

Claim.—The construction and arrangement of the frame A, ladder sections B, C, D, cross bars a, c, d, f, pulleys b, h, fair leader e, sheave e, shaft J, drum K, rope L, and braces I, with their ratchet bars, as set forth.

No. 4454. HUGH NEILSON, Toronto, Ont., 3rd March, 1875, for 5 years: "Gravity Battery." (Batterie électrique.)

Claim.—1st. The glass tube F, in combination with the upper copper plate C, having a hole D, and trimmings E, as set forth; 2nd. The combination of a glass cup A, with the reservoir P, to be filled with sulphate of copper solution or emptied of it, as required, by means of the glass tube F, set on the trimming E, on the upper copper plate C, as set forth.

No. 4455. HENRI E. CASGRAIN et GEORGES DROLET, Québec, Que., 3 Mars, 1875, pour 5 ans: "Machine à gaz d'éclairage." (Illuminating Gas Machine.)

Résumé.—1o. La combinaison des réservoirs A et C, avec les réservoirs B et D, fonctionnant tel que décrit; 2o. Le réservoir I, et sa disposition au-dessus de l'appareil contenant spécialement le gazoline et l'empêchant de refluer dans les tubes à air; 3o. Le diaphragme P, agissant sur la gazoline tel que décrit; 4o. La soupape de refus on nonchouche O, tel que décrit; 5o. La soupape G, admettant l'air dans le réservoir C, le tout fonctionnant ensemble tel que décrit.

Claim.—1st. The combination of the reservoirs A and C, with the reservoirs B and D, working as described; 2nd. The reservoir I, and its situation above the apparatus containing the gasoline, and the prevention of the back flow into the air tubes; 3rd. The diaphragm P, acting on the gasoline as described; 4th. The india rubber stop valve as described; 5th. The valve G, admitting air into the reservoir C, the whole working together as described.

No. 4456. ANDREW ALLAN, Montreal, Que., (Assignee of C. C. Jordeson) 3rd March, 1875: (Extension of Patent No. 267, for 5 years:) "Revolving Screw Windlass." (Vindas à vis de renversement.)

Claim.—1st. The arrangement and combination of the vertical screw H, working in the circular angular groove G, either attached to windlasses or for raising by continuous motion; 2nd. The capstan J, revolving on the spindle or pivot of and independent of the perpendicular or vertical screw H.

No. 4457. HENRY BOLTON, Elizabethtown, Ont., 4th March, 1875, (Extension of Patent No. 1570) for 5 years: "Improvements on Churns." (Perfectionnements aux barattes.)

Claim.—The arrangement of the friction-bar F, spring H, friction-roller C, and driving-wheel B, in combination with the inclined platform A, turning on journals J, J.

No. 4458. ADOLPHUS TRUMBLE and JEAN BARON, Ottawa, Ont., 4th March, 1875, for 5 years: "Washing Machine." (Machine à laver.)

Claim.—The conical slats H, and interspaces I, of the semi-circular bottom C, and the conical slats O, and interspaces K, of the inside semi-circular box J, said interspaces I, and K, being set diagonally to each other, in combination with a washing machine A.

No. 4459. ROBERT P. SPICE, Westminster, Eng., 5th March, 1875, for 5 years: "Gas Apparatus." (Appareil à gaz.)

Claim.—1st. The construction of vertical and taper retorts open at the bottom, as described; 2nd. The construction of the mouth piece with its hopper and appliances for charging the retorts, as described; 3rd. The troughs for cooling the bottoms of the retorts, as described; 4th. The construction and application of the steam superheaters, as described; 5th. The construction and arrangement of the condensers, as described; 6th. The general arrangement in the setting of the retorts and apparatus; 7th. Introducing into the retort the heavy spirit or oil of petroleum with steam, as described; 8th. Passing hot gas into the saturator, as described.

No. 4460. FRANKLIN P. LAUBACH, Catasauqua, Pa., U. S., 5th March, 1875, for 5 years: "Water Cooler." (Réfrigérant à eau.)

Claim.—1st. The combination with a water cooler of the outlet or drain pipe a, communicating with the inner pan A, and passing thence through the centre of the outer pan B.

No. 4461. JOHN S. ROYCE, Cuylerville, N. Y., U. S., 5th March, 1875, for 5 years: "Improvements on Harvesters." (Perfectionnements aux moissonneuses.)

Claim.—1st. The combination of the fixed divider plate K₁, the laterally adjustable divider L, pivoted thereon, and the supplementary laterally movable grain guard L₁, pivoted to the divider; 2nd. The clutch t, on the tumbling shaft t₁, in combination with a spring hook t₂, also on the shaft to hold one member of the clutch out of gear when desired; 3rd. The combination of the rake arm, the rake head so pivoted as to be capable of swinging around said arm, the locking spring latch Y, on the rake head and a swinging tripping lever Y₁ on the cam, whereby each rake head, after sweeping the out grain upon the platform, is automatically released and allowed to turn up out of the way until a gavel of sufficient size has accumulated on the platform; 4th. The combination of the rocking trunnion f, the rocking bar H, secured thereto, and the bifurcated bracket g, on the finger-beam, capable of moving vertically on said rod, these members being constructed and operating in combination to admit of the rising and falling as well as of the rocking of the finger-beam; 5th. The combination of the rocking trunnion f, the rocking bar, the bifurcated bracket movable endwise thereon and the spring g₁, interposed between the trunnion and bracket to diminish the pressure of the cutting apparatus upon the ground and render it easier to lift; 6th. The combination of the rocking trunnion f, rocking lever, its spring handle rocking on a pivot transverse to the rocking trunnion, and the detent whereby the lever may be released and rocked, as set forth; 7th. The combination of the driving wheel, the frame plate, the seat standard mounted thereon, the rocking lever mounted on said standard, the bifurcated bracket movable endwise thereon, the lifting lever pivoted on the seat standard and the lifting chain, all these members being constructed and operating in combination; 8th. The combination of the disc shaped driving wheel, the frame plate enclosed thereon, the crank shaft mounted in a pipe box pivoted to vibrate laterally on said plate, and the cam lever or shipping lever pivoted on said plate, and acting upon a lug on the crank shaft pipe box to throw the cutters into or out of gear, as set forth; 9th. The combination of the tongue, the frame plate, the rocking trunnion f, the rocking lever, the finger beam, and the diagonal draw bar pivoted to the tongue and to a post or standard on the finger beam but above it, these members being constructed and operating in combination.

No. 4462. DAVID MOODIE, Bell's Corners, Ont., 6th March, 1875, for 5 years: "Potato-digger." (Extracteur à patates.)

Claim.—The revolving shaft I, having a series of hoes H, operating within a frame A, and over a cutting knife or point G, secured to the said frame, as set forth.

No. 4463. WARREN HARRIS, Danville, Vt. U. S., 6th March, 1875, for 5 years: "Reflecting Stereoscopic Camera." (Chambre à réflexion stéréoscopique.)

Claim.—The combination of two reflectors with the two object glasses of a stereoscopic camera, as described.

No. 4464. HENRY C. BUTLER, Minceapolis, Ma., U. S., 6th March, 1875, for 10 years: "Gang Saw Hanger." (Châssis à scie multiples.)

Claim.—1st. In combination with the rods M, the rods F, and connecting bars O, O, O, as set forth; 2nd. In combination with the rods M, and F, F, and the connecting bars O, O, O, O, the bevel slotted pieces K, K, and the saw frame H, I, H₁, as set forth.

No. 4465. PARLEY J. AYRES, Lindsay, Ont., 6th March, 1875, for 5 years: "Stump Machine." (Arrache-souche.)

Claim.—1st. The construction of the frame A, with timber trussom A, carrying two girders K, K, to carry winch B, as set forth; 2nd. The combination of the triple geared winch B, with the reeling pulley D, thereto attached with the frame A, as set forth.

No. 4466. EDMUND C. TOZEL and RICHARD D. SOUTHWOOD, New Castle, N. B., 6th March, 1875, for 5 years: "Freezing Apparatus." (Appareil de congélation.)

Claim.—1st. The perforated pipes M, in combination with the pipes H, and G, as set forth; 2nd. The air tubes N, in combination with the waste pipe J, and cylinder I, as set forth; 3rd. The racks P, constructed of perforated posts a, and adjustable horizontal bars b, as set forth; 4th. The boxes Q, constructed with perforated sides and having open partitions c, for the circulation of air, as set forth.