

ing over the cylinder and both side passages; 2nd. The plunger consisting of the four caps NN and OO, the leathers RR and one or more centro washers P; 3rd. The combination of the top plate W with passage A' and chamber B with interm pipe G, and the spout E with reservoir H.

No. 8473. Machine for Holding Wash-Tubs.
(*Machine à supporter les cuves à lessive.*)

Charles Barlow, Thomas B. Terrill and Charles W. Taylor, Cookshire, Que., 28th February, 1878, for 5 years.

Claim.—The combination of uprights AA, round bar B, flat bar C, rack D cross bars EE, board F, round bar G, drip board H, cross bar I, bar or latch J, button K and rollers L.

No. 8474. Improvements on the Granulation of Ligneous Substances. (*Perfectionnements dans la granulation des matières ligneuses.*)

William E. Nickerson, Somerville, Mass., U.S., 28th February, 1878, for 5 years.

Claim.—The method or process of reducing bark, etc., etc., to fine particles, by first forming in it a series of kerfs and then scraping off the ridges between the kerfs; 2nd. The combination on the cylinder C of the set of kerf forming teeth e e c with the edge reducing scrapers k k k of less projection.

No. 8475. Improvements on Lamp Heaters.
(*Perfectionnements aux chauffe-lampes.*)

Charles A. Howard, Pontiac, Mich., U.S., 28th February, 1878, for 5 years.

Claim.—In combination with an ordinary lamp, the removable sheet metal cylinder C provided with the notched rim E, and diaphragm G having the elongated opening a and perforations b.

No. 8476. Improvements on Buckboard Waggon. (*Perfectionnements aux voitures-marches.*)

James L. Phillips, Lowville, N.Y., U.S., 28th February, 1878, for 5 years.

Claim.—1st. The buckboard L suspended at the front from the end of half C or elliptic spring F, secured to and in line with the bolster B and at

the rear to the end of CC or elliptic springs HH, secured to and in line with two side bars CC, connecting the rear axle A with the bolster. 2nd. The buck board L hung between side bars CC, having a front cross-bar K attached by leather or metal shackles JJ to a half C, or elliptic spring G, fastened to a bolster B which is pivoted to the front axle A by a king bolt E. 3rd. The spring buck board L hung between side bars CC, having its rear cross-bar K attached by leather or metal shackles JJ to the end of CC or elliptic springs HH, fastened to the side bars CC, secured to the rear axle A and bolster B. 4th. The cross-bar D, connecting the side bars CC, having a short reach D' extending to the bolster B, and a brace E extending below the axle A and receiving the king bolt F, for supplementary bracing the connection of the side bars CC and bolster B.

No. 8477. Improvements on Clothes Dryers.
(*Perfectionnements aux séchoirs à linge.*)

John G. Yemen, Stratford, Ont., 28th February, 1878, for 5 years.

Claim.—The post B, with the hub H and arms JJ thereon, in combination with the weights CC.

No. 8478. Improvement on Cans for Liquids.
(*Perfectionnement des bidons à liquides.*)

John Graves, New York, U.S., 28th February, 1878, for 5 years.

Claim.—1st. A box or case for oil and other cans formed of two sections, separated at or near the centre of two of its sides, the sides of the lower section having bearings to support the trunnions upon the sides of the can. 2nd. A box or case for oil, and other cans made of two sections, separated at or near the centre of two of its sides, the meeting edges of these sides having bearings for the trunnions upon the sides of the can, while the remaining sides are arranged with locking devices, for connecting the sections; 3rd. A box or case for oil and other cans formed of two sections, separated at or near the centre of two of its sides, the remaining sides being extended above the can and provided with central bearings for the trunnions upon the sides of the can, so that the can may be tilted therein; 4th. A box or case for oil and other cans formed of two sections, separated at or near the centre of two of its sides, the meeting edges of the upper and lower sections having recesses for the trunnions upon the sides of the can, and bevelled edges to prevent bulging of the sides.

List of Patents issued up to 23th March, 1878, but not yet Officially published in the Patent Office Record.

No. 8479. E. H. Jenkins, Dayton, Ohio, U.S.A., "Lamp Burner," 28th February, 1878.

No. 8480. H. Mawin, Wallaceburgh, Ont., "Bread Raising Machine," 28th February, 1878.

No. 8481. R. Soper, London, Ont., and A. Soper, Tilsonburg, Ont., "Combined Looking Glass, Comb Case and Towel Rack," 28th February, 1878.

No. 8482. G. R. Prowse, Montreal, Que., "Stove," 28th February, 1878.

No. 8483. D. J. George, Winona, Minn., U.S.A., "Wash Board," 28th February, 1878.

No. 8484. J. Hogill, Jr., Seaforth, Ont., "Windmill Pump," 28th February, 1878.

No. 8485. S. K. Thompson, Brookline, Mass., U.S.A., "Bark Raping and Cutting Machine," 28th February, 1878.

No. 8486. T. H. King, San Francisco, Cal., U.S.A., "Wheels for Vehicles," 28th February, 1878.

No. 8487. J. Nesbitt and A. Anderson, Toronto, Ont., "Curtain Fixtures," 4th March, 1878.

No. 8488. C. S. Gorman, Irvine, Scot., "Chromato Process," 4th March, 1878.

No. 8489. T. Austin, Virginia City, Nev., U.S.A., "Washing Machine," 4th March, 1878.

No. 8490. E. and C. Gurney, Hamilton, Ont., "Stove," 4th March, 1878.

No. 8491. J. DuBois and E. F. Bengler, Williamsport, Pa., U.S.A., "Metal Working Lathes Tools," 4th March, 1878.

No. 8492. F. M. Lechner and J. A. Jeffrey, Columbus, Ohio, U.S.A., "Mining Machine," 4th March, 1878.

No. 8493. J. O. Beaupreland, Fall River, Mass., U.S.A., "Washing Machine," 4th March, 1878.

No. 8494. R. Hensley and D. Anderson, Montreal, Que., "Looks for Tying Bags," 4th March, 1878.

No. 8495. W. Wilmington, Toledo, Ohio, U.S.A., "Car Wheel," (Extension of Patent No. 2212,) 4th March, 1878.

No. 8496. J. Balluff, Ottawa, Ont., "Coal Oil Stove," (Extension of Patent No. 2366,) 4th March, 1878.

No. 8497. J. Balluff, Ottawa, Ont., "Coal Oil Stove," (Extension of Patent No. 2366,) 7th March, 1878.

No. 8498. P. M. Bawltinimer, Woodstock, Ont., "Potato Digger," (Extension of Patent No. 2184,) 8th March, 1878.

No. 8499. N. S. Woodward, (Assignee of R. Booth) and L. Smith, Sherbrooke, Que., "Automatic Fog Alarm," 8th March, 1878.

No. 8500. A. McLean, B. Morton and J. W. G. Whitney, Toronto, Ont., "Stone Wash," 8th March, 1878.

No. 8501. E. S. Redfern and C. B. Merchant, Meaford, Ont., "Washing Machines," 8th March, 1878.

No. 8502. A. Bijur, New York, U.S.A., "Shutter," 8th March, 1878.

No. 8503. E. S. Pratt, Buffalo, N.Y., U.S.A., "Folding Chair," 8th March, 1878.

No. 8504. J. W. Elliot, Toronto, Ont., "Stove," 8th March, 1878.

No. 8505. A. Gibson, Burford, Ont., "Potato Bug Gatherer," 8th March, 1878.

No. 8506. L. Côté, St. Hyacinthe, Que., "Foot and Guide for Sewing Machines," 8th March, 1878.

No. 8507. C. E. Marshall, Boston, Mass., U.S.A., "Anchor," 8th March, 1878.

No. 8508. J. P. Lawson, Chandler's Valley, Pa., U.S.A., "Sled Tongue," 8th March, 1878.

No. 8509. E. Baines, Toronto, Ont., "Motive Power Generator and Motor," 8th March, 1878.

No. 8510. D. Ahl, Newville, Pa., U.S.A., "Felted Surgeon's Sphincter," 8th March, 1878.

No. 8511. J. N. Lilly, Chicago, Ill., U.S.A., "Horse Shoe," 8th March, 1878.

No. 8512. T. H. King, San Francisco, Cal., U.S.A., "Anti-Friction Bearing for Shafts and Axles," 8th March, 1878.

No. 8513. G. P. Sheffield, Ont., and G. W. McKee, Brooklyn, N.Y., U.S.A., "Gas Burner," 8th March, 1878.

No. 8514. W. T. Cleveland, Richmond, Que., "Carriage Pole and Shaft Adjuster," 8th March, 1878.

No. 8515. L. and A. Dion, St. Thomas, Que., "Tug Pin for Harness," 8th March, 1878.

No. 8516. W. R. May, McClemons, Mich., U.S.A., "Pump," 8th March, 1878.

No. 8517. F. B. Stevens, and J. L. Bond, Port Huron, Mich., U.S.A., and C. Mackenzie, Sarnia, Ont., "Hydant Valve," 8th March, 1878.

No. 8518. C. W. Glidden, Lynn, Mass., U.S.A., "Heel Nailing and Trimming Machine," 8th March, 1878.

No. 8519. B. C. Pole, Washington, Columbia, U.S.A., "Ticket Register," 12th March, 1878.

No. 8520. Jno. W. Denrman, Maitland, Ont., "Cathead," 12th March, 1878.

No. 8521. E. A. Godkin, Elizabethtown, Ont., "Dress Model," 12th March, 1878.

No. 8522. J. J. Hogue, Montreal, Que., "Time Counter," 12th March, 1878.

No. 8523. J. G. Brown and G. T. Cooke, Stratford, Ont., "Planing Machine," 12th March, 1878.