No. 737,195. PATENTED AUG. 25, 1903.

T. J. BARRY, A. WEHMILLER & J. W. DAWSON.

BOTTLE SOAKING MACHINE.

APPLICATION FILED MAY 2, 1903.

NO MODEL.

Fig. I.

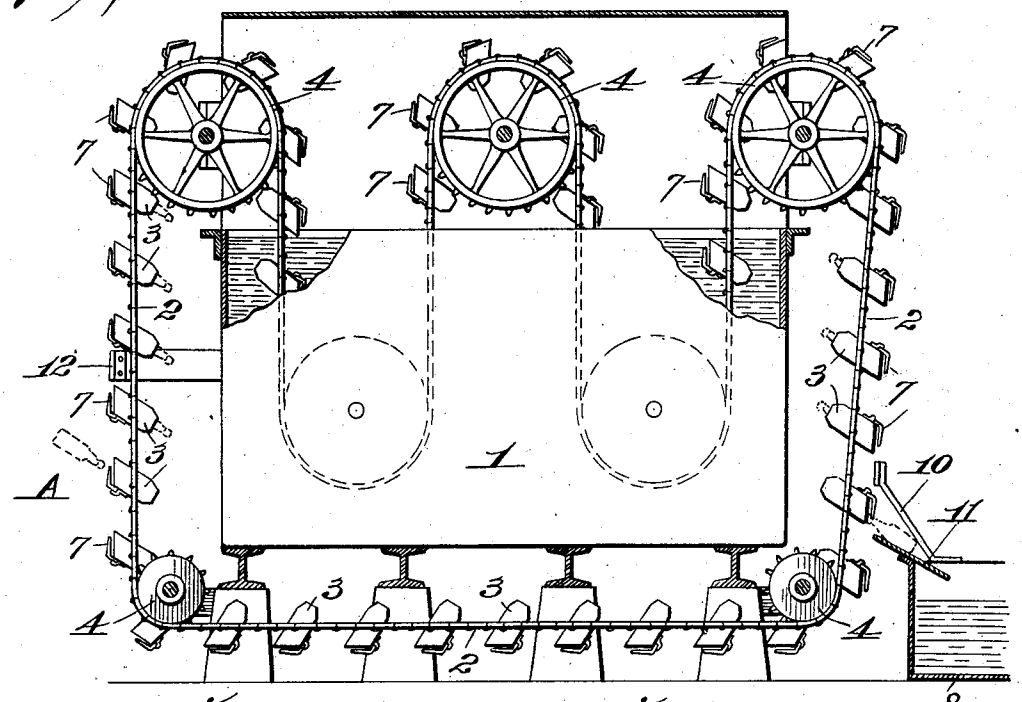


Fig. II.

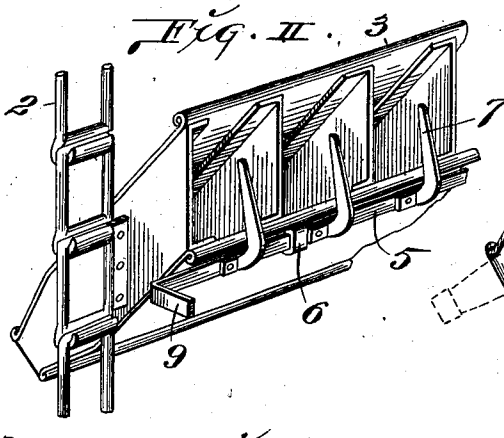


Fig. III.

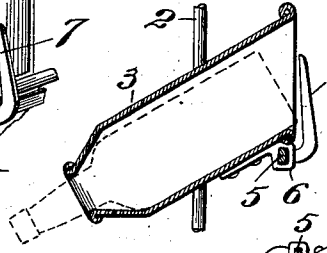


Fig. IV.

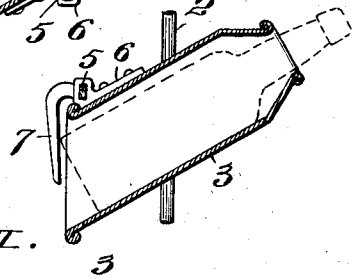


Fig. V.

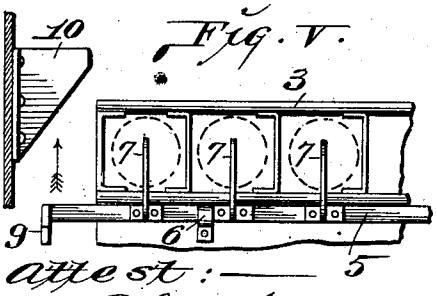
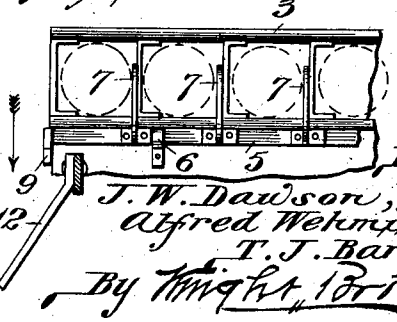


Fig. VI.



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No. 737,195. Patented August 25, 1903.

UNITED STATES PATENT OFFICE.

THOMAS J. BARRY, ALFRED WEHMILLER, AND JOSEPH W. DAWSON, OF ST. LOUIS, MISSOURI.

BOTTLE-SOAKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 737,195, dated August 25, 1903.

Application filed May 2, 1903. Serial No. 155,431. (No model.)

To all whom it may concern:

Be it known that we, THOMAS J. BARRY, ALFRED WEHMILLER, and JOSEPH W. DAWSON, citizens of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Bottle-Soaking Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

Our invention relates to a means for holding the bottles in the baskets or receptacles as they are carried through the machine, the object of our invention being to dispense with the stationary guards heretofore commonly used for such purpose.

Our invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a side view, part in section, illustrating our invention. Fig. II is an enlarged detailed perspective view. Figs. III and IV are enlarged detail sections of the carrier and bottle retaining-guard. Fig. V is a detail front view illustrating the position of the guards when in position for holding the bottles in their pockets. Fig. VI is a detail front view showing the position of the guards when shifted to release the bottles.

Referring to the drawings, 1 represents a water-tank in which the bottles are soaked and through which the bottles are conveyed by means of an endless carrier consisting of a pair of chains 2 and a set of baskets or receptacles 3, connecting the chains together. The chains pass over sprocket-wheels 4, and the baskets are preferably divided into compartments, (see Fig. III,) each compartment being of the proper size to hold one bottle. As the bottles are carried through the machine the receptacles are at times turned with their open or larger ends lowermost and it is necessary to provide means to prevent the bottles slipping out of their pockets at such times.

By the use of our invention a cheap and effective means is provided for holding the bottles in their receptacles and for releasing them automatically when they reach the point of discharge, and to this end our invention consists in providing each basket or receptacle with a sliding bar 5, held to its basket by means of keepers 6, which permit of its endwise movement. Each bar is provided with a series of fingers 7, so formed as to extend across the open ends of the bottle-receiving pockets, as shown in Fig. II. There is a finger for each pocket and the large ends or bottoms of the bottles rest against these fingers when the baskets are turned with their large ends lowermost, as shown in Fig. IV. Each basket thus carries its own bottle-retaining guard-fingers and the device forms a cheap and effective means for holding the bottles in their pockets.

8 represents a rinsing-tank, into which the bottles are deposited after they have been soaked. Just as each basket reaches the rinsing-tank the outturned end 9 of its bar 5 comes against a stationary cam 10, and the bar is shifted to move the fingers into line with the partitions of the basket and out of the path of the bottles, which now move by gravity from their pockets onto an inclined chute 11, that conveys them into the tank 8. The baskets are refilled with fresh bottles at A, at which point the open or large ends of the bottle-receiving pockets are uppermost. As the baskets move from the point A the outturned ends of the bars 5 come against another cam 12, and the bars are moved back again into the position shown in Fig. II, so that the fingers 7 are brought into substantially a central position across the open ends of the pockets.

While we have shown and described our invention as applied to a soaking-machine, still it may be used in connection with a machine for pasteurizing beer and for other like purposes, such as the sterilization of liquids of any kind.

We claim as our invention—

1. In a machine of the class described, the combination of a tank, a carrier having baskets with bottle-receiving pockets, and a sliding guard carried by each basket for holding the bottle in its pocket, substantially as set forth.

2. In a machine of the class described, the combination of a tank, an endless carrier having baskets with bottle-receiving pockets, a sliding guard carried by each basket, and cams

for moving the guards, substantially as set forth.

3. In a machine of the class described, the combination of a tank, a carrier having baskets with bottle-receiving pockets, a sliding bar carried by each basket, guard-fingers secured to the bar and which extend in front of the bottle-receiving pockets, and means for shifting the bars, substantially as set forth.

4. In a machine of the class described, the combination of a tank, an endless carrier having baskets with bottle-receiving pockets, a bar carried by each basket and having a finger for each bottle-receiving pocket and stationary cams adapted to be engaged by the outturned ends of said bars, substantially as and for the purpose set forth.

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In presence of—
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