

(No Model.)

G. W. RODGERS.
EVAPORATOR OR SIRUP PAN.

No. 445,266.

Patented Jan. 27, 1891.

Fig. 1.

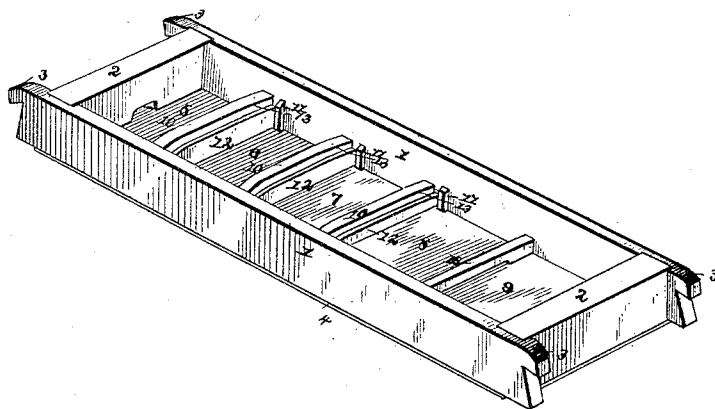


Fig. 2.

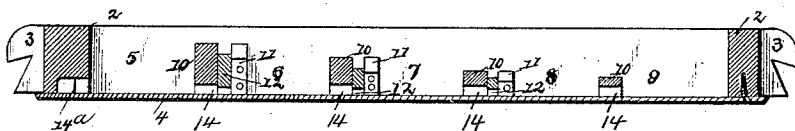
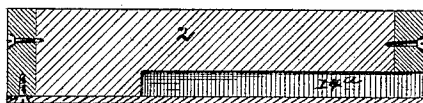


Fig. 3.



Witnesses:

Isaac Behrend.

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UNITED STATES PATENT OFFICE.

GEORGE W. RODGERS, OF LISBON, LOUISIANA.

EVAPORATOR OR SIRUP-PAN.

SPECIFICATION forming part of Letters Patent No. 445,266, dated January 27, 1891.

Application filed May 27, 1890. Serial No. 353,312. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. RODGERS, a citizen of the United States, residing at Lisbon, in the parish of Claiborne and State of Louisiana, have invented a new and useful Evaporator or Sirup-Pan, of which the following is a specification.

This invention has relation to improvements in evaporator or sirup-pans, and among the objects in view are to provide a pan so constructed as to effect a saving of the sirup, which is self-skimming, and which will avoid any scorching of the sirup or juice during evaporation.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of an evaporating or sirup pan constructed in accordance with my invention. Fig. 2 is a longitudinal section. Fig. 3 is a transverse section through the rear end bar.

Like numerals of reference indicate like parts in all the figures.

In constructing my pan I employ the usual longitudinal side bars 1, arranged parallel to each other and connected near their ends by end or transverse bars 2, let into the side bars, which side bars are continued for a short distance beyond the end bars and reduced to form handles 3, whereby the pan may be conveniently carried. To the frame thus constructed is secured the sheet-metal bottom plate 4, by screws or otherwise, which securing devices take into the under edges of the side and end bars.

The space within the pan is divided into a series of compartments, in this instance five, and designated as 5, 6, 7, 8, and 9, which compartments are formed by a series of transverse partitions 10. The partitions 10 are graded as to depth, the first partition being very narrow and extending but a slight distance above the bottom of the pan, the second slightly deeper, and the third still deeper, and so on throughout the series. With the exception of the narrowest partition, there is mounted in front of each a pair of guide-blocks 11, and between the partitions and the guide-blocks are located vertically-sliding

gates 12, adapted to regulate the width of the slots or passages. The upper edge of each partition at its opposite ends is beveled or cut away, as at 13, so that its ends are lower than the central portion of the partition, and the lower edge is transversely recessed, as at 14, to form communicating passages. The rear end bar 2 is provided at its center with a drainage-port 14^a, which port passes through the end bar and parallel with the same and through one of the side bars.

The raw sirup is first poured into the compartment 9 and passes from the same through the passage 14 into the next compartment 8, and so on from one compartment to the other until the last compartment is reached, by which time the juice has been reduced to a thick sirup, which passes out slowly through the discharge-port in the end bar 2. The discharge-port being in the center of the end bar the drainage from the last compartment is central and even and unlike the drainage heretofore employed, which took place through a side port or opening, and therefore drained at one side of the pan more rapidly than at the other, so that the sirup at the latter side was retained over the fire longer than the sirup at the drain side and thereby was liable to become burned.

The skimmings that rise from the sirup as it is evaporated overflow the edges of the several partitions at the sides of the same and flow from one compartment rearwardly to the other until they reach the first compartment 9, in which the raw juice is introduced and from which the skimmings may be removed with facility and very little waste.

Having described my invention, what I claim is—

1. The herein-described evaporating-pan, the same consisting of a rectangular frame having a bottom and a series of transverse partitions, forming a series of compartments, and provided with openings in their lower edges to afford communication between the compartments, the rear end bar of the frame being provided with a draw-off passage leading from one end of the said bar to about the center thereof and communicating with the end compartment of the series at that point, substantially as specified.

2. The herein-described evaporating-pan,

the same comprising the opposite end and side bars, the rear one of which is provided with a longitudinal sirup-passage terminating at one end and at the center of the bar, the
5 opposite side bars, the bottom, the series of transverse partitions gradually increasing in depth from front to rear, their lower edges being cut away to form passages and their upper ends notched to form overflow-passages,

and gates located in front of the first-mentioned passages, substantially as specified.

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

GEORGE W. RODGERS.

Witnesses:

B. F. STEVENS,

J. R. RAMSEY.