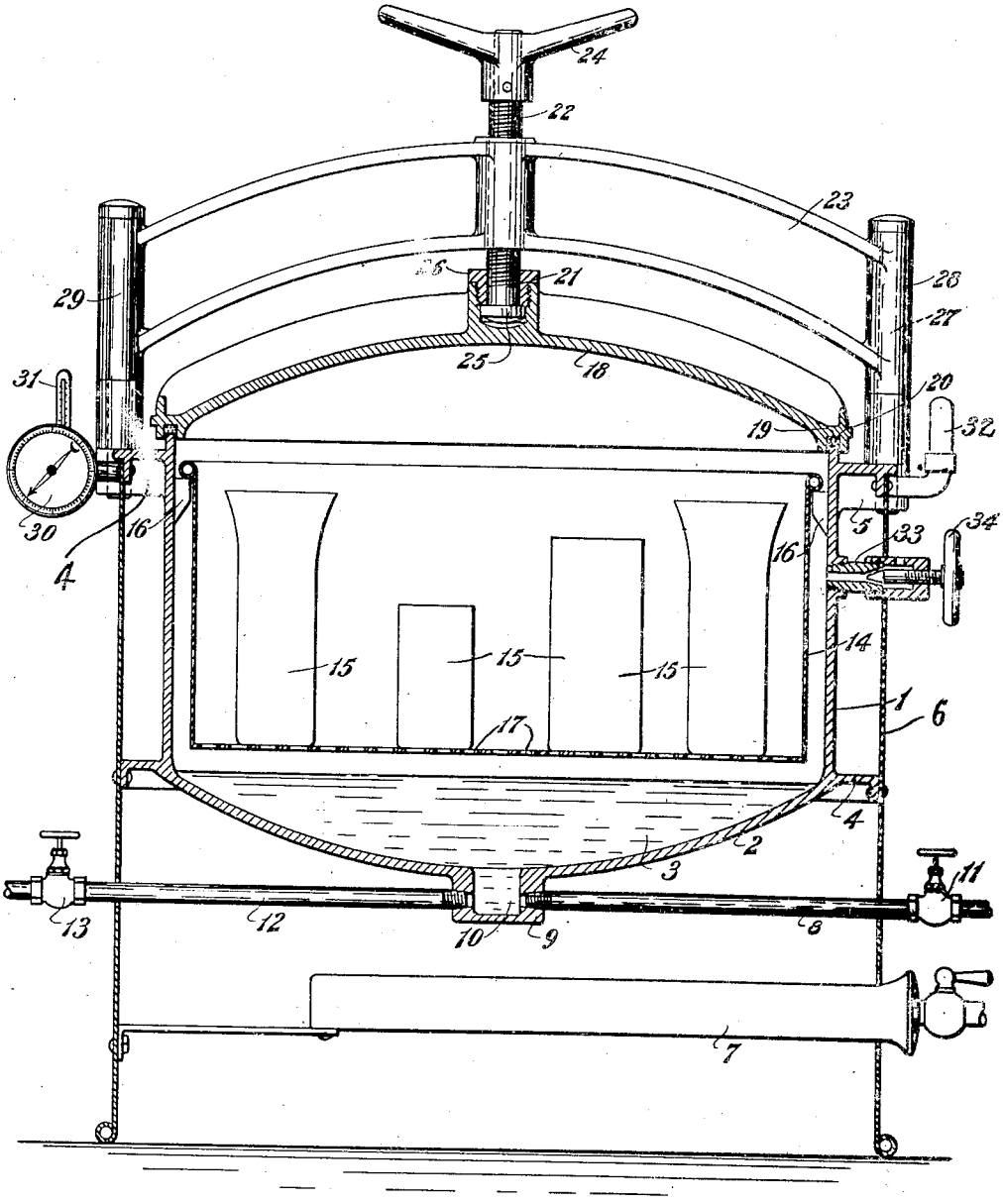
L. H. ALLEN.

STERILIZING DEVICE.

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1,348,837.

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STERILIZING DEVICE.

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To all whom it may concern:

Be it known that I, LEWIS H. ALLEN, a citizen of the United States of America, residing at 32 Woodmont street, West Springfield, in the county of Hampden and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Sterilizing Devices, of which the following is a specification.

My invention relates to improvements in sterilizing devices in which a suitable inclosing chamber is provided for receiving the articles to be sterilized. This chamber is designed to receive a suitable frame-work for holding the articles. One of the important features of my improvement is locating the frame-work and the articles directly in the chamber which contains the sterilizing fluid. In the present invention it is designed to use water, which is heated by means of a suitable burner to convert it into steam. Suitable means is also provided for allowing the water to enter the chamber and for drawing off the same after the sterilizing is completed.

One of the objects of my invention is to provide a device for sterilizing glasses which are used by the public at soda water fountains in drug stores. It is desirable to provide suitable means for readily inserting and removing the glasses and at the same time to prevent the steam from escaping into the room. Suitable means is provided for indicating the temperature, pressure, and a safety valve to avoid explosions. I attain these objects by means of the mechanism shown in the accompanying drawings in which the figure shown is a vertical sectional view taken on a plane passing through the axis of the sterilizing device, and showing the interior construction with the basket for supporting the glasses, the cover, the inlet and draw-off pipes and the means for forcing the cover to its seat.

Referring to the drawing in detail: 1 designates the container, or chamber having the curved bottom portion 2 for receiving the water indicated at 3 in the bottom portion, which is to be converted into steam. This container is supported by means of the lugs 4 and 5 on the casing 6, in the lower portion of which is located the gas burner 7. 8 designates a pipe for supplying water to the chamber 2 which is connected to the boss 9 that communicates with the interior portion by means of the space 10. 11 designates a shut-off valve in the pipe 8. 12 is a drain pipe for drawing off the water and steam from the chamber. 13 is a shut off valve therein. 14 designates a basket-like member for receiving the glasses 15 to be sterilized. This member preferably is made from thin metal as brass or copper and is supported in the container 1 by means of the rim or bead resting on the lugs, 16. The bottom of the member 14 is perforated as shown at 17 to permit the steam to readily enter the space in which the glasses are located. The steam can also pass above the glasses as readily understood.

The chamber 1 is closed at its top by means of the cover 18, which is formed with a chambered portion 19 having the packing 20 therein. This cover is raised and lowered by means of the bolt 21, which has a threaded connection 22 with the supporting piece 23, whereby when the bolt 21 is rotated by means of the handle 24, the cover 18 may be raised or lowered as desired. The lower end of the bolt 22, it will be observed, is formed with a head 25, which is engaged by the gland 26, which is screwed into a threaded recess in the cover. This construction permits the bolt 21 to turn freely with relation to the cover. The cover is preferably made arch-shaped, as shown, for the purpose of strength. The part 23 is also made arch-shape as shown, and preferably concentric with the cover. This part 23 is pivotally connected to a suitable pin 27, which is supported by the container 1. The hub part 28 of the part 23 turns on the pin 27; the other end of the part 23 is suitably secured to a pin 29 when the cover 18 is closed. A suitable pressure and temperature gage is shown at 30 and 31 respectively, and a safety valve or blow off at 32. In order to permit the external air to enter when the blow-off valve 13 is opened, to allow the water and steam to escape a suitable pipe connection 33 is shown which is controlled by the hand wheel 34 in order to prevent the steam escaping into the room when the cover 18 is opened.

One of the advantages of my invention is in making the bottom part of the container 1 concave in order that a small quantity of water may be used whereby the same can be converted into steam in a comparatively short space of time, and the steam will at once pass upward through the openings 17 into the receptacle 14 which receives the glasses 15. It will be seen that my improve-

ment can be readily installed and can be readily opened and closed for the purpose of inserting and removing the glasses. I am aware that prior to my invention in this class of devices sterilizing devices broadly have been made and I do not therefore claim such devices.

It is to be understood that the form of the container is not limited to that shown in the drawings, as other forms suitable for the purpose may be used without departing from the spirit and scope of my invention.

What I claim is:

1. In a sterilizing device in which the steam is used as the sterilizing agent, the combination of a container having a curved bottom in which the liquid to supply the sterilizing vapor is placed and there evaporated by heat applied to the basin, a cover for the container, spaced lugs on the inside surface of the container to support a basket-like member to receive the articles to be sterilized, said member having closed sides, an open top and a perforated bottom to permit the vapor from the liquid to pass directly into said member and come in contact with the articles to be sterilized and to pass up around the side of said member and into the open top.

2. A sterilizing device comprising, in combination, a container having a curved bottom for receiving a sterilizing liquid, the lowermost portion having a hollow projection communicating with the interior of the container, pipes connected with said projection for supplying and draining off the liquid, an inclosing casing for supporting the container, a device within the casing for heating the liquid in the container, the inner surface of the container having spaced lugs, a receptacle for receiving the articles to be sterilized and supported on the lugs, said receptacle having closed sides, a perforated bottom and an open top to permit the vapor from the heated liquid in the container to pass up around the sides of the container and into the top of the same, a cover for the container, and means to permit the external air to enter the container when the liquid is drawn off, whereby the hot vapor and liquid will escape from the container before the cover is removed.

LEWIS H. ALLEN.