

No. 3105. THOMAS J. WHITEHEAD, South Paris, Me., U. S., 4th May, 1874, for 5 years: "Combined Cooking Stove and Hot Air Furnace." (Poêle de cuisine et calorifère combinés.)

Claim.—A cooking apparatus arranged within a double walled casing which is provided with jointed doors, a lid, pipes, and dampers, in the manner specified.

No. 3103. SAMUEL TAYLOR, Greenbush, and JOSIAH C. FAWLE, Bangor, Me., U. S., 4th May, 1874, for 5 years: "Improvements on Gauges for Edgers." (Perfectionnements aux jauges des tables de scies rondes.)

Claim.—The bed or frame a, provided with lips, b, b, c, operating as described in combination with the table of an edger or circular saw.

No. 3107. ORLANDO THOWLESS, Guelph, Ont., 4th May, 1874, for 5 years: "Window Sash Fastener." (Arrête-croisée.)

Claim.—1st. The combination of the block A, pin C, screw D, and ring E, or their equivalent as set forth; 2nd. The combination with the block A, the pin C, the screw D, and ring E, of the plate F, and stop G, or their equivalents as set forth,

No. 3108. WILLIAM A. HAWTHORN and EDGAR E. SCOTT, Carson City, Nev., U. S., 4th May 1874, for 5 years: "Window-Fastener." (Arrête-croisée.)

Claim.—In combination with the rod D, notched as shown, the bar H, with its thumb piece and shoulder and the spring I, for the purpose of locking the sash at any point, as described.

No. 3109. ALEXANDER CRUMBIE, Brooklyn, N. Y., 4th May 1874, for 10 years: "Baker's Oven." (Four de boulangerie.)

Claim.—1st. A Baker's Oven heated by the direct introduction within the baking chamber of the heated air of gases from the furnace, the arrangement of said chamber of draught pipes or flues having the openings for distribution of the heated air arranged along their bottoms or under surfaces; 2nd. The combination of upper and lower hot air distributing pipes within the baking chamber having the distributing apertures in their bottoms and dampers for controlling said apertures; 3rd. The combination with the baking chamber S, and its furnace U, of the upper and lower hot air distributing pipes E, G, provided with lower distributing openings o, the dampers K, the up-draught flue F, the horizontal flue H, the apertures d, c, and the dampers L, J, the whole being arranged as specified; 4th. The combination with the endless chain of pendant breadholders o, and their carrying pulleys M, M, of the friction clutch U, the loose driving pulley V, the screw Q, on the shaft R, the worm wheel T, the weighted lever W, with its toe r, clutch operating connection m, and the notched disc X, as set forth.

No. 3110. WILLIAM MANSON, San Francisco, Cal., U. S., 4th May, 1874, for 5 years: "Atmospheric Power Hammer." (Marteau à Machine atmosphérique.)

Claim.—1st. An atmospheric engine consisting of the operating cylinder D, with its piston N, in combination with the condensing cylinder C, of larger diameter and having the condensing piston E, the two cylinders being connected by port O, O, both above and below the pistons and having the supply port and valve I, as described; 3rd. In combination with the compressing cylinder C, the tube P, with its cock H, for connecting the chambers above and below the piston E, in order to regulate the amount of compression as specified; 3rd. The reciprocating piston N, of the cylinder D, operated by atmospheric pressure applied alternately above and below it by means of a condensing piston E, which moves in a separate cylinder and alternately forces and compresses the air in its cylinder above and below the piston N, as described.

No. 3111. DANIEL W. DAKE, Beloit, Wis., U. S., 7th May, 1874, for 15 years: "Apparatus for Working Butter." (Appareil à apprêter le beurre.)

Claim.—1st. The frames E, provided with blades or knives and a wire-cloth sieve; 2nd. The combination and arrangement of the hopper A, (or a similar device) presser B, crank C, frames E, provided with blades or knives or wire-cloth sieve F, F, and impellers I, and H, in connection with a vat or other receptacle to receive the butter pressed from the hopper, having all its parts constructed and arranged for joint operations as set forth in the drawings.

No. 3112. ROBERT D. EWING, Toronto, Ont., 7th May, 1874, for 5 years: "Improvement in Furnaces." (Perfectionnement dans les fourneaux.)

Claim.—Introducing an air blast in conjunction with a jet of

steam beneath the grate bars of a furnace for the purpose of improving the combustion of slack coal as described.

No. 3113. HIRAM B. MORRISON, LeRoy, N. Y., U. S., 7th May, 1874, for 5 years: "Improvement on Breast Collars for Harness." (Perfectionnement des bricoles de harnais.)

Claim.—The combination of the two clamping plates C, D, situated on opposite sides of a breast collar and united by a screw or equivalent when the same forms a portable attachment and is otherwise constructed and arranged as described.

No. 3114. OAKLEY B. FULLER, Newark, N. J., U. S., 9th May, 1874, for 5 years: "Improvements in Dough Machines." (Perfectionnements aux machines de pâtisseries.)

Claim.—1st. The combination of corrugated rollers and curved cheeks in a machine for forcing dough, arranged and operated as described; 2nd. The combination of corrugated rollers and curved cheeks with a slot for forming a sheet of dough, whether the slot be adjustable or not in its opening; 3rd. The hopper E, E, constructed larger at the bottom, in combination with the rollers B, B, as described; 4th. The case constructed in two parts L, L, and M, M, and provided with a hopper E, E, made larger at the bottom.

No. 3115. JACOB S. ARMSTRONG and JOHN G. ARMSTRONG, Ottawa, Ont., 11th May, 1874, for 5 years: "Spring Seat for Waggon and Cars." (Siège à ressorts de voitures de chemins de fer et autres.)

Claim.—1st. The compensating rods E, the lock piece H, constructed and operated as described; 2nd. The seat A, the spiral springs G, the strip C, the compensating rods E, the spring board B, the lock piece H, the clamps G, and hooked plate I, constructed as described.

No. 3116. EDWARD W. CALLEY, St. Mary's, Ont., 11th May, 1874, for 5 years: "Improvement in Lamp Burners." (Perfectionnements des becs de lampes.)

Claim.—The construction and arrangement of the copper heater D, in the lamp burner and its combination with the lamp burner as set forth.

No. 3117. THOMAS S. BAYLES, Hamilton, Ont., 11th May, 1874, for 5 years: "Improvements in Horse Shoes." (Perfectionnements aux fers à chevaux.)

Claim.—The holders E, and D, attached to the shoe, together with the steel wedges F, fitted in them to form the wearing parts of the shoe, and which wedges can be taken out and replaced as required; together with the combination and arrangement of the several parts, all operating as set forth.

No. 3118. ISAAC BROWN, Baltimore, Ind., U. S., 11th May, 1874, for 5 years: "Steam Circular Saw Mill." (Moulin à scies circulaires à vapeur.)

Claim.—The combination of a steam cylinder H, detached piston, rod I, cross-head G, and forked connecting rod F, as described.

No. 3119. ABRAHAM MYERS, Salem, Oregon, U. S., 11th May, 1874, for 5 years: "Improvement in Metallic Cases for Turbine Wheels." (Perfectionnement des biefs métalliques de turbines.)

Claim.—1st. A portable metallic case for a turbine, running upon a horizontal shaft combining in its construction water induction and education openings, a head piece and bridges with adjustable bearings and a downward bent draught tube, as set forth; 2nd. The downward bent draught tube enlarged at the portion surrounding the internal blades, as set forth; 3rd. In combination with the horizontal shaft the internally placed bearings I, I, having openings between the adjustable followers for the passage of the outflowing current of water as set forth; 4th. In combination with bearings F, E, and I, H, fitted with adjustable followers, the adjustable step J, as set forth.

No. 3120. WILLIAM S. HUNTER, Stanstead, Que., 11th May, 1874, for 5 years: "Improvements on Wooden Soles for Boots and Shoes." (Perfectionnements aux semelles de chaussures en bois.)

Claim.—1st. A wooden sole for boots and shoes jointed transversely, hinged together, and having a rubber strip C, or flexible material interposed in the joint as described; 2nd. A wooden sole,