

No. 2410. HENRY G. W. KETTRIDGE, Petrolea, Ont., 4th June, 1873, for 5 years: "Tar and Petroleum Burner." (Fourneau consommant le goudron et le pétrole.)

Relates to the method of arranging the several pipes so as to unite the hot air with oil or tar and steam and to the principle of a downward discharge.

Claim.—1st. In the combination of steam pipe D, oil pipe F, and air pipe I; 2nd. In the combination with steam pipe D, oil pipe F, and air pipe I, the downward discharged pipe M.

No. 2411. DAVID E. TAYLOR, Charlton, and THOMAS H. DODGE, Worcester, Mass., U.S., 4th June, 1873, for 15 years: "A Spring Bed." (Un lit à ressorts.)

Claim.—1st. In the combination with the canvass F, of tension springs C, having their upper parts bent, as shown at e; 2nd. In a tension bed spring c, having an upper supporting bend e, and lower coiled and bent ends; 3rd. In a holding button K; 4th. In the combination with the springs B, and slats J, of the buttons L; 5th. In the combination with a base rail A, and a canvass strap F, of the slotted holding parts G; 6th. In the combination with a base rail and canvass F, of the tension springs C, buttons a, and screws b; 7th. In the combination with the base rail A, and slats J, of the tension springs c, canvass F, supporting springs B, attaching parts G, and buttons K.

No. 2412. ELBRIDGE G. LIBBY, Medford, Mass., U.S., 4th June, 1873, for 5 years: "A Turbine Water Wheel." (Une turbine hydraulique.)

Claim.—1st. In the bed plate E, with its portion 12 to 13 inclined down and toward the axis of the wheel and provided with apertures d, in combination with a wheel D, the floats or buckets of which are inclined downward and inward, and discharge the water at its outer periphery; 2nd. In an inclined gate G, in combination with an inclined bed plate E, and wheel D, operating in the manner set forth; 3rd. In a gate G, provided with openings s, as described.

No. 2413. MILLINGTON H. SYNGE, London, Eng., 4th June, 1873, for 5 years: "A Deodorizing Apparatus." (Un appareil désinfectant.)

Consists in combination with a self-acting deodorant discharge apparatus of a series of intercepting pans applied to a closet and capable of receiving an intermittent axial motion by means of which empty pans are brought in succession into position and when filled are caused to discharge their contents into a receptacle below. Also in the means employed for preventing the apparatus from being tampered with.

Claim.—1st. In the arrangement of rotating pans as described in the drawings sheet 1, and the mechanism in connection therewith for automatically supplying the charcoal or other deodorant to the pans; 2nd. In the combination of a horizontal shaft with a series of measuring wheels or instruments for effecting the intermittent discharge of a deodorant on to faecal matters when the axial motion of such shaft is controlled by a locked lever or equivalent device.

No. 2414. ROBERT C. PARVIN, Farmington, Ill., U.S., 4th June, 1873, for 5 years: "Improvements on Traction Engines." (Perfectionnements aux locomotives.)

Claim.—1st. In a traction engine having the following parts namely: a frame supporting an endless traction band or carrier, a boiler and forward guiding wheels, when said frame and wheels are united by an intermediate joint; 2nd. In a traction engine or land carrier so constructed that the front and rear sections may adapt themselves independently of each other to uneven surfaces or obstructions upon the ground; 3rd. In a traction engine in which the boiler is located between the rear frame and front driving wheels of the engine and while supported by both said frame and wheels does not rest directly upon either; 4th. In a traction engine provided with an endless carrier or band for moving the engine over the ground the construction of the feet with convex or rounded surfaces for the purpose set forth; 5th. In the combination of the boiler c, and frame a, when said parts are swivelled or jointed as described; 6th. In the described combination and arrangement of the axle D, boiler C, frame A, and traction band B, as described.

No. 2415. GEORGE BOLTON & RICHARD ROTHWELL, Arnprior, Ont., 4th June, 1873, for 5 years: "A Pump." (Une pompe.)

Claim.—1st. In the sheet metal tubular lining B, applied to a wooden pump cylinder A; 2nd. In constructing the piston of two portions C, D, the upper portion tapering as set forth, and the application of the annular packing ring E, of leather or other material.

No. 2416. JOHN M. VANALSTYNE, and WILLIAM MITCHELL, West Troy, N. Y., U. S., 4th June, 1873, for 5 years: "A Culinary Boiler." (Une chaudière de cuisine.)

Claim.—In the combination of the pipe E, with the steamers A, C, and D, also in the detached perforated bottom in each steamer and the oval shaped steamer on top.

No. 2417. ANSON T. BUTTON & SAMUEL J. LUNDY, Uxbridge, Ont., 4th June, 1873, for 5 years: "Gang Plow Attachment." (Disposition des charrues à socs multiples.)

Claim.—1st. In the radial wheel K, and its application to the forward part of gang plows, so as to run in the furrow; 2nd. In the combination of the radial wheel K, with the arm M, bracket L, rack T, pinion P, shaft H, circular flange S, connecting rod F, motive lever A, catch lever C, spring B, wheel E, ratchet segment R, boss X, studs Y, and journal Z, whereby the plow can be raised or lowered by the plowman as he may desire, the depth of the plowing uniformly gauged, and the plow easily turned without lifting or handling.

No. 2418. TIMOTHY F. ALLYN, Nyack, N. Y., U. S., 4th June 1873, for 15 years: "Railway Freight Car Spring." (Ressort de wagon de chemin de fer.)

Claim.—In the combination of the spring plates E, E, with the end clasp A, A, and the frame C, or its equivalent, thus securing the end clasp A, A, in place without subjecting the frame C, to vibration from the action of the spring plates E, E.

No. 2419. TIMOTHY F. ALLYN, Nyack, N. Y., U. S., 4th June, 1873, for 15 years: "Railway Car Elliptic Spring." (Ressort elliptique de voiture de chemin de fer.)

Consists in constructing a steel plate spring so as to obtain the maximum elasticity and sustaining capacity of the material employed.

Claim.—1st. In the combination of the spring plates E, E, and clasps B, B, bolts or rivets F, F, auxiliary springs A, A, housings D, D, and india rubber bearings C, C, all working together in the manner described; 2nd. In the combination of the spring plates E, E, constructed in the manner described with the end clasps B, B, and bolts or rivets F, F; 3rd. In the auxiliary springs A, A, arranged between the ends of the plate springs E, E, in the manner described.

No. 2420. JOSEPH C. FIRTH, St. Catharines, Ont., 4th June, 1873, for 5 years: "A Grain Separator." (Un séparateur des grains.)

Claim.—1st. In the fan box K, and fans L, and counter screen E, arranged and combined with a hopper A, and series of screens F, of a grain separator; 2nd. In the arrangement of the counter screen E, in combination with a series of screens F, and hopper A; 3rd. In the adjustable pitch board B, applied to the hopper a, in combination with a sliding bottom C; 4th. In providing the hopper A, with a sliding bottom C; 5th. In the drawer P, provided with partitions inclined bottoms, and openings Q as set forth.

No. 2421. LYMAN TOWER, Berlin, Ont., 4th June, 1873, for 5 years: "A Washing Machine." (Une machine à laver.)

Relates to that class of washing machines in which a vertically arranged perforated beater is operated by a horizontal lever to press the clothes against a vertically arranged wash board.

Claim.—1st. In the adjustable cover formed of sections E, and F, hinged together in combination with the box A; 2nd. In the segment brace G, in combination with the lever D, and beater B.

No. 2422. EBENEZER TUTTLE, Canaan, Me., U.S., 4th June, 1873, for 5 years: "A Water Wheel." (Une roue hydraulique.)

Consists in placing a circular disc below the seat of the wheel leaving a space between the wheel and the bottom of the shaft for the reception of water for the purpose of buoying up the wheel and thereby removing friction from the lower end of the driving shaft.

Claim.—In the combination of the wheel A, having the buckets A, A, of the form shown, the gate G, having the horizontal plates g, g, the shaft H, disk D, rim b, and arms h, h, extending upward and attached to the shaft H, as described.

No. 2423. DEXTER CURTIS, Sun Prairie, Wis., U.S., 4th June, 1873, for 5 years: "Harness Lining." (Doublure de harnais.)

The object of the invention is to prevent the chafing or galling of a horse by the harness and to promote the healing of the flesh when thus galled or chafed.