

(No Model.)

J. H. B. BUTTS.
EVAPORATOR AND SKIMMER.

No. 442,013.

Patented Dec. 2, 1890.

Fig 1.

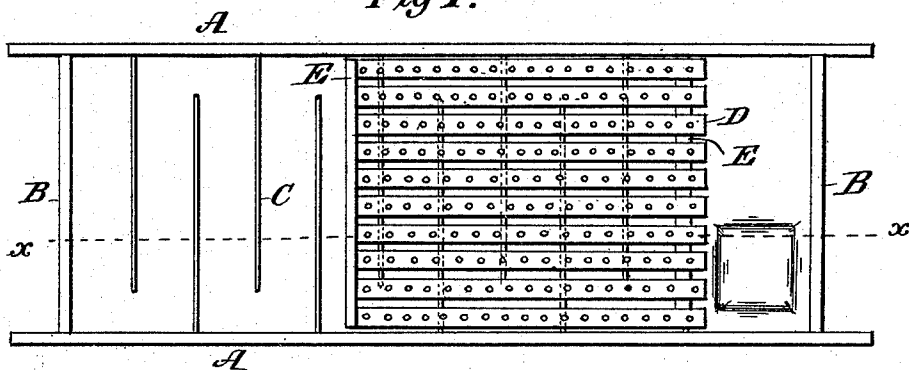


Fig 2.

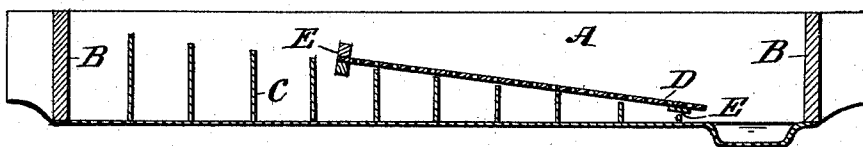
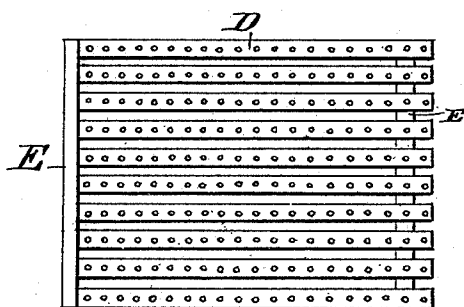


Fig 3.



Witnesses
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Inventor
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By his Attorney's
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UNITED STATES PATENT OFFICE.

JOHN HENRY BARTON BUTTS, OF THOMASTON, GEORGIA.

EVAPORATOR AND SKIMMER.

SPECIFICATION forming part of Letters Patent No. 442,013, dated December 2, 1890.

Application filed November 26, 1889. Serial No. 331,642. (No model.)

To all whom it may concern:

Be it known that I, JOHN HENRY BARTON BUTTS, a citizen of the United States, residing at Thomaston, in the county of Upson and State of Georgia, have invented certain new and useful Improvements in Evaporators and Skimmers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to a means for skimming sirup in evaporators.

The object of the invention is to automatically remove the scum from boiling sirup and provide a simple means for carrying the invention into successful operation.

The improvement consists of the novel features which will be hereinafter more fully described and claimed, and which are shown in the annexed drawings, in which—

Figure 1 is a top plan view of an evaporator embodying my invention. Fig. 2 is a longitudinal section on the line X X of Fig. 1. Fig. 3 is a top plan view of the skimmer detached.

The invention consists in placing a skimmer of novel construction at an incline over the evaporator in such a manner that the said skimmer will incline upwardly from the juice-entrance end of the evaporator, whereby the scum in the process of boiling the juice will collect on the bars of the skimmer and gravitate to the entrance end of the evaporator.

To carry the invention into successful operation, the deflecting-plates of the evaporator are made of different relative heights, whereby the skimmer is given the inclined position.

The evaporator is of ordinary construction, being composed of the sides A, the end pieces B, and the cross deflecting-plates C.

The skimmer is composed of parallel slats D, which are perforated at intervals, and cross-slats E, to which the slats D are fastened. The skimmer is placed so that the slats D will extend at right angles to the deflecting-plates C.

The operation of the skimmer is as follows: Being placed on the deflecting-plates, it will incline upward from the lower or juice-entrance end of the evaporator, and the scum from the sirup will pass between and through the openings in the slats and gravitate to the said lower end of the evaporator, where it will accumulate and can be removed from time to time. The slats D are shown perforated. However, this is not essential, as the perforations may be omitted.

Saccharine juices when subjected to a high temperature foam, and the foam rising in the present instance passes between the slots of the skimmer and striking the air some of it is condensed and runs back on the slots of the skimmer, and as the scum forms and collects in the coolest places obviously it will collect on the slots and be carried down or toward the entrance end of the evaporator by the condensed foam.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination, with the evaporating-pan having cross deflecting-plates of graduated height, of the slats D, supported on the upper edges of the cross-plates and having spaces between their edges, and provided in sufficient number to extend from one side of the pan to the other, and inclining upward from the entrance end of the pan, substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN HENRY BARTON BUTTS.

Witnesses:

C. M. PASLEY,

G. W. T. HANNAH.