

No. 19,582. Hay and Grain Rack Elevator.*(Monte-Râtelier pour le Foin et le Grain.)*

Peter G. Walker, Westwood, Ont., 16th June, 1884; 5 years.

Claim.—The shaft A, journaled at an elevation overhead in a barn or building, and having attached to it ropes L, I passing over pulleys a, a to the load to be lifted, grooved pulley C having wound upon it rope D and provided with brake lever L', cord U, pawls K and cord k, the whole being arranged to operate substantially as and for the purpose described.

No. 19,583. Machine for Gumming and Sharpening Saws.*(Machine pour Evider et Aiguiser les Scies.)*

Samuel C. Rogers, Hamilton, Ont., 16th June, 1884; 5 years.

Claim.—1st. In a saw gummer and sharpener, of a double hinge device to produce a parallel motion of spindle and grinding wheel, substantially as and for the purpose specified. 2nd. The combination in a saw gummer or sharpener, of the movable frame A, the hinge frame F and bed plate G to carry a non-sliding spindle to which a grinding wheel is attached, all constructed and relatively arranged substantially as herein set forth. 3rd. In combination with a saw gummer and sharpener, of the hinged guide H, substantially as and for the purpose specified. 4th. In combination with a saw gummer and sharpener, of the slotted plate d, the same being formed at one end with a lug d1 and projection k, the guide arm f hinged to the plate d, a spring g attached to guide arm f and made adjustable by thumb screws h, i and ii, a stop screw j, all constructed substantially as and for the purpose specified. 6th. In combination with a saw gummer and sharpener, and guide frame H, of the adjustable stop pin c provided with block nut n, substantially as and for the purpose specified. 6th. In combination with the saw gummer and sharpener, of the circular spiked base piece m, the same being provided with a cone screw pin and put, all constructed to hold a saw while being gummed and sharpened substantially as specified. 7th. In combination, with the frame F of a hinged saw gummer, of the step pin l, as and for the purpose specified.

No. 19,584. Conveyor for Grain and Flour Machines.*(Vis sans fin pour Machines à Grain et à Farine.)*

Eli S. Edmonson, Oshawa, John Goldie and Hugh McCulloch, Galt, Ont., 16th June, 1884; 5 years.

Claim.—As an improved conveyor for a grain or flour machine, a spirally-bent rod C, substantially as and for the purpose specified.

No. 19,585. Machine for Mangling Clothes.*(Machine à Calendrer de Linge.)*

Hubert R. Ives, (assignee of George Scott,) Montreal, Que., 16th June, 1884; 5 years.

Claim.—1st. In a mangling machine, the combination, with a fixed upper roller and an adjustable lower roller, of the arms D, D carrying the table, said arms being fulcrumed to the standards and provided with sockets to receive the journals of said lower roller, substantially as and for the purpose set forth. 2nd. The combination, with the frame, the table c, levers D, D and the lower roller B1, of the spring board E, rod F and crank nut C, substantially as and for the purpose set forth. 3rd. The combination of the standard A A having vertical slots c and fulcrum pins d, with the levers D, D having horizontal slots c and carrying-table c, substantially as and for the purpose set forth.

No. 19,586. Fifth-Wheel for Vehicles.*(Rond d'Avant-Train pour Voitures.)*

The Fallesen Fifth-Wheel Company, (assignee of Christian Fallesen, and Johannes M. Jensen,) Brooklyn, N. Y., U. S., 16th June, 1884; 5 years.

Claim.—In a fifth-wheel, constructed of annular plates, the combination, with an inner ring connected and secured to the running gear of the vehicle, of an upper transversely divided annular plate rotating upon said inner ring, and constructed to overlap, conceal and protect the upper surface and outer rim of said inner ring, one section of said upper plate being connected to the body of the vehicle and its other section hinged to the first and left free to open out independently therefrom, substantially as and for the purpose hereinbefore set forth.

No. 19,587. Harvesting Machine.*(Moissonneuse.)*

George Fielden, Dundas, Ont., 16th June, 1884; 5 years.

Claim.—1st. The combination of the movable arm A, yoke B, reel shaft C, reel arms D, reel pins E, grain platform et. 2nd. The combination of the movable arm A, yoke B, set-screw F, lock-bolt G, pivot-bolt H, as and for the purpose hereinbefore set forth.

No. 19,588. Thrashing Machine.*(Machine à Battre.)*

George A. Roberte and Christian Schafer, Three Rivers, Mich., U. S., 16th June, 1884; 5 years.

Claim.—1st. The combination, with a straw shaker, of two sets of rake fingers arranged to take the straw therefrom, one set pivoted above the other, and means for vibrating said sets of fingers past each other in opposite direction, substantially as and for the purpose set forth. 2nd. The combination with a straw shaker, of a rock-bar mounted independently thereof, the straw-carrying fingers projecting from said rock-bar over said shaker, and means for giving said rock-

bar a lateral reciprocating motion opposite to that of the shaker and a simultaneous rocking motion, thereby causing the carrying fingers to vibrate up and down as well as to move longitudinally, substantially as and for the purpose set forth. 3rd. The combination, with a straw shaker, of one or more sets of carrying fingers arranged above the same, and means for causing said fingers to rise and move forward as the shaker moves backward, and to fall and move backward as the shaker moves forward, substantially as described. 4th. The combination, with two connected moving straw-shakers, one in advance of the other, of two sets of rake fingers, one set connected to the rear end of the first shaker, and the other set connected to the front end of the second shaker and under the set connected to the first shaker, it means for raising the fingers of each set as the shaker to which it is connected moves rearward and *vice versa*, substantially as described, whereby the fingers of the two sets will be caused to pass each other in opposite directions as the shakers operate. 5th. In a separator, in combination with two shakers arranged one in advance of, and above the other and having counter movements, of a rake-head and a set of straw fingers journaled at the junction of the two and move forward with the upper shaker, said fingers constructed to rise and move forward as the upper shaker advances and to drop and move backward as the upper shaker recedes, substantially as described. 6th. In a separator, the combination, with two reciprocating shakers arranged one in rear of and below the other and having counter movements, of a set of straw fingers and rake-head journaled at the junction of the two, said rake-head being arranged to move with the upper shaker, the rearward shaker being provided with longitudinal slots adapted to receive said rake-head and in which it may have a reciprocating movement, substantially as described.

No. 19,589. Ditching Machine.*(Machine à Fossoyer.)*

Russell H. Nogar, Dundee, Mich., U. S., 15th June, 1884; 5 years.

Claim.—1st. The combination, in a truck for a ditching machine, of the front and rear axles secured to the bed, each by a proper king-bolt with locking cams or their equivalents for locking said axles in position, said axles being each provided with suitable bounds or other known appliances for securing a tongue thereto, whereby the device may be run in either direction, substantially as and for the purposes described. 2nd. In a ditching machine, a cutting wheel vertically as described, journaled in the lower end of a sash having a vertically reciprocating movement within a frame, in combination with cleaning devices or plates adapted to clear the earth from the cutting wheel in advance of its cut in either direction, substantially as described. 3rd. In a ditching machine, and in combination with the cutting wheel journaled in the lower end of a sash, such sash being provided with means for elevating or lowering the same, a frame secured longitudinally to said sash and carrying at each end thereof cleaners, which such cleaners may be alternately thrown out of action as circumstances may require, substantially as set forth. 4th. A ditching machine, consisting of the bed A to which are pivotally secured as axles B, locking devices C by which such axles are secured as required, frame D centrally supported upon the bed A, sash E to which is journaled the cutting wheel F, w h means for elevating or lowering said sash frame G secured to said sash and carrying upon its ends the fingered cleaners H provided with means for being alternately thrown out of action, the parts being arranged, constructed, combined and operating, substantially as and for the purposes described.

No. 19,590. Telephone Transmitter.*(Transmetteur Téléphonique.)*

The Bell Telephone Company of Canada, Montreal, Que., (assignee of Emile Berliner, Boston, Mass., U. S.), 16th June, 1884; 5 years.

Claim.—1st. In a telephone transmitter, a variable resistance consisting of a mechanical mixture of small conducting particles such as lamp black, or granulated coke with water or other liquid of low conductivity. 2nd. The combination, in a telephone ring, the whole vibrating diaphragm, a weight and a non-conducting ring, the whole constituting a chamber of which the diaphragm forms one side thereof, weight the other and the inner surfaces of the ring the walls thereof, with a variable resistance placed in the chamber thus formed and consisting of a damp conducting mass produced by mixing granulated carbon particles with water or some other semi-conducting liquid. 3rd. The combination, in a transmitting telephone, of the containing cavity, the moist carbon mass formed by adding a partially conducting liquid to granulated carbon, the conducting weight peripherally grooved and the soft and flexible packing for the said grooves, all substantially as hereinbefore described. 4th. In a telephone transmitter, the combination of a sliding weight adapted to be acted upon by sound waves, and a packing of felt or similar soft material around said weight.

No. 19,591. Telephone Transmitter.*(Transmetteur Téléphonique.)*

The Bell Telephone Company of Canada, Montreal, Que., (assignee of Emile Berliner, Boston, U. S.), 16th June, 1884; 5 years.

Claim.—In a telephone-transmitter, a tube or chamber containing a mass of loose conducting particles through which a current passes, and which particles are held together by a movable weight resting on said mass, substantially as described.

No. 19,592. Spring Shade Roller.*(Bâton de Rideau à Ressort.)*

The Shorey Spring Bed and Shade Roller Company, (assignee of Marshall E. Graves and Prescott C. Gates,) Lowell, Mass., U. S., 16th June, 1884; 5 years.

Claim.—1st. The combination of the hollow barrel, the spindle having a portion angular in cross-section, means of imparting a longitudinal outward motion to said spindle, the plug secured within: