

Claim.—1st. The herein described means or process of treating sugar liquors, syrups and saccharine juices, to facilitate filtration and decolorization, said means or process consisting in adding to, or mixing with the liquor, a quantity of broken or pulverulent brown coal, tertiary coal, lignite or peat, previous to passing to passing the liquor through the usual filters, filter beds, or filter presses, substantially as herein set forth. 2nd. The herein described means or process of filtering and decolorizing sugar liquors, syrups and saccharine juices, which consists in passing the liquor through a mass of broken pieces or lumps of brown coal, tertiary coal, lignite or peat contained within any suitable vessel. 3rd. The herein described filtering and decolorizing medium for treating sugar liquors, syrups and saccharine juices, said medium consisting of a mass of broken or pulverulent brown coal, tertiary coal, lignite or peat contained within any suitable vessel, substantially as herein set forth.

No. 19,280. Revolving Cylinder Engine.

(Machine à Cylindre Tournant.)

John J. Blair, Tacoma, Washington, U.S., 9th May, 1884; 5 years.

Claim.—1st. In a revolving cylinder engine, the combination, with a fixed hollow cylindrical piston, of the swinging gates J, the revolving cylinder A and the revolving valves O held within the cylindrical valve chamber in the piston, substantially as herein shown and described. 2nd. In a revolving cylinder engine, the combination, with a fixed hollow cylindrical piston, of the swinging gates J, the revolving cylinder A, the revolving valves O held within the cylindrical chamber in the piston, and of the sliding valves P adapted to close either of the channels or ports K, or the channels or ports K1, substantially as herein shown and described. 3rd. In a revolving cylinder engine, the combination, with a fixed hollow cylindrical piston, of the swinging gates J, the revolving chamber A, the revolving valves O, held within the cylindrical chamber in the piston, and the sliding valves P adapted to close either the channels or ports K, or the channels or ports K1, substantially as herein shown and described. 4th. In a revolving cylinder engine, the combination, with a fixed cylindrical hollow piston E, of the revolving cylinder A, the revolving valves O held in a cylindrical chamber L in the piston, the sliding valves P having projections P1, and the sliding rod R in the shaft of the piston, provided with an annular groove R1 into which the projections P1 of the valves P pass, substantially as herein shown and described. 5th. In a revolving cylinder engine, the combination, with a fixed hollow cylindrical piston E, of the revolving cylinder A, the revolving valves O held in a cylindrical chamber L in the piston, the valve carrier N, the cylindrical journal M and the valve stem M1, secured in one head of the cylinder and connected with the valve carrier N in such a manner as to turn the same, substantially as herein shown and described. 6th. In a revolving cylinder engine, the combination, with the fixed piston E having a cylindrical chamber L in its middle, the cylinder A, the valve carrier N, the valves O, the valve stem M1 secured in the head A2 of the cylinder, the cylindrical journal block M mounted on a valve stem M1 having a squared end M2 projecting into a recess in the valve carrier, substantially as herein shown and described. 7th. In a revolving cylinder engine, the combination, with the fixed piston E provided with two pairs of gates J for running in opposite directions, of the revolving cylinder A, the shaft F connected with the piston, and provided with a steam inlet channel G and a steam outlet channel G1, substantially as herein shown and described. 8th. In a revolving cylinder engine, the combination, with the fixed piston E provided with two pairs of gates J for running in opposite directions, of the revolving cylinder A, the shaft F connected with the piston and connected with the piston, and provided with the steam inlet channel G and the steam outlet channel G1, and of the collars H, H1, held on the shaft and connected with the steam inlet and exhaust pipes, substantially as herein shown and described. 9th. The combination, with a cylindrical piston, of a cylinder, the opening of which is formed of two semi-cylinders elongated at the base or diameter edges, beyond the middle of the circle, whereby two meniscus-steam chambers will be formed between each half of the piston and the corresponding half of the cylinder, substantially as herein shown and described. 10th. The combination, with the cylindrical piston, of a cylinder, the opening of which is formed of two semi-cylinders united at their base or diameter edges, and elongated at the said edges beyond the middle of the circle, whereby two meniscus-shaped steam chambers will be formed between the surface of the piston and the inner surface of the cylinder, a cylindrical valve chamber being formed in the piston, substantially as herein shown and described.

No. 19,281. Attachment for Dress or Bodice Fronts. (Renfort pour Devant de Robe ou de Corsage.)

Ella Whaples, Jackson, Mich., U.S., 9th May, 1884; 5 years.

Claim.—An attachment to dress fronts consisting of the parts A, A1 provided with the buck steels B, B1, and adapted to be used substantially as and for the purposes described.

No. 19,282. Button. (Bouton.)

John Bird, Union City, Cr., U.S., 9th May, 1884; 5 years.

Claim.—1st. The swivelled button A, combined with the eyelet B, which has the lower enlargement d that projects beyond the back of the button, and integral cross-bar b, substantially as herein shown and described. 2nd. The button, constructed of the parts e and f, bar D and split eyelet a, all combine substantially as herein shown and described. 3rd. The button A having vertical central aperture and another horizontal aperture at right angles therewith, in which horizontal aperture the bar D is received and held so that it traverses the vertical aperture, as set forth.

No. 19,283. Locomotive. (Locomotive.)

William E. Cole, Montgomery, Ala., U.S., 9th May, 1884; 5 years.

Claim.—1st. The combination of the poles A and the locomotive frame E provided with grooved wheels B, each having a free longitudinal

play upon the axle at all times, substantially as specified. 2nd. The combination of the locomotive frame having cross beams curved upon their under surfaces, as at e, and resting upon the axles and having depending brackets c, with the axle C and grooved wheels B, having at all times a free longitudinal play thereon, substantially as specified. 3rd. The combination of a locomotive frame, provided with wheels having at all times a free longitudinal play upon the axles thereof, and means for driving each of the wheels independently of the other with chains, substantially as specified. 4th. The combination of a frame, a motor mounted thereon, a pair of sprockets mounted on each end of a shaft connected to said motor, and a front and rear wheel, each provided with a sprocket arranged on relatively-opposite sides of said wheels, and chains connecting the sprockets of the shaft and of the wheels, having a free longitudinal play upon the axle, substantially as specified. 5th. The combination of a boiler and engine front, and rear wheels having respectively inner and outer sprockets secured thereon, with a frame narrower at the front and having a shaft bearing sprockets and located between said wheels, and with independent chains connecting said shafts with the inner and outer sprockets, substantially as described. 6th. The combination of the engine C and a frame E having wheels B, each having a free longitudinal play upon their axle, and a sprocket b, connected by a chain b1 to a shaft D adapted to be rotated by said engine, substantially as described. 7th. The combination of the truck E having curved cross-beams e, pedestals c and straps c1 with the axle C and loosely journaled wheels B, having at all times a free longitudinal play upon the axles, substantially as described. 8th. The combination of the engine G, boiler H, crank shaft F, pinion A, gear D1, shaft D, sprockets d, d1, frame E, axle C, wheels B, sprockets b, and chains b1, substantially as shown and described. 9th. The combination of the truck E, the axles C having the middle portion of their upper surface slotted transversely, and the pedestals c adapted to receive washers between them and the axles, with sprocket wheels and chains adapted to drive each supporting wheel independently from the other, substantially as described.

No. 19,284. Lantern. (Lanterne.)

John B. Stetson, Lincoln, Me., U.S., 9th May, 1884; 5 years.

Claim.—1st. A lantern having a fixed tubular frame severed at a single point above the burner, and a globe mounted in an adjustable cage hinged to the reservoir or air chamber, and provided with a catch, whereby the globe and its cage may be tipped down independently of the frame for filling, trimming and lighting the lamp, and secured, when turned back, into position for use without detachment of any of the parts, substantially as set forth. 2nd. The globe D, plate E, disk F and straps G, in combination with a hinge and catch forming adjustable connections of the globe to the frame, for the purpose set forth. 3rd. In a lantern having a tubular frame, the globe mounted in a hinged cage, in combination with the severed tube J J and overlaps K, K, for the purposes set forth. 4th. In a lantern having a tubular frame, the combination of the frame with the hinged globe, the severed tube J J and the lock L P, substantially as set forth.

No. 19,285. Printer's Dry Rack.

(Rayon d'Imprimerie.)

George A. Clapper, Wooster, Ohio, U.S., 9th May, 1884; 5 years.

Claim.—1st. In a dry rack, the opposite corresponding notched standards D, D1, opposite corresponding notches or supports I, I, having bearings B, S, and one or more ratchet stops G, adjustable lattice leaves T, having shafts R, R1 adapted to enter the supports I, I, substantially as and for the purpose specified. 2nd. In a dry rack, the combination of the standards D, D1, united to form a rack frame, with opposite notches or supports I, I, in or upon the inner sides of the standards D, D1, each having opposite bearings B, S, and one or more ratchet stops C, substantially as and for the purpose specified. 3rd. In a dry rack, the combination, with the perpendicular rack frame D, D, having self supporting notches or supports I, I, of adjusting leaves or shelves T, adapted to connect with, and be supported by, said notches or supports so as to project from the rack frame either horizontally or obliquely upward, and also to be detached from the supports and rack frame at will, substantially as and for the purpose specified.

No. 19,286. Carriage Shaft Supporter.

(Support de Limonière de Voiture.)

George C. Eastman, Lewiston, Me., U.S., 9th May, 1884; 5 years.

Claim.—1st. The shaft supporter having its metallic parts B, B1 provided with grooves to receive the edge of the packing and connected by screws arranged in them to the said parts, in combination with the packing A, arranged between the rings of such parts with its inner and outer peripheries, essentially even or flush with the next contiguous surfaces of such rings, all substantially as set forth. 2nd. The shaft supporter composed of the two grooved metallic parts B, B1, the leather packing A and their connection screws C, D, E and F, a bucking tongue G adapted to two of the screws, and a bucking loop I of leather or other suitable material, arranged in eyes extended from the said two parts and connected by packing between them, as specified.

No. 19,287. Cut-out for Electric Lighting and other Electric Circuits. (Interrupteur pour Circuits d'Eclairage Electrique et Autres.)

William M. Thomas and The Grand Rapids Electric Light and Power Company, Grand Rapids, Mich., U.S., 10th May, 1884; 15 years.

Claim.—1st. The combination of the main circuit, the loop circuit, and means operated by the diversion of the current from the loop to automatically cut out the loop circuit, substantially as set forth. 2nd. The combination of the main circuit, the loop circuit, and means operated by the diversion of the current from the loop to automatically short-circuit the loop circuit, substantially as set forth. 3rd.