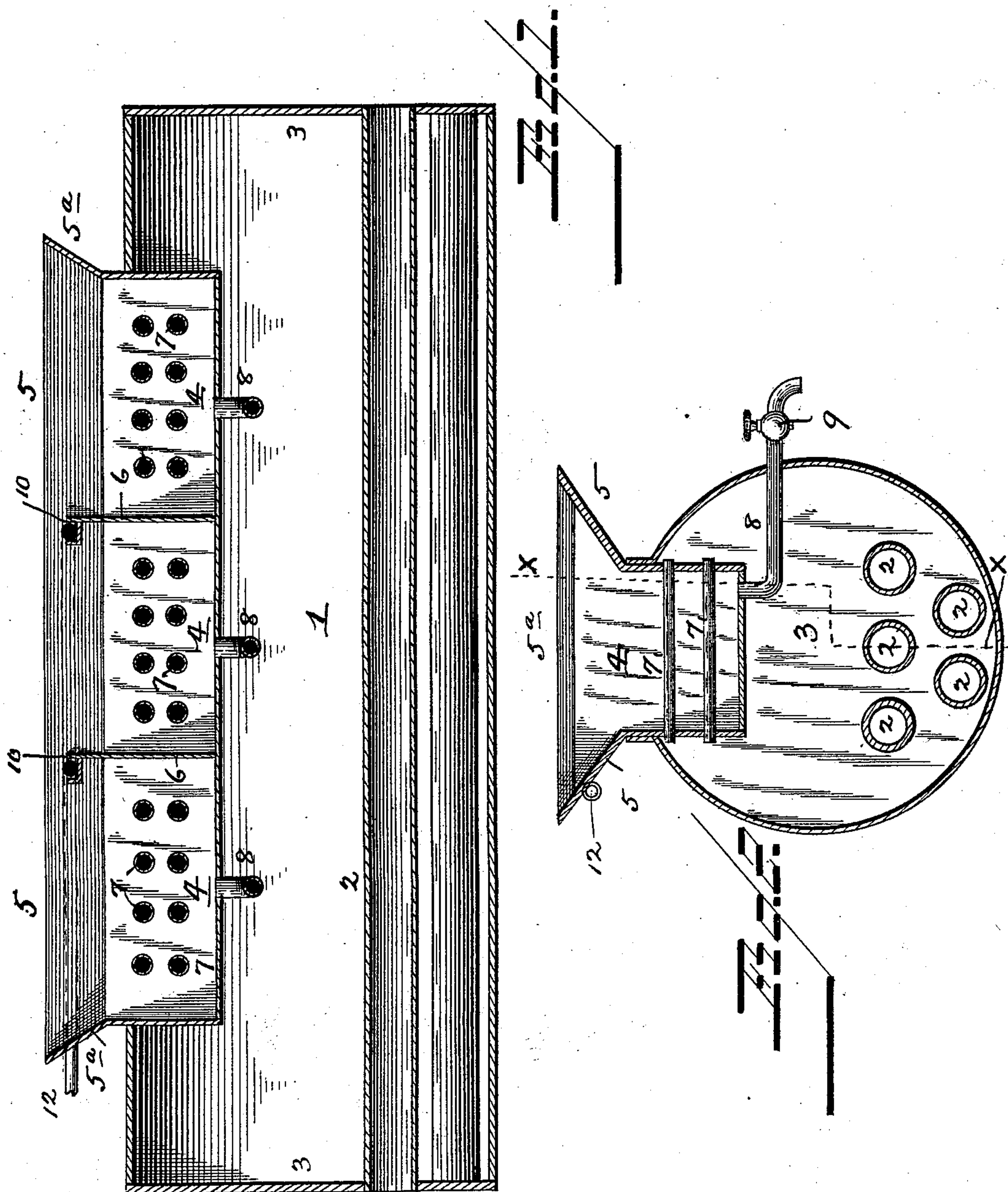


(No Model.)

S. A. POCHÉ.
EVAPORATING PAN.

No. 517,765.

Patented Apr. 3, 1894.



WITNESSES:
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UNITED STATES PATENT OFFICE.

SIMEON ALEXANDER POCHÉ, OF DONALDSONVILLE, LOUISIANA.

EVAPORATING-PAN.

SPECIFICATION forming part of Letters Patent No. 517,765, dated April 3, 1894.

Application filed October 16, 1893. Serial No. 488,317. (No model.)

To all whom it may concern:

Be it known that I, SIMEON ALEXANDER POCHÉ, a citizen of the United States, and a resident of Donaldsonville, in the parish of Ascension and State of Louisiana, have invented certain new and useful Improvements in Evaporating Apparatus; 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.

My invention relates to improvements in boilers for evaporating cane and other juice in the manufacture of sugar, and its object is to provide an improved construction of the same, whereby I secure superior advantages with respect to economy in fuel and efficiency in operation.

The invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings: Figure 1 is a central longitudinal section of a boiler and evaporating pan constructed in accordance with my invention; on the line $x-x$, Fig. 2. Fig. 2 is a cross section of the same.

In the said drawings, the reference numeral 1 designates a cylindrical boiler provided with a series of flues 2, in its lower part connected with the heads 3. These flues can be of any number and size found convenient or desirable, five being shown in the present instance.

In the upper part of the boiler is a rectangular opening in which the evaporating pans 4, are located. Three of these pans are illustrated in the drawings, but their number may be varied if desired, or circumstances require.

These pans as shown, are formed of a rectangular box, projecting down into the boiler a sufficient distance through the opening therein, and are formed with outwardly flaring sides and ends 5 and 5^a, and divided by means of partitions 6, into a number of compartments which constitute the pans proper. Passing through these compartments are a

number of steam pipes 7 which communicate with the steam space of the boiler, and the bottom of each compartment is provided with a draw off pipe 8, having a cock 9. The upper edges of the partitions are formed with grooves or recesses 10 forming skim troughs, into which the scum rising to the top of the liquid is directed by suitable implements during the operation of the apparatus. These troughs are connected with a pipe 12 provided with a cock, by which the contents can be drawn off when desired. The boiler is set in any form of furnace found applicable, so that the products of combustion therefrom will pass through the flues, heating in their passage, the water contained in the boiler, which being converted into steam will pass through the pipes 7 which will result in the evaporation of the juice contained in the pans. From the above it will be seen that the pans themselves will not only be heated by the steam surrounding the lower part thereof, but the liquor contained therein will be heated by the pipes 7 passing therethrough, thus effecting a great economy in fuel.

Having thus described my invention, what I claim is—

In an evaporating apparatus, the combination with a boiler having an opening in its upper part, and provided with a series of flues, of the rectangular box seated in said opening, having flaring sides and ends, the partitions located therein having troughs in their upper edges and dividing the box into a series of compartments, the drainage pipe connected with said troughs, the transverse pipes passing through said compartments and communicating with the steam space of the boiler and the draw off pipes connected with said compartments, substantially as described.

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

SIMEON ALEXANDER POCHÉ.

Witnesses:

I. C. BRAND,

J. T. NOLAN.