

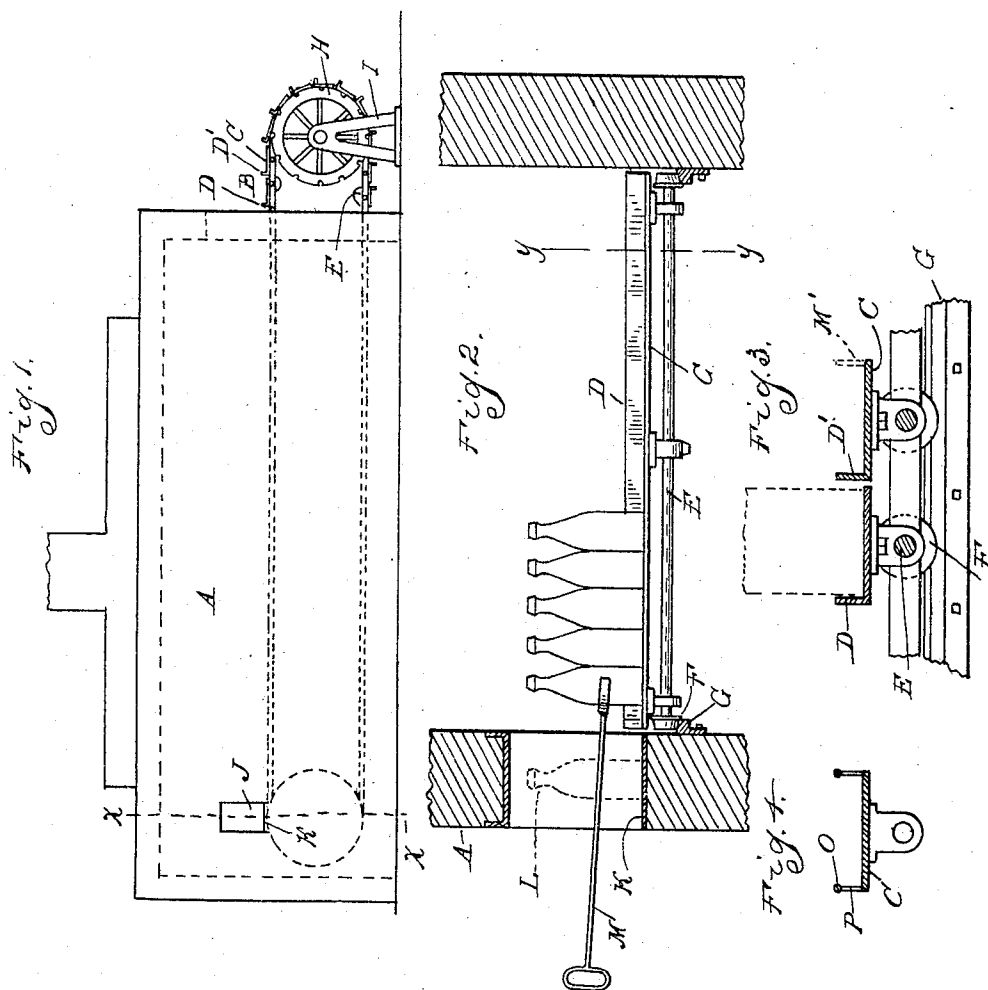
No. 774,692.

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M. J. OWENS.
LEER.

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NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

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LEER.

SPECIFICATION forming part of Letters Patent No. 774,692, dated November 8, 1904.

Application filed February 8, 1904. Serial No. 192,692. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL J. OWENS, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Leers, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to new and useful improvements in leers; and it consists particularly in the construction of a carrier which I provide with guides between which the articles may be fed and be guided upon the carrier, as more fully hereinafter described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation of the leer, showing my improvement applied thereto. Fig. 2 is a vertical section thereof on line *x x*, Fig. 1. Fig. 3 is a vertical section on line *y y*, Fig. 2. Fig. 4 is a section similar to Fig. 3 of a slightly-modified form of carrier-plate.

A represents the ordinary leer-casing, which is preferably of brick and which may be heated in any known and usual manner. B is the carrier extending therethrough. This carrier I have shown as composed of a series of plates C, having at one edge the upturned flange D, the other edge of the plate being in close proximity to the upturned edge D of the adjacent plate, forming a guideway between the two upturned flanges, which it is intended shall be of substantially the width of the article which is intended to be placed thereon. These plates extend transversely of the leer-carrier and are connected together by suitable hinge-joints, preferably formed by means of the cross-bars E, which at their ends are provided with the bevel-wheels F, running on rails G on the inner sides of the rear walls. This carrier-chain runs over wheels H at the ends, which wheels are journaled in brackets I. In this construction I have shown near the left hand of the leer-casing or leer-walls a feed-opening J, through which the articles may be fed upon the leer-carrier, the lower edge K of the opening preferably being in line with the upper face of the plates of the carrier.

To fill the leer, the operator places a bottle (which I have shown in this case as being the article to be annealed) upon the plate K, as shown in dotted lines at L, and then by hand or preferably by a suitable tool M pushes the bottle onto a leer-carrier, the bottle being prevented from toppling over by being guided between the flanges D D' of adjacent plates, as shown in dotted lines in Fig. 3. After placing one bottle in position the operator places the succeeding one in the same way and pushes it along onto the leer-carrier, the first bottle pushing the second one until the entire row is on the leer-plate transversely of the carrier. Then by any suitable mechanism (not shown) the carrier is moved the distance of the width of a plate, and a succeeding plate is filled with the bottles.

Instead of placing the flanges D D' upon only one edge of the carrier-plates I may place them upon both edges, as shown in dotted lines at M' in Fig. 3. The device can be made much more cheaply and with less material by simply making the flange upon one edge of each plate.

Instead of making the guides D by upturning the edge of the plate I may simply provide guide-rails O at one side or at each side of the carrier-plates C and support them by posts or pins P, as shown in Fig. 4.

This device of course is mostly useful where articles of uniform width are being manufactured in glass-factories—as in a factory manufacturing only beer-bottles, for instance—and in case different sizes of bottles are made, such as pints and quarts, different leers will be required or different carriers for the same leer.

When the bottles have been properly annealed, they are taken off from the right-hand end of the carrier, which in this case I have shown as projecting slightly out beyond the end of the lower walls.

Of course instead of having an opening, such as J, in the side walls of the leer I may feed the leer on an extension of the carrier beyond the lower wall, such as is shown at the right hand of Fig. 1. In that case the carrier would move from the right to the left and the annealed ware would be taken out at the other

end and can be accomplished by simply extending the carrier through the other end of the leer.

While I have shown a particular form of guides on a carrier, I do not desire to be limited in my invention to the form shown, for I believe I am the first to provide a leer having a carrier having transverse guides so combined with the carrier that the carrier and guides are adapted to receive, support, and guide a series of separate articles while being fed transversely thereon.

What I claim as my invention is—

1. In a leer, a carrier, transverse guides thereon, the guides and carrier being adapted to guide a series of separate articles while being fed transversely onto the carrier.

2. In a leer, a carrier, continuous trans-

verse guides thereon, such guides being spaced apart a slightly greater distance than the width of the articles to be fed thereon, and being adapted to guide a series of separate articles fed laterally on the carrier.

3. The combination of the leer-casing having a lateral feed-opening, a carrier in the leer passing said opening, and transverse guides on the carrier adapted to guide a series of articles fed upon the carrier through said opening.

In testimony whereof I affix my signature in presence of two witnesses.

MICHAEL J. OWENS.

Witnesses:

E. H. CLOSE,

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