

A. A. PINDSTOFTE.
PASTEURIZING APPARATUS.
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939,162.

Patented Nov. 2, 1909.

Fig. 1

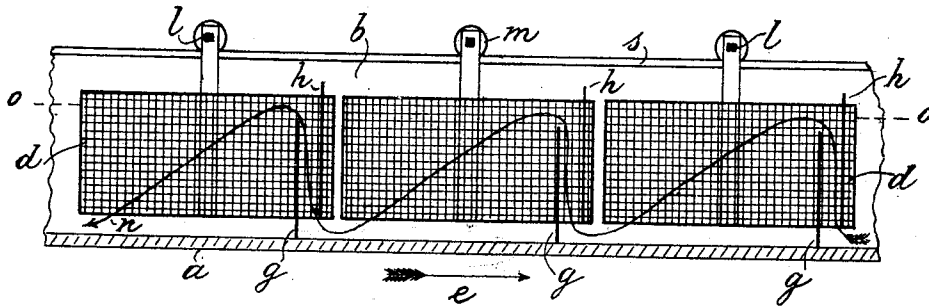
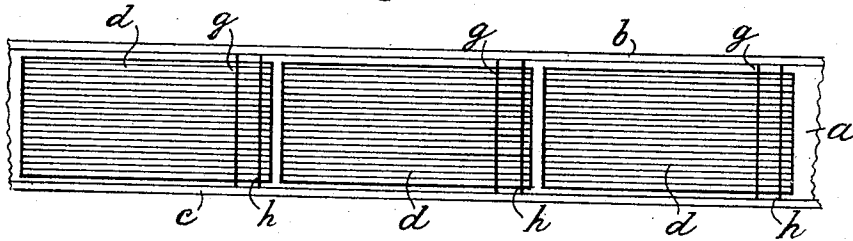


Fig. 2



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UNITED STATES PATENT OFFICE.

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PASTEURIZING APPARATUS.

939,162.

Specification of Letters Patent.

Patented Nov. 2, 1909.

Original application filed October 1, 1907, Serial No. 395,390. Divided and this application filed June 22, 1909.
Serial No. 503,682.

To all whom it may concern:

Be it known that I, ANDERS ANDERSEN PINDSTOFTE, a subject of the King of Denmark, residing at Frederiksberg, near Copenhagen, Denmark, have invented certain new and useful Improvements in Pasteurizing Apparatus, of which the following is a specification.

The present application is a division of my application Serial No. 395,390, filed October 1, 1907, for improvements in pasteurizing apparatus.

The present invention relates to improvements in pasteurizing apparatus of the kind in which the bottles are placed in baskets moving through a water reservoir of suitable dimensions, the bottles being gradually heated in this reservoir to pasteurizing temperature. The water is maintained at pasteurizing temperature as long as required by means of heat supplied to the water by suitable devices, the bottles afterward being cooled by means of a cooling medium supplied to the water near the place where the bottles are removed from the apparatus. In such apparatus the pasteurizing fluid is, of course, put in motion when the baskets are pulled or pushed through it, but this motion is not sufficient to cause the warmer water at the top to mix with the colder water at the bottom, and therefore the temperature of the upper water and that of the lower water present so great differences that a pasteurizing process safe and free of breakage cannot be effected in such apparatus. These drawbacks are obviated by the present invention, which has for its object to combine the baskets with means which will produce a perfect mixing of the upper and lower layer of water during the motion of the baskets, so that the temperature is practically uniform from top to bottom of the different parts of the apparatus.

The invention is illustrated in the accompanying drawing, in which—

Figure 1 is a vertical longitudinal section through a part of the improved apparatus. Fig. 2 is a plan view of parts of the apparatus; the suspension means of the baskets being omitted.

Referring to the figures, *a* is the bottom

of the water reservoir, and *b*, *c* the side walls of said reservoir. The bottles (not shown) are placed in baskets *d*, which can be made of wire-grating, plait-work, frame-work or the like, permitting the pasteurizing fluid to pass through the baskets. The baskets *d* are suspended on transverse shafts *l* (Fig. 1), provided with rollers *m* running upon rails *s* on the top of the side-walls of the water reservoir so that the baskets can be moved through the water reservoir in the direction indicated by the arrow *e*. In the interior of each of the baskets *d* is arranged a channel, which consists of two plates *g* and *h* placed transversely to the side-walls *b* and *c* of the water reservoir. The length of the plates *g* and *h* corresponds to the distance between said side-walls. The plate *g* extends from the bottom of the water reservoir to some distance below the upper edge of the basket *d*, and the plate *h* extends from the bottom of the basket *d* to some distance above the water level *o—o* (Fig. 1) in the water reservoir.

The operation of the apparatus is as follows: The baskets containing the bottles are inserted in the water reservoir and moved through it in the direction of the arrow *e*. The motion of the baskets and the channels formed by the plates *g* and *h* causes the pasteurizing fluid to move in the opposite direction so that the fluid-current always passes up through the channels and down between the bottles placed in the baskets, as indicated by the arrow *n* (Fig. 1), thereby mixing the water in such a manner that the temperature is practically uniform from top to bottom at all parts of the apparatus.

What I claim is:

In a pasteurizing apparatus, the combination with a water reservoir, of a number of open bottle-baskets having their bottom some distance above the bottom of the reservoir, means which permit of the moving of said bottle-baskets through said reservoir, and a number of channels placed one in the interior of each of the bottle baskets and separating the bottle-supporting parts, each of said channels consisting of two spaced parallel plates placed transversely to the side-walls of the water reservoir and having a

length corresponding to the distance between
said side-walls, one of said plates g extend-
ing from the bottom of the water reservoir
to some distance below the upper edge of the
5 bottle-baskets, while the other of said plates
 h extends from the bottom of the bottle-bas-
kets to some distance above the water level

in the water reservoir; substantially as and
for the purpose set forth.

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Witnesses:

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