verting reciprocating motion into rotary; 3rd. The block I constructed and arranged so as to support and retain in position one or more wheels for the purpose of converting reciprocating motion into rotary; 4th. One or more wheels F F, in combination with one or more automatic looking devices and one or more wheels J J; 5th. The combination and arrangement of one or, more locking devices and one or more shafts G G; 6th. The block I attached to and used in combination with pin E.

No. 7754. Broom Holder. (Porte-balai.)

Henry M. Wells and Thomas R. Fuller, Toronto, Ont., 11th August, 1877 for 5 years.

Claim.—1st. The pierced rubber E, irrespective of any particular form in which it is pierced, as secured by the clamping piece D and the arms C C, in combination with a rack or other fixture A; 2nd. A broom holder constructed with pierced rubber E, the rubber E in one or more pieces thereof; 3rd. A broom holder constructed with pierced rubber E in one or more pieces there-of, the application of the same to the holding of the within specified and other such articles

No. 7755. Improvements on Gas Pipe Fencing.

(Perfectionnements aux clôtures en tuyaux de gaz.)

William S. Hobs, London, Ont., 11th August, 1877, for 5 years.

Claim.—let. The T-side outlet K. cross couplings F F₁ and double T couplings G G₁, in combination with lengths of gas pipe B C D E and bolt J: 2nd. In combination with the elbow couplings I I: and length of gas H with post L provided with screw foot M and flange N and movable gas. couplings O Or

No. 7756. Improvements on Ear Slippers.

(Perfectionnements aux oreillères.)

Isaac B. Kleinert, New York, U.S., 11th August, 1877, for 5 years.

Claim—An outer piece of the desired size and form to cover the ear and an inner or fastening piece, which latter is arc-shaped and secured to the outer piece above the middle portion of the same.

Improvements on Seeding Machines.

(Perfectionnements aux semoirs.)

John Westlick, Bethany, Ont., 11th August, 1877, for 5 years.

Claim—1st. The adjustable guard G secured in the draw bar A of a seeding or other such machine; 2nd. The spring E as applied to a seeding or other such machine; 3rd. The combination with the guard G of the draw bar A, tooth B, arm b, links C D, stop e and spring E; 4th. The combination with the guard G of the draw bar A and tooth B.

No. 7758. Improvements in Food.

(Perfectionnements dans les composés alimentaires)

James D. Cragin, Melrose, Mass., U.S., 11th August, 1877, for 5 years.

Claim.-Freshly drawn blood, common salt, pulverized sage, pepper, allspice, pluck and catmeal.

No. 7759. Process for Preserving Fruit and Vegetables.

(Procedé de conservation des fruits et des légumes.)

Lyman Bradley, Buffalo, N.Y., U.S., 11th August, 1877, for 5 years.

Claim.—The process of treating various fruits and vegetables for the purpose of preserving them in a raw or uncooked state by first impregnating them with sulphurous acid gas, and then filling the barrels or other vessels in which they are afterwards placed with cold water so as to submerge the articles therein.

No. 7760. Improvements in Pipe Core Barrels.

(Perfectionnements aux noyaux de tuyaux.)

George Bisset, Jr., and William H. Knight, Quebec, Que., 11th August, 1877, for 5 years.

Claim.—1st. A cylinder formed in segments as a core barrel L L; 2nd. The adjusting pyramidal or cone-shaped blocks H H; 3rd. The adjusting bolts R R; 4th. The mode of applying the bolts through the intervention of the diaphragm M.

No. 7761. Improvements on Thill Couplings.

(Perfectionnements aux ajustages de limonières.)

Alexander P. Ladd, St. Lawrence, N. Y., U.S., 11th August, 1877, for 5 years.

Claim.—1st. In combination with the thill iron A and coupling iron C, the coupling pin D having a crank a, elbow b, a curved elongation E integrally formed there with to lock with the irons A C for preventing an endwise movement of the pin D; 2nd. The bow spring F in combination with the clip B and thill iron A to prevent rattling.

No. 7762. Improvements on Washing Machines.

(Perfectionnements aux machines à laver.)

Alexander P. Ladd, St. Lawrence, N. Y., U. S., 11th August, 1877, for 5

Claim.—The clothes' carrier or hollow cylinder provided with ribs or beaters D, rounded or blunt on their inner surfaces, for rubbing the clothes and having sharp edges set ra lially outward so as to direct the currents of water inward, upon and through the clothes, and acting equally well when the stroke or motion of the machine is raised.

No. 7763. Improvements on Refrigerators.

(Perfectionnements aux réfrigérants.)

John O. Beck, Laporte, Ind., U.S., 11th August, 1877, for 5 years.

Claim.—The combination of the two chambers h l, ice rack d and doors c, the chambers h being located in front of the one l and having for its ceiling a portion of the bottom of the ice rack, and elsewhere being open at the top.

No. 7764. Improvements on Spikes.

(Perfectionnements aux clous barbelés.)

Edwin R. Whitney, Magog, Que., 11th August, 1877, for 5 years.

Claim.—A spike having a series of indentations in its shank B, the rectangular edges of the shank being unbroken by said indentations.

No. 7765. Improvements on Carriage Clips.

(Perfectionnements aux brabans de voitures.)

James Woods, Strathroy, Ont., 11th August, 1877, for 5 years.

Claim.—1st. The iron clips F F with journal boxes G Gr, bars a and the rods b b; 2nd. The clips F F, bar a, the rods b b and journal boxes G Gr, in combination with side bars C Gr, springs D Dr and spring eveners E Er.

No. 7766. Improvements in Clapboarding.

(Perfectionnements dans le lambrissage à clin.)

Eli Barrett, Cobourg, Ont., 11th August, 1877, for 5 years. Claim. - The use of the boards planed and fitted.

No. 7767. Apparatus for Recovering Waste Alkalies.

(Appareil de révivification des alkalis perdus.)

John W. Dixon, West Manayunk, Pa., U.S., and John A. Fisher, Dundas, Ont., 11th August, 1877, for 5 years.

Ont., 11th August, 1877, for 5 years.

Claim.—1st. The combination of a digester A, the evaporating vessel B connected by a pipe C, the auxiliary evaporating pan E, the incinerating hearth H and a furnace I; 2nd. The combination of a furnace I, theat passage K, evaporating pan B over the passage K, coil of pipe L placed in said passage and having upon it a pump M to circulate the liquor from the evaporating pan B through the oil and back to the said pan B, whereby one furnace is used to heat the evaporating pan and the coil containing the liquor in circulation; 3rd. The combination of a furnace I, incinerating hearth H in the heat passage K, evaporating pan B over the passage K, coil of pipe L placed in said passage and having upon it a pump M to circulate the liquor through the coil from and to the evaporating pan B, whereby the united heat from the furnace E and the hearth H through passage K heats both the evaporating pan B and the coil L containing the liquor in circulation; 4th. The combination of the furnace I having incinerating hearth H in heat passages K, an auxiliary evaporating pan B on top of said passage, and a coil L within said passage having a pump M to circulate the contents of pan B through said coil, whereby the process of reclaiming the alkaline salt is performed by continuous operation.

No. 7768. Machine for Setting the Edges of

No. 7768. Machine for Setting the Edges of Boots and Shoes.

(Machine à polir la coupe des semelles de chaussures.)

George H. P. Flagg, (Assignee of George A. Fullerton), Boston, Mass., U.S., 11th August, 1877, for 5 years.

Claim.—1st. The device for sustaining the tool consisting of the pin K and spring l; 2nd. The tool holder K provided with one or more pine k k and mounted upon the journal or boss k, in combination with catch m and plunger n: 3rd. The tool M formed with a hollow sheak p and with a notch q on the shank, adapted to operate in combination with the spring L.

No. 7769. Improvements in Churn Powers.

(Perfectionnements aux moteurs de barattes.)

Samuel Weaver, Buchanan, Mich., U.S., 11th August. 1877, for 5 years. Claim.—The combination of a hanger or its equivalent by which the churning machine is elevated with a weight from which is derived the power or driving mechanism.

No. 7770. Apparatus for the Purification of Gas. (Appareil de lavage du gaz.)

Thomas N. Kirkham, David Hulett, Samuel Chandler, Jr., and Josiah Chandler, London, Eng., 11th August, 1877, for 5 years.

Claim.—The improved washer or scrubber.

No. 7771. Improvements on Harrows.

(Perfectionnements aux herses.)

Benjamin Wetherbie, St. Eleanor's, P.E.I., 11th August, 1877, for 5 years.

Claim.—1st. The combination of the shears F and G, the latter having wings b of less curvature and projection than the wings a of the former, and boiled to the frame A, whereby they travel within their path; 2nd. The frame A provided with harrow shears F G H subdivided by a hinged ioint E.

No. 7772. Dough Raising Apparatus.

(Appareil à faire lever la pâte.)

William Skillen and Rebecca L. Skillen, Parnassus, Pa., U. S., 15th August, 1877, for 5 years.

Claim.—1st. The combination of the closet or box A provided with the perforated partitions a: a and the heated brick or like body suspended therein; 2nd. The closet or box provided with perforated partitions, one of which forms a slide or drawer a: a:; 3rd. The dough raising apparatus having the detachable reversible hinged cover B.