

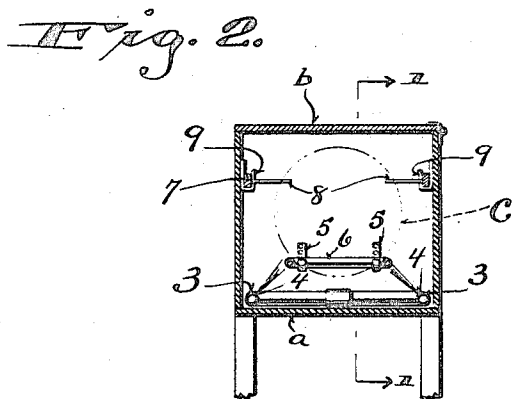
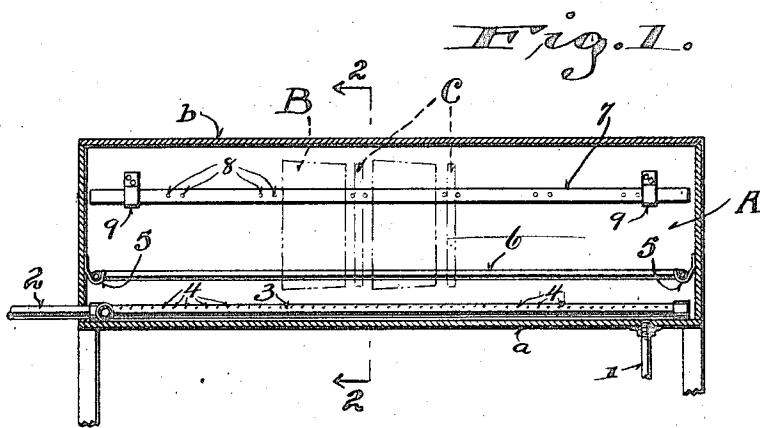
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1,458,384

H. H. BATHKE

CHEESE HOOP AND FOLLOWER STERILIZING WASHER

Filed April 26, 1921



Inventor

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Witness:
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UNITED STATES PATENT OFFICE.

HENRY H. BATHKE, OF OCONTO, WISCONSIN.

CHEESE HOOP AND FOLLOWER STERILIZING WASHER.

Application filed April 26, 1921. Serial No. 464,737.

To all whom it may concern:

Be it known that I, HENRY H. BATHKE, a citizen of the United States, and resident of Oconto, in the county of Oconto and State of Wisconsin, have invented certain new and useful Improvements in a Cheese Hoop and Follower Sterilizing Washer; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to provide a simple, economical and convenient machine for sterilizing and washing utensils for manufacturing cheese, such as hoops and followers, the arrangement and construction of the device being such that a series of hoops can be conveniently assembled in connection with a series of followers over steam jets, the units being conveniently supported and spaced apart, whereby the surfaces will all be exposed to the effects of the steam in such manner that milksteam is prevented from gathering on the parts and they are thoroughly cleansed from grease and other foreign products, whereby the parts are sanitarily cleaned for use. It is understood that when the cleaning process is taking place, the steam, together with the hoops and the followers, are confined within a container, the steam jets being discharged directly against the parts, and the grease and foreign matter removed from the cleansed parts is suitably drained from the container.

With the above objects in view, the invention consists in certain peculiarities of construction and combination of parts, as are hereinafter set forth with reference to the accompanying drawings and subsequently claimed.

In the drawings:

Figure 1 represents a sectional elevation of a cheese hoop and follower sterilizer embodying the features of my invention, the section being indicated by line 1—1 of Figure 2, and

Figure 2 is a cross section of the same, the section being indicated by line 2—2 of Figure 1.

Referring by characters to the drawings, A represents a box or container which may be of any length desired, having side end walls and a bottom *a*. The container is hermetically sealed by hinged cover *b*, and the bottom *a* is provided with a drained pipe 1. A steam inlet pipe 2 is arranged to enter the container through one end wall and within said container it is coupled to branch steam

discharge pipes 3—3, which pipes are positioned to extend parallel with the bottom corners of the container and have series of perforations 4 therein, which perforations are preferably bored at an angle of approximately 45 degrees, whereby steam jets therefrom will converge at a point of approximately midway of the height of said container whereby their force is directed upon a plurality of hoops B and followers C, as indicated in dotted line. It is understood that the hoops and followers are of any standard type and form no part of my invention.

The ends of the container have secured thereto brackets 5, which are in the form of hooks that are adapted to receive the end sections of a tubular rectangular frame 6, which frame is positioned directly over the perforated steam pipes, as shown, and said frame is adapted to be removable for convenience in assembling the parts to be washed and sterilized, and also for cleaning purposes.

While I have shown the sterilizer somewhat shortened in proportions with relation to actual size, it is understood that the length of it may be indefinitely extended so as to provide ample space for a large number of the units to be cleansed.

In operation, the desired number of hoops are first inserted within the container and arranged in a parallel row with their outer side walls supported by longitudinal stretches of the frame 6, one portion of their circular wall being adapted to drop below the longitudinal stretches, whereby the hoops are held firmly upon two points of contact, and within the field or range of the steam jets, which are discharged toward the central portions of the hoops. Obviously, the hoops may be assembled upon the rack and thereafter the rack inserted in position above the steam pipes, and the cover of the receptacle being closed, steam is introduced into the container whereby the hoops are thoroughly washer and sterilized, the drainage therefrom being discharged through the pipe 1. The followers C are then dropped into position, alternating the hoops B which are spaced apart, as shown in dotted lines, of Figure 1. The followers will rest upon the rack, and in order to hold them in parallel relations with the hoops, and to prevent contact therewith, whereby both sides of the followers will be thoroughly cleansed, I provide

a set of removable rack bars 7—7, which rack bars have extending therefrom groups of pins 8—8 that are arranged in pairs so as to engage the opposite walls of every follower, thereby preventing tilting of the followers upon the supporting rack 6.

Obviously, these rack bars may be provided with a continuous row of holes for receiving pins, whereby the pins may be arbitrarily grouped in accordance with the depth of the hoops, so as to support the followers in their correct relative positions with relation to said hoops. The rack bars 7—7 are dropped into place and supported by a pair of flat hooks or brackets 9 secured to the side walls of the container.

Thus it will be seen that I provide a simple, economical device for accomplishing the cleansing of hoops and followers. The device has been practically used in a cheese factory, and this use has demonstrated the thorough utility of the structure, as a whole. Heretofore, nothing for the purpose for thoroughly cleaning cheese hoops and followers has been produced, and the apparatus under construction is, so far as I am aware, the first apparatus of this kind to be put upon the market and meet with the general requirements of a cleaner of the character described.

I claim:

A cheese hoop and follower sterilizing washer comprising a closed, elongated receptacle of rectangular cross section and having a movable top to afford access to the interior thereof, a pair of perforated steam pipes located within the receptacle adjacent the bottom and closely adjacent the lower corners thereof, the axes of said perforations extending towards the center of said receptacle, a rigid rectangular frame of approximately the interior length of said receptacle and of materially less width than the interior width of said receptacle, a pair of supporting brackets carried by the inner side of the ends of said receptacle for removably supporting said rigid frame in spaced relation to the bottom of the receptacle, spaced clips carried by the side walls of said receptacle and projecting inwardly thereof, a pair of rectangular rods removably carried by said clips and held against turning by said clips, and a plurality of inwardly projecting pins carried by said rods.

In testimony that I claim the foregoing I have hereunto set my hand at Oconto, in the county of Oconto and State of Wisconsin.

HENRY H. BATHKE.