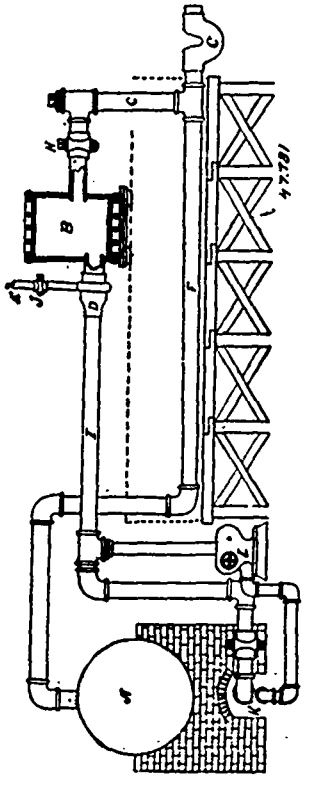
ate its ends, having two of its opposite side edges parallel, or nearly so, one with the other and the remaining ones, or the end edges of the plate, approximately parallel with each other, but forming acute and obtuse angles with the first named edges, a perforation near each of said end edges for receiving a bolt, and an upward curve between the lowest point in the aforesaid downward curve and each end of the plate whose highest point is at a line passing transversely of said plate through said bolt perforations, a lip extending along the edge of each of said ends and projecting from one face of said plate from its commencing point, at approximately one third of the distance from the obtuse to the acute angle of said ends, the projection of said lips being gradual from their commencing point toward the latter angle, and said lips being adapted when in contact with a bolt head or nut, to penetrate said parts and to thereby hold the bolt from turning while screwing down its nut, substantially as set forth. 7th. A nut-locking washer-plate, consisting of a thin, four sided metallic plate of resilient metal, perforated near each end for receiving a bolt and being concave in the direction of its length intermediate its ends, the circle of said concavity at the opposite side edges of said plate being eccentric, one to the other, and producing thereby a winding surface to said plate, a lip extending along each end and projecting from the concave face of said plate from its commencing point, at approximately one-third of the distance from an obtuse toward an acute angle of said ends, said projection having a gradual increase from its commencing point toward the latter angle, and said lips being adapted when in contact with a bolt head or nut, to penetrate said parts, and to thereby hold the bolt from turning while screwing down the nut, or to hold the nut from loosening on said bolt, substantially as described.

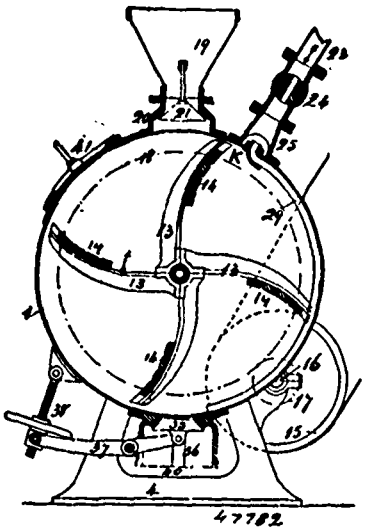
No. 47,781. Apparatus for Separating and Utilising Gas for Heating Purposes. (*Appareil pour séparer et utiliser le gaz pour le chauffage.*)



Martin Jesse Woodward, Petrolia, Ontario, Canada, 24th December, 1894; 6 years.

Claim.—1st. The combination of one or more oil stills and condenser pipes with U-shaped pipe or pipes at the outlet or outlets connected to a receptacle by a pipe and valve as herein specified, and thence connected with a furnace or furnaces by one or more pipes. 2nd. The combination with one or more stills or condenser pipes with U-shaped pipe or pipes at the outlet or outlets connected to a receptacle by a pipe and valve, and thence connected by a pipe or pipes containing a gas sucker as above described, into which steam is conveyed, causing a more rapid flow of gas to the furnace or furnaces as well as moistening same, as herein specified. 3rd. The combination of one or more stills and condenser pipes with U-shaped pipes at the outlet or outlets connected to a receptacle by a pipe and valve, and thence connected with a pipe or pipes containing an exhaust air pump either alone or in combination with the gas sucker as above described to the furnace or furnaces.

No. 47,782. Apparatus for Manufacturing White Lead. (*Appareil pour la fabrication de blanc de plomb.*)

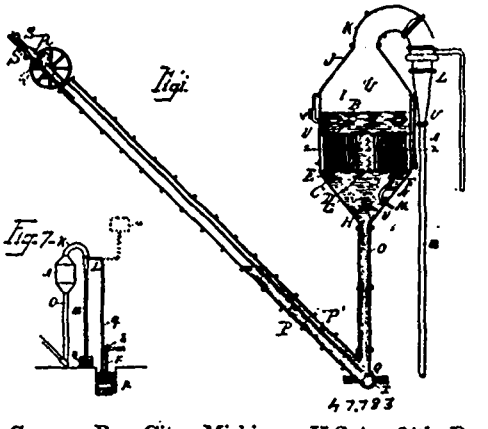


John William Henry James, Westminster, Middlesex, England, 24th December, 1894; 6 years.

Claim.—1st. In apparatus for carbonating lead oxide and for drying the carbonate produced, the combination of a cylinder 1, water inlet cock and ways 26, charging hopper 19 and bell 21, acetic acid cock 22, carbonic acid cock 24, trough 25, and distributing pipes 29, escape cock 31 and valve 32, discharge valve 33 and beaters 13 on the hollow rotating spindle 5 connected to a steam pipe, substantially as set forth. 2nd. In apparatus for carbonating lead oxide and for drying the carbonate produced the combination of stove *a*, movable trolleys B, and drying frames H, substantially as set forth.

No. 47,783. Salt Evaporator.

(*Appareil évaporatoire pour le sel.*)



Thomas Craney, Bay City, Michigan, U.S.A., 24th December, 1894; 6 years.

Claim.—The combination with the casing A, of the escape pipe leading from the top thereof, the condenser L into the top of which the pipe enters, the vertical discharge pipe *m* leading from the bottom of the condenser, a water seal at the lower end of the discharge pipe, an unbroken or continuous supply pipe *q* leading into the top of the condenser, its lower end extending down to a point near the base of the apparatus and located in a suitable water supply, and a pump at or near the lower end of the supply pipe for forcing the water through the same, substantially as described.

No. 47,784. Draft Regulator for Brick Kilns.

(*Régulateur du tirage pour fours à brique.*)

Carl Frederic Kaul, Madison, Nebraska, U.S.A., 24th December, 1894; 6 years.

Claim.—1st. In a draft regulator, the combination, with a frame, of a turn-plate, a vane carried by said turn-plate, a fan pivotally mounted on said turn-plate, a horizontal shaft in bearings carried by said frame, a weighted arm extending from said shaft, a rod connecting said fan with said weighted arm, and mechanism