No. 3181. GEORGE MORTIN, Orwell, Ont., 6th March, 1874, for 5 years: "Machine for Burnishing Photographs." (Machine à calendrer les cartes photographiques)

Claim.—1st. The double faced ends of the burnishing roller; 2nd. The method of connecting the supporting pillars with the platform; 3rd. The method of supporting the moveable table by two adjusting screws instead of one.

No. 3182. SAMUEL W. EMERY, Portland, Me., U. S., 6th March, 1874, for 5 years: "Four Wheeled Railway Safety Car." (Voiture de railroute, de sûreté, à quatre roues.)

Claim.—1st. A car body with bifurcated sills A, A; 2nd. The bifurcated sills A, A, in combination with the journal boxes and housings D, and D1, and the independent axle *b*; 3rd. The bifurcated sills A, A, journal boxes and housings D, and D1, axle *b*, and braces c, c, in combination with the safety shoe E.

No. 3183. WILLIAM R. JOLLEY, North Repps, Eng., 6th March, 1874, for 10 years: "Life Raft." (Radeau de sauvetage.)

Claim.—The saloon or deck cabin B, fastened by means of spikes E, E, and bolts D, D, and convertible into a navigable vessel when afloat by means of tables G, G, rudder H, and spars and sails K, as and for the purpose set forth.

No. 3184. ANGUS MACKAY and GEORGES JONES, *Montreal, Que., 7th March, 1874, for 5 years:* "Process for Preventing and Neutralizing Sour Beer, Stout, Ale and other Malted Liquors." (Procédé pour empêcher et neutraliser l'acidification de la bière, du porter, de l'aile et autres boissons d'orge brassée.)

Claim—1st A compound consisting of a carbonate of potash, or carbonate of soda, and borax or boracic acid, mixed together or separate and melted in hot or cold water in the proportions set forth; 2nd. The process of preventing and curing acidity in beer and all other kinds of malt liquors, wines, finings and yeast by mixing with them, the above compound in the proportions and in the manner described.

No. 3185. JAMES MORRISON, Toronto, Ont., 7th March, 1874, for 5 years: "Combined Adjustable Check and Globe Valve." (Soupape mobile d'arrêt et à boulet combinée.)

Claim.—The combination and arrangement of the various parts of the device comprising the invention, viz.: The chamber A, valve seat B, adjusting stem C, with hand wheel W, valve D, stem E, with pin *g*, and cap F.

No 3186. JAMES MORRISON, Toronto, Ont., 7th March, 1874, for 5 years: "Adjustable Water Gauge for Steam Boilers." (Echelle d'eau mobile pour les chaudières à vapeur.)

Claim.—1st The combination and arrangement of the various parts of the device comprising this invention, viz.. The glass tube A, the sockets B, C the cocks D, E, with chambers *d*, *e*, having the sockets B, C, screwed into the chambers *d*, *e*, of the cocks D, E, as illustrated in Fig. 3; 2nd. The glass tube A, the sockets B1, C1, and the cocks D1, E1, the sockets B1, C1, constructed with a projecting body, or barrel *b*, or *c*, which is turned and fitted into the chambers *d*, or *e*, of the cocks D1, E1, as illustrated in Fig. 4.

No. 3187. ISRAEL M. ROSE, Brookhaven, N. Y., U. S., 12th March, 1874, for 5 years: "Embroidering Attachment for Sewing Machines." (Disposition des machines à coudre pour la broderie.)

Claim. 1st. The vibrating plate C, carrying the latch needle G, for the purpose of laying an embroidery-thread upon the surface of the fabric, 2nd. The latch needle G, carried by the arbour H, which has an independent axial play on or in the vibrating plate C, 3rd. The latch-needle or embroidery thread guide C1, of a sewing machine attachment when arranged so as to perform a longitudinal and also a slight lateral motion to carry the embroidery thread toward and by the sewing needle; 4th. The combination of a sewing machine needle with the vibrating embroidery thread carrier or latch needle G; 5th. The combination of an embroidery thread guide with the sewing machine needle and vibrating embroidery thread carrier or latch needle G; 6th. The combination with the latch needle G, having not only a longitudinal movement to and fro across the presser foot, but also a slight lateral movement relatively thereto, of the embroidery thread guide I, constructed and arranged to have the same combined movements as the embroidery thread carrier or latch needle G, and in common with the latter; 7th. The combination of the lever E, with the shoulders *b*, *d*, of the vibrating plate c for operation by the sewing needle bar or holder, whereby the vibrating plate c, which carries the latch needle, is retained in position during the upper portion of the stroke of the needle bar and is prevented from slipping; 8th The mechanism described for applying an embroidery thread upon the surface of the fabric and stitching the same down by the sewing thread as set forth.

No. 3188. WILLIAM BEEMAN, Selby, Ont., 12th March, 1874, for 5 years: "Portable Fence." (Clôture portative.)

Claim—The erection of fences in sections as shown in drawing Fig. 1, pivot post B, bolt or pin C, also bolt or pin H passing through standards E E, and pivot post B, also short stake I, with bolts or pin passing through standards *f*, *f*, and stake I.

No. 3189. JOSEPH H. LIVINGSTON, New York, U. S., 12th March, 1874, for 5 years: "Improvements in the Processes of Making Cheese." (Perfectionnements dans les procédés de fabrication du fromage.)

Claim.—1st. The improvement in the art of manufacturing cheese by treating an emulsion of skim-milk and fat with rennet; *2nd The mixture of animal fat or oil procured from the same* with skim-milk and rennet.

No. 3190. VANDERLYN H. FELT, Brantford Ont., 12th March, 1874, for 5 years: "Self-acting Rake Attachable to Reaping Machine." (Râteau automate de moissonneuse.)

Claim.—1st. The method in which the rake arms F are constructed with the brace G, the bar L, with cone pointed ends and counter sunk indentations in arm and brace, and the latches O; 2nd. The mode in which the rake arms F, with brace G, are attached to the crown wheel B, by lugs J, and pins K; 3rd. The construction of the upper guide plate M, and the under guide plate H, with hinged leaf I, and spring S, and arrangement of the same to retain the rake arms F, in an upright position; 4th. The adjustable hooks P, on the periphery of the crown wheel B, in combination with the rock shaft N, and its moveable foot lever 1, and spring T, and the rock shaft N, N, and its lever 2, for raising the rake arms F, from the platform; 5th. The moveable guide Q, on fender board R, by which the distance of the fall or descent of the rake or reel arms F, into the standing grain before the knives, is governed; 6th. The combination of the crown wheel B, rake arms F, brace G, and latches O, with the under guide plate H, with its hinged leaf I, and spring S, upper guide plate M, and rock shafts N, and N, N, with their levers 1, 2, and spring T, and the moveable guide Q, on fender board R, as set forth.

No. 3191. ASAHEL SOPER, New York, U. S., 12th March, 1874, for 5 years: "Machine for Drying Grain." (Machine à sécher les grains.)

Claim.—The combination in a grain drier of a large number of triangular steam-pipes B, constructed and arranged as described, with the exhaust chambers C, D, and the apertures *e*, through the walls *a*, and *b*, immediately underneath the bases of the said steam-pipes, all constructed, arranged, and operating as specified.

No. 3192. PETER BROTHERHOOD, London, Eng., 12th March, 1874, for 15 years: "Triple-cylinder Engine and Pump." (Engin et pompe à trois cylindres.)

Claim.—1st The slide K, worked by the crank E, in a jacket external to the cavity B, in combination with the supply and discharge pipes L, M, and the ports a^1, a^2, a^3, whereby the outer surface of the pistons are alternately and successively subjected to and relieved from the working pressure their inner surface being always subject to the atmospheric or less pressure in the said cavity, 2nd. The segment or disc O1, Fig. 3, and 4, with the stop ends o^1, o^2, of its slot in combination with the crank E, slide and slide spindle N, and hand wheel *n*, whereby the slide can be set so that the engine shaft shall rotate in either direction as described in reference to Figs 3, and 4; 3rd. The governor Q, mounted on the rotating slide in combination with the racks *r*, *r*, pinion R, spindle S, split ring *t*, and cylindrical segment T, whereby the degree of expansion is regulated by the velocity as de-