

No. 10,313. Improvements on Knitting Machines. (*Perfectionnements aux machines à tricoter.*)

Orison Twombly, Lake Village, N. H., U. S., 1st August, 1879, for 5 years.

Claim.—1st. The combination, with the stationary needle plate A, of the rotary cam-wheel B provided with the fixed cam Bt and the adjustable cams k k; 2nd. The combination of the single supporting arm D, the yarn carrier u supported upon the standard T, the bobbin carrier V, and tension spring z; 3rd. The combination, with the cam wheel B provided with the sleeve C, through which the spindle of the needle plate passes, of the level gear wheels G H and crank arm I I; 4th. The combination, with the needle plate A, of the adjustable fingers S; 5th. The combination, with the rotary cam-wheel B provided with the gear wheel H engaging with gear wheel G, of the horizontal bobbin carrier and yarn carriers Q M P, so arranged as to allow the said bobbin and yarn carriers to rotate freely, without obstructing the action of the crank while in operation; 6th. The auxiliary yarn carrier M in combination with the yarn carrier M, the spur wheel N, cam-wheel P, and the needle plate A.

No. 10,314. Improvements in Bird Cages. (*Perfectionnements aux cages à oiseaux.*)

Owen W. Taft, New York, N. Y., U. S., 1st August, 1879, for 5 years.

Claim.—1st. The combination of the cap A, having band B, with standard E, tension wires I and lower band F, having bottom of cage attached thereto; 2nd. The combination, in the base L, of the parts, ridge M forming angular space N, also forming a socket for the reception of the flange Q of the cup or bath O; 3rd. The combination of the base L, having ridge M, with cup or bath O; 4th. The combination of the band B having hooks D, tension wires I, and band F having notches G; 5th. The combination of the band B having hooks D, standards E, and band F having notches G and tension wires I; 6th. The combination of the bottom I, provided with openings and springs c, with feed cups b; 7th. The cap A, having perforations C forming hooks D; 8th. The combination of the bottom L provided with openings over which are attached the feed cups b; 9th. The combination of the perch, having spring ends d, with standards E.

No. 10,315. Improvements on Carriage Tops. (*Perfectionnements aux soufflets des voitures.*)

James McCrum, Irish Creek, Ont., 1st August, 1879, for 5 years.

Claim.—1st. In a carriage top, the combination of any one of its bows with the pivot plate B, pivot a, and pin hole f; 2nd. The combination of the bow A with the spring g and lock lever D; 3rd. The pivot plate B having the pivot a, lugs d and pin hole f; 4th. The segment C having the pivot a, standard b, pin holes c and feet h; 5th. The arrangement and combination of the bow A, pivot plate B, segment C, lock lever D and spring g.

No. 10,316. Improvements on Animal Traps. (*Perfectionnements aux pièges à vermine.*)

William Driscoll, Brookville, Ont., 1st August, 1879, for 5 years.

Claim.—1st. The elbow lever C, pivoted to the sides of the box A, in combination with the falling platform c and tilting shelf D; 2nd. The combination, with the box A, having the falling platform c, of the pivoted elbow lever C and tilting shelf D; 3rd. The combination of the tilting platform c, lever C, tilting shelf D, with the box A.

No. 10,317. Improvements on Lamp Wick Adjusters. (*Perfectionnements aux bocs des lampes.*)

George H. Hyde, Boston, Mass., U. S., 1st August, 1879, for 5 years.

Claim.—1st. The combination of the tube C, the two independently moving wick adjusting wheels A B and a suitable operating mechanism, whereby the burning end of the wick may be adjusted evenly; 2nd. The combination of the wick tube C and the edge adjusting spur wheels A B, with the quill and finger wheel B B and the shaft and finger wheel A A.

No. 10,318. Improvements in Stump Extractors. (*Perfectionnements aux arrache-souches.*)

Joshua Henshaw, St. Hyacinthe, Que., 1st August, 1879, for 5 years.

Claim.—1st. A stump, or stone extractor capable of acting both in the upward and downward stroke of the lever or handle; 2nd. The combination and arrangement of the fixed stem A, movable or lifting bar C C embracing and sliding on the stem A and provided with a set of ratchet teeth e e, on each of its outer edges, with the double break or lever D, lifting pawls f f and retaining pawls g g.

No. 10,319. Improvements on Iron Fences. (*Perfectionnements aux clôtures de fer.*)

John W. Davy, Brookville, Ont., 1st August, 1879, for 5 years.

Claim.—1st. An iron fence post, having feet a a formed by splitting the bar flatwise, longitudinally and curvilinearly bending the split portion; 2nd. A wrought iron fence panel, constructed of two or more flat horizontal bars B C, and vertical rods D passing through punctures in the bars having ends notched and tenoned to lock together; 3rd. A wrought iron fence, composed of post A having outwardly bent feet a a, and two or more horizontal bars B C and inserted vertical rods D, the ends of said bars passing through punctures in the posts, and formed with a tenon f, to lock with notches in the bent end d, of an adjoining section or panel to secure the post A interlocking; 4th. A wrought iron fence panel, constructed of two or more flat horizontal bars B C and vertical rods D, passing through punctures in the bars having angular bent ends to bolt or lock to the posts; 5th. A wrought iron fence, composed of posts A having outwardly bent feet a a, and two or more horizontal bars B C and inserted vertical rods D, the ends of said bars angularly bent and bolted to the posts A intermediately placed between two panels.

No. 10,320. Improvements on Musical Instruments. (*Perfectionnements aux instruments de musique.*)

George B. Kelly and Mason J. Matthews, Boston, Mass., U. S., 1st Aug., 1879, for 15 years.

Claim.—1st. In combination with the driving shaft, the feed rolls of a mechanical musical instrument A in which a strip of perforated paper, or other flexible material, is used, one or more pitman rods connected to said shaft, and the shaft J connected to the bellows by crank Jr Jz J3, and links m m; 2nd. In combination with a mechanical musical instrument in which a strip of perforated paper, or other flexible material, is used, the rollers L M mounted and adapted to be revolved in suitable bearings, in the supplementary or removable frame C; 3rd. A strip of paper having perforations arranged to represent a quadrille, or other piece of dancing music, and adapted to control the passage of wind through the reeds, and having marked or printed thereon the "calls" or "figures" belonging to said quadrille or other dancing music, at the proper place for the same to be called; 4th. A strip of paper having perforations arranged so as to represent a quadrille, or other piece of dancing music, and adapted to control the passage of wind through the reeds, having marked or printed thereon the "calls" or "figures" belonging to said quadrille or dancing music, at the proper place for the same to be called, and marks or lines formed thereon to indicate to the operator the proper time to give the calls.

No. 10,321. Window Cleaning Step Chair. (*Chaise marche-pied pour nettoyer les fenêtres.*)

Anna Dormitzer, New York, N. Y., U. S., 1st Aug., 1879, for 5 years.

Claim.—1st. A window cleaning chair having a platform A, raised strip B, side strips E E, strip F supported by braces c c, guards C D D, supports G G, iron supports I, rods g, spring k k, eccentric h h, step H, auxiliary step K, side strips L, rod l, holes m, support M provided with plated and trussed cross-beam N, spring O, rod S, clamp q q, drain R provided with ratchets t, shaft u, lugs v provided with pawls x, forks T provided with handles z and stops z; 2nd. In combination with the window cleaning chair, the standard W provided with device c; 3rd. In the construction of a window cleaning chair, the combination of a drum R provided with ratchets t, shaft u, lugs v provided with pawls x, forks T provided with pawls w and cords P; 4th. In the construction of a window cleaning chair, the combination of the spring z, supports G G, cross-pieces g, step H, springs d, k k, concentrics h h, supports I, rod g, and auxiliary step provided with sockets f, legs r r, and slots z; 5th. The steps z; 6th. The rear support M provided with cross beam N that is furnished with an iron plate n, a truss rod o and spring O; 7th. The sliding wedges U, held in grooves in the side strips L faced with leather, or other soft material, and provided with handles z, in combination with the stops z; 8th. The cords P that are secured at one end to the pins p, and thence passing through the cross-beam N, over the grooved rollers Q and through F, have their other ends secured to the drum R; 9th. The spring O wound around the rod l, with the loop resting against the lower face of the platform and with ends entering the support M, which it serves to throw open as the tension of the cord P is relaxed; 10th. The springs f in combination with the platform A and auxiliary step K; 11th. The plated and trussed cross-beam N.

No. 10,322. Improvements on Rotary Engines. (*Perfectionnements aux machines rotatoires.*)

Alexander L'Espérance, Littleton, N. H., 1st Aug., 1879, for 5 years.

Claim.—1st. The casing E, having brackets I provided with downwardly projecting arms J J, in combination with the foundation A having openings K K, uprights B B and the rotary disk E; 2nd. The pistons S, having rods Q provided with transverse pins R, in combination with the pivoted levers V having pivoted arms W provided with sockets X and studs Y, and the cam groove disk or plate F; 3rd. The combination of the plates F G and curved plates H H, having grooves K, with the springs L, packing rods M and the rotary disk E; 4th. The abutments A, composed essentially of the plates B, having bolts C, recessed plates D, springs E, and angular plates F, G, H, and a binding plate and nut; 5th. The combination, with the rotary disk E having annular groove O, of the abutments A.

No. 10,323. Machine for Mincing Meat. (*Machine pour hacher la viande.*)

Robert C. Cuff, Hamilton, O., 2nd Aug., 1879 (Extension of Patent No. 3 725), for 5 years.

No. 10,324. Machine for Disintegrating Fibres. (*Machine pour désagréger les fibres.*)

William S. Archer, Yonkers, N. Y. (Assignee of John A. Southmayd Elizabeth, N. J.), U. S., 7th Aug., 1879, for 5 years.

Claim.—1st. A machine for disintegrating fibres, in which the finer and coarser fibres are separated by means of a picker and a stop or stops, and carried off in different directions; 2nd. In combination with a current or currents of air, the screen H, picker D and a stop or stops; 3rd. In combination with a current or currents of air, the picker D, carrier z and stop N; 4th. In combination with a current or currents of air, the picker D, carrier z, stop N and stop M; 5th. In combination with a current or currents of air, the adjustable carrier z provided with the loop e, apertures c and a rod.

No. 10,325. Improvements on Steam Boilers. (*Perfectionnements aux machines à vapeur.*)

The Swamscot Machine Company (Assignees of Patrick Quinn), South Newmarket, N. H., U. S., 7th Aug., 1879, for 5 years.

Claim.—1st. The neck b, extending down from the main part a, in combination with the vertical stack of pipes c (extending up through such neck) the smoke chamber f, return pipes g and encompassing flue i arranged with such neck b and main part a; 2nd. The insulating chamber l, smoke cham-