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B. E. LINFOOT

CRATE FOR BOTTLE CLEANING MACHINES

Filed Dec. 15, 1920

Fig. 1.

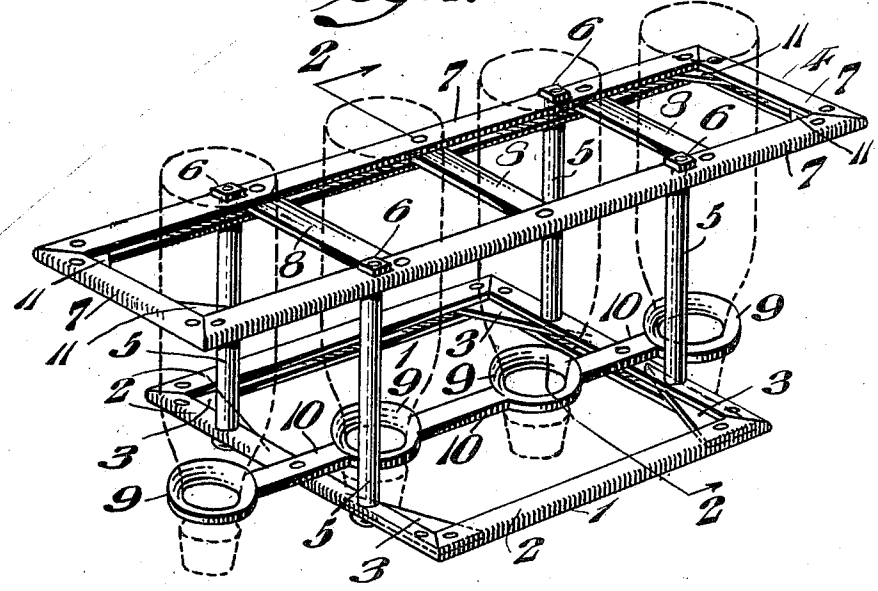
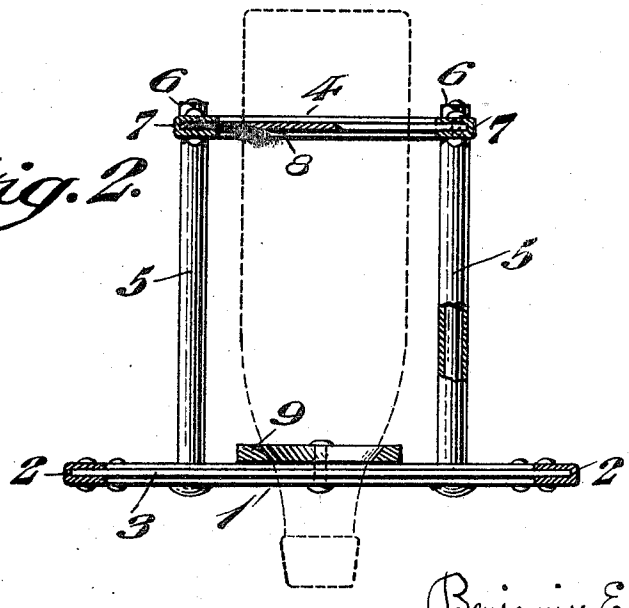


Fig. 2.



INVENTOR:
Benjamin E. Linfoot.
BY
Wiederheim + Fairbanks.
ATTORNEYS.

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UNITED STATES PATENT OFFICE.

BENJAMIN E. LINFOOT, OF PHILADELPHIA, PENNSYLVANIA.

CRATE FOR BOTTLE-CLEANING MACHINES.

Application filed December 15, 1920. Serial No. 431,035.

To all whom it may concern:

Be it known that I, BENJAMIN E. LINFOOT, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Crate for Bottle-Cleaning Machines, of which the following is a specification.

My invention consists of a crate adapted to hold bottles while being washed or cleaned by a bottle washing or cleaning machine, said crate being constructed of light, strong and inexpensive members and adapted to have the bottles easily applied thereto, firmly and steadily supported therein, and easily removed therefrom, as will be hereinafter set forth.

The invention is satisfactorily illustrated in the accompanying drawing, but the important instrumentalities thereof may be varied, and so it is to be understood that the invention is not limited to the specific details shown and described, as long as they are within the spirit or scope of the claims.

Figure 1 represents a perspective view of a bottle crate embodying my invention.

Figure 2 represents a transverse vertical section thereof on line 2—2 Figure 1.

Similar numerals of reference indicate corresponding parts in the figures. Referring to the drawings,

1 designates the base of a crate embodying my invention, the same having its sides formed of bars 2 of metal or other suitable material bent on themselves forming longitudinally extending channels therein, in the corners of which are the fillets 3 which enter said bars and are riveted or otherwise firmly secured to the adjacent portions of the latter, and extending far enough so that the channelled bars shall not be crushed under pressure of tightening devices hereinafter described, the base thus providing a strong structure for the purpose intended.

4 designates a frame comprising the top of the crate, it forming stringers the end members of which are supported above the base by the pedestals 5 which are preferably of the form of tubes or sleeves and headed bolts therein, the latter having on their threaded ends the nuts 6 for tightly connecting the top frame and the base, and firmly retaining the latter in their respective positions.

The frame 4 has its sides formed of bars 7 of metal or other suitable material bent inwardly on themselves forming longitudinally extending channels in which are received the ends of transversely extending cross bars 8, said ends being riveted or otherwise firmly connected with said bars 7, in the corners of which are the fillets 11 which enter said bars and are riveted or otherwise firmly secured to the adjacent portion of the latter, the frame 4 thus being a strong structure. Both frames being constructed of bars bent into channelled form are vastly stiffened by the same, while being also adapted to be constructed of light metal or material.

The cross bars are spaced apart and form with the sides 7 of the frame 4 a series of pockets to receive within them the bodies of bottles to be washed, as shown dotted in the figures and hold them by the walls of said pockets.

On the base 1 are the collars 9 which are carried by the bars 10, the latter being riveted or otherwise firmly secured to the side pieces of said frame, said collars and bars 10 being preferably integral of metal or other suitable material.

The collars 9 are in alignment with the pockets of the frame and have their inner faces conical forming open sockets, said faces according with the contour of the adjacent portions of the necks and breasts of the bottles and embrace the same when fitted therein, whereby said portions are retained snugly in the collars by contact therewith and thus the opposite portions of the bottles are held firmly in the resultant crate or rack, they being applied thereto in inverted position so that their mouths are below to receive the water or washing fluid thereat as usual in machines of the class, the rack being supported on a proper portion of the machine for said purpose. When the washing is accomplished the bottles may be easily lifted from the rack and fresh bottles applied.

Having thus described my invention what I claim as new and desire to secure by Letters Patent, is: —

1. In a bottle holding crate of the character stated, a base formed of side bars of channelled form with fillets at the corners thereof, said fillets being seated in the channels of said side bars and secured thereto, and a socket on said base adapted to receive the neck of an inverted bottle and firmly and steadily sustain the same thereon.

2. In a bottle holding crate, a base frame, a socket adapted to support the neck of a

bottle, a stringer connected with said base frame adapted to carry said socket, means for connecting said stringer with said base frame, and an upper frame connected with said base frame and formed of longitudinally and transversely extending bars providing a pocket for supporting the body of a bottle, said base and upper frames being composed of bars of channelled form, the upper frame having the transversely extending bars seated in the channels of the said longitudinal bar thereof and secured thereto.

3. In a bottle-holding crate, an upper frame member consisting of side bars, and a cross bar forming a receiving pocket for the body of a bottle, said side bars being of channelled form, the channels thereof having the end portions of said cross bar therein and firmly secured thereto, a base frame which is secured to the upper frame, and a socket member on said base frame in alignment to receive the neck of a bottle.

4. A bottle-holding crate of the character stated consisting of a base constructed of bars of channel form, an upper frame constructed of bars of channel form, means for supporting the latter on the former and connecting said base and frame, and a socket on said base, said upper frame having a transversely extending cross bar the ends whereof are seated in the channels of the bars of said frame, the latter named bars and said cross bar forming a pocket, said pocket and socket being in vertical alignment whereby opposite portions of a bottle may be held firmly and steadily while being washed or cleansed.

5. In a bottle-holding crate, upper and base frames, means for connecting the same, a cross bar on the upper frame forming therewith a pocket adapted to receive the body of a bottle, a socket member on the lower frame in register with said pocket adapted to receive the neck of a bottle, said frame being formed of bars with longitudinally extending channels therein, and fillets at the corners of said frames respectively adapted to enter the channels of the bars thereat and being secured thereto.

BENJAMIN E. LINFOOT.

Witnesses:

JOHN A. WIEDERSHEIM,

N. BUSSINGER.