No. 5178. HENRY BOLTON, Elizabethtown, Ont., 14th September, 1875, for 5 years: "Potato-digger," (Arrache-patates.)

Claim.—1st The plate E adjustably attached to the standard B, for securing the horizontal spring-arms |D|; 2nd, The plate E secured to the standard and having the gains |G|, for the adjustment of the arms |D|.

No. 5179. John A. Mackinnon, Sandwich, Ont., 14th September, 1875 (Extension of Patent No. 627), for 5 years: "Improvements on Whiffle-trees." (Perfectionnements aux palonniers.)

Claim.—1st. The novel combination of shell a hooks b, b), bolts c, bolts or roots d, holes dl, springs e, chain or cord f, chain g, pulleys h, pins i, divisions j, and spring coverings k; 2nd. The novel combination of the hook bi, holes dt, bolts or rods d, springs e, chain or cord f, and chain g, or their equivalents, together with the other parts of the whithetree.

No. 5180. William R. Fenerty, Halifax, N. S., 20th September, 1875, for 5 years: "File and Tool Handle." (Manche de lime et d'outils.)

Claim.—1st. The combination of the metallic handle A. A. and the wooden plug B. or B2. 2nd The combination with the handle A. A. and plug B. or B2. of the screw thread E. and the shape F. F. to H. H. as set forth.

No. 5181. George Kelly, London, Eng., 20th September, 1875, for 5 years: "Feather Renovating Machine." (Machine à rafraîchir la plume.)

Claim.—1st. The box A, with double casing C, D, to lower half, and having sliding door N, serew M, and lid I, the whole supported on legs B, B; 2nd. A feather renovating apparatus A, the construction of double casing C. D, the upper one having a series of perforations KI, and operating in conjunction with space E, and steam inlets J, K, either as damping or drying chambers as required; 3rd. In combination with the preceding claims the paddles G, G1, G2, G3, operated by shaft F, and crank H.

No. 5182. John W. Johnson, Charles M. Manvhle, Stephen W. Alvord Edwin E. Buffington, Lyman B. Rodgers, Elijah R. Myer, Isaac Wosburg and Collin F. Nichols, Towanda, Pa., U. S., and Charles M. Dunlap, Seaforth, Ont., 20th September, 1875, for 5 years: "Fanning Mill." (Tarrare ventilateur.)

Claim.—1st. The viorating shoe H, provided with the inclines j, jt, K, screens h, h, and E; 2nd. The long screen E, provided with the finer and coarser sieves it, it, and valve M; 3rd. The fan shaft b, provided at both ends with crank pinions B, Bi, the latter driving a smaller crank pinion B2 in combination with the transferable connecting rods c, f, elbow lever fi, on the removable bracket F, and removable crank arm D, on the rocking shaft D1.

 No. 5183. George H. Bliss, West-Stockbridge, Mass.,
 U. S., 20th September, 1875, for 5 years: "Culinary Apparatus." (Appareil de cuisine.)

Apparatus." (Appareil de cuisine.)

Claim.—1st. The combination of the vessel A, closed at the top by a suitable cover, and open at the bottom, and adapted to be used upon the top of a stove or range by heing placed over an opening therein directly over the fire, and a doubt leaved folding gridition or skeleton food-holder C, supported vertically therein in a position to admit of a free and equal access of the heat from the fire to both sides thereof, to cook both sides of the food contained therein without turning; 2nd. In combination with the bottomless vessel A, adapted to be used upon the top of a stove or range by placing it over an opening therein directly over the fire and the gridino. or food-holder C, supported vertically therein the trough or spout D, provided with the air tube or space E, beneath it; 3nf. In combination with the bottomless vessel or casing A, adapted to use upon the top of a stove or range by placing it over an opening therein directly over the fire, and the gridino or food-holder C, supported vertically therein in position to admit if a free and equal access of the heat of the fire to both sides thereof, the detachable trough or spout D, arranged to form the upper side or cover of the sir passage E, 4th. The combination of the bottomless vessel or casing A, adapted to use upon the top of a stove or range, the doubtle leaved gridiron or skeleton food holder C, supported vertically therein and the inclined trough or spout D, and tube E, made in one piece and detachably mounted in the lower end of said casing A; 5th. The combination of the bottomless vessel or casing A, adapted to use upon the top of a stove or range, the doubtle leaved gridiron, or skeleton food holder C, supported vertically therein and the inclined trough or spout D. projecting through the side of the casing A, and the detachable mounted in the lower end of said casing A; 5th. The combination of the bottomless vessel or casing A, adapted to use upon the top of a stove or range, the double leaved gridiron, or skeleto

No. 5184. ALBERT CUNNINGHAM, Milwaukee, Wis., U. S., 20th September, 1875, for 5 years: "Saw-mill Dog." (Clameau de scierie.)

Claim.—1st In combination with two or more sets of dogs attached to a saw mill carrage, the shaft R, Rt, provided with the universal joints Q, Q, and with the extension feathered coupling sleeve S. 2nd The dog I, having two teeth or hooks, 3nd. In combination with the bed plate A the dogs I 1.1, moving in a curved line and the dogs b, b, b moving in a straight line, both adapted to be projected into a log simultaneously from opposite directions, 4th. The combination of lever H, pawl L, spring f, and plate E, 6th. The combination of tever H, cam N arm F, and plate E, 6th. The combination of lever H, connecting rod C connecting bar D, and dogs I I I. 7th. The combination of lever H, pawl I, and ratchet y.

No. 5185. Franklin H. Kalbeleisch, New York, U.S., 20th September, 1875, for 5 years: "Carrier for Acid." (Ustensile pour les acides.)

Claim.—A carrier for caustic acids provided with a pouring nozzle and lined with lead extending through the nozzle and overlapping its upper surface or edge.

No. 5186. George Walling, Port Perry, Ont., 20th September, 1875, for 5 years: "Machine for Producing a Current of Cold Air around Mill Stones." (Machine à produire un courant d'air froid autour des meules des moulins.)

Claim.—1st. The combination of the suction wheel E, with P s tube or box Dl, D2, or D3, D2, the covered conveyer box A, and the air tight spouts B,B; 2nd. The combination of the chamber I, as a receptacle of flour with the tube or box Dl, D2, or D3, D2, and the wheel E; 3rd. The combination of the air-tube K, K, and the spouts B, B, and the suction wheel E, 4th. The combination of the suction wheel E, with the tubes K, K, and the curb of the milistones.

No. 5187. James J. Martin, Cobourg, Ont., 20th September, 1875, for 5 years. "Improvements in Washing Machines." (Perfectionnements aux machines à laver.)

Claim.—The form and construction of the cylinder, and the consequent application of the combination of steam and boiling water applied through the medium of the appertures left in the cylinder, and the change of position of the articles caused by the projections in the cylinder.

No. 5188. Charles J. Riply, Cumberland, Ont., 20th September, 1875, for 5 years: "Tag-pin for Vehicle Shafts." (Atteloir de collier de cheval.)

Claim.—The combination of the draw-pin B, having notch C, and chisel pointed end d, and spring E, with the shafts A

No. 5189. Timothy Stebins, Boston, Mass., U. S., 20th September, 1875, for 5 years: "Hydrauhe Elevator." (Elévateur hydraulique.)

Claim.—1st. The wheel E, provided with the buckets  $\epsilon$ ,  $\epsilon$ , and water fight easing in combination with the part g, provided with the hinge Jaw h, for automatically adjusting the flow of water, 2nd The wheel E, and pipe G, provided with the valve I, in combination with the pipe K, four way cock N, exhaust pipe n, cylinder K, piston M, piston rad M, and brake F1. 3rd. The swinging frame II, provided with the yoke b, and draim A in combination with the levers I, and  $h^1$ , and automatic port g.

No. 5190. Robert S. Galbraith, and William Snow, Montreal, Que., 20th September, 1875, for 5 years: "Umbrella and Parasol Case." (Etui de parapluie et de parasol.)

Claim—1st The combination of the case c. and umbrella or parasol 2nd. The combination of the cap a, ferulo b, case c. ferule d bush e and ferule f. 3nd. In the manufacture of umbrella or parasol cases the combination of alternate layers of paper and waven fabric united by cement

No. 5191. John Brokenshire, Kingston, Ont., 22nd September, 1875 (Extension of Patent No. 613), for 5 years "Improvements on Ships' Pumps." (Perfectionnements aux pompes de navires.)

Claim.—1st. The interval chamber A, in connection with the barrels B, B, the plungers C, C, and the valves D, D, together with the hole or plug H, for sounding, and the opening M, as access to the same and the turn cock L, with pipes K; 2nd. In combination with the above in the construction of the spears or double guides R in connection with the friction-rollers S, S, and eccentrics P, P.