No. 8337. Improvements in Tobacco-Cutters.

(Perfectionnements aux hache-tabac.)

John Farrar and John C. Nichol, Montreal, Que., 22nd January, 1878, for 5

-1st. The oblong rectangular hollow frame A formed with upright Claim.—Ist. The oblong rectangular hollow frame A formed with upright carriage B, planed or wrought to a true surface on its outer face, and with channels C C and opening ϵ , in combination with the cross head G, guides ff and spiral springs gg, 2nd. The kaife holder b adapted to work against the planed face of the carriage B, so as to give an oblique or shearing action to the kaife, and to cut completely through the plane of tobacco, without coming in contact with any underlying surface. 3rd. The projection mon the inner end of the kaife holder b, in combination with the spindle h, arm f, sorewed pin k, spring l and stop n, 4th. The spring oor its equivalent; 5th A tobacco cutter, in combination with an oblong rectangular hollow frame h, a self-acting feeding motion oblique or shearing action completing the cut independently of any underlying surface, adjustable guage automatically removable when the knife is in action. removable when the knife is in action.

No. 8338. Improvements on Snow-Ploughs.

(Perfectionnements aux charrues à neige.)

George Royal, Truckee, Cal., U.S., 22nd January, 1878, for 5 years.

Claim.—The boxes D pivoted to the angular timbers B B and connected as described, in combination with the adjustable shares or cutters H H, and the fixed mould boards H I H.

No. 8339. Improvements on Speaking Telegraphs. (Perfectionnements aux téléphones.)

James J. McTighe, Alpsville, Pa., U.S., 22nd January, 1873, for 5 years.

James J. McTighe, Alpsville, Pa., U.S., 22nd January, 1873, for 5 years. Claim—1st. The method of producing inducing intermittent currents of electricity in the wire of an electrical coil or helix, by the vibration of the pole or poles, of a permanent or electro magnet within whose field of induction said electrical coil or helix is situated; 2nd. The combination of an electrical circuit, of two or more telephonic or speaking telegraph; ic instruments, consisting each of a permanent or electro magnet and an electrical coil or helix, said permanent or electro-magnet having its pole or poles of diaphragm form, and said electrical coil or helix being situated eathin the inductive field thereof, 3rd. A permanent or electro-magnet, having its pole or poles reduced to the forms of a diaphragm; 4th. A permanent or electro-magnet, having its pole or poles diaphragmoidal, in combination with an electro-magnet or coil, 5th. The combination of an electrical coil or helix, with a permanent or electro-magnet having one or both poles of diaphragmoidal. with an electro-magnet or cook, sin. The commandon of in electron colling the like, with a permanent or electro-magnet having one or both poles of disphringm form, said coil or holix and pole or poles being adjustable with relation to each other, 6th. In a telephone, the combination with the disphragm and magnet or disphringmoidal pole, of an electro-magnet having its core constructed of two or more pieces, or of one piece slit as described.

No. 8340. Improvements on Rolling Slat Shutters. (Perfectionnements aux persiennes à lames mobiles.)

William Menzies and William Menzies, Jr.. (Assignoes of William B. Tur-ner), New York, U.S., 22nd January, 1878, for 5 years.

Claim.—1st. A shutter composed of rolling slats, that may be opened or closed to any desired extent, and left so opened or closed, whather the okutter be in motion or be stationary; 2nd. The slats I provided with twisted blades 4; 3rd. The combination of the slats provided with twisted blades

4, of devices for operating in connection with said twisted blades; 4th. The slate I turned by the guides having transverse and oblique movements described, the one upward and the other downward, this reducing the free tion of the operating devices to a minimum; 5th. The combination of the operating devices to a minimum; 5th. The combination of the slate 1 provided with twisted blades 4, of guides 114 49 18 19 and extension pieces 83 20; 6th. The combination of the slats 1 provided with twisted blades 4, of guides 95 58 and extension pieces 98 55 84 21. 7th. The combination of the slats provided with the twisted blades 4, guides 114 49 18 19, extension pieces 83 20, with the plate 31 provided with slot 45, plate 82 provided with slot 81, plate 29 provided with slot 29, plate 80 provided with slot 79, plate 24 provided with slot 23 28 42 and plate 75 provided with slot 79, plate 24 provided with slot 53, plate 108 provided with slot 53, plate 108 provided with slot 107, plate 48 provided with slot 63, plate 108 provided with slot 107, plate 49 provided with slot 113, plate 31 provided with slot 30 37, plate 80 provided with slot 113, plate 31 provided with slot 37, plate 24 provided with slot 113, plate 31 provided with slot 39 37, plate 80 provided with slot 45 36 71 and plate 75 provided with slots 50 37, plate 80 provided with the spiral 11; 11th. The roller 8 provided with the weight 13, to counterbalance the shutterin any position when over the wie dot or or space to be covered.

No. 8341. Combined Table and Clothes Rack.

(Table et séchoir à linge combinés.)

Lucius H. Goff, Richford, Vt., U.S., 22nd January, 1878, for 5 years.

Claim.—1st. The combination of a pair of leabes A, hinged together as at B. with the legs C having hinges D attaching said legs to said leaves and provided with rails E and F, 2nd. A combined table and clothes rack.

No. 8342. Improvements on Shingle Machines (Perfectionnements aux machines à bardeau.)

Byron C. Brown, Clinton, Iows, U.S., 22nd January, 1878, for 5 years.

Direction C. Brown, Clinton, towa, U. S., 22nd January, 1818, for Syears.

Claim—1st. The frame II hung to standards g on carriage G, in combination with the slide blocks h carrying the dogs I, 2nd. The dogs I privated in recesses to the slide block h, in the awinging frame II in combination with the adjusting bar K, 3rd. The combination with the carriages B and G, the swinging frame II, pivoted dogs I and adjustable bar K; 4th The feeding device consisting of rock shelf Y, sleeve and weight R, panior P, pawl J and spring T; 5th; The adjustable stop E, in combination with the carriages B and G. carriages B and G.

No. 8343. Improvements in Steam Engines.

(Perfectionnements dans les machines à rapeur.)

Benjamin F. Olmsted and William Mennie, St. Thomas, Ont., 22nd January 1878; for 5 years.

Claim.—1st. The combination of the sliding plate E and the intermediate eccentric F, the levelling lug I and cam II, the toggle legs K, together with the tripping cams M, with toggle and lover frame G: 2nd. The combination of the governor sliding cams L, the radiating cams e e and the lock levers?

No. 8344. Improvements on Vehicle Wheels.

(Perfectionnements aux roues de voitures.)

Aloah A. Philbrick, Coldwater, Mich.; U.S., 22nd January, 1878; for 5 years Claim.—1st. The combination of the hub A with enlargement A and pokes BB, the scrow rim or collar C and the tubular thimble D having apering screwend a, for screwing under and forcing outward the spokes.

List of Patents issued up to 12th February, 1878, but not yet Officially published in the Patent Office Record.

No. 8350. J. H. Stone, Hamilton, Ont., "Kerosene Lantern," (Re-issue of Patent No. 2156), 26th January, 1878.

No. 8351. W. Fawcett, Omaba, Neb., U.S.A., "Ladles for Metal Founding," 26th January, 1878.

No. 8352. H. C. Sergeant, New York, U. S. A., "Paving Block Former and Presser," 26th January, 1878. No. 8353. W. A. Cates, Union, Oregon, U.S. A., "Geographical Clock,"

26th January, 1878.

No. 8354. F. A. Buck, Eastport, Maine, U.S.A., "Anchor," 26th January, 1878. No. 8355.

M. Smith, Springfield, Vt., U.S.A., "Scythe Fastener," 26th January, 1878.

No. 8356. D. C. Ebaugh, Charleston, S. C., U. S. A., "Disintegrating Mill," 20th January, 1878. No. 8357. H. C. Sergeant, New York, U. S. A., "Rock Drill," 26th Janu-

ary, 1878. No. 8358. G. B. Richmond and A. Beamer, Lansing, Mich., U. S. A., "Hydro-Electro Telephone," 26th January, 1878.

No. 8359. G. A. Dickson, Shortsville, N. Y., U. S. A., "Hay and Grain Unloader," 26th January, 1878.

No. 8360. C. H. Rubicam and E. Henderson, (Assignees of H. S. Miller), Philadelphia, Pa., U. S. A., "Coasting Sled," 26th January, 1878.

No. 8361. W. P. Trow ator," 26th January, 1878. W. P. Trowbridge, New-Havon, Ct., U.S. A., "Steam Gener-

No. 8362. W. S. Mayo, Ottawa, Ont., "Box Matching Machine," 26th January, 1878.

No. 8363, F.W. Tuerk, Berlin, Ont., (Assignee of F.W. Tuerk, jr., Chicago, Ill., U.S.A.), "Hydraulic Motor." 26th January, 1878.

No. 8364. R. P. Street, Hamilton, Ont., (Assignee of C. II. Haynes, Boston, Mass., U.S.A.), "Lawn Sprinkler," 26th January, 1878.

No. 8365. Jas. Good, Toronto, Ont., "Oven Attachment to Coal Stoven" 26th January, 1878.

No. 8366. E. Gray, Chicago, 1tt., U. S. A., "Morse-Telephonic War Duplex Telegraph," 26th January, 1878.

No. 8367. O. B. Kendall, Buffalo, N. Y., U. S. A., "Flue Cleaner," 26th January, 1878.

No. 8368. J. Goldie, Galt, Ont., "Steam Engine," 26th January, 1878. No. 8369. C A. Hotchkiss, Bridgeport, Ct., U. S. A., "Curry Comb," 26th January, 1878.

No. 8370. T. Draper, Petrolea, Ont., "Pump," 26th January, 1878.

No. 8371. C. Duquet, Quebec, Que., "Telephone," 1st February, 1s78. No. 8372. E. Buell, Henvelton, N. Y., U. S. A., "Rotary Churn"ls February, 1878.

No. 8373. C. F. Ham, Rochester, N. Y., U. S. A., "Locomotive Head Light," 1st February, 1878.

No. 8374. W. Chalmers and W. N. Reynolds, Detroit, Mich., U. S. A. "Contrivances for Ironing and Fluting Linen, &c.," 1st February, 1878.

No. 8375. S. E. Griscom, Pottsville, Pa., U.S. A., (Assignce of I., Moore, Cole's Creek, Pa., U. S. A.,) "Millstone Dressing Machine," 1st February,

No. 8376. G. E. Marvine, D. S. Jackson and M. Farrington, (Assigned of W. H. Johnson, Delhi, N.Y., U.S.A.), "Metal Neck Yoke," lat February. 1878.

No. 8377. Jas. Boydell, Kingsey, Que., "Sleigh Check," 1st February.

No. 8378. J. E. Stebbins and M. J. Starr, Asage. Iowa, U.S.A., "Baking Oven," 1st February, 1878.

No. 8379. E. F. Robbins, Reading, Mass., and N. T. Gorham, Boston Mass., (Assignces of E. Bobbins, Barnstable, Mass., U. S. A.), "Auchor Tripper," lat February, 1878.