Dec. 1, 1925.

1,563,575

J. M. JUNG

LIFTER

Filed Aug. 15, 1925

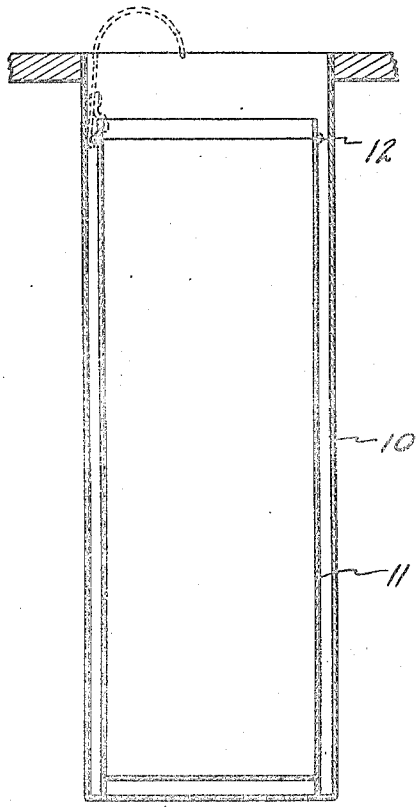


Fig. 1

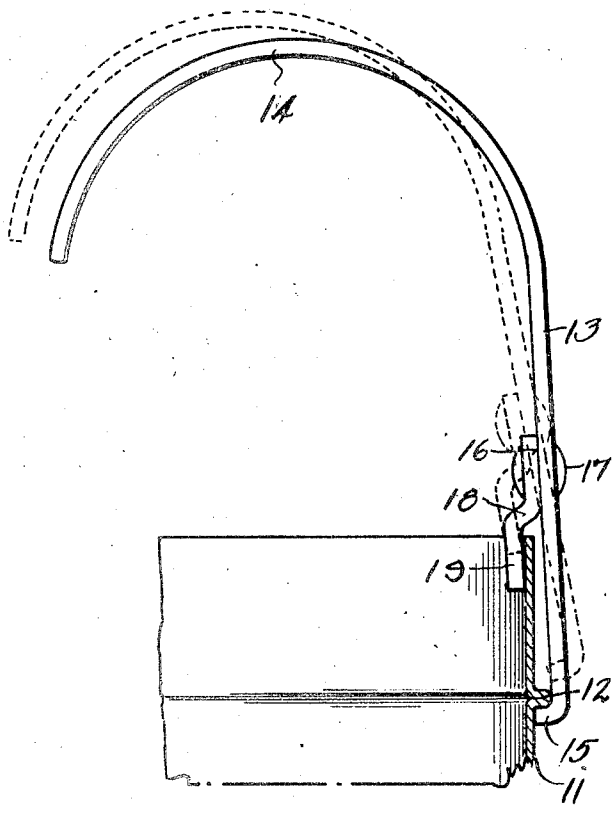


Fig. 2

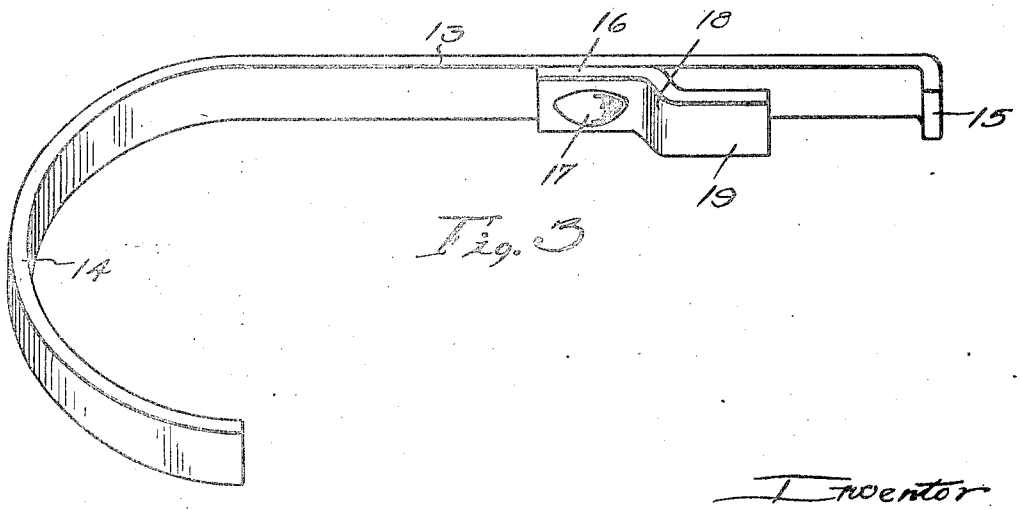


Fig. 3

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UNITED STATES PATENT OFFICE.

JOHN M. JUNG, OF SIOUX CITY, IOWA, ASSIGNOR OF ONE-HALF TO ARTHUR S. HANFORD, JR., OF SIOUX CITY, IOWA.

LIFTER.

Application filed August 15, 1925. Serial No. 50,427.

To all whom it may concern:

Be it known that I, JOHN M. JUNG, a citizen of the United States, and a resident of Sioux City, in the county of Woodbury and State of Iowa, have invented certain new and useful Improvements in a Lifter, of which the following is a specification.

My invention relates to a lifter particularly adapted to be used in handling cans of considerable size of the type which has an annular flange formed at its side and spaced from its upper edge, serving as a shoulder for the can cover, such as the ordinary can in which ice cream is frozen and delivered.

More particularly, it is my object to provide such a lifter which is of very durable, simple and inexpensive construction, and which may be manipulated to engage the edge of a can in a very limited space.

My improved lifter does away with all springs and moving parts, and is so constructed that it can be very quickly adjusted to position gripping the edge of a can.

With these and other objects in view, my invention consists in the construction, arrangement and combination of the various parts of my device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawings, in which:

Fig. 1 is a vertical, longitudinal view through a portion of an ice chest such as is ordinarily used to retain an ice cream can, illustrating the use of one of my improved lifters in conjunction with an ice cream can therein.

Fig. 2 is an enlarged sectional view of a portion of a can with the lifter in engagement therewith, a dotted line position of the lifter in the process of engaging the can being used to illustrate the readiness with which the lifter may be handled.

Fig. 3 is a perspective view of the lifter.

The handling of ice cream cans full of ice cream is a rather awkward procedure, due partly to the cold occasioned by the contents, and partly to the position in which the cans are placed in the ice cream vendor's cooling chest.

Different types of tongs have been devised for handling the cans, some of which encircle the can, others of which grasp the can from opposite sides and are provided with means for opening and closing a movable jaw on either side, but none of these have been found entirely satisfactory.

Fig. 1 illustrates a can, 11, enclosed in one of the compartments, 10, of an ordinary cooling chest such as is used by the ice cream retailer. It will be noted that there is very little space between the sides of the can and the compartment, 10, so the opening and closing of a movable jaw member is a rather difficult process in such a position. The use of an encircling member necessitates a different size for each size of can, and further the use of a lifter for each can since the lifter can not be removed from the can when the can has been deposited within the compartment, 10.

My invention comprises a bar, 13, having a handle, 14, at one end, and a jaw, 15, at the other end. The handle and jaw are bent in the same direction, for a reason which will later appear.

The bar, 13, may be made of heavy strap metal, but preferably of steel.

Intermediate the ends of the bar, 13, a finger is formed of a length of the same material as the bar, 13, and has a portion, 16, riveted to the bar, 13, by means of a rivet, 17, thence bent outwardly as at 18 to form the finger, 19.

The finger, 19, is positioned on the same side of the bar, 13, as the jaw, 15 and handle, 14, and is hooked in the direction of the jaw, 15. The finger is substantially parallel to and spaced from the bar, 13, sufficiently to receive the upper edge of the can, 11, when tilted in the angular position shown in dotted lines in Fig. 2.

In using the lifter the hook, 19, is inserted within the edge of the can and the jaw, 15, swung outwardly away from the outer side of the can so as to clear the bead, 12, as indicated in the dotted line position. With a continuous motion the lifter is pushed downwardly until the jaw, 15, has passed the flange, 12, and the operator then simply reverses the movement and lifts upwardly on the handle, 14, at the same time moving it somewhat outwardly, and as a result the jaw, 15, will swing under the flange, 12, and the finger, 19, will fulcrum against the side of the can so as to transmit lifting pressure on the handle, 14, to lateral inward pressure of the jaw, 15, against the flange, 12.

The finger, 19, is of such length as to in-

sure positive gripping of the upper edge of the can, and also to allow for slight variations in the distance of the flange, 12, from the upper edge of the can.

The purpose of positioning the handle, 14, on the same side of the bar, 13, as the jaw, 15, is to give a direction to the lift against the bar, 13, such as will tend to push the jaw, 15, inwardly against the side of the can. Thus when the can is being carried, its weight insures against the possibility of the lifter losing its grip.

Two of the lifters may be used if desired, one on either side of the can, although one is sufficient to handle the ordinary can.

Some changes may be made in the construction and arrangement of the parts of my invention without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claims, any modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim as my invention:

1. In a lifter to be used with a can having an annular flange spaced from its upper edge, a bar, a handle at one end of the bar, a jaw at the other end of the bar, a finger intermediate of the bar, said finger being hooked toward the jaw, the lifter being adapted to grasp a can by first hooking the finger over the edge thereof on the side remote from the flange, and then lifting the handle and consequently moving the jaw into engagement with the under side of the flange, the finger then acting as a fulcrum to change part of the lifting pressure of the handle to side pressure against the flange to insure gripping thereof by the jaw.

2. In a lifter to be used with a can having an annular flange spaced from its upper edge, a bar, a handle at one end of the bar, a jaw at the other end of the bar, a finger intermediate of the bar, said finger being hooked toward the jaw, the finger, jaw and handle being all positioned on the same side of the bar.

Signed at Sioux City, in the county of Woodbury and State of Iowa, this 12th day of August, 1925.

JOHN M. JUNG.