

columbia root, twenty-five grains, bitter orange peel, twenty-five grains, socotrine aloes, six grains, jalap, six grains, wahoo bark, four grains, golden seal, three grains, mandrake root, two grains, capsicum, one-fourth of a grain, the whole to be powdered and mixed together.

### No. 16,615. Improvements in Tubular Wells.

(*Perfectionnements aux puits artésiens.*)

Ramson E. Strait, Galesburg, Mich., U.S., 4th April, 1883; for 5 years.

*Claim.*—1st. The tubular well packing lock consisting of the combination of the valve joint having the packing lock recess, with the said packing device composed of the metal collar with the upper rim integral therewith, the thick rubber band or the equivalent, the outer band with its integral rim under the lower edge of the rubber band, and the metallic washer movably located on the lower end of the metallic collar. 2nd. A leader or battering-ring to a tubular well pipe having a rib on its inner surface. 3rd. A packing for locking valve-joints with the outer pipe of tubular wells consisting of the metal collar with upper rim, the rubber band, the outer band with its integral rim under the lower edge of the rubber band, and the metal washer on the lower end of the metal collar, all in combination as described. 4th. A plunger cylinder and connections, which are designed for locating at given points in the main well-pipe, in combination with said well pipe provided at its lower end with a leader or battering ring, or joint, having the internal rib, whereby all danger of losing said cylinder and connections is obviated.

### No. 16,616. Double-Clamping Brick.

(*Brique à double emboîtement.*)

Jean Darrigan, Cagnotte, France, 4th April, 1883; for 15 years.

*Résumé.*—1o L'établissement sur chacune des deux grandes faces de la brique d'un évidement de forme et de sections transversales trapézoïdales, dont les dimensions sont égales à celles des deux saillies latérales restantes. 2o L'inversion du sens de la concité des évidements et des saillies des deux faces d'une même brique. 3o L'établissement des faces latérales de la brique en forme de parallélogramme, les faces extrêmes en forme de double T étant coupées en biseau, en vue de former un parement horizontal, alors que les briques sont employées dans une position oblique comme les claveaux d'une voûte plate. 4o L'établissement facultatif de briques de forme rectangulaire ou trapézoïdale, selon qu'elles doivent être employées pour murs verticaux ou pour voutes cintrées. 5o Le mode d'assemblage de ces briques entre-elles par l'emboîtement des parties pleines de deux briques jointives d'une même rangée dans les évidements conjugués des rangées précédentes et suivantes. 6o La disposition facultative en forme courbe ou brisée des parois latérales des évidements d'emboîtement, les formes de ces évidements et des saillies latérales correspondantes pouvant également varier suivant qu'on le juge utile, aussi de faire varier les formes et dimensions des diverses parties constitutives de la brique suivant l'épaisseur des parois à établir.

### No. 16,617. Improvements on Wire Fences.

(*Perfectionnements aux clôtures en fil de fer.*)

Adélard F. Martel, James McPherson, Montreal, Que., Alexander F. McIntyre and John T. Lewis, Ottawa, Ont., 4th April, 1883; for 5 years.

*Claim.*—The combination of a twisted metal fence wire A having twisted in its folds, a piece of sheet metal of the shape Y.

### No. 16,618. Improvements on Vehicles.

(*Perfectionnements aux voitures.*)

Adna Wildern, Vienna, Ont., 4th April, 1882; for 5 years.

*Claim.*—1st. The combination of the collar C, collar C provided with screw thread H, teeth G G and corrugations F F, flanges D D, axle-box B provided with flange J, grooves L L and screw thread K and spokes E E. 2nd. The combination of the disk N provided with flanges N and straps N<sub>2</sub>, disk N<sub>3</sub> provided with flanges N<sub>4</sub> and sleeve N<sub>5</sub>, and bolt S. 3rd. The application of rubber packings Z placed between the outer end of the tennon E<sub>1</sub> on the end of the spoke E, and the inside face of the mortise V of the filly V.

### No. 16,619. Improvement on Hernial Trusses.

(*Perfectionnement des bandages herniaires.*)

Edwin J. Nelson, (Executor of the Will of William Nelson,) Little Falls, N. Y., U.S., 7th April, 1883; for 5 years.

*Claim.*—A truss pad supported upon, or by means of a number of spiral springs which are placed beneath the same near the periphery.

### No. 16,620. Improvements on Step Ladders.

(*Perfectionnements aux échelles à queue.*)

Lewis Francis, Kingston, Ont., 4th April, 1883; for 5 years.

*Claim.*—1st. The shaft section E having slots F and hung on rod G secured to the legs C C of the ladder, and engaging with the underside of a step, whereby the shelf will be maintained horizontally and fall to the vertical position. 2nd. The sectional stay-bars I I having a bent tongue J intersecting the adjoining section, pivoted thereto.

### No. 16,621. Improvements on Secondary Batteries.

(*Perfectionnements aux batteries secondaires.*)

William Taylor and Frank King, London, Eng., 7th April, 1883; for 5 years.

*Claim.*—The manufacture of the improved plates by coiling strips, or tapes of lead when cut in the required shape with uneven surfaces.

### No. 16,622. Improvements on Brick and Tile Kilns.

(*Perfectionnements aux fours à briques et à tuiles.*)

Robert A. Brown and John F. Brown, Washington, Ind., U.S., 9th April, 1883; for 5 years.

*Claim.*—1st. In a brick kiln, the back wall of which is provided with vertical concave recesses communicating with the floor flues. 2nd. The improved kiln provided with furnaces D, floor-flues F having openings H extending through the floor G, back wall B having vertical concave recesses I communicating with the flues F, arched roof J, flues K and front wall A, having openings L connecting the interior of the kiln with the lower ends of the exit flues K.

### No. 16,623. Improvements on Tire Upsetting Machines.

(*Perfectionnements aux machines à refouler les bandages des roues.*)

Andrew B. Jardine, Hespeler, Ont., 9th April, 1883; for 5 years.

*Claim.*—The combination of the lever F, the link E and the connecting straps C C with the eccentric dogs or catches B B<sub>1</sub>.

### No. 16,624. Machine for Decortiating and Cleaning Wheat and other Grains.

(*Machine à décortiquer et à nettoyer le blé et autres grains.*)

Peter N. McChesney and John W. Craig, Port Elgin, Ont., 9th April, 1883; for 5 years.

*Claim.*—1st. The combination, in an apparatus for decortiating grain, of one or more longitudinal cylinders constructed of an upper and lower sections of woven and perforated material respectively of steel, wire and iron, and the decorticators consisting of a series of spaced disks secured upon shafts, and the feed, discharge and exhaust mechanism. 2nd. The combination, with the cylinders and decorticators, of the feed tubes and the feed hopper having a partition provided with openings through which the grain is fed to the tubes, and with wings whereby the feed of the grain is regulated. 3rd. In combination with the upper and lower pairs of decortiating cylinders, and the decorticators adapted to rotate therein, the upper and lower discharge tubes, the one discharging into the other. 4th. The combination of the enclosing casing having an aperture between the cylinders, the exhaust mechanism adapted to draw or suck the loose particles through said aperture, the feed hopper and tubes, a series of decortiating cylinders and disks, and the discharge tubes. 5th. The combination of a series of decortiating disks mounted and secured, at intervals, on a revolving shaft, with a decortiating cylinder consisting of an upper horizontal section constructed of woven steel wire, and a lower horizontal section of perforated sheet iron united together, whereby a more durable abrasive surface is obtained, where the excess of abrasion occurs.

### No. 16,625. Improvements on Stoves.

(*Perfectionnements aux poêles.*)

Dominicus Brix, Geneseo, Ill., U.S., 9th April, 1883; for 5 years.

*Claim.*—1st. The combination of a stove or range of ordinary construction having a removable top plate with an ashfall A and pit A<sub>1</sub>, partitions F A<sub>2</sub> with dampers D D<sub>1</sub> D<sub>2</sub> for the regulation of the draft. 2nd. The combination of a stove or range having a removable top-plate, with a removable heater-box or dome E provided with fire-box to fit upon the top of the oven and fire-box B, pipe base and enclosed side lights, said dome covered with a removable top-plate T provided with lugs, feeder G, cover G<sub>1</sub> and double branch pipe P<sub>2</sub>.

### No. 16,626. Improvements on Calks.

(*Perfectionnements aux crampons.*)

Ephraim Witham, Carritunk, Me., U.S., 9th April, 1883; for 5 years.

*Claim.*—1st. A lumberman's calk having a cylindrical stem, provided at its upper end, for about two-thirds of its length, with annular grooves, the lower sides of which are horizontal, while the upper sides are bevelled upward and inwardly. 2nd. A lumberman's calk having a cylindrical shank or stem, provided at its upper end, for a portion of its length, with annular grooves, a bevelled or gradually tapering point and an intermediate disk or enlargement having bevelled or concave shoulders on its upper and under sides.

### No. 16,627. Improvements on Stop and Waste Cocks.

(*Perfectionnements aux robinets de retenu et de dégorgeement.*)

John Kelly, Chicago, Ill., U.S., 9th April, 1883; for 5 years.

*Claim.*—1st. The stop-cock consisting of casing A that forms a connection between the pipes B C D, in combination with crank E reciprocating the conical elastic valves F G. 2nd. The combination, with the casing A having base a, screw necks for coupling pipes B C D and stuffing box e, of crank E, valve-rods f and g and elastic conical rods F G. 3rd. The combination, with the casing A, valves F G and crank E, of lever J, weight P and cord R.

### No. 16,628. Improvements on Carriages.

(*Perfectionnements aux voitures.*)

Francois X. Koy, Montreal, Que., 9th April, 1883; for 5 years.

*Claim.*—The carriage reach H pivoted at one end hingedly to the bottom of the carriage, and hingedly to the upper part of the fifth wheel at the other end.

### No. 16,629. Improvements on Pan Cleaning Machines.

(*Perfectionnements aux machines à nettoyer les casseroles.*)

Walter S. Ovens, Buffalo, N.Y., U.S., 9th April, 1883; for 5 years.