No. 2092. HENRY B. CORNER, ALFRED D. WARREN & WILLIAM WARREN, Worcester, Mass., U. S., 21st February, 1873, for 10 years: "A Washing Apparatus." (Appareil de buanderie)

Claim.—1st. Combination with the internal steam generating chamber B, having an inlet pening *b'* of the stop-valve E, actuated by a spring I. 2nd Combination with the chamber-plate or case B', and boiler A, in a washing apparatus of the bar K, and loop L, for securing the parts in position; 3rd. Combination with a wash-boiler A, of the internal steam generating chamber B, constructed with inclined sides.

No. 2093. ALBERT H. EMERY, New York, U.S., 21st February, 1873, for 5 years: "Anti-Friction Weighing Machine." (Appareil de pesage à anti-friction.

Claim.—1st. The combination and arrangement of the thin plates 10, 10, etc., with the platform A, and frame around it. 2nd The combination and arrangement in weighing machines of two or more hydraulic-pressure supports, which support the load to be weighed either in whole or in part whenever the chambers containing the liquids in the different pressure supports are not connected with those of the other supports, but each hydraulic pressure support receives its load and transmits its pressure to the weighing beam or beams independently of the others; 3rd. The combination and arrangement of the pressure column 25, ring 36, and thin diaphragms 37, and 27: 4th. The arrangement and combination of the cup-shaped diaphragm 38, with the case 31; 5th The combination and arrangement of the two liquid pressure chambers in piece 26, separated by diaphragm 40, pressure column 41, and diaphragm 42. 6th. The combination and arrangement of the sealed pressure chambers in 26, and contained liquid, pipes 30, and contained liquid and the sealed pressure chamber and the contained liquid in piece 20, with the thin diaphragms 44, and pressure column 47; 7th. The combination and arrangement of two or more pressure chambers and contained liquid in piece or pieces 0, acting through diaphragms 44, against a single pressure column 47, 8th. The combination and arrangement of the thin diaphragms 44, pieces 45, nuts 46, and pressure column 47; 9th. The combination and arrangement of the pressure column 47, ring or plate 62, pressure chamber in 58, the contained liquid and the diaphragms 63, and 64, with the pressure column 65; 10th. The index 190, in combination with a suitable guide 181, and two or more levers arranged to operate in any manner described: 11th. The combination and arrangement with the levers or scale beams of weighing machines of thin plates to fix or connect their fulcrums in place of the knife edges and links or struts heretofore used.

No. 2094. JAMES E. EMERSON, Beaver Falls, Pa., U. S., CHAS. H. WATEROUS & GEORGE H. WILKES, Brantford, Ont., 21st February, 1873, for 5 years: "Improvements on Saws." (Perfectionnements aux scies.)

Relate to saws having removable teeth and to the adaptation of the teeth to the saw plate.

Claim.—1st. The removable saw tooth *c*, triangular in cross-section constructed in the form described; 2nd. The triangular formed tooth *c*, having the planing edges *c'*, *c'*, and angular back in combination with the angular groove *c*, in saw-plate A, and clamping-piece B; 3rd. The removable mouth-piece B, B; 4th The mouth-piece B, B, in combination with the wedge B, or its equivalent. 5th. The notched tooth *c*, fig. 3, notched mouth-piece B, *b²*, *c²*, and *b⁴*, and wedge *b*, fig. 1,

No. 2095. JOHN STARR, Halifax, N. S., 21st February, 1873, for 5 years: "Railway Rail Scabbard and Fish-Plate Slice." (Manchon et éclisse de rails des chemins de fer.)

The object of the invention is to prevent deflection of the rail ends between the ties by giving increased strength to the scabbard in a vertical direction

Claim.—A railway rail-joint splice composed of the scabbard portion A, and outward lapped fish-plate portion *c*, bent from one piece of wrought metal plate constructed and applied as set forth.

No. 2096 WILLIAM GLEN, Toronto, Ont., 21st February, 1873, for 5 years. "Reversing Valve and Steam Chest." (Soupape de machine à vapeur à double action et boîte à vapeur.)

Claim.—The combination of the steam pipe-hole F; outside steam chamber H, and inside steam chamber J, connected together by the steam ports G and I, with the valve B, operated as described for the purpose of admitting steam into the cylinder or cylinders of an engine in such a manner that the first pressure may be exerted on whichever side of the piston the engineer may desire, producing by the aforesaid combination a reversible engine as described.

No. 2097. ALEXANDER F. YARWOOD, Guelph, Ont., 21st February, 1873, for 5 years: "Improvements in Melodeons." (Perfectionnements aux mélodéons)

Claim. 1st. The placing of the pumper A, beneath the reed-board and operating it through the combination of the treadle G, lever E, rod D, and stay F, 2nd. The combination of the hand-stop H, lever I, and system of levers J, arranged for the purpose of operating the "swells" as described.

No. 2098. GEORGE STEPHENS & FRANK G. BECHER, Ottawa, Ont., 21st February, 1873, for 5 years: "Improvements on Trusses." (Perfectionnements aux bandages herniaires.)

To ensure freedom of motion on the part of the wearer without danger of displacing the pad.

Claim.—The pad A, working on the swivel B, the padded belt C, with the elastic insertion D, to which the truss F, is attached by means of the loops E.

No. 2099. ADAM CANT, Galt, Ont., 21st February, 1873, for 5 years: "Blind Slat Tenoning Machine." (Machine à faire les tenons des lames de persiennes.)

Claim.—The combination of the treadle G, belt tightener H, and belt D, arranged and operated as specified.

No. 2100. WILLIAM M. HOWLAND, Topsham, Me., & STEPHEN C. TAFT, Milford, Mass., U. S., 21st February, 1873, for 5 years: "Machine for reducing Wood to Pulp." (Machine à décortiquer le bois.)

Claim.—1st. The combination of the grinding stone bound with metal tire and clamped between the plates *a*, *c*, with the frame F, divided into partitions *i*, 2nd. The projections of the plate C, to fit the recesses in the lower surface of the stone, 3rd. The combination of the frame F, weights G, stone D, the bevel-wheels *b³*, *b⁴*, on the sleeve around the shaft with pinions, worm-screws, cog-wheels, drums and chains; 4th. Combination with the weights G, and frame F, the tipping carriage with the downward projecting-arm, the pin *f*, the latch and spring; and 5th The revolving sieve, supported by rings, which form its ends and combined with the wood-grinding machine as set forth.

No. 2101. CARLOS D. MEIGS, Pierreville Mills, Que., 21st February, 1873, for 5 years: "An Oscillating Saw Gate." (Un porte-scie oscillant.)

The gate is attached to the sliding frame in the ordinary manner and the upper ends of the slide rods are arranged to retire at the up-and-down action of the saws.

Claim.—1st. The guide rods *f*, caused to recede at their upper ends in combination with the gate and saws attached thereto; 2nd The guide rods *f*, pivoted at *g*, with gate and saws *k*, attached as described, in combination with the parts *e* and *d*, forming the toggle joint operating as described.

No. 2102. JOHN A. FORDON, Bay City, Mich., U. S., 21st February, 1873, for 5 years: "Dogs for Circular Saw Mills." (Clameaux à pointes pour les moulins à scies circulaires.)

The invention consists in a standard bolted to the side of the knee, carrying a vertical bar moving in diagonal guides, with downward inclined studs or spurs projecting from its face, said bar and its studs being operated by an eccentric lever and link.

Claim.—1st. A saw mill dog, provided with inwardly and downwardly projecting spurs *c*, for the purpose of securing the log to the carriage; 2nd The standard B, B', slides *a*, *a*, the bar C, carrying the spurs *c*, and cross heads *b*, *b*, moving in said slides the friction rollers *d*, the eccentric lever D, and link E, for moving said bar C

No. 2103. SAMUEL RAYNOR, New York, Assignee of Adolphine Cuppers, widow of Gustavus Cuppers, Brooklyn, N. Y., U. S., 25th February, 1873, for 5 years: "A Gas Illuminator." (Un réverbère à gaz.)

Claim.—1st. The combination of a cup and a burner so arranged that the light from the flame may pass downward through the cup, without being obstructed by any part thereof, 2nd. The bracket A, supporting the suspended cup C, in combination with a burner *c*, above the cup, 3rd The slotted arm *a*, on the bracket in combination with the cup C, and burner *c*

No. 2104 JAMES F. GORDON, Rochester, N. Y., U. S., JOSEPH M. CURRIER, Ottawa, Ont., & CHARLES C. COLBY, Stanstead Plain, Que., 25th February, 1873, for 15 years: "A Self Binding Harvester." (Une moissonneuse faisant les gerbes.)

Claim.—1st. An intermittently rotating gavelor in combination with balancing fingers operating conjointly. 2nd The picker I, or its equivalent in combination with the endless belt of rakes F, 3rd. the ribs *h²*, on apron G, in combination with the gaveler arms. 4th. The grain dividing teeth *l*, 5th The rock-shaft P, with its fingers Q, in combination with the slats C, 6th. The clearers *r²*, in combination with the picker; 7th. The combination of cam K, yoke *l*,