position without at any time stopping its motion, as described. 6th. In an automatic scale, the pivoted and vertically movable weighing box L, having gates r in the bottom and central partition P combined with the spout N which dips into the chambers of the weighing box alternately, so as to prevent overflowing the partition passing beneath said spout when the box oscillates, as specified. 7th. In an automatic scale, the pivoted and vertically movable weighing box L, having gates r in the bottom and central partition P, combined with anti-friction rollers q bearing against said gates r, and with the spout N, which dips into the chambers of the weighing box alternately, so as to prevent overflowing the partition, passing beneath said spout when the box oscillates, as specified. 8th. The combination, with an oscillating weighing box, of the sustaining vertically movable uprights n with the de-

tent levers e and with pins x engaging said detent levers, substantially as shown and described. 9th. The combination, with an oscillating weighing box, of the sustaining vertically movable uprights n with the detent levers e and with pins x, provided with anti-friction rollers e<sub>1</sub> engaging said detent levers, substantially as shown and described. 10th. The combination of the pivoted weighing box L, having partition P with the roller r, uprights n, detent levers e, and means for moving said detent levers, substantially as shown and described. 11th. The pivoted weighing box L, combined with the adjustable weight S at one end of the said boxes, as specified. 12th. The combination of the scale beam H and its slotted arm I, with the screw J, the nut having gudgeons or supports s<sub>1</sub> and with the weight K, substantially as and for the purpose herein shown and described. 13th. The weighing box L, combined with the uprights n, frame m, scale beam H and with the steady mechanism X, Z and frame A, substantially as described. 14th. The weighing box L, combined with the uprights n, frame m, scale beam H and with a steady support X and adjustable bracket or guide Z, substantially as described. 15th. The combination, with the weighing box L, of the uprights n, frame m, scale beam H provided with marks or characters for the proper adjustment of the weight K, substantially as described. 16th. The weighing box L, combined with the uprights n, frame m, scale beam H provided with marks or characters for the proper adjustment of the weight K, and with the steady mechanism X, Z and frame A, substantially as described. 17th. The combination, with the oscillating box and scale beam of an automatic weighing machine, of oppositely arranged and independent adjustable detent levers e, whereby the oscillating box is locked in one or the other of the positions in which it is filled and released by the downward movement of the box, as described. 18th. The combination of the lever F, ridge plate E, weight G, abutment or cushion e and valve Q operated by the lever F, substantially as herein shown and described. 19th. In a grain weighing machine, the oscillating box L made with a partition P and hinged bottom valves r, r, in combination with the rods p provided with anti-friction rollers q, substantially as herein shown and described, so that the machine may be adjusted to receive and discharge grain, or similar material, by the oscillation of said box L, as set forth.

### No. 22,749. Roofing for Buildings. (*Couverture pour Bâtimens.*)

Lewis D. Cartwright, Hyde Park, Ill., U.S., 3rd November, 1885, 5 years.

**Claim.**—1st. A metallic roofing plate or shingle blank, having a pentagonal piece cut from one of its corners, and the side approaching such corner thereby pointed, whereby the sides of the blank may be folded to each other in the completed shingle, substantially as described. 2nd. A metallic roofing plate or shingle, having two of its sides approaching one of its corners bent or folded inwardly and then outwardly to a point, and two of its sides approaching the diagonally opposite corner, straight or unfolded, whereby in laying the roof the straight or unfolded edges may be inserted in the bent or folded edges of its fellows, substantially as described. 3rd. A metallic roofing plate or shingle, having two of its contiguous sides or edges bent or folded inwardly and then outwardly to a point, both the folds being on the under side of the shingle, and two of its contiguous sides or edges straight or unfolded, whereby in laying the roof the bent or folded edges will overlap and cover the straight or unfolded edges of adjoining shingles, substantially as described. 4th. A roof for buildings, consisting of a series of metallic plates, each provided with laps or folds, as described, on its two sides or edges, extending from a point at the lowest corner and with straight or unfolded edges on its two sides extending from the highest corner, whereby the upper and unfolded edges are inserted into the bends or laps in the lower and folded edges of the plates forming the next upper series substantially as described. 5th. A roof for buildings, consisting of a series of metallic plates, each provided with laps or folds, as described, on two of its sides or edges adjacent to each other and with straight or unfolded edges on two of its sides, also adjacent to each other, the corresponding folded edges of the several plates being a line parallel to each other, whereby the said unfolded edges are inserted into the bends or laps in the folded edges of its fellows, substantially as described. 6th. A roof for buildings, consisting of a series of interlocking or interlapping plates in which the first row of plates is laid at the comb or apex of the building, and each successive row farther down, substantially as described and for the purpose set forth.

### No. 22,750. Method of Preventing Explosions in Oil Tanks. (*Méthode pour empêcher les Explosions dans les Réservoirs d'Huile.*)

Russell Thayer, Philadelphia, Pa., U.S., 3rd November, 1885, 5 years.

**Claim.**—1st. The method of preventing explosions in oil tanks, which consists in forcing steam into the tank above the oil, whereby all of the accumulated explosive gases are saturated with moisture and rendered non-explosive. 2nd. The method of preventing explosions in oil tanks, which consists in forcing steam into the tank above the oil, whereby all of the accumulated explosive gases are saturated with moisture and rendered non-explosive and finally expelling said mixture of steam and gases from the tank, their place being supplied by steam alone.

### No. 22,751. Mop Wringer. (*Essoreuse à Torchon.*)

Charles Clifford and John T. Richards, (assignees of Arthur M. Barnham), Gardiner, Me., U.S., 3rd November, 1885, 5 years.

**Claim.**—1st. A mop wringer constructed with a base frame, paired bell-crank levers fulcrumed thereto, wringer rolls carried by said levers and a foot lever on the bell crank levers to press the wringer rolls together, substantially as set forth. 2nd. The combination of the base-frame, bell crank levers fulcrumed thereon and carrying wringer rolls a, U-shaped foot lever bearing on the bell crank levers