

also arranged on a line parallel with the axis of the reel and carrying a brush, the crank wheel arranged inside the casing and connected by gearing with the conveyor shaft, and a pitman connecting the crank wheel with the rock-shaft, substantially as set forth. 14th. In combination with a revolving reel, a conveyor below the reel, a vibrating brush arranged on a line parallel with the axis of the reel, a rock-shaft also arranged on a line parallel with the axis of the reel, a gear wheel mounted on the conveyor shaft a crank wheel provided with a gear, and mounted upon a stud shaft projecting from the conveyor or box, and meshing with the gear of the conveyor shaft, and a pitman connecting the crank wheel with the rock-shaft, substantially as set forth.

### No. 23,540. Manufacture of Felt Stockings, etc. (*Fabrication des Bas de Feutre, etc.*)

Edward Roos, Galt, Ont., 6th March, 1886, 5 years.

*Claim.*—1st. In a track scraper and clearer, consisting in placing on a woven or knitted tube, a layer of wool, which is partially hardened, then sewn at one end, substantially as specified. 2nd. The within-described process, consisting in placing on a woven or knitted tube, a layer of wool, which is partially hardened, then sewn at one end, a welt of hardened wool being placed in the seam, substantially as specified.

### No. 23,541. Track-Scraper for Railroads. (*Grattoir de Chemin de Fer.*)

Harvey M. Littell, St. Paul, Minn., U. S., 6th March, 1886; 5 years.

*Claim.*—1st. In a track scraper and clearer, the scrapers secured to the scraper levers and the rock-shaft, in combination with the arm which serves to operate the rock-shaft and scrapers, substantially as described. 2nd. In a track scraper and clearer, the rock-shaft journaled to the platform and carrying the scrapers and adjustable cross-bar, in combination with the lever arm which operates the rock-shaft and scrapers, substantially as described. 3rd. In a track scraper and clearer, the rock-shaft pivotally secured to the platform or sill by the eye bolts or journal boxes, said boxes having bolts which extend up through the platform, in combination with the scrapers and the outward lever arm and latch which operate the scrapers, substantially as described. 4th. In a track scraper and clearer, the combination of the rock-shaft carrying the scraper levers and scrapers, and the lever arm, which operates in conjunction with a latch to operate the scrapers with the latch and the pawl, substantially as described. 5th. In a scraper and clearer of the character described, the rock-shaft and scraper levers combined, and the lever and latch, said latch having a flattened head, in combination with the slotted platform, and the pawl for engaging the recesses in the latch, substantially as described, whereby the scrapers may be adjusted and held at any desired position with relation to the rail, as set forth. 6th. In a scraper and clearer, the rock-shaft and levers which operate the same and support the scrapers, in combination with the scrapers, said scrapers having the projecting agitators which clear inside the track, substantially as set forth. 7th. In a scraper and clearer, the rock-shaft and levers for operating the same and for supporting the scrapers, in combination with the scrapers, said scrapers having the agitators which scrape inside of the rails, and also having a straight portion which extends diagonally across and scrapes the top of the rail, and throws the debris therefrom, substantially as described. 8th. In a scraper and clearer, the rock-shaft, and levers for operating the same and for carrying the scrapers, in combination with the scrapers, said scrapers having the agitators, and upwardly and outwardly inclined, curved or tapered portions, substantially as described. 9th. In a scraper and clearer, the combination of the rock-shaft provided with the rearwardly extending scraper levers and scrapers, with the forwardly extending lever arm which is slotted to receive the latch, and the latch pivoted to the lever arm in between the projections in the slotted end of the lever arm, where it is protected by said projections, substantially as described. 10th. In a scraper and clearer, the combination of the rock-shaft, the levers and the scrapers with the latch, the slotted platform and the metal-slotted plating for said slot in the platform, substantially as described. 11th. In a scraper and clearer, the combination of the rock-shaft, the eye-bolts or journals, the levers and the scrapers with the cross-bar, which is loosely secured to the scraper levers, and which extends from one to the other and is free to vibrate therewith, substantially as described. 12th. In a scraper and clearer, the rock-shaft and scrapers journaled to the car, in combination with the lever arm which operates the rock-shaft, and the latch which operate the rock-shaft, and the latch which operates said lever arm, said latch and lever arm being provided with means whereby their lengths may be varied, substantially as set forth. 13th. In a scraper and clearer, the rock-shaft and scraper pivoted to the car, in combination with the lever arm which operates the rock-shaft, said lever arm being provided with a locking device, whereby the scrapers may be rigidly held down into contact with the rail at will, substantially as set forth. 14th. In a scraper and clearer, the rock-shaft and scrapers pivoted to the car, in combination with the cross-bar which extends back with and strengthens the scrapers, substantially as set forth. 15th. In a scraper and clearer, the rock-shaft having the crooked arms, provided with scrapers, in combination with the separable journals, substantially as set forth.

### No. 23,542. Forming Cast Iron into Shot, Grains or Globules. (*Conversion de la Fonte en Grenailles, Grains ou Globules.*)

Frederick T. C. Burpee, St. John, N.B., 6th March, 1886; 5 years.

*Claim.*—The method of atomizing or forming cast-iron into shot grains or globules, by means of a steam jet, as above described.

### No. 23,543. Machine for Making Bricks and Tiles. (*Machine pour Faire les Briques et les Tuiles.*)

William Baillo, Sparta, Ont., 6th March, 1886; 5 years.

*Claim.*—1st. The combination of the horse-power shaft B, and main driving wheel C, with the piston driving wheel E, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the piston driving-wheel E, with the piston rods F, F, and plungers G, G, by means of the eccentric pullies H, H, substantially as and for the purpose hereinbefore set forth.

### No. 23,544. Machinery for Spinning Yarn. (*Machine à Filer.*)

Robert Gemmell, Columbus, Ont., 6th March, 1886; 5 years.

*Claim.*—1st. As an improvement on mechanism for spinning yarn, an endless belt passing from the cylinder or drum round each bobbin-pulley, in combination with a belt-tightener, consisting of a pulley attached to a box sliding within a dove-tail groove, said box being operated by means of a screw working in a fixed nut, substantially as shown and for the purpose specified. 2nd. As an improvement or mechanism for opening yarn, an endless belt passing from the cylinder, as shown, round each bobbin-pulley, in combination with a belt tightener, consisting of a pulley attached to a block sliding in a dove-tail groove, said sliding block being operated and controlled by means of pawls engaging with ratchets, substantially as shown and for the purpose specified.

### No. 23,545. Egg Carrier. (*Boîte à Oeufs.*)

John A. Berry, Detroit, Mich., U. S., 6th March, 1886; 5 years.

*Claim.*—An egg-carrying device, composed of a series of open ended cylinders arranged in concentric series, each series being surrounded by a concentric ring and adapted to fit into a cylindrical outside package, in combination with removable partitions by means of which the devices are separated from each other, substantially as described.

### No. 23,546. Microphone. (*Microphone.*)

Thomas Wallace and Oscar A. Enholm, New York, N. Y., U. S., 6th March, 1886; 5 years.

*Claim.*—1st. In a microphone, a series of polished hard carbon bars resting in contact with one another, and controlling the circuit passing through them, substantially as described. 2nd. In a microphone, the combination, with the diaphragm, of a bridge piece secured thereto, the carbon bars secured to the bridge piece and connected to the circuit, and the carbon bar resting upon the said bars, and completing the electric circuit, substantially as described. 3rd. In a microphone, the combination, with the two fixed polished carbon bars, of the suspended bar resting in contact therewith, substantially as described. 4th. In a microphone, the combination, with the fixed bars, of the suspended bar resting in contact therewith, and having a weighted bar, substantially as described. 5th. The combination, with the diaphragm, of the bridge piece secured thereto, the bars secured to the bridge piece and connected to the line, and the suspended and weighted bar resting on said bars, substantially as described. 6th. The combination, with the bridge piece carrying the carbon bars, of a covering connected to the bridge piece and extending over the bars, substantially as described.

### No. 23,547. Graining or Ornamenting Painted or Colored Surfaces. (*Imitation ou Ornamentation des Surfaces Peintes ou Colorées.*)

Joseph A. Meginn, Liverpool, Eng., 6th March, 1886; 5 years.

*Claim.*—1st. The method of forming grained surfaces, which consists in forming sheets of fibulous or absorbent flexible material, embossing the same with the pattern or graining required, so that the pattern shall stand out in relief, cutting these sheets to the size and shape of the surface to be grained, covering the surface to be grained with wet paint color, or varnish, and pressing the said sheets on the said even surface, whereby the paint under the embossed parts is absorbed, leaving a grained pattern, substantially as described. 2nd. The improvement in the process of manufacturing grained, painted or colored surfaces, which consists in forming the pattern in low relief upon sheets of highly absorbent flexible material, capable of being cut to the size of the surfaces to be grained, substantially as described. 3rd. The improvement in the process of making grained surfaces, which consists in coating them with the wet paint, color or varnish, and then applying sheets of embossed absorbent material thereto, with pressure sufficient to cause the embossed surface to press against the wet paint, or other material, and absorb most of that portion that comes in contact with the raised part of the surface of the absorbent material, substantially as described. 4th. The improvement in the method of graining surfaces mechanically, without unsightly joints, which consists in cutting out from embossed absorbent paper a piece, the same size and shape as the surface to be grained, covering the surface with fresh graining color, or paint, and then pressing the piece of absorbent paper against the same, so as to absorb the color or paint beneath the embossed parts.

### No. 23,548. Auger. (*Taridre.*)

Benjamin Forstnor, Salem, Oregon, U. S., 6th March, 1886, 5 years.

*Claim.*—1st. In an auger, a circular peripheral cutting edge formed of two parts a, a', each provided with a cutting edge c, inclined slots d formed in opposite sides of the cutter, cutting lips e formed along the inclined slots, and a central cutting point c, joining the cutting lips e, substantially as herein specified. 2nd. As an improved article of manufacture, an auger formed of a shaft carrying a slotted disk, having on the circumference thereof peripheral cutters a, a', provided with cutting edges c, inclined cutters e formed along the sides of the slots of the disk, and the cutting point c, joining the cutters e, substantially as herein specified.