

each other, or either of them, consisting of a scale for determining the position of these sections, a pin, pencil, or other device used, in connection with said scale, for marking, upon the last or last block, the same, and an indicating figure or other device for each length of last to which the scale is applied, 2nd. A series of measuring straps, bearing indicating marks for determining the various dimensions which a last of a given size shall possess, printed or marked upon paper, cloth, or other flexible material, and adapted to be severed into independent straps of varying lengths.

No. 9906. Improvements on Portable Boats. (*Perfectionnements aux canots portatifs.*)

Charles De Cazez, Winslog, Man., 29th April, 1879, for 5 years.

Claim.—1st. In a portable boat the sections A B C having the bulk heads a, bottom b and grooves c, 2nd. In a portable boat, the combination of the sections A B C with the tie rod or rope, or any approved substitute therefor, plates o and bolts p, 3rd. The combination of a portable boat, composed of several sections, with the rack composed of the rails A₁ and pins C₁.

No. 9907. Improvements on Animal Powers. (*Perfectionnements aux manèges.*)

James J. Heenan, Ops, Ont., 29th April, 1879, for 5 years.

Claim.—1st. The combination of the driving roller B, the latch H the construction of the frame A and the friction roller G (i) attached to the ends of frame, 2nd. The combination, with the driving roller B, latch H and frame A, of the shaft C, pulley J attached to the end thereof and outside the balance wheel I and the platform D.

No. 9908. Improvements on Curtain Fixtures. (*Perfectionnements aux ajustages de rideaux.*)

John S. Henry, North-Bellevernon, Penn., U. S., 29th April, 1879, for 5 years.

Claims.—1st. In an improvement on curtain fixtures, the cylinders C with longitudinal slots D, passed over the roller and the folded end of the curtain thereon, to fasten it to the roller, in combination with the roller and curtain, 2nd. The brackets F with curved end H, in combination with eyes O, attached to the window frame in which they are entered, and pivots E on the ends of cylinders C, 3rd. The combination, with the curtain roller having ratchet wheel g and cord j, of the bracket E and suspended hook, or ring h, pivoted at its upper end in front of the roller and extended below the ratchet to form an eye or loop for the cord.

No. 9909. Improvements on Car Replacers. (*Perfectionnements aux enaillours des wagons.*)

Elisha Newcomb, Westbrook, Me., U. S., 29th April, 1879, (Extension of Patent, No. 3331) for 5 years.

No. 9910. Improvements on Gas Apparatus. (*Perfectionnements aux appareils à gaz.*)

John Hanlon, New York, U. S., 29th April, 1879, for 5 years.

Claim.—1st. In a gas apparatus, a boiler and super heater D, provided with an upper and lower longitudinal chamber communicating at the rear, in combination with a series of boiler tubes E₁ and water supply pipes F, 2nd. The boiler and super heater D, in combination with the return E, provided with the longitudinal chambers a b c, chamber H and pipes G F, 3rd. The return E, provided with the chamber f, having elongated spiral ribs, in combination with the boiler and super heater D and connecting pipe F, 4th. The return E, provided with the discharge pipe i, in combination with the washer I and supporting frame r, provided with the friction rollers m, 5th. The adjustable dipcup, in combination with the operating worm screw P and washer I, and its supporting frame mounted on friction rollers m.

No. 9911. Improvements on Wardrobe Bedsteads. (*Perfectionnements aux couchettes garde-robes.*)

Harlan P. Blackman and Charles S. Greene (Assignees of Frederick Caulier) Philadelphia, Penn., U. S., 1st May, 1879, for 5 years.

Claim.—1st. In a wardrobe bedstead, the rail b, centrally of the bottom of the portion C, in combination with the hinged sections D D, 2nd. The wardrobe bedstead having convertible hinged sections D D, 3rd. The counterbalance mechanism of the bedstead portion C consisting of coiled springs F and mandrels E, 4th. The portion C, in combination with the mandrels E, springs F and jointed arms d.

No. 9912. Improvements on Sewing Machines (*Perfectionnements aux machines à coudre.*)

John C. Love (Assignee of James F. Snodiker) Philadelphia, Penn., U. S., 1st May, 1879, for 5 years.

Claim.—1st. A sewing machine attachment in which a slotted dog, having a pointed projection with beveled ends is combined with a pin i and with a needle carrying plate having an arm or lever for acting on and being acted on by the dog, 2nd. The combination, in a sewing machine attachment, of a needle carrying plate having an arm or lever, a reversible dog, a spring for acting on said dog and device for operating the same, 3rd. The combination of the needle bar B and its block D, having the sliding plate a, b, arm or lever F, with the plate J carrying the slotted dog e, 4th. In the combination of the needle bar B, the carrying plate a, the arm or lever F, the pin i and the slotted dog e, having a projection s, 5th. The combination of the plate J, having a recessed arm f and pin i, with the slotted dog e having a pin j, 6th. The combination of the needle bar B, the sliding plate a having lug c c, and the lever F having a set screw z.

No. 9913. Improvements on Car Axle Boxing. (*Perfectionnements aux moyeux des roues de wagons.*)

James S. Hodgson, Simcoe, John K. McLennan, Charles H. Kilmaster, Charles F. Sinden Samuel Sinden, Joseph P. Graves, Walsingham, and Samuel Wright, London, (Assignees of L. V. H. Montross Simcoe) Ont., 1st May, 1879, for 5 years.

Claim.—1st. The combination of the box or casing H, provided with a half

boxing or keeper E₁ E₂, with the axle A, single bearing wheel B₁ set to one side of, or obliquely to the axle and shoulder wheel B₂, 2nd. The casing I provided with the reservoirs F G and ducts f g, in combination with the friction wheels B₁ B₂ and shafts C C₁.

No. 9914. Improvements on Spoke and Felloe Joints. (*Perfectionnements aux joints des côtes des jantes.*)

Charles E. Kennedy, Hatley, Que., 1st May, 1879, for 5 years.

Claim.—1st. The combination of the socket B, having the plates by which it is secured to the felloe C, and which serve to increase its bearing surface with the convex ears a and rivet b, 2nd. A socket B having a large bearing surface, and secured by bolts to the felloe C, 3rd. In a carriage wheel the socket B having ears a riveted to the opposite sides of the felloe C, and serving as a bearing for the nuts and bolts, to bind it and the tire securely to the wheel.

No. 9915. Process for Preserving Meat.

(*Procédé de conservation de la viande.*)

Arthur A. Libby, Chicago, Ill., U. S., 1st May, 1879, for 5 years.

Claim.—The process of preserving raw meat in ordinary hermetically sealed cans or boxes, which consists in coating the said meat with a solution of bi-sulphite of lime, salicylic acid, or any equivalent substance, or some adhesive gummy substance, or both, coating the interior of the cans or boxes also with the adhesive or gummy substance, then preferably placing the coated meat in cans or boxes without contact with the interior of the same, and then placing the can or box and contents where they will not be disturbed until the germs of fermentation are deposited.

No. 9916. Process for Preserving Meat.

(*Procédé de conservation de la viande.*)

Arthur A. Libby, Chicago, Ill., U. S., 1st May, 1879, for 5 years.

Claim.—The process of preserving raw meat and retaining the juices of the same, which consists in treating the exterior surface of the meat, placing it in a can or box, preferably without contact with the interior thereof, closing the said can or box with the exception of the inlet and the outlet for air, forcing through said can or box a current of calcined air, and then hermetically sealing the can or box.

No. 9917. Process for Preserving Meat.

(*Procédé de conservation de la viande.*)

Arthur A. Libby, Chicago, Ill., U. S., 1st May, 1879, for 5 years.

Claim.—The process of preserving raw meat from decomposition or putrefaction, which consists in cooling the meat in order to eliminate the animal heat, cutting it into pieces of the proper size, brushing it or bathing it in a solution of bi-sulphite of lime or salicylic acid, drying the solution upon the meat, placing the meat in a vessel coated on the interior, and containing an inlet and outlet aperture, but being otherwise hermetically sealed, submitting the meat to a current of cool air previously calcined, and then closing the two apertures of the can or vessel.

No. 9918. Improvements on Hay Rakes.

(*Perfectionnements aux râteliers à foin.*)

Henry A. Conuell and Alexander Duoba, Woodstock, N. B., 1st May, 1879, for 5 years.

Claim.—1st. The socket S and the connecting thereby of the bent lever F to the axle stock M, 2nd. The attaching of the draught bar E, with the bent lever F, 3rd. The foot catch B.

No. 9919. Improvements on Plough Coulters.

(*Perfectionnements aux coutres des charrues.*)

John Clayton, Brainerd, Minn., U. S., 1st May, 1879, for 5 years.

Claim.—The combination of the axle B made with a flaring journal or bearing surface, the flanged washer or cap C, the hub E made with a tapering cavity or bearing surface, the clamping plate H, the set screw I, the nuts J D with each other, and the rotary coulters F for connecting the said coulters with its hanger.

No. 9920. Improvements on Mail Bags.

(*Perfectionnements aux valises à lettres.*)

Jesse G. Thompson, Clarion, Pa., U. S., 1st May, 1879, for 5 years.

Claim.—The pouch A, surrounded with the stiff flange B, provided with openings a, in combination with cover C, having flange D, fastening hooks I and strap S.

No. 9921. Improvements on Window Frames.

(*Perfectionnements aux châssis des fenêtres.*)

Richard Kelly, Picton, Ont., 1st May, 1879, for 5 years.

Claim.—The grooves A A.

No. 9922. Improvements in Telephones.

(*Perfectionnements aux téléphones.*)

Thomas A. Edison, Menlo Park, N. J., U. S., 1st May, 1879, for 5 years.

Claim.—1st. The combination with a resonant case or support of the carbon, or similar material the lever e, disk k, and circuit connections, 2nd. The combination of two moving plates or diaphragms p k, with finely divided carbon, or similar material intervening, and the circuit connections passing through the same, 3rd. The combination, with a resonant case, of two diaphragms, or plates p k, upon which sound or other vibrations operate, and a circuit regulator of finely divided carbon, or other material placed between such plates p k and the circuit connections, 4th. The combination, with an electro-magnet in one circuit of an armature, and finely divided conducting material in another circuit, whereby the variable magnetic attractions are translated into electric waves, 5th. The receiver R, provided with the