

No. 5779. Sash-balance. (Contre-poids de croisée.)

John Berndt, Detroit, Mich., U. S., 11th March, 1876, for 5 years.

Claim.—The combination with sashes B, C, of the cord D, pulley F, and clamp G, the first being brought down through a vertical hole in the top of lower sash, and partly through the mullion thereof, the second arrangement within a slot, and the third attached to the surface of said mullion.

No. 5780. Process for Producing Gelatine Relief Plates for Printing.

(Procédé pour produire des plaques en relief d'imprimerie en gélatine.)

William H. Munier, Boston, Mass., U. S., 11th March, 1876, for 5 years.

Claim.—1st. The process of obtaining level, straight and true surfaces on gelatinous films from which to produce relief plates for printing from by grinding the surface of said film with emery cloth or other suitable abrading material properly extended upon and secured to a true flat surface of wood or other suitable material. 2nd. The process of producing relief surfaces upon gelatine plates by photographing or printing from a photographic negative, the picture to be reproduced upon the surface of said gelatine plate grinding the surface of the plate either before or after printing thereon the picture, and then treating it with acetic acid. 3rd. The process of producing gelatine relief plates by photographing or printing from a photographic negative on positive upon the surface of the gelatine plate the picture to be produced in relief, treating the plate with acetic acid until it has eaten away the gelatine to as great a depth as possible without injury to the lines removing the acid and coating or filling the parts acted upon by the acid with a paste made of bone black and any suitable gum, or with India ink, black shellac, varnish or other opaque or semi-transparent substance, then exposing the plate to the direct rays of light without the negative or positive plate, and after removing the paste or other opaque or semi-transparent substance, treating the gelatine plate with acetic acid a second time. 4th. The process of producing gelatine relief plates, treating the plate, after a partial relief has been produced to a coating of bone black, paste, India ink, black shellac, varnish, or other opaque or semi-transparent substance. 5th. The method preventing the emery or other abrading material from scratching the surface of the gelatine plate, by filling the interspaces of the abrading surface with tallow, or equivalent material.

No. 5781. Rotary Broiler. (Gril rotatoire.)

John Schranker, Lancaster, N. Y., U. S., 11th March, 1876, for 5 years.

Claim.—1st. A rotary broiler composed of two vertical clamping discs or frames mounted on a horizontal shaft so that the articles to be broiled are presented edgewise to the fire and cooked on both sides simultaneously. 2nd. The combination of the disc C, provided with shaft d, and threaded socket e, of the disc C, mounted on the shaft e, provided with screw e, for adjusting the discs towards and from each other in clamping and releasing the article to be broiled. 3rd. The combination with the case A, B, of the rotary clamping discs C, C', shaft d, e, handle d, crank h, and shield K.

No. 5782. Improvement on Stock Cars.

(Perfectionnement des wagons à bétail.)

John R. McPherson, Jersey City, N. J., U. S., 11th March, 1876, for 5 years.

Claim.—1st. The purpose of feeding and watering animals in stock cars, while being transported by rail, a feed and water troughs arranged parallel with car track, at a distance therefrom, free of the car walls and suitably elevated to present feed and water to said animals in or upon such car or stock car when the train passing over said track is stopped at said troughs, the cattle remaining in or upon the car. 2nd. The purpose of utilizing the ordinary cattle cars for feeding and watering, the combination of such a car having side openings A, for the heads of the cattle with fixed track troughs C at suitable distances on the track, or at depots upon each side from which the stock feeds and waters when the train is stopped for that purpose. 3rd. The combination in a stock car, of the sectional doors D, E, F, in which the intermediate section E, are combined with the long shutters B, of the side openings, to furnish continuous side openings from end to end of the car through which the cattle feed from the fixed track troughs. 4th. For the purpose of utilizing the ordinary cattle car for feeding and watering, the combination of such a car having side openings A, for the heads of the cattle with fixed track troughs C, said troughs provided with divisions C', C'', and water supply pipes H.

No. 5783. Improvements on Hydrants.

(Perfectionnements aux bornes-fontaines.)

James V. Hayes, Solomon Brullard and George B. Hayes, Buffalo, N. Y., U. S., 11th March, 1876, for 5 years.

Claim.—The combination of the passage B, steam passages e and e', divided by diaphragms d, d', and having the inlet and outlet openings f, and g.

No. 5784. Car Truck Shifting Apparatus.

(Appareil à déplacer les wagons de leurs trains.)

Robert H. Ramsay and George N. Scarlett, Cobourg, Ont., 11th March, 1876, for 5 years.

Claim.—The trucks D, on rails C, arranged at both longitudinal sides of the car to be transferred, and bars I, placed transversely under its body and bearing in the trucks D, to sustain the car body when transferred from the main way trucks, and a pit A having inclines at both ends and through rails B, to effect a change of trucks without elevating or lifting the car body.

No. 5785. Button Holing Attachment for Sewing Machine.

(Appareil de machine à coudre pour faire les boutonnières.)

Samuel J. Baird, Richmond, Va., U. S., 11th March, 1876, for 5 years.

Claim.—1st. An extension lever consisting of the two pieces A, and B, the latter having a slot diagonal to the line of its movement upon A, and of un-

equal diameter, with lips or projections at the wider part. 2nd. A perpendicular cam shaft d, having two cams of different diameter and throw, in combination with the slot and its projecting lips, whereby the proper vibration and adjustment are accomplished for the automatic forming of the sides and barring of the ends of the button hole. 3rd. The double rack G, and rack guide F, in combination with the adjustment cam k. 4th. A reciprocating driving shaft and twist shaft, in combination with the automatic pawl o, and ratchet wheel D; 5th. The driving shaft and twist shaft, in combination with a segment gear, rack and sliding bars. 6th. A four leaved ratchet, having the two opposite leaves in one plane and the alternate leaves in another plane, and reciprocating bars one of which moves in the plane of each pair of leaves, in combination with the cam shaft and extension lever.

No. 5786. Waggon Tongue Support Spring.

(Ressort porte-timon de voiture.)

William Burgess, Etobee, Ont., 11th March, 1876, for 5 years.

Claim.—1st. The elevis F, formed with eyes instead of hooks for hanging on tongue bolt G, the adjusting bolt I, and guide stud K. 2nd. The elevis F constructed with the bolt I, in one piece when so required. 3rd. The combination with the tongue A, and axle D, of the spring E, with oblong slot K', elevis F, and adjusting bolt I.

No. 5787. Improvements in Graters.

(Perfectionnements aux râpes.)

Robert Soper, London, Ont., 11th March, 1876, for 5 years.

Claim.—1st. A grater consisting of the cylinder A, coil spring C, rod D rotary grater H, arm I, bearings J, J', crank K, and elevis or hook L. 2nd. In combination with the above, a case or cap G, having an opening V, at side and secured by collar c, and pin b, to the cylinder A.

No. 5788. Improvements in Gaff-fastenings.

(Perfectionnements aux ajustages des cornes de vergues.)

James H. David, Danmariscotta, Me., U. S., 11th March, 1876, for 5 years.

Claim.—The guard E, journals C, C', guard F, with openings g, in combination with the ring D, nuts f, f', rope e, gaff B, with opening or slot b, nut A.

No. 5789. Vehicle Spring. (Ressort de voiture.)

William P. Whitney, Poughkeepsie, N. Y., U. S., 11th March, 1876, for 5 years.

Claim.—1st. The combination with the body A, and side bars B, of a vehicle of one or more torsion springs attached to the body, and having torsion arms arranged to connect with the side bars of the vehicle. 2nd. The torsion spring E, or E', fastened at each end and having one or more torsion arms G, or G', secured to them at a point or points between the fastenings by which said springs are united with the body. 3rd. The parallel torsion springs E, E', composed of one continuous bar connected transversely at one or both ends and having combined with them torsion arms applied to connect the body through the intervention of the springs, with other portions of the vehicle.

No. 5790. Machine for Edging Shingles.

(Machine à chanfreiner le bardan.)

James E. Austin and Cassius W. Colby, Iowa, Me., U. S., 11th March, 1876, for 5 years.

Claim.—1st. The combination of a stationary circular saw and a laterally adjustable circular saw mounted upon the same arbor, each of the said saws having plan cutters formed in the plate set inwardly toward the other saw and bevelled from the outside, when the said saws are adapted to edge and plane both sides of a shingle from the under side of the tables. 2nd. The combination of the slide O, arm G, sleeve P, rod Q, pedal S, shaft S, sector T, arm U, and connecting rod V, with the feed rod for carrying forward the shingles. 3rd. The combination of the guide d, sleeve b, bar c, arm e, shaft f, lever g, box sleeve i, fork h, and guide bar j, with the frame A, and sleeve of the movable saw for adjusting the latter upon its arbor. 4th. The combination of the jointer h, with the box slide l.

No. 5791. Extension Clothes Horse.

(Séchoir à linge à rallonger.)

Samuel B. Denton, Port Dalhousie, Ont., 11th March, 1876, for 5 years.

Claim.—1st. The laterally extended feet B, in combination with the supports A, hinged at top, and bars D, with rounded ends, to form an extension clothes horse. 2nd. The combination of the hook G, with the middle or corner supports, to keep the clothes horse from leaning too much and from coming down open and flat on the ground. 3rd. The combination of the hooks F, F', fixed to the corner supports A, hooking with the horizontal bars D.

No. 5792. Liquid Meter. (Spiritomètre.)

Edward R. Carpenter, Collingwood, Ont., 11th March, 1876, (Extension of Patent No. 579), for 5 years.

Claim.—1st. The combination of the vessel A, made of glass or any suitable material with a graduated scale, so arranged as to exhibit its contents and permit the quantity withdrawn at any time to be noted base B, cock C with three way plug connected to a reservoir E, by a pipe D. 2nd. In connection with the aforesaid combination in a tube F, with a valve G.

No. 5793. Machine for Making Clips for Railway Rail Joints.

(Machine à faire les éclisses pour les joints des rails de railrotes.)

John Forbes, Halifax, N. S., 16th March, 1876, (Extension of Patent No. 569), for 5 years.

Claim.—1st. The bending levers E, swinging in rocking frames D, and actuated by cam shafts B, 2nd. The stationary cams F, for controlling the motion of the outer ends of the levers E; 3rd. Providing the cam