

UNITED STATES PATENT OFFICE.

ARESTILDE SAVOIE, OF LOCKPORT, LOUISIANA.

SUGAR-BOILER.

SPECIFICATION forming part of Letters Patent No. 263,613, dated September 5, 1882.

Application filed June 12, 1882. (No model.)

To all whom it may concern:

Be it known that I, ARESTILDE SAVOIE, of Lockport, in the parish of Lafourche and State of Louisiana, have invented certain new and useful Improvements in Sugar-Boilers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to apparatus for evaporating or boiling sugar and other saccharine matter, and has for its object to provide a simple, durable, and inexpensive device. To this end it consists in certain improvements in the construction and operation of the same.

In the drawings, Figure 1 is a top plan; Fig. 2, a vertical longitudinal sectional view, and Fig. 3 a cross-section on the line *xx*, Fig. 1.

Referring by letter to the drawings, A designates the boiler, which is of tapering shape, having large end, B, small end, C, sides D D, and bottom E, and is mounted at each end on front and rear plates, F G, respectively. The top H of the boiler is provided at its larger end with concave pans I I, and also with a series of concave pans, J, extending in a line toward the smaller end of the boiler and gradually diminishing in size as the sediment decreases as the sugar evaporates and flows toward the smaller and less heated end of the boiler. The top is divided into several compartments, each having a pan, by partitions K, having suitable gates or doors, L.

M is a fire-door in front plate, F, through which the fuel is fed to the fire, which is arranged under the boiler, and N is an opening

in rear plate, G, for the escape of smoke up through the chimney or flue P, (shown in dotted lines.)

O is a heating flue, running through the boiler, with its rearend opening into the flue P. The front end of the flue O may be connected in any suitable manner either with a fire-chamber under the boiler or with a separate stove or furnace.

Q are water-gages, and R a safety-valve. S are supports for the stirrers.

The operation and advantages of my invention will be readily understood. The saccharine juices are first placed at the large end of the boiler, (the latter being of course filled with water and the fire under the boiler started,) where exposed to the greatest heat, and are passed successively through the different compartments toward the smaller end, the heat diminishing as the evaporation progresses. In each compartment the denser portion or sediment remains in the pans to be afterward removed.

I claim and desire to secure by Letters Patent—

In an evaporator or boiler for sugar and the like, the herein-described boiler, tapering toward one end, and provided in its top with concave pans, which diminish in size toward the smaller end of the boiler, and are inclosed by partitions having suitable gates, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

ARESTILDE SAVOIE.

Witnesses:

GOURDAIN SAVOIE,
JAMES A. HARGIS.