Claim.—1st. A filter, constructed as herein described, and provided with an air chamber containing air under pressure, in contact with the water, whereby the water becomes saturated with air, as described. 2nd. In a filter, constructed as herein described, the combination, with the downward extension of the cover, of a valve arranged and operated for cutting off the flow in case of accident to the filter, as described. 3rd. The combination of packing rings of compressible material, with grooves or corrugations formed in the upper part of the filter, and upon the adjacent faces of the ring and cover for ensuring a perfectly water-tight closure, as described.

No. 22,106. Improvements in Anaesthetics.

(*Perfectionnements dans l'Anesthésie.*)

Urial K. Mayo, Boston, Mass., U.S., 18th July, 1885; 5 years.

Claim.—1st. An anaesthetic composition, substantially as described, for use in surgical operations, etc., consisting of nitrous oxide gas and the vapour of alcoholic tincture of hops, stramonium, and valerian, in or about in the proportions specified. 2nd. An anaesthetic compound, consisting of nitrous oxide gas and the vapour of an alcoholic tincture of hops, stramonium and valerian and skull-cap, in or about in the proportions specified. 3rd. An anaesthetic compound, substantially as described, consisting of nitrous oxide gas and the vapour of an alcoholic tincture of hops, lady's-slipper and valerian, in or about the proportions specified. 4th. An anaesthetic compound, substantially as described, consisting of nitrous oxide gas and the vapour of an alcoholic tincture of hops, lady's-slipper, valerian and skull-cap, in or about in the proportions specified.

No. 22,107. Roller Holder for Photographic Films. (*Porte-Rouleau pour Ecrans Photographiques.*)

The Eastman Dry Plate and Film Company (Assignee of Willis A. Bannister and Louis H. Bannister), Rochester, N.Y., U.S., 18th July, 1885; 5 years.

Claim.—1st. The combination, in a roller-holder, of the measuring roll G and attachable spindle c_1 passing through the wall of the holder and carrying the indicator e_1, substantially as described. 2nd. The combination, in a roller holder, of the measuring roll G, detachable spindle c_1, indicator e_1, casing p, and transparent plate f, substantially as described. 3rd. In a roller-holder for exposing photographic films, and in combination with the enclosing case and rollers, the removable end or side supporting the corresponding ends of the rollers, substantially as described. 4th. The combination, in a roller-holder, of the measuring rolls G, removable end I, spindle C, and indicator i_1, substantially as described. 5th. The combination, in a roller-holder, with one of the film-carrying rolls, of a friction pad or brake arranged to act on the reverse or unsensitized side of the film, substantially as described. 6th. The combination, in a roller-holder, of the film-carrying rolls D and E, friction pieces J and K, and springs b, substantially as described. 7th. The combination, in a roller-holder, with the film-carrying rolls, of a measure roll provided with a series of film-perforating devices arranged longitudinally of the roll, and the latter having its circumference equal to the length of the film required for a single exposure, substantially as described. 8th. The combination, in a roller-holder, of the film-receiving roller E, provided with mechanism which prevents its reverse motion, and the film-carrying roller D, having connected therewith the spring x arranged to operate as a film-straining device, substantially as described. 9th. The combination, in a roller-holder, of the removable film-carrying roller D, sliding spindle c, and spring r, substantially as described. 10th. The combination, with the film-receiving roller E, provided with ratchet h_1 and spring-pawl u, of the film-carrying roller D, provided with spring x, the outer end of which revolves against a friction resistance, substantially as described. 11th. In combination with the enclosing case and the measuring roller contained therein, the removable end piece carrying the indicator, the latter when the said end piece is applied to the case being brought into operative connection with said measuring roller, substantially as described. 12th. The combination, with the roller D, of the spring x, collar z and ratchet M, the inner end of said spring engaging notches in the collar z, and the outer end resting in frictional contact with the teeth of ratchet M, substantially as described. 13th. The combination, with the roller D, of the spindle c, collar z, spring x and a frictional piece M attached to the holder, substantially as described. 14th. The combination, with the roller D, of the sliding spindle c and the collar z and spring x, arranged within a suitable recess in the wall of the holder, substantially as described. 15th. The combination, with the roller E, of the sliding spindle s and ratchet k_1, provided with a spring pawl and arranged within a recess in the wall of the holder, substantially as described. 16th. In a roller-holder for exposing photographic film, the combination, with the winding and unwinding rollers located in the inclosing case and provided at one end with fixed bearings therein, of the removable side or end piece, and the devices mounted thereon for engaging the ends of the said rollers and affording bearings for the latter, substantially as described. 17th. In combination with the supporting frame of a roller holder, a rotary tension device independently mounted or supported upon said frame, and a spool upon which the film is wound detachably applied to said tension device, substantially as described. 18th. In a roller-holder for photographic films, the combination with the frame, of the spindle supported therein and provided with means for engaging the end of the spool, and a yielding tension device intermediate the said spindle and the frame, substantially as described, whereby the spool can be removed or applied to the tension device and spindle at will. 19th. In a roller-holder, such as described, wherein the film supply is wound upon a spool and drawn therefrom at intervals to expose a limited surface and in combination with said spool, a longitudinally adjustable spindle provided with means for engaging the end of the removable spool, and a yielding tension device applied to said spindle, substantially as described.

No. 22,108. Sugar Sap Evaporator.

(*Appareil Evaporatoire de l'Eau Saccarine.*)

Arlington I. Farnam, Sutton, Que., 18th July, 1885; 5 years.

Claim.—The combination of the triangular round or square return fire flues D, with a corrugated bottom in the sap evaporating compartment B, and the sap heating comparnment E, with its supplemental heating chamber G and its opening H for cleaning purposes, together with the arrangement of the syrup compartment F, as described, with an evaporator, substantially as and for the purpose hereinbefore set forth.

No. 22,109. Process for Cutting Files.

(*Procédé pour Tailler les Limes.*)

Crawford M. Fairbanks, Lincoln, R.I., U.S., 18th July, 1885; 5 years.

Claim.—The process of cutting flat files, herein described, consisting in first preparing and cutting the edges only, and subsequently preparing and cutting the sides, as and for the purposes specified.

No. 22,110. Riding Saddle. (*Selle.*)

Theodore J. Wint, Leavenworth, Ks., U.S., 18th July, 1885; 5 years.

Claim.—1st. A saddle, having side bars hinged together at the pommel and cantle, by curved arms forming an arc of a circle and that slide in a line with each other, to enable the side bars to be adjusted to any requisite angle, the pivotal point or axis being on a line with the upper edges of the bearing surfaces of the side bars, and means for clamping the curved arms together, substantially as set forth. 2nd. The combination of the side bars B, and the curved arms a forming an arc of a circle, and adapted to work in a line with each other and adjust the side bars, substantially as described.

No. 22,111. Treating Yarn, Hemp, etc., for the Manufacture of Cordage.

(*Traitement du Fil, Chanvre, etc., pour la Fabrication du Cordage.*)

Moses H. Day, Roxbury, Mass., U.S., 18th July, 1885; 5 years.

Claim.—1st As a new article of manufacture used in the preparation, manufacture and treatment of yarn, hemp, and other materials employed in the manufacture of cordage, rope, and cables in their various forms, the within-described compound, consisting substantially of two per cent. of cotton seed oil, and ninety-eight per cent. of tar, as set forth. The within-described process of treating yarn, hemp and other materials used in the manufacture of cordage and rope in their various forms, the same consisting in saturating the said material with a compound of, substantially two per cent. of cotton seed oil, and ninety-eight per cent. of tar, as set forth.

No. 22,112. Force and Drain Faucet.

(*Pompe à Transvaser.*)

Albert J. Weatherhead, Cleveland, Ohio., U.S., 18th July, 1885; 5 years.

Claim.— The combination with faucet F, consisting of the tube or barrel B, having open end with tapering bore, and provided with discharge b_2, and the tube C having tapering end fitted to fill said tapering bore, and having opening c registering with said discharge b_2, of handle H, the inner end projecting through barrel B, and held by the ring c and spring c_2, and provided with the crank D connected to and operating the piston of the pump P, substantially as described and for the purpose specified.

No. 22,113. Friction Device for Printing Press Flyer. (*Appareil à Friction pour Volant de Presse d'Imprimerie.*)

Lewis W. Hyde, Brooklyn, and Albert H. Seaman, New York, U.S., 18th July, 1885; 5 years.

Claim.—1st. The printing press flyer B, consisting of a series of fingers or bars framed together, and provided with series of rollers C having points or projections D around their faces, and arranged with their axis transverse to the fingers, substantially as shown and described. 2nd. In combination with flyer B of a printing press, friction rollers C arranged with their axis transverse to the bars of the flyer, and their surface provided with points or projections, substantially as shown and described. 3rd. The combination of cross-bar E attached to the bars of a printing press flyer, rod F adjustably connected to bar E, as at G, forked rods H adjustably connected to rod F, as at I, and rollers C pivoted within the forked end of rods H, substantially as shown and described.

No. 22,114. Railroad Car Spring.

(*Ressort de Char de Chemin de Fer.*)

Charles T. Schoen and Charles Scott, Philadelphia, Pa., U.S., 20th July, 1885; 15 years.

Claim.—1st. A graduated bolster spring for railroad cars, composed of a group of spirally-coiled bars placed side by side, and in which the spiral (or spirals) having the greatest bearing and carrying capacity is not acted on by the load till after the other and weaker spirals of the group have been brought into action, and in which all the spirals under a given pressure shall become solid at the same time, all substantially as set forth. 2nd. The combination, in a spring for a vehicle, of a number of spirals A and B situated separately in position, as described, and further arranged, as described, whereby a portion of the spirals come into action only after the other portion of spirals have been compressed the desired amount, the whole constructed, arranged and operating substantially as described. 3rd. The combination, in a spring for a vehicle, of a number of spirals A and B situated separately id position, as described, and further arranged, as described, whereby a portion of the spirals come into action only after the other portion of them have been compressed the desired amount, and further arranged so that all the spirals will come to a solid at the same time as shown, the whole constructed and arranged as described, substantially as and for the purposes set forth. 4th. The combination, in a graduated vehicle spring, of the lower