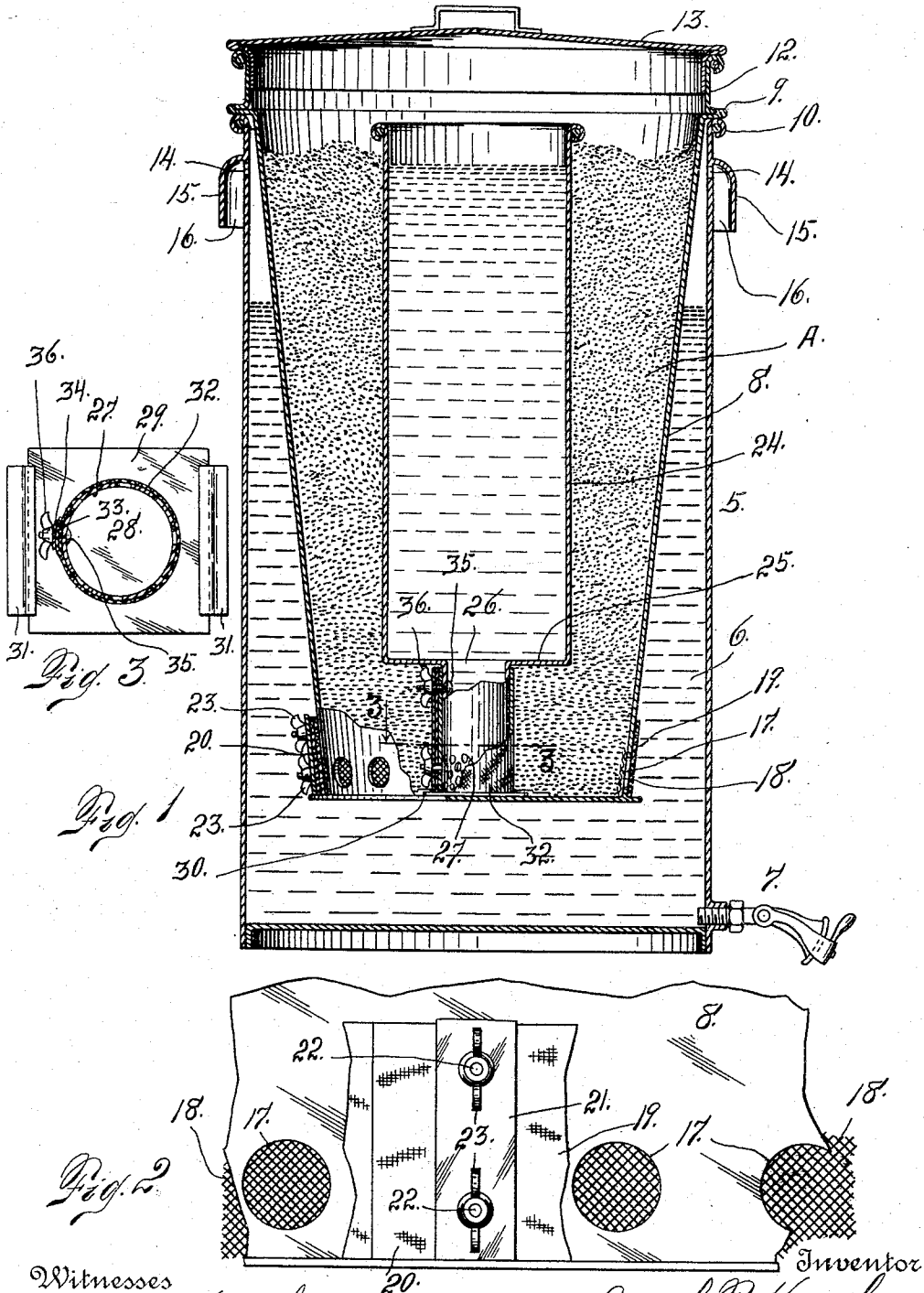


S. T. HENSEL.
SIMPLE SYRUP PERCOLATOR.
APPLICATION FILED MAR. 5, 1909.

939,131.

Patented Nov. 2, 1909.



Witnesses

Otto E. Haddick

J. D. Thornburgh.

Samuel T. Hensel.

By *[Signature]*

Attorney

UNITED STATES PATENT OFFICE.

SAMUEL T. HENSEL, OF DENVER, COLORADO.

SIMPLE-SYRUP PERCOLATOR.

939,131.

Specification of Letters Patent.

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Application filed March 5, 1909. Serial No. 481,447.

To all whom it may concern:

Be it known that I, SAMUEL T. HENSEL, a citizen of the United States, residing at the city and county of Denver and State of Colorado, have invented certain new and useful improvements in Simple-Syrup Percolators; 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 figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in percolators for the manufacture of simple syrup.

My improved construction in its general characteristics, comprises an outer casing adapted to contain the syrup, an inner sugar container suspended within the casing, and a water receptacle centrally located in the sugar container and supported upon the bottom of the latter which is imperforate.

In my improved construction the lower portion of the outer wall of the container is perforated, being covered on the inside by mesh material and upon the outside by felt or other suitable material forming a strainer, the bottom of the sugar receptacle being closed or free from perforations, whereby lateral percolation is made necessary. The water receptacle is provided with a reduced extension projecting downwardly from its bottom proper, the said projection being perforated and surrounded upon the outside by a strainer. The upper portion of the water container is imperforate. By virtue of this construction, the water is compelled to travel laterally a relatively long distance from the reduced extension of the water receptacle, to the outer perforated portion of the sugar container.

By supporting the water receptacle upon the bottom of the sugar container, the necessity for supports extending from the water receptacle to the inner wall of the sugar container is obviated. This is very important since in an ideal construction of this character, all obstructions which interfere with the downward movement of the sugar from the upper portion of the container, must be removed, and to this end the inner wall of the sugar container is made perfectly smooth, while the wall of the water receptacle is cylindrical, its outer sur-

face being perfectly smooth and vertically disposed, offering no obstruction whatever to the downward movement of the sugar, the lower extremity of the reduced portion of the water container, is closed and provided with an exteriorly projecting flange adapted to interlock with the parts with which the bottom of the sugar receptacle is equipped, whereby the water receptacle is held in its proper position and prevented from possible flotation due to the greater specific gravity of the surrounding body of sugar.

Having briefly outlined my improved construction, I will proceed to describe the same in detail, reference being made to the accompanying drawing in which is illustrated an embodiment thereof.

In this drawing, Figure 1 is a vertical longitudinal construction of my improved syrup percolator. Fig. 2 is an enlarged exterior view illustrating the outer lower portion of the wall of the sugar container, the exterior strainer being partly broken away. Fig. 3 is a horizontal section taken on the line 3—3 Fig. 1 looking downwardly, the parts being shown on a larger scale.

The same reference characters indicate the same parts in all the views.

Let the numeral 5 designate an outer casing adapted to receive a quantity of simple syrup 6. The lower part of this casing is equipped with a draw-off faucet 7.

Suspended from the top of the casing 5 is a sugar container 8 whose top has an outwardly projecting flange 9 resting upon the outer edge 10 of the casing 5. The sugar container is also provided with a cylindrical part 12 projecting upwardly from the flange 9 and in which is fitted a cover 13. The upper portion of the casing around the sugar container is provided with perforations 14, communicating with a depending housing 15 closed above and open at its lower extremity, as shown at 16.

The lower part of the sugar container is provided with perforations 17, which are interiorly covered by a layer of mesh material as wire gauze 18. The perforated portion of this container is exteriorly covered by a strainer 19, preferably composed of felt or other suitable flexible material. As shown in the drawing, this exterior strainer material is passed around the lower part of the sugar container, its extremities being overlapped, as shown at 20. To these over-

lapping extremities is applied a metal strip 21 through which are passed screw bolts 22 to which thumb nuts 23 are applied.

Within the sugar container is located a cylindrical water receptacle 24 which as shown in the drawing is of uniform size from its upper open extremity to the bottom 25, its walls being free from perforations. In the central portion of the bottom is an opening 26 from which extends downwardly a reduced cylindrical perforated member 27, whose lower extremity is closed as shown at 28. The bottom 28 extends outwardly beyond the part 27 as shown at 29 and two of its opposite edges engage grooves 30, formed in retaining strips 31 secured to the bottom of the sugar container. The water receptacle is connected with the sugar container by sliding the opposite edges of the portion 29 of the bottom plate, into the grooves 30 of the retaining strips 31. From this it will be understood that the water receptacle is securely held in place within the sugar container when the device is in use. It will also be understood that it may be readily removed. By virtue of the interlocking connection between the reduced part 27 of the water receptacle and the bottom of the sugar container, the receptacle is held in place within the container and prevented from flotation due to the greater specific gravity of the mass surrounding the receptacle.

To the outer surface of the reduced perforated depending member 27 is applied a strainer 32 composed of felt or other suitable fabric adapted to perform the strainer function. The extremities of this strip of mesh material overlap each other as shown at 33 and to these overlapping ends is applied a metal strip 34, all of the parts being secured in place by screws or small bolts 35 secured in place by wing nuts 36.

From the foregoing description, the use of my improved syrup percolator will be readily understood.

Assuming that the parts are assembled as shown in Fig. 1, a quantity of sugar A is placed within the container 8, water being placed within the receptacle 24. The container is then closed by applying the cover 13, after which percolation goes on automatically, the syrup 6 accumulating in the receptacle 5. By virtue of the relatively small diameter of the depending lower portion 27 of the water receptacle, the water passing from the water receptacle, is obliged to travel laterally a considerable distance through the sugar of the container. During such travel, the water becomes fully saturated with sugar and when it escapes from the container, is simple syrup.

The perforated portion of the depending reduced part of the water receptacle, preferably occupies a position directly opposite the perforations 17 of the sugar container, meas-

ured in a horizontal plane. In other words, the perforations 17 and 27 occupy corresponding horizontal portions of their respective elements, whereby the simple syrup is formed by lateral percolation only. This has been found very important in actual practice since the water is compelled to travel through a sufficient body of sugar, before escaping from the sugar container, to cause it to be fully saturated with sugar, thus making it impossible for any water to escape from the sugar container that is not completely saturated. In this way, a uniform product results, producing a syrup entirely homogeneous in character. Furthermore, by having the perforated portions of the two receptacles in the same horizontal zone and at the lower extremity of each receptacle, the sugar is gradually dissolved and, therefore, removed at the extreme bottom portion of the container only, thus preventing the possibility of the accumulation of a quantity of sugar in the bottom of the container in a zone where the water is completely saturated, which is the case in syrup percolators heretofore in vogue.

In my improved construction, the sugar is gradually removed from the bottom of the container, and the sugar from above in the container passes downwardly into the bottom, as it is needed and as space is formed therefor, into the zone of percolation. Hence, it will be understood that there is no opportunity for the accumulation and retention of a quantity of sugar within the percolating zone of the container, since the sugar is gradually dissolved as it enters this zone, leaving no opportunity whatever, for the same quantity of sugar to remain in the said zone longer than is necessary to dissolve the same or form it into syrup.

Having thus described my invention, what I claim is:

1. A simple syrup percolator, comprising a sugar container having an imperforate bottom, its wall above the bottom having a perforated portion, a water receptacle located within the sugar container and having a reduced lower portion projecting downwardly from the bottom proper of the said receptacle, the said lower portion being perforated and provided with a suitable strainer, and the receptacle being otherwise imperforate the lower extremity of the said perforated portion being closed and resting upon the imperforate bottom of the sugar container, substantially as described.

2. A simple syrup percolator, comprising a sugar container having a perforated lower portion covered with a strainer located a short distance above the bottom of the container, the bottom being imperforate, and a water receptacle located within the sugar container and having a reduced, perforated, strainer-covered lower portion resting upon

the imperforate bottom of the sugar container, the lower extremity of the perforated portion of the water receptacle being interlocked with the bottom of the sugar container for the purpose set forth.

3. A simple syrup percolator, comprising a sugar container having an imperforate bottom and a perforated portion covered with a strainer just above the bottom, a water receptacle centrally located within the sugar container and whose body portion is cylindrical in shape, the bottom of the body portion having an opening from which extends downwardly a perforated portion of reduced diameter covered with a strainer, whereby the water from the receptacle is caused to travel laterally through the sugar, substantially as described.

4. A simple syrup percolator, comprising a sugar container having an imperforate bottom and a perforated portion covered with a strainer located just above the bottom, and a water receptacle centrally located within the sugar container and having a smooth outer surface, the said receptacle having a depending, perforated portion of reduced diameter covered with a strainer and whose lower extremity is closed by a plate which projects beyond the said perforated portion, the bottom of the sugar container being provided with strips with which the plate of the said perforated portion is adapted to interlock, substantially as described.

5. A simple syrup percolator, comprising

a sugar container having the lower portion of its wall above the bottom perforated, and a water receptacle having a depending perforated lower portion of reduced diameter resting upon the bottom of the sugar container and removably interlocked therewith, said container and receptacle being otherwise imperforate.

6. A simple syrup percolator, comprising a sugar container having the lower portion of its wall above the bottom perforated, and a water receptacle having its lower portion perforated in the same zone only as the perforated zone of the sugar container, whereby lateral or horizontal percolation is obtained.

7. A simple syrup percolator, comprising a sugar container having the lower portion of its wall above the bottom perforated, its bottom being imperforate, and a water receptacle resting upon the bottom of the sugar container, the bottom of the water receptacle being closed, and its lower portion above the bottom perforated in a zone occupying the same horizontal position as the perforated zone of the sugar container, the walls of the said container and receptacle being imperforate, except as specified.

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

SAMUEL T. HENSEL.

Witnesses:

A. J. O'BRIEN,

A. EBERT O'BRIEN.