

roller held and movable in said box like guide, substantially as set forth. 6th. The combination of the vertical and laterally movable shelving section and the backing line for moving such section laterally, substantially as set forth. 7th. The combination of the vertically and laterally movable shelving section, the drag line for moving the shelving section laterally and the movable connection between said section and the backing line, substantially as set forth. 8th. An apparatus, substantially as described, comprising the guideways having horizontal portions provided at their outer ends with outwardly curved portions and the shelving sections having portions movable in said guideways, substantially as set forth. 9th. An apparatus substantially as described comprising the elevated framing having guideways for the movable shelving section and the shelving section having portions engaging such guideways, substantially as set forth. 10th. The combination of the framing having vertical and lateral guideways, the shelving sections having portions moving in said guideways, the backing line having a vertically movable connection with the shelving section and adapted to adjust the latter horizontally, the counterbalance cord and means whereby said cord is movably connected with the shelving section whereby the stress will not hinder the horizontal movement of the shelving section, substantially as set forth. 11th. The combination of the guideways and the movable shelving section having rollers operating in said guideways, substantially as set forth. 12th. An apparatus, substantially as described, comprising the framing having guideways arranged one above the other and the shelving section having at its front and rear edges projections operating in said guideways, substantially as set forth. 13th. An apparatus, substantially as described comprising the movable shelving section, the guideways for the front and rear edges of said section, the guideways for the front of the section being projected in advance of those for the rear of said section, and portions of the section in position to operate in said guideways, substantially as set forth. 14th. An apparatus, substantially as described, comprising the movable shelving section provided at its front and rear edges with portions to operate in the guideways the portions at the front edge being in a plane above those at the rear, the guideways having portions arranged one above the other in position to receive the portions on the shelving section, the guideway receiving the front portion of the shelving being projected in advance of that which receives the rear portion of the section, substantially as set forth. 15th. The improvement in shelving herein described comprising the movable shelving section and the cable or cord by which the shelving section may be raised and lowered, substantially as set forth. 16th. In an apparatus, substantially as described, the combination of the vertically and laterally movable shelving section and the counterbalance cord or cable detachably connected therewith substantially as described. 17th. In an apparatus, substantially as described, the combination of the vertically and laterally movable shelving section the counterbalancing cord or cable connected with the said section and the counterbalancing cord to cable detachably connected with the front end of the shelving section, substantially as set forth. 18th. In an apparatus, substantially as described the combination of the framing having a guide for the front counterbalancing cord and such cord having a head stopping below the said guide and the vertically and laterally movable shelving section having a catch engaging above the head on the counterbalancing cord, substantially as shown and described.

No. 62,493. Separation and Purification of Nitrate of Ammonia. (*Séparation et purification de nitrate d'ammonique.*)

Robert N. Lennox, Fulham, London, England, 1st February, 1899; 6 years. (Filed 8th February, 1899.)

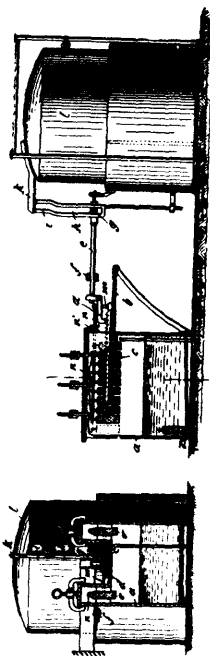
Claim.—1st. The separation of nitrate of ammonia from a mixture of sulphate of ammonia and nitrate of soda or nitrate of other metal, by distillation in vacuo, or under a pressure less than that of the atmosphere at such a temperature (not above 230° Centigrade) that material destruction of the nitrate of ammonia does not occur, substantially as hereinbefore described. 2nd. The purification of ammonia from non-volatile substances by distillation in vacuo, or under a pressure less than that of the atmosphere and under conditions of heating not above 230° Centigrade, substantially as hereinbefore described. 3rd. The manufacture of nitrate of ammonia by mixing sulphate of ammonia with the nitrate of a metal capable of double decomposition, as described, placing the mixture in a closed vessel and reducing the pressure therein, and then heating the vessel to distil the nitrate which is afterward condensed, substantially as hereinbefore described.

No. 62,494. Acetylene Manufacturing Apparatus. (*Appareil de manufacture d'acétylène.*)

Hermann Otto Marks, 10 Schöneberger Ufer, Berlin, Germany, 1st February, 1899; 6 years. (Filed 11th March, 1898.)

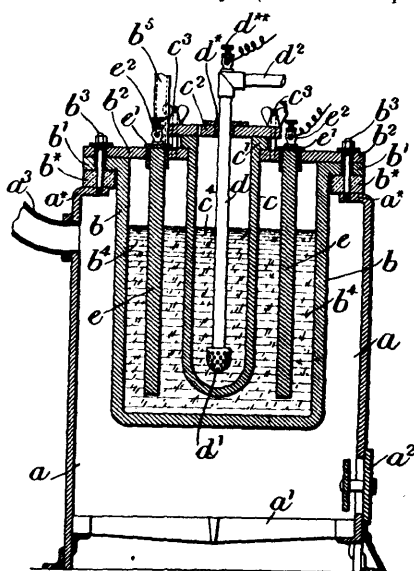
Claim.—1st. In acetylene generating apparatus, supplying definite charges of calcium carbide to the gas generating apparatus in proportion to the consumption of gas, by carrying the said charges on rods or bars which receive a step-by-step motion from the bell of the gas holder, so as to cause the charges to fall successively from the rods into the water in the generator, at different parts thereof, constructed and arranged, substantially as hereinbefore described. 2nd.

In acetylene gas generating apparatus as shown, arranging the carbide charges or cartridges *c* in two rows, the charges of the one



row being shifted in position relatively to those of the other row, so that cartridges will fall alternately from each row into the water, constructed and arranged, substantially as hereinbefore described. 3rd. In acetylene gas generating apparatus as shown, connecting to the bell of the gas holder a bar with cam-shaped groove or slot *h* *i* which actuates a rod *a* and catch *d*, by means of which a toothed bar *c* and rods *n* have the requisite step-by-step motion imparted to them for supplying successive charges of calcium carbide to the water of the gas generator, constructed and arranged substantially as hereinbefore described.

No. 62,495. Electric Battery. (*Batterie électrique.*)



John Laskey Dobell, 46 Connaught Road, Harlesden, Middlesex, England, 1st February, 1899; 6 years. (Filed 14th February, 1898.)

Claim.—1st. An electric battery, comprising a trough or container, a porous pot suspended within the trough or container, a quantity of lead within the trough or container and outside the porous pot, carbon or carbonaceous matter arranged in or fed to the lead, a quantity of a suitable oxygen carrier within the porous pot, which will readily take up oxygen from air or other suitable oxidising agent and readily give it up through the porous pot to the fused