studded, and means for giving it a tendency to turn against the strain of the pulley belt, with an arm projecting from the said sleeve in the direction of the strain of the pulley belt, and a lever parallel to said arm and connected thereto and to the valve or governor stem, as set forth. 8th The combination of the sleeve adapted to resist the strain of the pulley belt, a weighted arm for giving it this resistance, another arm loosely clamped to said sleeve and projecting from the opposite side thereof, a stop projecting from said sleeve in position to strike a pin on the last named arm, and a hinged lever connected to said arm and to the valve or governor stem, as set forth. 9th. The combination, with the sleeved bearing, of the sleeve to which the pulley is studded, means for giving the latter a tendency to turn on its bearing against the strain of the pulley belt, a shaft and gearing connecting the said shaft with the pulley and driving sleeve of the governor, and an arm and lever connecting the sleeve with the valve or governor stem, as set forth. 10th. The combination, with the valve or governor stem, of means, constructed and operated as shown, for lifting it to cut off steam in case of accident, and a spring for returning it when released, as set forth.

No. 29,801. Rubber Boot and Shoe.

(Chaussure de caoutchouc)

The Canadian Rubber Company, (assignee of John J. McGill,) Montreal, Que., 1st September, 1888; 5 years.

Claim.—A "pure gum" ankle boot or shoe, with central slot C and eye D, D on each side of said slot, all as herein set forth.

No. 29,802. Separator. *(Séparateur)*

James J. Lowden, George A. Walker and William F. Baldwin, Boston, Mass., U.S., 1st September, 1888; 5 years.

Claim.—1st. A grease, grit and water separator, consisting of a body provided with removable perforated places, and a receiver provided with an automatic discharge valve, substantially as set forth. 2nd. The body A provided with perforated plates D, in combination with the receiver B, provided with a valve H operated by a float, substantially as set forth. 3rd The body A, perforated plates D, pipes *f*, bolts *g*, and screws *h*, in combination with the receiver B, and cover B_1, the perforated plates E, valve H, rod G, and float F, substantially as and for the purposes set forth.

No. 29,803. Coffin Depositor.

(Enfouisseur de cercueil)

Andrew M. Lewellen and Charles A. Lowellen, Rosendale, Mo., U.S., 2nd September, 1888, 5 years.

Claim.—1st. In an apparatus for depositing coffins and caskets in graves, the combination, with a main frame, of uprights extending therefrom, and bearing-rollers and ropes by means of which the lowering is accomplished. 2nd In an apparatus for depositing coffins and caskets in graves, the combination, with a main frame composed of two parts hinged together for the purpose of folding of uprights extending therefrom, and attached thereto by means of hinges, braces connecting the uprights and main frame, said braces being jointed or hinged to permit of folding with the uprights, and rollers journalled in the uprights, substantially as shown. 3rd. In an apparatus for depositing coffins and caskets in graves, the combination, with the main frame hinged at its centre and having pivotal legs attached thereto, of uprights, one set of which is hinged to the main frame, and the other set attached to a frame sliding upon the main frame, substantially as described 4th. In an apparatus for depositing coffins and caskets in graves, the combination, with the main frame, of uprights extending therefrom, one set of said uprights being attached to the main frame, the other attached to a frame sliding thereon, the main frame being provided with a scale for the purpose of adjusting the apparatus to any desired length, substantially as shown and described. 5th. In an apparatus for depositing coffins in graves, the combination, of the main frame centrally hinged for the purpose of folding uprights hinged to the main frame near one end, and uprights hinged to the sliding frame upon the opposite end of the main frame, a strap beneath the main frame attached to the sides thereof near one end, and a similar strap attached to the sides of the sliding frame at the opposite end, the straps being for the purpose of supporting the coffin before lowering it into the grave, substantially as set forth. 6th. In an apparatus for depositing coffins and caskets in graves, a crank-roller having perforations therein for the attachment of the lowering ropes, there being a longitudinal groove connecting said perforations, and a break for locking the crank-roller consisting of a strap rigidly secured to some convenient point of the frame of the apparatus, and passing partially around the roller and connected to a pivoted cam-lever, all substantially as and for the purpose set forth and described.

No. 29,804. Sulky Plough. *(Charrue à siège.)*

Herbert W. Fleury and William J. Fleury, (assignee of Charles Thom and Charles J. Bailey), Aurora, Ont., 2nd September, 1888; 5 years.

Claim.—1st. A lead-wheel connected to a bracket adjustably supported on an arm extending at right angles from the beam of the plough, in combination with a pivoted lever connected to the adjustable bracket, so that the movement of the said lever shall impart the desired adjustment to the lead-wheel, substantially as and for the purpose specified. 2nd. The combination, with a tongue pivoted on the plough-beam, of an arm extending from the journal of its pivot to engage with an arm or loop extending from the lead wheel post, substantially as and for the purpose specified. 3rd. The tongue D pivoted on the bracket C which is journalled on the post B extending vertically from the plough-beam, in combination with an arm E fixed to and extending horizontally from the bracket C to engage with a loop F, or its equivalent, extending from the lead-wheel post H, substantially as and for the purpose specified.

No. 29,805. Sad Iron and Plate Heater.

(Réchaud pour fers à repasser et assiettes)

Brent Shearer, West Point, Miss., U. S., 2nd September, 1888; 5 years.

Claim.—1st. The improved sad iron and plate heater herein described and shown, comprising the top a^1 and back a^2, the rearwardly projecting supporting hooks a, the sides a^3 at the ends of the top, and the steps A^2 at the lower ends of the sides to support the irons or plates, substantially as specified. 2nd The improved sad iron and plate heater comprising the top a^1, the hooks a, the sides a^3 at the ends of the top, the feet A^2 at the lower ends of the sides and arranged at an acute angle thereto, and the closed sides a^4, substantially as specified

No. 29,806. Roller Mill Feed Hopper.

(Trémie de moulin à rouleaux)

William J. Purdy and John H. Lyons, Carberry, 2nd September, 1888; 5 years.

Claim.—In a roller mill, the combination, with the feed roller S, of a hopper 9 connected to a feed board 6, endwise pivoted or journalled through the mill casing, a crank or wheel 19 on said journal to rock the feed board, and a spring tension regulator 11 connected to said lever or wheel by a chain or cord 10, whereby the hopper when overcharged will overcome the resistance of the spring, and actuate the feed board to allow an abnormal quantity of grain to escape to the feed and reduction rollers until the tension of the spring overcomes the gravity of the hopper, the feed board then returning to its normal position.

No. 29,807. Gate Latch. *(Loquet de barrière.)*

Henry Bacon, Walkerton, Ont., 2nd September, 1888; 5 years.

Claim.—The drop latch, and the combination by which the latch and striker fasten the gate, as described and shown.

No. 29,808. Electric Call. *(Avertisseur électrique)*

Willard H. Cutting, St. Louis, Mo., U. S., 2nd September, 1888; 5 years.

Claim.—1st. The combination of the hand, provided with a contact-brush alarm having electrical connections with the hand and with a suitable supply, a number of series of pins against which the contact-brush bears, and push buttons interposed in a connection between the pins and the supply, as set forth. 2nd. The combination of the hand alarm electrical connection between said hand and alarm, and between the alarm and battery, a ring or cylinder in which are arranged longitudinal series of pins, push buttons interposed in the connection between the pins and the battery, and a contact-brush on the hand adapted to bear on each of the pins in the series by means of a series of projections on the brush, substantially as described. 3rd. In a call-system, substantially as herein shown and described, the combination of the buttons, and removable tablets having bent fingers on their stems for fitting over the buttons, substantially as and for the purpose set forth.

No. 29,809. Tool for Spiral Turning.

(Outil pour tourner en spiral.)

Ellis Cutlan, London, Eng., 2nd September, 1888, 5 years.

Claim.—In a spiral-turning tool, the combination, with a pair of pivoted handles and arms, of an adjustable guide adapted to run on the work or upon a bar or rod parallel with the work, and a rotating or fixed blade for causing the traverse of the tool relatively to the work, for the purpose specified.

No. 29,810. Saw Mill Set-Work.

(Charriot de scierie.)

De Witt C. Prescott, Marinette, Wis., U. S., 2nd September, 1888; 5 years.

Claim.—1st. The set shaft, in combination with a ratchet-wheel secureed thereon, the fixed shells arranged on each side of the wheel and forming fixed ways to receive the pawl carriers, and the reciprocating pawl carriers mounted on said shells or ways, substantially as and for the purposes specified 2nd. The set shaft and a single ratchet-wheel secured thereon, in combination with the fixed shells arranged on each side of the wheel, and forming ways to receive the pawl carriers, the reciprocating pawl carriers mounted on said shells or ways, pawls attached to the carriers and arranged to engage with the ratchet-wheel in the same direction, and mechanism for reciprocating the pawl-carriers simultaneously in opposite directions, substantially as and for the purposes specified. 3rd The ratchet-wheel C_2, in combination with the fixed shells D arranged on each side thereof, and provided with inwardly-extending flanges *d*, and the reciprocating pawl-carriers E arranged within the shells D, and provided with flanges *e* extending outward over the flanges *d* of the shells, substantially as and for the purposes specified. 4th. The ratchet-wheel, in combination with the separate fixed shells to receive the pawl-carriers, the pawl-carriers E, cut away centrally as described to receive the pawls, and the pawls F pivoted to the carriers and arranged within the cut-away portion, substantially as and for the purposes specified 5th. The set shaft B, in combination with the single ratchet-wheel C thereon, the fixed shells D to guide the pawl-carriers, the pawl-carriers E mounted on said shells, the pawls F, the pitmen *i* and i_2 and the rock-shaft *h* and triangular plate H, substantially as and for the purposes specified. 6th. The ratchet wheel, in combination with the shell D provided with ways d_3 upon its inside, the plate I seated in said ways and provided with wings *s*, the eccentric J mounted in the shell and arranged to work in an opening in the plate I, and the pawls F provided with lateral projections *f*1, substantially as and for the purposes specified.