

reservoir and a rest by which the reservoir is supported, substantially as described. 11th. The generating cylinder rest 10, having valve 12 and a discharge tube having a stop cock 22, in combination with chemical reservoir 7, having slots 8 and operating shaft 16 having cross-piece 17, whereby the reservoir is turned away from the valve, substantially as described.

No. 25,377. Method of and Apparatus for Carburetting and Mixing Gas and Air. (*Méthode de Carburation et de Mélange du Gaz et de l'Air, et Appareil pour cet objet.*)

George R. Cottrell, New York, and Ballard S. Dame, Brooklyn, N.Y., U.S., 17th November, 1886; 5 years.

Claim.—1st. The method of producing carburetted gas of the desired candle power for illuminating or heating purposes, which consists in heating the gas, then carbureting it, withdrawing such gas from the carburetor, and mixing with it a suitable proportion of atmospheric air and conducting it to the place of use. 2nd. The method of producing carburetted gas of the desired candle power for illuminating or heating purposes, which consists in heating the gas, then carbureting it by conducting it in a warm or heated state in contact with volatile hydro-carbon, withdrawing from the carburetor a portion of such gas, and mixing with it a definite and measured proportion of atmospheric air to adapt it for use, as described. 3rd. The method of producing carburetted gas of the desired candle power for heating or illuminating purposes, which consists in heating or warming the carbureting chamber, supplying heated gas thereto, and carbureting it with hydro-carbon vapors, withdrawing such carburetted gas and mixing with it a suitable measured proportion of atmospheric air to adapt it for use, as described. 4th. The method of producing carburetted gas of the desired candle power for illuminating or heating purposes, which consists in heating the gas and mingling therewith hydro-carbon vapors, withdrawing from the carburetor a portion of such gas and mixing with it a suitable proportion of atmospheric air, conducting such mixture into the carbureting chamber and mingling therewith heated, enriched gas to adapt it for use, as described. 5th. The method of producing carburetted gas of the desired candle power for illuminating or heating purposes, which consists in heating gas and enriching it with hydro-carbon vapor, then mingling with such enriched gas a mixture of gas and air united in definite and measured proportion, to adapt it for use, as described. 6th. The method of preparing a carburetted mixture of gas and air of the desired candle power for illuminating or heating purposes, which consists in enriching gas with hydro-carbon vapor, forming a mixture of gas and air by uniting them in definite and measured proportions, and then mixing the enriched gas with the mixture of gas and air to form a gas of the desired quality. 7th. The method of preparing a carburetted mixture of gas and air of the desired candle power for illuminating or heating purposes, which consists in vaporizing solid or crystalline hydro-carbons by heat and enriching gas with such vapors, then uniting with such enriched gas a measured proportion of atmospheric air to adapt it for use, as described. 8th. The method of producing carburetted gas of uniform candle power, consisting, first, in heating the gas, second, conveying it to the carbureting chamber and thereby enriching the gas, third, introducing a mixture of oxy-hydro-carbon gas and atmospheric air into the carbureting chamber with the heated and enriched gas, fourth, removing condensable matter from the mixture of enriched carburetted gas and oxy-hydro-carbon gas and air, and, fifth, purifying the mixture for illuminating purposes, substantially as described. 9th. The carbureting chamber, having the water-jacket, in combination with the purifying chamber communicating with such carbureting chamber, substantially as described. 10th. The carbureting chamber having the inclined upper sides, and the water jacket surrounding them, in combination with the purifying chamber communicating with said carbureting chamber, substantially as described. 11th. The combination of the carbureting chamber, the heating coils for supplying heated gas thereto, means for heating the coils, means for mixing gas and air, and the pipe for supplying the mixture of oxy-hydro-carbon gas and air to the carbureting chamber, substantially as described. 12th. The combination of the carbureting chamber, the pipes P for supplying heated gas thereto, the mixing chamber O communicating with the carbureting chamber, and the means for supplying oxy-hydro-carbon gas and atmospheric air to the mixing chamber in suitable proportions, substantially as described. 13th. The combination of the carbureting chamber, the mixing machine communicating therewith and having the pumps K and L, and the mixing chamber communicating with the mixing machine and also communicating with the carbureting chamber for supplying a mixture of gas and air to the latter, substantially as described. 14th. The combination of the carbureting chamber, having the gas gauge and the heating coils, with the pipe R having the burners under the heating coils, and the stop-cock connected to and controlled by the gas gauge, for the purpose set forth and substantially as described. 15th. The combination with a carburetor, a gas meter, a connecting supply pipe leading from the meter to the carburetor, drums or pumps for delivering gas and air in measured proportions, and pipes connecting such measuring drums with the carburetor, whereby carburetted gas and air may be mixed in suitable proportions to form illuminating or heating gas.

No. 25,378. Shingle Packer.

(*Cordeuse de Bardeau.*)

Isaac M. House, Gravenhurst, and Alfred R. Williams, Toronto, Ont., 16th November, 1886; 5 years.

Claim.—1st. A shingle packer of solid iron having adjustable ends C, D, one of which sides is pivoted so as to swing outwards, substantially as shown and for the purpose specified. 2nd. In a shingle packer, the combination of the upright arms E, E having notches, with the vertical blocks F, F, having corresponding ratchets, both engaging with pinions G, G, and being actuated by a lever H, which lever is retained by a rack J, all arranged and operating substantially as shown and for the purpose specified.

No. 25,379. Dynamo-Electric Machine.

(*Machine-Dynamo-Electrique.*)

Ernest P. Clark, Ann E. Applegate and James H. Seymour, New York, N.Y., U.S., 17th November, 1886; 5 years.

Claim.—1st. In a dynamo-electric machine, an external and an internal pole-piece, each pole-piece being the segment of a cylinder, and the said pole-pieces being connected by a plate of magnetic material, substantially as described. 2nd. In a dynamo-electric machine, a field-magnet, the axial lines of whose coils are without the cylindrical surface of a cylindrical or ring armature, a second field magnet, the axial lines of whose coils are within the cylindrical surface of a cylindrical or ring armature, and a third field-magnet, the axial lines of whose coils are perpendicular to the cylindrical surface of a cylindrical or ring armature, the first field-magnet having external pole-pieces, and the second and third field-magnets having common internal pole-piece, substantially as and for the purpose described. 3rd. In a dynamo-electric machine, the combination of a shaft provided with a ring armature, internal pole-pieces and magnets connecting them to each other, and two additional field-magnets, one of which has coils whose axial lines are parallel to the said shaft, and is connected to the external pole-pieces, and the other of which has coils whose axial lines are parallel to the said shaft and is connected to the internal pole-pieces, substantially as described. 4th. In a dynamo-electric machine, the combination of a shaft provided with an armature, internal pole-piece, and magnets connecting them to each other, and two additional field-magnets, one of which has coils whose axial lines are parallel to the said shaft, and is connected to the external pole-pieces, and the other of which has coils whose axial lines are parallel to the said shaft and is connected to the internal pole-pieces, and the said external and internal pole-pieces being connected by plates of magnetic material, substantially as described. 5th. The combination, with a rotating ring armature, of field-magnets having pole-pieces which are segments of cylinders, two of the said pole-pieces being shaped and located so as to be in close proximity to the outer surface of the said armature, and the other two being shaped and located so as to stand in close proximity to the inner surface of the said armature, the said outer and inner pole-pieces being connected by plates of magnetic material, substantially as described.

No. 25,380. Scale Section Liner. (*Règle.*)

Daniel W. Briggs, Saginaw, Mich., (assignee of Casimir N. Podgorski, Northampton, Mass.), U.S., 17th November, 1886; 5 years.

Claim.—1st. The within-described improved scale section liner consisting of a straight edge ruler provided with teeth to a scale, and a triangle set square or other figure having a straight base provided with one or more teeth corresponding to and engaging with those of the ruler, and adapted to be moved over said ruler to have the intervals of movement of its ruling edges determined by the teeth of the ruler, the two combined and operating, as and for the purpose set forth. 2nd. The notched plate d attached to the triangle or set square, and made adjustable thereon, substantially as described. 3rd. The drawing board C having the rule B attached thereto, and provided with the notched segment or plate b, substantially as described. 4th. The drawing board or other support C having the adjustable ruler B attached thereto, and provided with the notched plate b, substantially as described. 5th. The drawing board C having the rule B applied thereto, and provided with the notched plate b, in combination with a straight edged drawing implement provided with the notched plate d, substantially as described.

No. 25,381. Telegraphing or Telephoning from Stations to Moving Cars. (*Moyens de Télégraphier ou Téléphoner des Stations aux Chars en Mouvement.*)

William Vogel and Otto Wasmansdorff, Chicago, Ill., U.S., 17th November, 1886; 5 years.

Claim.—1st. The combination, with a railroad car, of a spring-supported receiving chamber, such chamber being formed with double walls and provided with an interposed packing, as and for the purpose set forth. 2nd. The combination, with a railroad car, of a receiving chamber which is placed therein and suspended upon springs, and the brackets for keeping the lower end of the chamber from moving about, substantially as described. 3rd. The combination of the railroad car, a suspended receiving chamber placed therein, and suitable electrically-operated mechanisms in the chamber with the connecting wires, a conducting connection which is applied to the under side of the car, a support which extends along the main track and upon which the conducting-connection travels, and a conducting wire placed upon the insulating material, and connected to the support, substantially as specified. 4th. The combination, with a railroad car, of a receiving chamber P, springs Q, cross beam R, springs S, and hangers T, the parts arranged as and for the purpose set forth. 5th. The combination, with a railroad car, of a receiving chamber P formed with double walls, and provided with interposed packings, springs Q, cross beam R, springs S, and hangers T, the parts arranged as and for the purpose set forth.

No. 25,382. Cigar Bunching Machine.

(*Machine à Lier les Cigares.*)

Adolph Lowin, Max Martin, Charles Schutz, and Levy Brothers, (assignees of Nicholas H. Borgfeldt and Adolph C. Schutz,) New York, N.Y., U.S., 17th November, 1886; 5 years.

Claim.—1st. The cylinder B having bottom a and shute C, combined with the rotary disk D having notches b, upper disk E having apertures d and scrapers H, for operation, substantially as herein shown and described. 2nd. The combination of the measuring disk D having the larger notches b with the upper disk E having smaller notches or apertures d, part of each notch b being covered by the disk E, as specified. 3rd. The combination of the cylinder B, and notched disk D on shaft F, with the stirrer H, and mechanism for