

formed in sections of equal or nearly equal parts. 6th. The stationary knife mounted on busses through which the holding screws or bolts are passed. 7th. The rotary cutter formed with transversely extending lugs; 8th. The handle attached to the side plates or frame by means of lugs with overlapping portions; 9th. The combination of sectional ratchet caps, driving wheels, tubular shaft, sectional gear box and cutters; 10th. The combination with the side plates or frame of adjustable caps for the shaft of the rotary-cutter and busses for the stationary cutter.

No. 8677. Improvement on Piston Packing. (*Perfectionnement des garnitures de pistons*.)

Archelaus V. Stewart and Herman B. Wells, Cincinnati, Ohio, U. S., 25th April, 1878, for 5 years.

Claim.—A packing ring and lubricating compound composed of slippery elm or other equivalent vegetable substance, and material for absorbing the former material, and holding the same in proper contact with the parts to be packed and lubricated.

No. 8678. Improvements on Bolt-cutters. (*Perfectionnements aux cisailles à boulons*.)

William McAdie, Strathroy, Ont., 25th April, 1878, for 5 years.

Claim.—The solid frame A with bevelled edge c, in combination with the cutting bar C handles D and enclosing plates E.

No. 8679. Improvements on School Desks. (*Perfectionnements aux pupitres d'écoles*.)

Edward G. Durant, Racine, Wis., U. S., 25th April, 1878, for 5 years.

Claim.—1st. The combination, in a seat or similar article of furniture, of a sustaining arm, or standard provided with lugs, a series of wooden slats applied to said arm and a pin or pins passing through the slats and lugs to hold the former in place. 2nd. The combination of the metal arm A provided with lugs C the slats B and the fastening pin or wire D. 3rd. A cast metal arm or standard A, for seats or similar articles of furniture provided with lugs C which shall adapt it to receive wooden slats and the fastening pin or wire.

No. 8680. Improvements in Cooking Stoves. (*Perfectionnements dans les poêles de cuisine*.)

James M. Spencer, Great Village, N.S., 25th April, 1878, for 5 years.

Claims.—1st. In combination with a soft coal or wood burning stove, having an elevated oven, the deep ash pit c r containing ash pan a a a, having bale or handle h h; 2nd. The combination and construction of back hinges to stoves, constructed in three triangular pieces, cut by lines c c c having deep ribs R R R.

No. 8681. Improvements on Horse Shoes. (*Perfectionnements aux fers à cheval*.)

George E. Pierce, Colchester, Ont., 25th April, 1878, for 5 years.

Claim.—The combination of the plate a flange b, band c, bolt d and log washer e.

No. 8682. Improvements in Hay Rakes.

(*Perfectionnements dans les râteliers à foin*.)

Charles Lundy, Newmarket, Ont., 25th April, 1878, for 5 years.

Claim.—1st. The hollow axle tree A with journals L L, upon which the wheels F F revolve in combination with the dump rod D D, connected to each of the wheels F F, and having friction pulleys C C keyed to them. 2nd. The friction band I attached to the pin J, fitting around the friction pulleys C C and connected to the arm K, in combination with the spindle L, arm N and grooved semi-circular lever P, operated by the foot lever O, through the rod P. 3rd. The arm N, pivoted upon the spindle L, and provided with a roller B resting on the lever P, in combination with the notched quadrant M, keyed to the spindle L.

No. 8683. Improvement on Washing Machines. (*Perfectionnement des machines à laver*.)

Albert R. Fowler, Rochester, N. Y., U. S., 25th April, 1878, for 5 years.

Claim.—1st. The combination with the standard B B, of the bevel piece c attached to the foot of one of the standards, the socketed block d attached to the bottom of the tub and receiving said bevel piece, the curved piece f on the opposite standard resting against the tub, and the loose locking piece g inserted in the space between the standard and the tub above the block d. 2nd. The combination with the fluted roller E and the pressing rollers G G, of the bearing plates K K, provided with sockets to receive the journals of the pressing rollers constructed with the brick runs, resting over the tops of the standards, the thin flanges p extending down between the roller and the standards, and connected by springs s s with the plates t t t. 3rd. The combination with the fluted roller E, of the rubber packing rings k k, resting in grooves at the end of the roller and the covering caps l l serving as clamps to tighten the rings in place. 4th. The combination of the sealing plate K provided with oval lug c, and the bearing I provided with up shot m, said bearing I being attached to the top of the standard, and the slot allowing a rocking motion of the lug c thereon.

No. 8684. Improvement on Fruit Dryers. (*Perfectionnement des séchoirs à fruits*.)

William S. Plummer, Portland, Oregon, U. S., 25th April, 1878, for 5 years.

Claim.—The combination of the box N drum P pipes Q and coil S with the lower case A, provided with the hump B, pipes C, and holes D, the continuous platform F, the upper case H, provided with the posts I, the slides J, the doors L, and the cover M.

No. 8685. Mode of Lacing Boots and Shoes. (*Mode de lacer les chaussures*.)

Nathaniel Evans, Boston, Mass., U. S., 25th April, 1878, for 5 years.

Claim.—A shoe provided with lace holes along the two edges of the opening, one set of holes being coincident with the other set, together with an auxiliary hole at one side, all adapted to receive a lacing.

List of Patents issued up to 21st May, 1878, but not yet Officially published in the Patent Office Record.

No. 8686. J. H. Palmer Lodi Wis., U. S. A., "Wind Mill," 25th April, 1878.

No. 8687. S. Bair, Spencerville, Ind., U. S. A., "Churn," 25th April, 1878.

No. 8688. O. Williamson, Covington, Ohio, U. S. A., "Picture Exhibitor," 25th April, 1878.

No. 8689. J. Smith, Hamilton, Ont., "Pruning Knife," 25th April, 1877.

No. 8690. B. P. Morrison, Abingdon, Virginia, U. S. A., "Thill Coupling," 25th April, 1878.

No. 8691. F. Clark, Springfield, Mo., U. S. A., "Saw Guide," 25th April, 1878.

No. 8692. C. Ryan, Montreal, Que., "Pots for Hot Air and Hot Water Furnaces Combined," 25th April, 1878.

No. 8693. W. H. Rodden, Toronto, Ont., "Marking Pots," 25th April, 1878.

No. 8694. P. H. Lindsey, Lockport, N. Y., U. S. A., "Buggy Top Adjuster," 25th April, 1878.

No. 8695. G. W. Staker, Monroe, Iowa, U. S. A., "Apparatus for Rescuing Goods from Fire," 25th April, 1878.

No. 8696. W. H. Doane and G. W. Bugbee, Cincinnati, Ohio, U. S. A., "Blind Stile Boring and Mortising Machine," 25th April, 1878.

No. 8697. D. B. McRae, Bay City Mich., U. S. A., "Circular Saw," 25th April, 1878.

No. 8698. Jas. F. McCoy and A. Tyler, Ayer's Flat, Que., "Freight Car Coupler," 29th April, 1878.

No. 8699. Godfrey Moreau, Victoriaville, Que., "Reservoir or Tank," 30th April, 1878.

No. 8700. J. N. Cuthin and G. Whitefield Bond Biddeford, Me., U. S. A., "Bearers for Harness Collars and Breeching," 30th April, 1878.

No. 8701. Jas. Wythe Bowmanville, Ont., "Process and Apparatus for Bread Making," 30th April, 1878.

No. 8702. E. T. Gennert, New York, U. S. A., "Drying Kilm," 30th April, 1878.

No. 8703. S. Rich, Boston, Mass., U. S. A., "Method of Preserving Cured Fish and Potatoes," 30th April, 1878.

No. 8704. F. and C. Watkins, Woodstock, Ont., "Pump," 30th April, 1878.

No. 8705. M. A. Keller, Fremont, Ohio, U. S. A., "Grain Raking and Binding Machine," 30th April, 1878.

No. 8706. F. J. T. Dixon, St. Alphonse, Que., "Animal Power for Churns, &c.," 30th April, 1878.

No. 8707. W. E. Henderson, Winona, Minn., U. S. A., "Furnace," 30th April, 1878.

No. 8708. C. and B. H. Dusenbury, New York, U. S. A., "Apparatus for Casting Metal," 30th April, 1878.

No. 8709. J. F. Allen, Brooklyn, N. Y., U. S. A., "Riveting Holding-on Bar," 30th April, 1878.

No. 8710. Jno. A. McMartin, Montreal, Que., "Pump," 30th April, 1878.

No. 8711. R. H. McQuoid, Frankford, Ont., "Hay Press," 30th April, 1878.

No. 8712. W. E. Nickerson, Somerville, Mass., U. S. A., "Circular Saw Making Machine," 30th April, 1878.

No. 8713. R. Strange, Point Edward, Ont., "Instrument for Curing Piles," 30th April, 1878.

No. 8714. Jno. Moss, New York, Jno. H. Smith and G. J. Hill, Buffalo, N. Y., U. S. A., "Cash Recording Machine," 30th April, 1878.

No. 8715. W. S. Plummer, Portland, Oregon, U. S. A., "Fruit Drier," 30th April, 1878.

No. 8716. H. E. Thompson Jr., Pittsfield Mass., U. S. A., "Temporary Binders," 30th April, 1878.

No. 8717. J. Chittuck, Cleveland, Ohio, U. S. A., "Transparent Burial Casket," 30th April, 1878.