

No. 1767. ROBERT BERRYMAN, Hartford, Ct., U. S., 12th November, 1872, for 15 years: "Improvements on Steam Boilers." (Perfectionnements aux chaudières à vapeur.)

*Claim.*—A feed water heater in which are combined chambers D, bent tubes F, connected to a plate J, and each communicating with said chambers D and a steam tight casing A, enclosing said tubes F, and adapted to be connected with a water reservoir and with the feed water apparatus of a steam boiler.

No. 1768. JEREMIAH ENEAS, Montreal, Que., assignee of Mary G. Briggs, Boston, Mass., U. S., 12th November, 1872, for 5 years: "An abdominal supporter." (Un suspensoir abdominal.)

*Claim.*—The frame *a*, with compound curve *a'*, the bars *d*, with slots *d'*, and buttons *d''*, or their equivalents, in combination with elastic.

No. 1769. MAURICE GOLDMAN, Montreal, Que., 12th November, 1872, for 5 years: "Metal sole of Boots and Shoes." (Semelle de chaussure métallique.)

*Claim.*—A metallic boot sole A, furnished with points B.

No. 1770. HENDERSON WILLARD, Grand Rapids, Mich., U. S., 16th November, 1872, for 5 years: "An improved Barrel." (Un baril perfectionné.)

*Claim.*—A barrel or other circular package with two series of staves, reciprocally breaking joints or otherwise.

No. 1771. ABRAHAM HUFFER, Rochester, N. Y., U. S., 16th November, 1872, for 5 years: "A Blind Hinge." (Une penture de persienne.)

A "surface" spring hinge *a* screwing directly upon the outside of the wood instead of being morticed in as customary.

*Claim.*—The surface blind hinge consisting of the parts A, B, constructed with the right angle bearing C, and having the spring D, operating in connection with the socket *b*.

No. 1772. JOSHUA L. ABELL, Northampton, Mass., U. S., 16th November, 1872, for 5 years: "Manufacture of Grindstones." (Fabrication de pierres à émoudre.)

*Claim.*—1st. Sawing the blocks of undressed quarried stone into a series of slabs of any required thickness; 2nd. An improved manufactured article in a grindstone having one or both of its flat side surfaces sawn.

No. 1773. ABNER BURBANK, Rochester, N. Y., U. S., 16th November, 1872, for 5 years: "A Wringing Machine." (Machine à tordre le linge.)

*Claim.*—1st. In combination with the set of solid wooden or metallic rollers C, C, D, enclosing the rubber roller E, the cross-bar H, and central set screw *d*, when employed for the purposes of allowing a retraction of one of the solid wooden or metallic rollers for the insertion or removal of the rubber roller; 2nd. The triplicate solid wooden or metallic rollers C, C, D, enclosing the rubber roller E, when the upper rollers are separated at some distance apart, and the whole are used without gearing.

No. 1774. JOHN MACLAREN, Scranton, Penn., U. S., 16th November, 1872, for 5 years: "A Stop Cook." (Un robinet.)

The invention consists in a flexible ball-valve provided with a metallic guide and guard plate projecting from one side in combination with a stem having a central recess for the reception of such guide, causing the ball when compressed to close the orifice.

*Claim.*—1st. A stop-cock having a flexible ball-valve *e*, provided with spindle *c*, and cap *d*, in combination with stem *b*, and recess or passage *f*; 2nd. A stop-cock having a flexible ball-valve *e*, provided with a spindle *c*, cap *d*, with nut *h*, and with or without washer *g*, in combination with stem *b*, and recess *f*; 3rd. A stop-cock having a flexible ball-valve *e*, provided with a spindle *c*, with head *i*.

No. 1775. ABBOTT R. DAVIS, East Cambridge, Mass., U. S., 16th November, 1872, for 5 years: "Method of preserving Eggs." (Procédé de conservation des œufs.)

Consists in mixing with the eggs when in a state of liquefaction certain quantities of sugar, salt and sulphate of soda.

*Claim.*—1st. The method of preserving eggs by evaporation or condensation. 2nd. As a new article of manufacture preserved eggs in a thick semi-liquid state. 3rd. As a new article of manufacture preserved eggs in a thick semi-liquid state when combined with the ingredients described; and 4th. A new article of manufacture preserved eggs when condensed and formed into plastic sheets.

No. 1776. THEODORE R. TIMBY, Tarrytown, N. Y., U. S., 16th November, 1872, for 5 years: "Improvements on Railway Cars." (Perfectionnements aux chars de chemins de fer.)

*Claim.*—1st. A railway car constructed with a moveable floor or false bottom resting on springs so that the said floor with its superincumbent burden may yield or move independently of the body of the car. 2nd. An improvement in freight cars in the moveable or detached bottom B, provided with vertical sides or frame work D, *d*, and guards F, the whole working in guides *g*, and supported by springs C, resting beneath the timbers *a*, of the main car body.

No. 1777. JOHN CAVEN, Indianapolis, Ind., U. S., 16th November, 1872, for 15 years: "A Fire-place Grate." (Une grille de foyer.)

*Claim.*—1st. The divided journal-bearings G, H, in combination with the hinged sections C, D, of a revolving coal grate, for the purpose of retaining the sections closed without fastenings while being revolved; 2nd. The seats L, of the extensions J, arranged to form a continuation of the journal-bearing seats to support one of the hinged sections of the grate when opened; 3rd. The combination of the hinged revolving grate C, D, with the divided journal bearings G, H, the supporting side frames A, the curved extensions J, with their openings L, and seats J.

No. 1778. HENRY S. STEWART, Newark, N. J. Assignee of Francis E. Mills, New York, U. S., 16th November, 1872, for 5 years: "Improvements on Sewing Machines." (Perfectionnements aux machines à coudre.)

*Claim.*—1st. A foot treadle so constructed that the ankle joint of the operator can be brought in line with the centre of motion or axis on which the treadle vibrates; 2nd. An adjustable foot-board for treadles, so arranged that the part thereof, on which the heel rests, can be raised or lowered with respect to the centre of motion or axis of the treadle; 3rd. An adjustable heel stop for one foot or for both arranged upon the foot-board of a treadle so that the feet can be adjusted longitudinally thereon; 4th. The adjustable heel stop on the foot-board of a treadle, in combination with a foot-board, which can be adjusted vertically to bring the ankle joints in line with the centre on which the axis of the treadle turns; 5th. The combination of a knee brace with a treadle.

No. 1779. JOSEPH RIPPON, Woodstock, Ont., 16th November, 1872, for 5 years: "An adjustable Reflector." (Un réflecteur mobile.)

*Claim.*—The application of the reflector B, to the outside of the lantern.

No. 1780. ISAAC ATKINSON, Hamilton, Ont., 16th November, 1872, for 5 years: "Process of curing and packing Hams and Bacon." (Procédé pour la préparation du jambon et du lard séché.)

*Claim.*—Rolling the shoulders, hams and bacon in fine ground alum, in combination with the first part of the treatment in rolling the shoulders, hams and bacon in paper or *stomboard* saturated in a solution of alum, also in curing on shelves to avoid under-pressure.

No. 1781. HENRY B. MYER, Philadelphia, Penn., U. S., 16th November, 1872, for 5 years: "Apparatus for the manufacture of Illuminating Gas." (Appareil pour la fabrication du gaz d'éclairage.)

*Claim.*—1st. The arrangement of the gasoline chamber and the air chamber; 2nd. The construction of the clock work mechanism, the fan, the stop mechanism, and the gasoline or carburettor chamber; 3rd. The combination of the clock work mechanism, the fan, the air chamber, the gasoline chamber and the tube leading to the gasoline chamber from the air chamber; 4th. The arrangement of the drip chamber; 5th. The perforated side pipes J, in combination with the air and gasoline chambers.

No. 1782. THOMAS COPLAND, Hamilton, Ont., 16th November, 1872, for 5 years: "Process of Sweetening Castor Oil." (Procédé adoucissant l'huile de ricin.)

By the addition of chloroform, oil of lemon, oil of cinnamon, essential oil of almonds, and oil of aniseed in specified quantities.

*Claim.*—The addition of chloroform to castor oil as a sweetening principle, in combination with the flavoring described or any other

No. 1783. JOHN FOSTER, St. Simon de Yamaska, Que., 16th November, 1872, for 5 years: "A vertical pulveriser." (Appareil à désagréger les corps pulvérulents.)

Consists in the means used for striking the material to be reduced while in a free and falling state.