

No. 17,794. Belting. (*Fabrication de courroies.*)

John Murphy, Brooklyn, N. Y., U. S., 2nd October, 1883; 15 years.

Claim.—1st. The improvement in the method of manufacturing vulcanized belting containing several layers of fibrous material which consists in uniting said layers by a series of stays disconnected from each other at frequent intervals and applied before vulcanization, substantially as described. 2nd. In combination with the several layers of a belt, a series of flexible stays disconnected from each other at frequent intervals, and held in position by the vulcanized material, substantially as described, whereby the separation of said layers is prevented and the condition of the belt is not injured by stretching.

No. 17,795. Supplemental Trucks for Railway Cars. (*Châssis supplémentaires des chars.*)

L. Finlay, Little Rock, Arkansas, U. S., 2nd October, 1883; 5 years.

Claim.—1st. The plate K, having the boss or projection L and recess or guide *a*, in combination, with the single central roller *a*, and base plate F, constructed and operating, substantially as described. 2nd. The combination of the plate G, and wheels I, with the flanged roller J, and bars H, substantially as specified. 3rd. The combination of the plate G, wheels I, with the rollers *i*, and bars H, substantially as described. 4th. In a supplementary or intermediate car truck, the bolster or bar E, plate F, and plate K, having a boss or projection L, in combination, with the end plates G, wheels I, J, and bars H, substantially as and for the purpose specified. 5th. The bar *c*, having the nut *f*, in combination, with the roller J, and plate G, substantially as described.

No. 17,796. Ink Stands. (*Encrriers.*)

Isaac Brooke, Pottstown, Penn., U. S., 2nd October, 1883; 5 years.

Claim.—1st. The base A, ink well B, and sliding cover F, in combination with the arms E, and the weighted elbow lever D, formed with an upright hand-bearing portion D¹, said arms being connected with said cover F and pivoted to said portion D¹, substantially as and for the purpose set forth. 2nd. The ink-well provided with a cover and an operating lever therefor, in combination with the collar G, the arm H, the base A, and fastening J, said arm having lips K, whereby the ink-well is clamped to the base and the operating lever of the cover is held in position, substantially as and for the purpose set forth.

No. 17,797. Machines for Making Confections. (*Machines à confectionner les bonbons confits.*)

James Luttet, Buffalo, N. Y., U. S., 2nd October, 1883; 5 years.

Claim.—1st. In a machine for making confections, the frame *a*, having the vertical side pieces *a*¹, a vertically movable plate or bed provided with a pattern plate *c*³, and patterns for forming the moulds in the boxes *d*, as specified, in combination with a stock-box having a series of valves for opening or shutting off the supply, a cam and connections for operating them and a suitable feeding mechanism, substantially as specified. 2nd. In a machine for making confections, or similar articles, the combination of a cross head or bed *a*⁴ and a suitable mechanism for giving it a vertical reciprocating movement, substantially as described, with a hinged pattern plate provided with a bolt *c*⁵ for limiting its movement for the purposes specified. 3rd. The combination of the stock box arranged in a suitable holding frame so as to have a movement up or down with the screw rods *f*¹, secured to the frame *a*, substantially as specified, and provided with the hand wheels *f* or other equivalent device for adjusting the box vertically up or down for the purposes described. 4th. The stock box *e*⁵, provided with nozzles *h*⁵, valves *h*⁵ and valve rods secured in vertical guide ways, in combination, with the springs *g*⁴, for closing the valves after being released by the cams. 5th. In a machine for making confections, the wheels *A*, connecting rods *d*⁴, the shaft *d*⁵, provided with the pushing hooks *e*, and arranged in boxes *ab*, having pins *e*³, in combination with the arm *e*², and stationary rods *e*⁴, for the purpose of feeding the boxes, substantially as described. 6th. The frame *a* having the vertical side pieces, in combination, with a cross head *a*⁴, connecting rods *ab*, arms *a*⁵ *ab*, and foot step *d*³, for giving a vertical up and down movement, substantially as described. 7th. The combination of the stock box, having the valves and their connecting springs and parts, substantially as specified, with the jointed levers *h*¹, and connecting rods *h*, for the purpose of operating the valves by hand, as described. 8th. In a machine for making confections, or similar articles, a starch box provided with a series of valves, and springs for operating them one way, connecting rods *h*, and jointed levers or arms *h*¹, in combination, with the driving wheels provided with cams for operating them the other way, substantially as described.

No. 17,798. Cultivator Teeth. (*Dents de herse.*)

Luther W. Fillebrown, Piqua, Ohio, U. S., 2nd October, 1883; 5 years.

Claim.—1st. A harrow tooth consisting of a thin elastic blade having the form of the segment of a scroll, and constructed with a flexible wing, and a backwardly inclined cutting edge terminating at its front end in a point, substantially in the manner and for the purposes described. 2nd. The combination of an elastic blade, having the form of the mold-board, of a turn-pulp inverted, the elastic wing *w*, and the flanges *g*, all constructed and adapted to operate, substantially in the manner and for the purposes described. 3rd. The combination, with the elastic winged harrow-teeth, having perforated flattened flanges *g*, of the securing bolts *h*, having beveled T-shaped heads, all constructed and adapted to operate substantially in the manner and for the purposes described.

No. 17,799. Burnishing Machine.(*Brunissoir.*)

N. S. Valentine and H. E. Biggens, Hartford, Conn., U. S., 2nd October, 1883; 5 years.

Claim.—1st. In a burnishing machine, a rotary spindle B provided with blocks M P, or equivalent means for holding the article to be burnished, and a drum C, in combination, with the cord D, the reciprocating bar E, the connecting rod H, and the revolving adjustable crank G, whereby said spindle is partially revolved back and forth with a reciprocating rotary motion of less than a full circumference, substantially as described.

No. 17,800. Dust Collectors for Flour Mills.(*Tamis pour moulin à farine.*)

G. T. Smith, Jackson, Mich., (Assignee of J. R. Smith.) Rochester, N. Y., U. S., 2nd October, 1883; 5 years.

Claim.—1st. In a reel, a series of laterally arranged peripheral rings and inner rings, in combination with bolt cloth connecting the inner and outer series of rings, substantially as set forth. 2nd. In a reel, a series of longitudinal bars arranged concentrically to the axis of the reel, and a series of peripheral rings supported upon the bars, in combination, with a series of inner rings, substantially as set forth. 3rd. In a reel, a series of peripheral rings supported upon bars arranged concentrically to the axis of the reel, in combination with a series of inner rings supported upon bars arranged concentrically to the axis of the reel, substantially as set forth. 4th. In a reel, the combination of spiders, centrally mounted upon flanges or discs supported on the spider arms, an inner series of longitudinal bars connecting the heads and arranged concentrically to the spider, cloth rings supported on the inner series of horizontal bars, substantially as set forth. 5th. The combination of a rotating dust-catching balloon, provided with circumferential cloth-covered grooves, with stationary bushes arranged to clean the cloth, substantially as and for the purposes set forth. 6th. The combination of a rotating dust-catching balloon, provided with circumferential cloth-covered grooves, with the casing E, inlet spout C, and brushes B, adapted to clean the cloth at the sides of the grooves, substantially as set forth. 6th. The combination of a rotating dust-catching balloon, provided with circumferential cloth-covered grooves, with the casing E, inlet spout C, brushes B, and discharge valve D, substantially as described. 8th. The combination, of the outer and inner rings F and G, cloth *g*, thimbles *c*, arms *a*, and bolts *b*, substantially as described.

No. 17,801. Evaporator. (*Appareil évaporatoire.*)

J. A. Henderson, Troy, N. Y., U. S., 2nd October, 1883; 5 years.

Claim.—1st. An evaporating apparatus comprising a double drying-chamber with upwardly-inclined side walls or deflectors, in combination, with the hot air flues and an exhaust flue located between the drying-chambers, suitable dampers, and a smoke flue extending up through said exhaust flue, substantially as described. 2nd. In an evaporating apparatus, the drying chamber A, constructed with an inclined wall, or equivalent deflector, in combination, with a heater, provided with a pipe or flue carrying the heat up and into one side of the said chamber, the horizontal trays between which the heat is conducted, the exhaust flue and the smoke pipe extending from the heater into said flue, and both located on the side of chamber A, opposite to the side in which the heat is introduced, substantially as described.

No. 17,802. Machine for Making Barbed Wire. (*Machine à fabriquer le fil de fer barbelé.*)

A. Dillman and E. R. Knowlton, (Assignees of J. W. Nadelhoffer.) Joliette, Ill., U. S., 2nd October, 1883; 5 years.

Claim.—1st. In a wire-barbing machine, the combination of the shaft L, cams K¹ and J², arms *i* and *m*, jaw *c*¹, cutting-off dies *n* and *n*¹, bending-dies *h* *h*¹, pendulum block D², arms D³, and cam K, adapted to operate, as and for the purpose set forth. 2nd. In the machine described for making barbed wire, the combination of a suitable jaw or grasper for grasping and holding the barb with the cam *k*, arm D³, pendulum block D², having the bending dies *h* *h*¹, and cutting-off dies *n*¹, to swing therewith, and stationary lower cutting-off die *n*, all adapted to operate, as and for the purpose set forth. 3rd. In a wire-barbing machine, the combination of the wire crossing fingers *e*² *e*³, and cam *e* and *e*¹, adapted to operate as set forth. 4th. In a wire-barbing machine, the combination of the shaft L, rods *a*¹ and *a*², cranks *a*² and *a*¹, shaft B¹, eccentric cam K², reciprocating segmental racks R, and R¹, and wrapping pinions P¹ and P², having the wrappers *t* *t*¹, and inclined gathers *y*¹ *y*², as and for the purpose set forth. 5th. In a wire-barbing machine, the port *c*, adapted to support the strand wires *w* *w*¹, while the barb *b* is being placed on them, in combination with the jaw *c*¹, arm T, lever *m*, and eccentric cam K¹, as and for the purposes set forth. 6th. In a wire-barbing machine, the combination of the cams S², shaft *x*, vibrating arm S⁴, plates S¹, and spring dogs S⁶ S¹, adapted to operate as and for the purpose set forth. 7th. The combination of the arm T, grasper *c*¹, lug T⁷, screw T⁶, and die T⁴, as and for the purpose set forth. 8th. The combination of the fingers *e*² *e*³, friction plates *e*¹ *e*¹, and pin *e*⁷, as and for the purpose set forth. 9th. The combination of the grasper *c*¹, arms *i* and *i*¹, eccentric *i*² and adjustable die T⁴, as and for the purpose set forth.

No. 17,803. Sleds. (*Traineaux.*)

James W. Russell and John H. Kimble, Ellenville, N. Y., U. S., 2nd October, 1883; 5 years.

Claim.—1st. A sled, constructed with runners or raves B B¹, cross-braces C C, and arch braces D D, formed of metal, the said arch-braces being stepped by flanges upon the runners and secured thereto by rivets or their equivalent, and the front and back arch-braces being inclined in opposite directions, thereby dispensing with both standard and braces between the runners and raves, substantially as and for the purpose specified. 2nd. The combination to form a sled of the board A, the runners and raves B B¹, of continuous metallic strips, metallic cross-bars C C, metallic arch-braces D D, provided with corner braces *b* *b*, and stepped upon the runners by flanges secured by rivets or their equivalent, dispensing with both standard and braces