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INVENTIONS PATENTED.

No. 14,883. Improvements on Sky-Lights.
(*Perfectionnements aux lucarnes.*)

Anthony C. Dunlevy and Frank M. Campbell, St. Louis, Mo., U. S., 1st June, 1882; for 5 years.

Claim.—1st. In combination with the sash bar, consisting of one piece of sheet metal and provided with gutters B C, central compact web G, packing inserting in the space below the cap, and an apron hung upon the ridge of the web of the sash bar and depending therefrom between the said web and edges of the glass, and means to keep said apron in contact therewith. 2nd. In sash structures for sky-lights, an apron of fibrous material, asbestos or rubber cloth, or its equivalent, arranged to depend from the ridge of the web of the sash bar, and in contact with the edges of the glass, with the depending sides of said apron extending below the glass into the gutters. 3rd. In sky lights, the gutters B C, with a web extending lengthwise through the said gutters, with the glass plates on the sides thereof resting upon the edges of the gutters, in combination with an apron F arranged between the edges of said glass within the gutters. 4th. In the structure of sky light sash, a water shed R extending from the eaves of the sky light above and beyond the curb thereof, and so arranged below the ends of the plates of glass that the drip therefrom will fall upon the water shed.

No. 14,884. Improvements on Washing Machines. (*Perfectionnements aux machines à laver.*)

Henry J. Skinner, Bradford, Penn., U.S., 1st June, 1883; for 5 years.

Claim.—1st. The tub or water holding vessel A, having the curved chambers a a, the perforated washing cases B B¹ set in suitable bearings, and provided with cranks c c¹, in combination with the connecting rods d d¹, crank pin C, and crank D connected to the driving mechanism. 2nd. The tub A, perforated washing cases B B¹, cranks c c¹ and connecting rods d d¹, connected to the crank pin, so that both the washing cases receive their movements from a single crank pin. 3rd. The cranks c c¹ connected to the cases B B¹, in combination with the connecting rods d d¹, crank pin C, crank D and crank shaft D¹, whereby the perforated washing cases receive different movements, so that, when one case is in a horizontal position, the other is in an inclined position. 4th. A perforated washing case provided with troughs or water buckets f f¹ and adapted to oscillate in a tub or water vessel. 5th. A washing case provided with water buckets f f¹, in combination with a series of perforations leading to the interior of the case, for the purpose of carrying the water up and allowing it to fall down through perforations on to the clothes.

No. 14,885. Improvement in Anti Friction Journal Bearings. (*Perfectionnement des coussinets de tourillons à anti-friction.*)

James H. Langley, Boston, Mass., U.S., 1st June, 1882; for 5 years.

Claim.—1st. The combination, in a journal bearing, of a series of anti-friction rollers D provided with circumferential concave grooves d, adapted to receive spherical separators, a series of spherical separators E arranged between said rollers and fitting into said grooves, and concentric bands between which the said rollers and separators revolve. 2nd. The combination, in a journal bearing, of a series of anti-friction rollers D provided with circumferential concave grooves d, a series of spherical separators E arranged between said rollers and fitting into said grooves, and the solid concentric bands F F¹ between which the said rollers and separators revolve. 3rd. The anti-friction rollers D constructed with a hollow cylindrical end d¹ and a

concave ferrule piece d₂ combined with a central spindle d₂, so as to assemble the parts between two solid rings F F¹ and leave the last inserted roller practically solid and grooved, the same as the others.

No. 14,886. Improvements on Cabinets for Holding Paper Scraps. (*Perfectionnements aux buffets pour les retailles de papier.*)

James S. Norris, Joliet, Ill., U.S., 1st June, 1882; for 5 years.

Claim.—1st. The case B¹ containing the swinging skeleton racks s¹, receptacles or envelopes z, rests u and springs m. 2nd. The racks s¹ arranged to swing from the top of the case B¹, in combination with the rest n and spring m to hold up the inner end of the rest n and hold the lower end of the racks s¹ out. 3rd. The receptacle z having its sides connected by the corrugated or wrinkled ends of spring hook i, detachable card A and having ruled sides for reference purposes and arranged to hang suspended from the cross bars w of the swinging frame or racks s¹.

No. 14,887. Improvement in the Process for Preserving Milk. (*Perfectionnement dans le procédé de conservation du lait.*)

Heinrich W. L. O. Von Roden, Hamburg, Germany, 1st June, 1882, for 5 years.

Claim.—The process of preserving milk by bottling, the method of excluding air prior to sealing, which consists in covering the milk with a film or layer of edible oil during the first heating, then removing the same, sealing and reheating.

No. 14,888. Fire Proof Paint.
(*Peinture réfractaire.*)

William L. Maltby, Montreal, Que., (Assignee of Terence Sparkham, Brockville, Ont.,) 2nd June, 1882; (Extension of Patent No. 3786.)

No. 14,889. Improvements on Car Couplings. (*Perfectionnements aux accouplages des chars.*)

David H. Sherman and John Bishop, Wankegan, Ill., U.S., 2nd June, 1882; (Extension of Patent No. 14,707.)

No. 14,890. Improvements on Car Couplings. (*Perfectionnements aux accouplages des chars.*)

David H. Sherman and John Bishop, Wankegan, Ill., U.S., 3rd June, 1882; (Extension of Patent No. 14,707.)

No. 14,891. Improvement in Steam Valves.
(*Perfectionnement des soupapes de vapeur.*)

The Pratt and Cady Company, (Assignee of Rufus N. Pratt,) Hartford, Ct., U.S., 3rd June, 1882; for 5 years.

Claim.—1st. The combination, in a fluid cock, of a barrel a having branches g k and inclined valve seat d, with a swinging flap b and operating rod f. 2nd. A fluid cock having a barrel a, inclined valve seat d, branch g and branch k.

No. 14,892. Improvements in the "F. X. Bertrand Shingle Sawing Machine." (*Perfectionnements à la machine à scier le bardeau dite "de F. X. Bertrand."*)

François X. Bertrand, St. Hyacinthe, Que., 3rd June, 1882; for 5 years.

Claim.—L'excentrique ou came C, seul, et ses équivalents, la combinaison de la roue D, avec la roulette E sur son essieu F, avec le dit excentrique ou came C, et leurs équivalents: La combinaison de la dite roue D avec la roulette E, sur son essieu F, avec le dit excentrique ou came C, et du dit excentrique avec la roulette E sur son es-