

or heading sawing machine, the endless belt of upright cross-bars provided with dogs, in combination with the vertical plate S having its upper and lower portions forming guide-ways or guards for the endless belt of upright cross-bars, and its rear side connected to movable uprights W, and the fixed uprights Y connected to the latter, of the bolts X, and having the adjusting screws Z, adapted to act upon the guard plate uprights W, substantially as and for the purpose set forth. 4th. In a shingle or heading sawing machine, the endless belt of bars M provided with dogs, in combination with the guard plate S with its upper and lower ends adapted to receive and permit the passage through them of the endless belt of bars, its lower end having also a narrow horizontal flange *t* at its forward edge, substantially as and for the purpose set forth. 5th. In a shingle or heading sawing machine, the endless belt of bars M having dogs V, in combination with the guard or guide-plate *s* having the narrow horizontal flange U, and the rear plate *d* forming a continuation of the flange U, and having a vertical flange *e* with the forward end inclined toward, and terminating close to the side of the rear part of the saw, substantially as and for the purpose set forth. 6th. In a shingle or heading machine, the endless belt of upright cross-bars provided with dogs, in combination with the vertical guard-plate S having a narrow horizontal flange at its front edge, the table *a* and the spring adapted to hold the table inward toward the saw, and the pressure bar or levers *f* provided at its upper end with the adjustable plate *g*, and the vertical shaft terminating at each end in serrated wheels, for the purpose of holding the spawl against the endless belt of bars, substantially as and for the purpose set forth. 7th. In a shingle or heading machine, the combination, with the saw mandrel and saw, the endless belt of upright bars and the vertical guard-plates, of the adjusting box *n* regulated by the adjusting screw *o*, for the purpose of regulating the thickness of the shingle or heading, substantially as and for the purpose set forth.

### No. 19,513. Wood Pulp Coating.

(*Enduit de Pulpe de Bois.*)

Laurent Grenier, Ste. Ursule, Que., 7th June, 1884; 5 years.

*Reclame.*—Une composition formée de pâte de bois et de plâtre, de zinc, de ciment de Portland, de silicate de soude, de bicromate de potasse, d'alum, de gomme arabique et de colle de poisson, ou leurs équivalents, dans les proportions et pour les fins décrites.

### No. 19,514. Combined Table and Clothes Dryer. (*Table et Séchoir à Linge Combinés.*)

Jasper Bates, Thornbury, Ont., 7th June, 1884; 5 years.

*Claim.*—1st. In a combined table and clothes dryer, the combination of hinged bars or standards H<sub>1</sub>, H<sub>2</sub>, perforated to receive associated bars horizontally with, and as pivoting upon a supporting table frame B C D, substantially as and for the purposes set forth. 2nd. The combination of exterior bars E<sub>1</sub>, E<sub>2</sub>, the bolts K and the table frame B C D, substantially as and for the purposes set forth. 3rd. The combination of the supporting rods G<sub>1</sub>, G<sub>2</sub>, with the exterior bars E<sub>1</sub>, E<sub>2</sub>, the interior bars E<sub>1</sub>, E<sub>2</sub>, the pivoted bars H<sub>1</sub>, H<sub>2</sub> and the table frame B C D, substantially as and for the purposes set forth.

### No. 19,515. Automatic Railway Switch.

(*Aiguille Automatique de Railroute.*)

Harry W. Howell, Jr., Elizabeth, N.J., U.S., 7th June, 1884; 5 years.

*Claim.*—The combination, with the fixed and movable rails of the switch, of the levers G, G<sub>1</sub>, connected together to act in unison, as shown, the lever H mounted on a fixed fulcrum L and pivoted to the switch bar at L, the connecting bar of the levers being pivoted to said lever H between the fulcrum and the pivot L, substantially as herein set forth.

### No. 19,516. Automatic Grain Measuring Machine. (*Appareil de mesurage Automatique des Grains.*)

Joseph Nafziger and Andrew Nafziger, Hopedale, Ill., U.S., 7th June, 1884; 5 years.

*Claim.*—1st. The combination, with the measuring cylinder having a toothed ring secured around the same, and projections secured to said ring at given distances apart, of the shaft, a loose pinion thereon gearing with said ring, the clutch on the said shaft adapted to engage the pinion, and the arm pivoted to the clutch fork and having a catch adapted to engage the lugs on the said ring, substantially as shown and described. 2nd. The combination of the toothed ring carrying the measuring cylinder, and provided with lugs having inclines T and lips U, the shaft having the loose pinion gearing with the ring, the spring-actuated clutch feathered on said shaft and adapted to engage the pinion, the clutch fork supporting the clutch, the arm pivoted to the clutch fork and arranged between lugs thereon, and having a catch adapted to be engaged by the lugs on the ring, whereby the clutch shall be thrown out of engagement with the pinion before the ring is stopped by the catch, substantially as specified. 3rd. The combination of the toothed ring carrying the measuring cylinder, and provided with lugs having inclines T and lips U, shaft having the loose pinion gearing with ring, the spring-actuated clutch feathered on said shaft and adapted to engage the pinion, the clutch fork supporting the clutch, the arm pivoted to the clutch fork and arranged between lugs thereon, and having a catch adapted to be engaged by lugs on the ring, the grain packers and its supporting lever, the eccentric and connecting rod for oscillating said lever, and the rod connecting the said pivoted arm with the said lever, substantially as shown and described, and for the purpose set forth. 4th. The combination, with the measuring cylinder, of the grain packer consisting of a radially slitted disc or equivalent device, the lever carrying the said packer, and means for oscillating said lever, substantially as shown and described. 5th. The combination of the oscillatory lever of the grain packer, the clutch fork, the oscillatory arm pivoted to the said clutch fork, and the rod connecting the said arm with the

lever and serving as a fulcrum for said lever, substantially as shown and described, whereby the lifting of the lever by the contact of the grain with the packer shall lift the said arm, and thereby allow the clutch to act, as specified. 6th. The combination, with the measuring cylinder made open at both ends, and having the ring secured around the same, and adapted to rotate on a base of the roller supported above the said ring and in contact therewith, substantially as shown and described. 7th. The combination, with the measuring cylinder and its vertical supporting shaft, of the registering device comprising the rotary dial plate, the feed screw and the drum having pegs in its outer surface arranged in spiral order around the same and in vertical rows, substantially as shown and described. 8th. The combination of the dial plate having numbers marked thereon, the feed screw mounted on the shaft of the dial plate, the pegged drum supported on a vertical post and connected to a thread on said post, and having the pegs arranged in spiral order, substantially as shown and described. 9th. The combination of the drum, the post supporting the same and having a spiral thread thereon, and the dog supported in standards in the upper end of the drum and having a notch in its lower end which engages said thread, and having its upper end extended over the upper end of said post, substantially as shown and described, whereby the fall of the drum, when it runs off the upper end of the thread, shall cause the dog to re-engage the thread, as set forth.

### No. 19,517. Tool-Holder for Grindstones.

(*Porte-Outil pour Meules.*)

John I. Carr, (Co-inventor with George H. Strong,) and Charles E. Brown, Chicago, Ill., U.S., 9th June, 1884; 5 years.

*Claim.*—1st. The combination, in a tool-holder for grindstones, of the grooved base C, the screw E, the sliding standard D, the bar F, the tilting plate H, the screw G, a rotator or pivoted jaw for receiving the tool to be sharpened, the screw I and a screw for binding the tool in the jaw, substantially as and for the purpose specified. 2nd. The combination, in a tool holder for grindstones, of the sliding standard D, the cylindrical bar F, the tilting and sliding plate H, a rotator or pivoted jaw for receiving the tool and mounted on the said plate, and the binding screws K, I and G, substantially as and for the purposes specified.

### No. 19,518. Tool-Holder for Grindstones.

(*Porte-Outil pour Meules.*)

John I. Carr and Charles E. Brown, Chicago, Ill., U.S., 9th June, 1884; 5 years.

*Claim.*—1st. The combination, substantially as specified, of the arm or lever F with its bridged table or plate G thereon, near its forward end, the screw H entering the said bridge, and the standard C having therein grooves or recesses arranged one above the other, and adapted to receive the rear end of the said arm, substantially as and for the purposes set forth.

### No. 19,519. Road-Scraper. (*Grattoir de Chemins.*)

Aaron J. Nellis, Pittsburg, Pa., U.S., 9th June, 1884; 5 years.

*Claim.*—1st. The combination, in a wheel scraper, of a scraper pivoted on a tilting bar, a tilting bar pivoted on a sustaining and operating lever, a sustaining and operating lever on the frame or carriage and a slotted guide-post through which the free end of the tilting bar passes, substantially as and for the purpose specified. 2nd. The combination, in a wheeled scraper, of a scraper pivoted on a tilting bar, a slotted guide-post through which the free end of the tilting bar passes, a circle-plate and links which connect the opposite ends of the scraper with the circle-plate, substantially as and for the purpose specified. 3rd. The combination, in a wheeled scraper, of the loosely-suspended scraper B, the reciprocating tilting bar C having the scraper pivoted at or near one extremity, the opposite end being free, and the operating lever D pivoted on the frame and having an elongated slot at the point of its connection with the tilting bar, substantially as and for the purposes specified. 4th. The combination, in a wheeled scraper, of a loosely-suspended scraper B, a circle-plate arranged on the carriage in front thereof, rods L connecting the extremities of the scraper with the circle-plate, loose links I encircling the rods L and lever G, substantially as and for the purpose specified.

### No. 19,520. Meat Roaster. (*Rotissoire.*)

Marvin Campbell, (Assignee of David B. Eastburn,) East Bend, Ind., U.S., 9th June, 1884; 5 years.

*Claim.*—1st. The combination of the bake pans A, C, with the perforated bottom D and the bottomless connecting section B, said section being provided with the flange E upon its lower edge, adapted to fit within the pan C, and the ledge *e* upon its upper edge adapted to surround the edge of the pan A. 2nd. In a meat roaster, the bake pans A and C connected by the bottomless section B, substantially as shown and described.

### No. 19,521. Potato-Digger. (*Arrache-Patate.*)

Hans Nelson and Jacob Nelson, Waupaca, Wis., U.S., 9th June, 1884; 5 years.

*Claim.*—1st. In a potato-digger, the combination, with the beam and the scoop, connected to its rear downwardly and inwardly curved end, of the clearer with its forward curved bar supported in the lower end of the beam, and in lugs on the rear bottom portion of the scoop and connected to the divergent ends of bars, fastened at their convergent ends to the beam, and the clearer vibrating cams or wings on the axle of supporting wheels, substantially as and for the purpose set forth. 2nd. In a potato-digger, the combination of the beam, the scoop, the curved clearer supported at its forward end in the lower end of the beam, and in lugs on the rear bottom edge of the scoop, and connected to the divergent ends of bars fastened to the beam, the handles with their right-angled portions connected to the