

(No Model.)

H. BASANTA.
FEED PIPE FOR VACUUM PANS.

No. 478,906.

Patented July 12, 1892.

Fig. 1.

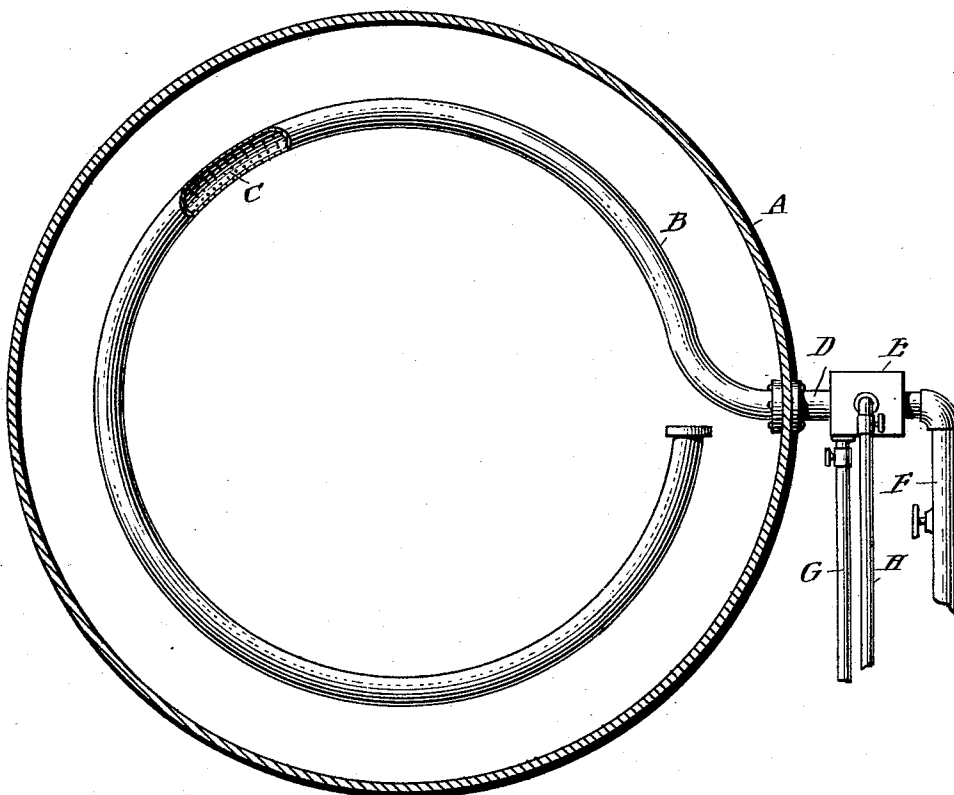
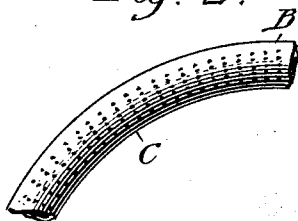


Fig. 2.



WITNESSES:

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HENRY BASANTA, OF PONCE, PORTO RICO.

FEED-PIPE FOR VACUUM-PANS.

SPECIFICATION forming part of Letters Patent No. 478,906, dated July 12, 1892.

Application filed September 25, 1890. Serial No. 366,083. (No model.)

To all whom it may concern:

Be it known that I, HENRY BASANTA, of Ponce, Porto Rico, Spanish West Indies, have invented a new and Improved Feed-Pipe for Vacuum-Pans, of which the following is a full, clear, and exact description.

The invention relates to vacuum-pans for boiling sirups; and its object is to provide certain new and useful improvements by which the sugar in the pan is formed into regular well-grained crystals.

The invention consists of certain parts and details and combinations of the same, as will be hereinafter fully described, and then pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a plan view of the improvement as applied, the vacuum-pan being in section; and Fig. 2 is an enlarged inverted plan view of part of the feed-pipe.

In vacuum-pans as heretofore constructed the sirup is forced through the supply-pipe with considerable pressure, so that a considerable portion of the newly-formed grains or sparks are melted shortly after they are formed. Thereby the sugar crystals become very irregular. In the apparatus presently to be described the feed of the sirup into the pan is uniform, so that the newly-formed grains or particles do not melt, and consequently retain their size to form well-portioned and regular sugar crystals.

The vacuum-pan A, of the usual construction, contains a feed-pipe B, preferably made ring-shaped, as illustrated in Fig. 1, and provided in its bottom with a series of perforations C, located equidistant apart and of uniform size. One end of the feed-pipe B is closed, while the other end is attached to the wall of the vacuum-pan and registers with a short

pipe D, leading to a chamber E, into which discharges the supply-pipe F, connected in the usual manner with a suitable source of sirup-supply.

Into the chamber E also lead the pipes G and H, each having a valve and of which the pipe G is connected with the steam-compartment of a boiler, so as to steam out the feed-pipe B whenever desired. The pipe H serves to introduce chemicals—such as sulphuric acid—into the vacuum-pan A. Ordinarily the valves in the pipes G and H are closed. Now the sirup is forced through the supply-pipe F, the chamber E, and short pipe D into the feed-pipe B, which discharges the sirup through the perforations C into the vacuum-pan A. As the perforations C are of the same size and regularly arranged, the discharge of the sirup is uniform, the pressure being equally distributed throughout the feed-pipe. Thus any crystals contained in the sirup are not liable to break and well-grained sugar is formed in the process of boiling. The pipe is in the form of an open ring to permit it to freely expand and contract.

It is understood that the feed-pipe B is preferably located directly above the heating-coil of the vacuum-pan.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with the vacuum-pan and its perforated feed-pipe, of the chamber E, having a pipe D connecting it with the feed-pipe, a sirup-supply pipe F, entering the chamber, and valved steam and chemical supply pipes G H, also entering the said chamber E, substantially as set forth.

HENRY BASANTA.

Witnesses:

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