Oct. 21, 1952 J. L. KJELDSEN 2,614,700

RACK FOR MILK BUCKETS OR LIKE CONTAINERS

Filed June 12, 1946

FIG. 1.

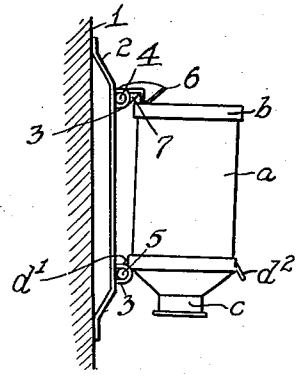
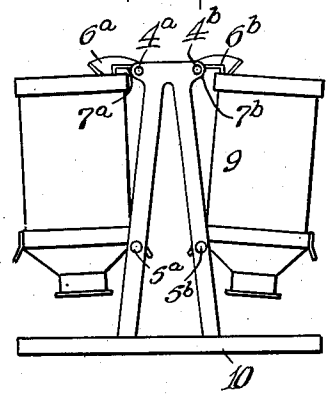


FIG. 3.



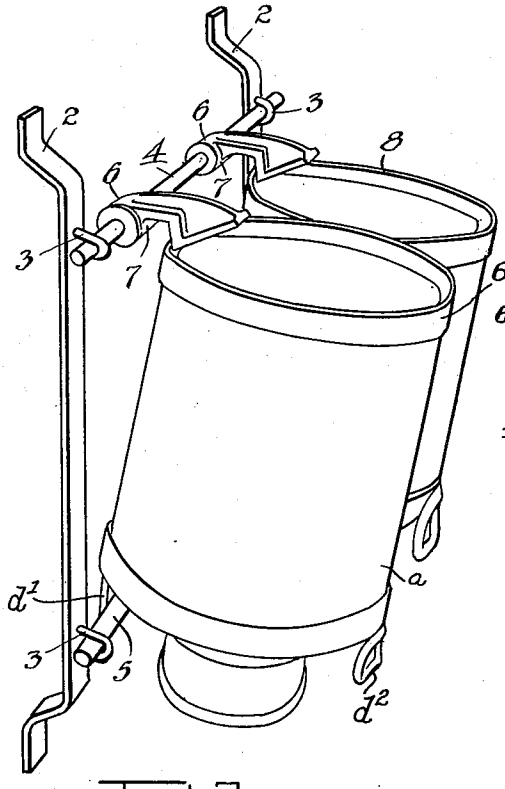


FIG. 2.

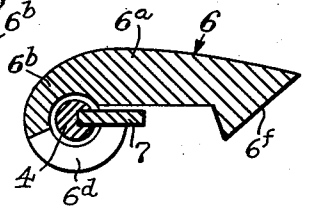


FIG. 4.

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RACK FOR MILK BUCKETS OR LIKE CONTAINERS

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3 Claims. (Cl. 211—75)

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This invention relates to racks for milk buckets or like containers, in which the buckets are supported in an inversed position. Such racks are used for supporting the buckets so as to permit them to dry after having been washed and cleaned.

The object of the invention is to provide a rack for this purpose in which the buckets or like containers may be easily arranged and safely supported. A more specific object of the invention is to provide a rack to support milk buckets or the like containers having a body portion with handles extending there above and a neck portion of decreased diameter in an inverted position in the rack. A further purpose of the invention is to provide a rack to support milk buckets of the type specified in which the containers will be held in position by automatic snap locking means gripping behind a flange extending below the body portion of the buckets and arranged substantially along the periphery thereof.

Still a further object of the invention is to provide a rack for milk buckets of the kind specified, which enables an easy handling of the buckets. More specifically it is an object of the invention to provide a rack, which enables a bucket to be arranged in its support position with one hand only without the necessity of operating the snap action locking means adapted to grip behind the bottom flange of the bucket.

The invention is more specifically described hereinafter, reference being had to the accompanying drawing, in which

Fig. 1 is a side elevation of a rack according to the invention and

Fig. 2 is a front perspective view of the same.

Fig. 3 is an end elevation of another embodiment of the invention, and

Fig. 4 is a vertical section thru a pawl member and the supporting means thereof as used in any of the racks according to Figs. 1 thru 3.

Referring to Fig. 1 two brackets **2** are by means of bolts, screws or other fastening means (not shown) fixed on a wall **1**. Each of the brackets **2** are provided with two lugs **3** in which are supported rods or tubes **4** and **5**. The distance between these rods corresponds substantially to the height of the body portion *a* of a milk bucket comprising a substantially cylindrical body portion having along its bottom edge a cylindrical flange *b* extending below the bottom portion and having at its top end a neck portion *c* of decreased diameter and further having handles d_1 and d_2 adapted to carry the bucket and extending above

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the body portion. On the upper rod **4** pawls **6** are mounted for swivelling movement and in mutual spaced relationship spaced slightly more than the diameter of the bucket. These pawls are by means of abutments **7** as more detailed shown in Fig. 4 mounted on the rod **4** prevented from moving below the horizontal position shown in Fig. 1. Fig. 4 is a vertical section thru a pawl as shown in Fig. 1. The pawl which is generally referred to as **6** has a body portion **6***a* and a substantially cylindrical portion **6***b* with a throughgoing bore **6***c*. Below the body portion **6***a* the cylindrical portion **6***b* is separated into two parts, of which only the one part **6***d* is shown in Fig. 4. Between these two parts a slot is provided to receive the abutment **7** serving the purpose of keeping the pawls in the horizontal position and simultaneously serving the purpose of keeping the pawls in position on the rod **4** preventing them from sliding sidewardly. The free ends of the pawls are wedge-shaped at their free ends at **6***f* so that the pawls are automatically lifted when a milk bucket is supported in an inversed position on the rod **5** and with the edge of its bottom urged against the inclined surface **6***f* of the corresponding pawl **6**. Thereby the pawl will fall down behind the cylindrical flange **8** of the bucket forming a snap action lock so as to retain the same safely in the rack.

The buckets are placed in their inverted supported position in the following way which will be more easily understood with reference to Fig. 2, which is a perspective view of the rack shown in Fig. 1 adapted to carry two buckets, being understood, however, that a plurality of pawls can be arranged forming a rack for a larger number of buckets. The bucket to be supported is gripped in inverted position and arranged with a shoulder portion of the body supported of the lower rod **5** with the handle d_1 behind said rod. Hereafter only one hand is necessary. The operator just pushes the bottom of the bucket in direction of the pawl, until it snaps down behind the bottom flange. It will be understood that it is not necessary to operate the pawls manually during the mounting. The bucket is only gripped with one hand in the handle and with the other hand in the bottom flange *b*, whereafter the bucket is lifted. Hereby the pawl will also be lifted to a position, in which the other handle can pass above the bottom rod **5**, whereafter the bucket is released from the rack. The rack may, as shown in Fig. 3, constitute part of a frame **9** adapted to be supported on the ground by means of a base **10**. In this case the frame may suitably

be provided with two horizontal rods 5*a* and 5*b* on each side so that the rack will be capable of carrying two rows of buckets. To this end, oppositely directed pawls 6*a*, 6*b* are mounted on the upper bar 4, which are adapted to co-operate with similar abutments 7*a*, 7*b* as in Fig. 1.

It is an essential feature of the present construction that the retaining members of the rack are in the form of pawls or the like pivotable in a vertical plane about a horizontal axis, the lifting of said members being hereby substantially facilitated. Likewise, the removal of a milk bucket from the rack may be effected without the pawl being lifted by hand, the pawl being swung upwards when the bucket is lifted so much that its handle becomes disengaged from the lower supporting bar.

The invention is not limited to the embodiment described with reference to the drawing, but may be modified in several respects within the scope of the appended claims.

I claim:

1. A rack for milk buckets or like containers provided with a cylindrical bottom flange, comprising a horizontal bar for supporting a plurality of containers adjacent each other in an inversed position at their top portions, means for engaging said containers at their upturned bottom flanges, said means including a horizontal axle and a plurality of pawls pivoted on said horizontal axle and each having an oblique end face adapted to be engaged by the bottom flange of a container when inserting the same in the rack so as to cause said pawls to be lifted selectively and subsequently drop behind said bottom flange for retaining the container in the rack, means for supporting said pawls in such position as to present their oblique end faces to said bottom flanges when inserting containers in the rack, and brackets supporting both said horizontal bar and said horizontal axle.

2. A rack for a milk bucket or like container provided with a cylindrical bottom flange, comprising a horizontal bar for supporting a container in an inverse position at its top portion; means for engaging said container at its upturned bottom flange, said means including a horizontal axle mounted above said horizontal bar and a pawl pivoted on said horizontal axle and having an oblique end face adapted to be engaged by the bottom flange of the container when inserting the same in the rack so as to cause said pawl to be lifted and subsequently drop behind said bottom flange for retaining the container in the rack, and means for supporting said pawl in such position as to present its oblique end face to said bottom flange when inserting the container in the rack.

3. A rack for milk buckets or like containers provided with a cylindrical bottom flange, comprising a horizontal bar for supporting a plurality of containers adjacent each other in an inversed position at their top portions, means for engaging said containers at their upturned bottom flanges, said means including a horizontal axle mounted above said horizontal bar, and a plurality of pawls pivoted on said horizontal axle and each having an oblique end face adapted to be engaged by the bottom flange of a container when inserting the same in the rack so as to cause said pawls to be lifted selectively and subsequently drop behind said bottom flange for retaining the container in the rack; means for supporting said pawls in such position as to present their oblique end faces to said bottom flanges when inserting containers in the rack.

JENS LAURITS KJELDSEN.

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