No. 3334. Cyrus E. Grandy and Ziba B. Grandy, Stafford Springs, Ct., U. S., 24th April, 1874, for 5 years: "Improvements on Saw Sets." (Perfectionnements aux rainettes.)

Claim.—The die-pinte A, notched bed-die B, movemble die-bar C, movemble die D, cam lover E, and adjustable yoke F, combined and arranged to bend the tooth between two bearings on the bed-pinte, the combination of the die plate A, bed-die C, moveable die D, cam lever K, adjustable yoke F, and gauge-bar M, arranged to bend the tooth over the bed-die.

No. 3335. THOMAS HOULDING, Ipswick, Mass. U. S., 24th April, 1874, for 5 years: "Combined Hay Rake and Spreader." (Rateau-faneur à foin)

Claim.—The revolving axle N, and block P, with arms Q, Q having the forks W, W, and t, t, at their ends, held stationary when used for a Hay Rake by aid of the shiding-bar D, and ratchet wheel C, and made to revolve when used as a tedder, by aid of cog-wheels d, e, k, and m, the arm j, and pin l, in combination with B, Bi, frames A, and O.

No. 3336. ROBERT H. THURSTON, Hoboken, N. J., U S., 24th April, 1874, for 5 years: "Autographic Testing Machine." (Machine à essai autographique.)

it essai autographique.)

Claim.—1st. The "Automatic Recording Attachment" to a machine for testing the strength of materials, said attachment consisting of a table G, carrying the card or paper upon which the record is made, the pencil and holder I, the guide-curve F, or their several mechanical equivalents, when combined in such a manner as t. be capable of describing a diagram or curve of which the coordinates are proportional, one to the four producing distortion or rupture, and the other to the degree of such distortion of the piece tested, the area of the said curve is also an indication of the resilience of the test piece; 2nd. An automatically produced strain diagram in which the abscesses or the ordinates as the case may be are greater than, and are proportional to the actual extension or change of form of the specimen producing it; 3rd. The combination of an automatic recording apparatus, of the kind described, with a machine for testing strength of materials; 4th The machine for testing strength of materials consisting of the suspended levers B, C, or equivalent E, Fig. 8, and the frame A, A, sustaining said levers with their axis in the same line.

No. 3337. James Kirkpatrick, Hamilton, Ont., (Assignee of Alfred Paraf), 24th April, 1874, for 5 years: "Improvement in Purifying and Separating Fats." (Perfectionnement dans la purification et la séparation des corps gras.)

Claim.—The precess or processes for the improvement in the manufacture of products from fresh fat, as set forth.

No. 3538. NICHOLAS A. ASSELSTINE, Ernestown, Ont., 24th April, 1874, for 5 years: "Portable Fence." (Cloture portative.)

Claim—1st. A fence panel composed of two upper rails A, At and two lower rails B, B, and pickets C, the rails A, A, inclining to admit of adjustment; 2nd A fence panel constructed to admit the end pickets of the adjoining sections to pass intermediately through the lapping rails A, A, and the lower rails B, B, to overlap laterally: 3rd. A fence treath having the fixed post D, at the apex and entering between the rails A, A, for securing the fence; 4th. The application of an adjustable straddle-bar E, notched to receive the rails B, B, and secured to the legs of the treath in mortises by a pin and wedge as described.

No. 3339. George Payzant, Chicago, Ill., U. S., 24th April, 1874, for 5 years: "Table-leaf Support." (Pied de pliant de table.)

Claim.—A table-leaf support, consisting of the supporting arm D, and of the brace or bearing C, provided with the laterally-inclined arm Cn, for the purpose of folding the arm D, when the leaf is folded as specified.

No. 3340. GEORGE A. MARTIN, Bolton Centre, Que., 24th April, 1874, for 5 years: "Veneer Cutting Machine." (Machine à tailler les bois de placage.)

Claim.—The frame d, in combination with dogs k; 2nd. The saddle e, set obliquely, 3rd. The combination of the dogs k, arranged to hold the material obliquely in combination with the oblique cutter f.

No. 3341. PERCY KEEN, and JOHN DENCE, London, Eng., 24th April, 1874, for 5 years: "Apparatus for Elevating Corn, Mineral Coal, &c.,

Applicable for Discharging or Loading Vessels, Dredging, Pûmping, &c." (Appareil à élever le blé, la houille, &c., propre à charger ou décharger les vaisseaux, à draguer, pomper, &c.)

Claim.—Ist The combination of the column a, or its equivalent, and the carriage b, with jib c, and trunk d. 2nd The combination of genrs and whoels et, bi, bi, bi, bi, c, with shafts e, and et. 3rd. The shaft e, and whoel et, in combination with the column a, and carriage b: 4th. The carriage b, in combination with the counterbalance fz; 5th. The jib c, and trunk d, in combination with counterbalance gr; 6th. The trunk d, spout f, and carriage b, combined and working togother as described; and 7th. The column a, in combination with carriage b, pipes h, hr, and it regother with motive mechanism attached to head of trunk d, as described,

No. 3342. John A. Blake, New Haven, Ct. U. S., 24th April, 1874, for 5 years: "Improvements in Stone Crushers." (Perfection ements dans les broyeurs de pierre.)

Claim.—1st. The jaw plates of a stone crusher constructed with wrought metal bars imbedded upon the surface; 2nd. In combinatic, a with the jaw-plate Fig. 2, the back or base, Fig. 3, independent of the frame of the machine and forming the bearing surface for the jaw-plate; 3rd. The jaw-plate or plates of a stone crusher, and the back or base for the jaw-plate, the one constructed with a projection or projections D, and the other with a corresponding racess or recesses upon their meeting surfaces as specified.

No. 3343. John A. Blake, and Samuel L. Mars-Den, New Haven, Ct., U. S., 24th April, 1874, for 5 years: "Improvements on Blake's Stone Crusher." (Perfectionnements au broyeur de pierre dit de Blake.)

Claim.—The pitman F, for a stone crusher formed with seats a, a, and having combined therewith the passages d, d, leading from the upper end of the pitman down to the seats as described.

No. 3344. Daniel A. Johnson, Boston, Mass, U. S., 24th April, 1874, for 5 years: "Device for Preventing Horses from Straying." (Appareil pour empêcher les chevaux d'errer.)

Claim.—The T-shaped yoke A with or without the depressor; operating in the manner set forth.

No. 3345. JEROME C. DIETRICH, Galt, Ont., 27th April, 1874, for 5 years; "Improvements on Saw Handles." (Perfectionnements aux manches de scies.)

Claim .- A double saw handle constructed as described.

No. 3346. ALFRED BINGHAM, Hamilton, Ont. 28th April, 1874, for 5 years; "Improvements in Machines for Cutting Circular Metal Pieces." (Perfectionnements aux machines à couper les pièces de métal circulaires.)

Cloim.—The combination and arrangement of the several parts, namely: the circular pointed chisel A. in connection with the series rod C, and the bars B, on which the centre point D, works by means of the lever or handle F, at end of machine, also the scale plate E, attached to the frame in connection with the centre point D, to regulate the diameter of the cut to be made, all operating as set forth.

No. 3347. CAMPBELL B. LECKIE, Hamilton, Ont. 28th April, 1874, for 5 years: "Composition for Washing." (Composition pour le lavage.)

Claim.—Mixing together sal-soda, common soap, pearl ash, liquid pot ash, sulphite of soda, palm oil, Fuller's Earth, Oxale Acid, and soda ash, then put them into a vessel and bring them to a boil, then put them into a cooler and agitate them till the crystals form.

No. 3348. FREDRIC DE CEU, Houghton, Ont., 27th April, 1874, for 5 years: "Machine for Washing Clothes." (Machine à laver le linge.)

Claim.—A suction washing machine for washing soiled clothing composed of the drum or cylinder e, its head d, and headle a, as shown in Figure 1, the two inside cylinders p, and h, the centre tube i, and the four stays *, *, *, in Figure 2, all constructed arranged and operated as described.