

ation for operating the creaser such consisting of the toggles C, C', fireated pitman E, stops g, g, projections f, f, and the cams h, h, k, the latter being fixed on the driving shaft.

No. 6167. Improvements on Butter Workers.
(*Perfectionnements aux appareils à apprêter le beurre.*)

James Mueene, Webster City, Iowa, U.S., 26th May, 1876, for 5 years.

Claim.—1st. The combination with a suitable kneading board or table, of the removable hand lever C, the same being connected to the table in a manner so that either side of such lever may be used; 2nd. The combination with the table A, and revolving kneading board B, provided upon its outer periphery with teeth or projecting flange, of the swivelled hand lever C, having near its outer end pins J, J.

No. 6168. Boot and Shoe Sewing Machine.

(*Machine à coudre les chaussures.*)

Charles Goodyear, Jr. (Assignee of Christian Dancel), New York, U. S., 26th May, 1876, for 5 years.

Claim.—1st. In a machine designed and adapted to sew seams or welts and turns, the use of an awl or piercing instrument to penetrate the sole transversely to the path of the awl or needle, so as to pin the sole in its place and hold the between substance of the sole firmly while the needle is piercing the work and tightening the stitch; 2nd. The combination with an awl and needle of a third piercing device operating transversely to the others, and near the path of the same to prevent the stitch from pulling through or breaking out and to keep the seam in place; 3rd. In combination with a circular needle operating from the outer edge of the work, an awl working concentrically or nearly so, with said needle piercing the work in the inside channel and operating as an awl feed in connection with the channel gauge; 4th. The combination of a curved awl, and a channel guide operating together in a channel to feed, guide and hold the work; 5th. Giving to the welt guide a positive motion away from the shoe intermittently between each stitch; 6th. So regulating said motion of the welt guide that it shall move away from the shoe a uniform distance irrespective of variations in the thickness of the upper; 7th. The arrangement of the locking devices for locking and releasing the back, or edge and welt gauges; 8th. The arrangement for regulating the length of the loop according to the thickness of the work to be sewn; 9th. In combination with a circular awl and needle mounting the edge or welt guide upon a slide moving to and from the work at a suitable angle with reference to the last instead of concentrically with the needle; 10th. In mounting the awl in such a manner that it will have an independent oscillating or tipping motion.

No. 6169. Process of Manufacturing Artificial Stone.
(*Procédé de fabrication de la pierre artificielle.*)

William H Smith, Philadelphia, Pa., U. S., 1st June, 1876, for 5 years.

Claim.—The mode or process of manufacturing artificial stone, that is to say: subjecting granulated or pulverized mineral substances, while in the damp condition and while in a mould, first to comparatively slight pressure or light blows, and then to heavy blows.

No. 6170. Improvements on Tallies.

(*Perfectionnements aux compteurs.*)

John French, St. Columban of Sillery, Que., 1st June, 1876, for 5 years.

Claim.—1st. The combination of the wire C, walking beam D, and its spring E, hook F, and its spring I, tally wheel G, and its cog A, and spring H, with sliding pull B, tally circle Q, and its hand C, of the tally box A, so count one tally; 2nd. The combination of the large wheel J, its series of pins K, and its cog h, spring I, striking apparatus L, with the gong M, the tally circle S, and its hand g, of the tally box A, to count fifty tallies; 3rd. The combination of the wheel N, and its pins m, with circle R, and its hand p, of the tally box A, to count up to six thousand pieces.

No. 6171. Hoop Cutting Machine.

(*Machine à tailler les cercles.*)

George V Griffith Huntington Ind. U. S., 1st June 1876 for 5 years

Claim.—1st. The combination of a reciprocating knife E, with an oscillating table G, whose inner edge forms the axis of oscillation, for the purpose of supporting the hoop blanks close to the cutting edge of the knife; 2nd. The oscillating table G, adapted for adjustment to and from the knife; 3rd. The oscillating table operated from the main shaft through the medium of the gearing, the cams M, the pivoted arms J, and the connecting rods and links L, K; 4th. The oscillating table having the extent of its oscillations adjustable by means of the screw rods L, and pivoted links K; 5th. The yielding stop or gauge Q, combined with the reciprocating knife and oscillating table; 6th. The yielding stop or gauge Q, adapted for adjustment to regulate the thickness of the hoops.

No. 6172. Improvements in Eye Glasses.

(*Perfectionnements aux lunettes.*)

Isaac Alexander, Washington, D. C., U. S., 1st June, 1876, for 5 years.

Claim.—1st. The spring clamp for eye glasses made adjustable by a set screw; 2nd. The spring A, for eye glass clamps, made adjustable.

No. 6173. Improvements on Charcoal Furnaces.

(*Perfectionnements aux fourneaux à charbon de bois.*)

Edwin G. Adams, Cohoes, N. Y., U. S., 1st June, 1876, for 5 years.

Claim.—The combination in a case having grate C, and a closed top of the fire F, with or without the hood E, and the inclined sides D, of the fire box.

No. 6174. Combined Milk Cooler and Pan.

(*Boîte-refrigérateur à lait.*)

Nelson D. Ferguson, Carthage, N. Y., U. S., 1st June, 1876, for 5 years.

Claim.—1st. The combination with a milk pan B, of an ice cooler consisting of the cylinder C, removable in receptacle K, perforated bottom tubes G, cover H, with tube I, and valve or cap B; 2nd. The perforated bottom J, connecting with the cylinder C, and with heating pipes L, under the pan B; 3rd. The frame A, having a canvas bottom, in combination with the pan B.

No. 6175. Fare Registering Apparatus.

(*Appareil à enregistrer les billets de passage.*)

Henry T. Davis, London, Eng., 1st June, 1876, for 5 years.

Claim.—1st. A glazed opening B, in the front lid and display plate for displaying a figure or figures denoting the value of fare or monies received whether in combination with a lamp or otherwise; 2nd. The handles 1, 2, 3, 4 and parts in connection therewith for actuating the registering wheels G, H, I, and bell plate K, to strike the bell and register, and display the figure; 3rd. The bell plate K with studs f, of serratures, and stud b, for actuating the hammer of the bell simultaneously with the displaying of the figure, and the actuating of the registering parts.

No. 6176. Improvement on Lap Robes.

(*Perfectionnement les tabliers de voitures.*)

James Milwahn, Albany, N. Y., U. S., 1st June, 1876, for 5 years.

Claim.—The combination of the lap robe A, with the foot pocket B.

No. 6177. Improvement on Carriage Rugs.

(*Perfectionnement des tapis de voitures.*)

James Milwahn, Albany, N. Y., U. S., 1st June, 1876, for 5 years.

Claim.—The combination of the carriage rug A, with the foot pocket B.

No. 6178. Bosom Pad. (*Trompe-Pard.*)

John C. Tallman, New York and Flavel W. Sullivan, Newark, N. J., U. S., 1st June, 1876, for 5 years.

Claim.—A bosom pad made of thin sheets of cork covered with muslin moulded or pressed into proper shape as also in the gusset, connection or centre piece and cover A, B, C, D.

No. 6179. Improvements on Anchors.

(*Perfectionnements aux ancres.*)

Thomas J. Whitecar and John M. Powell, Philadelphia, Pa., U. S., 1st June 1876, for 5 years.

Claim.—1st. The double ended tripper, engaging with the arch B, and limiting the movement of the arms B, B, by impinging against the block F, or band G; 2nd. The combination of the wedge block F, with the bifurcated shank A, and tripper E; 3rd. The combination with the notched fluke arms B, of the separately formed notched palms D, inserted in the notches B, and receiving the arms B, in the notches d; 4th. The combination of the bifurcated shank A, inserted tripper E, encircling fluke arms and arch; 5th. The combination of the shank A, fluke arms B, B, arch B, double ended tripper E, and wedge block or band.

No. 6180. Improvements on Volta-electric Appliances.

(*Perfectionnements aux procédés électro-électriques.*)

John E. Hetherington, Cincinnati, Ohio, U. S., (Assignee of Isaac L. Pulvermacher), 1st June, 1876, for 5 years.

Claim.—1st. A voltaic electric chain or belt constructed of alternately arranged zinc or copper strips or plates A, B, notched or looped, and strung upon twine or cord; 2nd. Arranging the strips or plates A, B, in alternate order, in two series upon a suitable backing so as to be folded together upon an interposed wet conductor.

No. 6181. Improvements on Volta-electric Appliances.

(*Perfectionnements aux procédés électro-électriques.*)

John E. Hetherington Cincinnati Ohio U. S. (Assignee of Isaac L. Pulvermacher), 1st June, 1876 for 5 years.

Claim.—1st. The arrangement of a series of copper and zinc disks, dish or coned in alternate order with a fibrous absorbent material interposed between members of the same element upon a hollow central stem supplied with the exciting fluid and shiftable or perforated to cause the passage of the exciting fluid from the tube to the absorbent material between the disks, the whole to form a battery; 3rd. The combination of a hexahed tube C, and a rigid fluted or corrugated central cone D, with concave or dish or copper and zinc disks A, B, to form a battery; 3rd. One radially slotted disk, provided with tongues e, c, at intervals for the opposite metal disk of the adjoining element to rest upon; 4th. The disk having a slot F, from the periphery to the centre and threaded sewed into it in concentric circles; 5th. Batteries formed of disks on a hollow central stem, the disk constructed of thread wrapped wire wound spirally until a suitable diameter is attained, and an aperture left at the centre to engage the central stem.

No. 6182. Improvements in Tube Wells.

(*Perfectionnements dans les puits forés.*)

David H. Zavitz and Edward Milner (Assignees of William Milner), Strathroy, Ont., 1st June, 1876 (Extension of Patent No. 1014), for 5 years.

Claim.—The tube-well having wire screen pockets a, b, c, d, e, f, g, h these pockets extending into the centre or hollow of the tube and having clear and unobstructed but narrow and oblong orifices or opening into these pockets at the circumference of the tube, these orifices or openings being m, n, o, p, into which sand or other suitable material may be inserted to allow the water to filter through, also in the application or insertion of coarse and or any other suitable material into these pockets to filter the water passing through the pockets being adapted to retain the sand.

No. 6183. Improvements in Wood Planing Machines.

(*Perfectionnements aux machines à raboter le bois.*)

Charles H. Warren, Toronto, Ont., 12th June, 1876, for 5 years.

Claim.—1st. The horizontal knives C, C, finished with a regularly serrated cutting edge forming angular or curved cutting teeth; 2nd. The saws F or their equivalent mounted upon the shaft E, either in front or in rear of the knives C, C, or attached to the horizontal head B, in combination with the heads D, D, provided with knives having a concave cutting edge; 3rd. The combination of the horizontal head B, having knives C, provided with a