

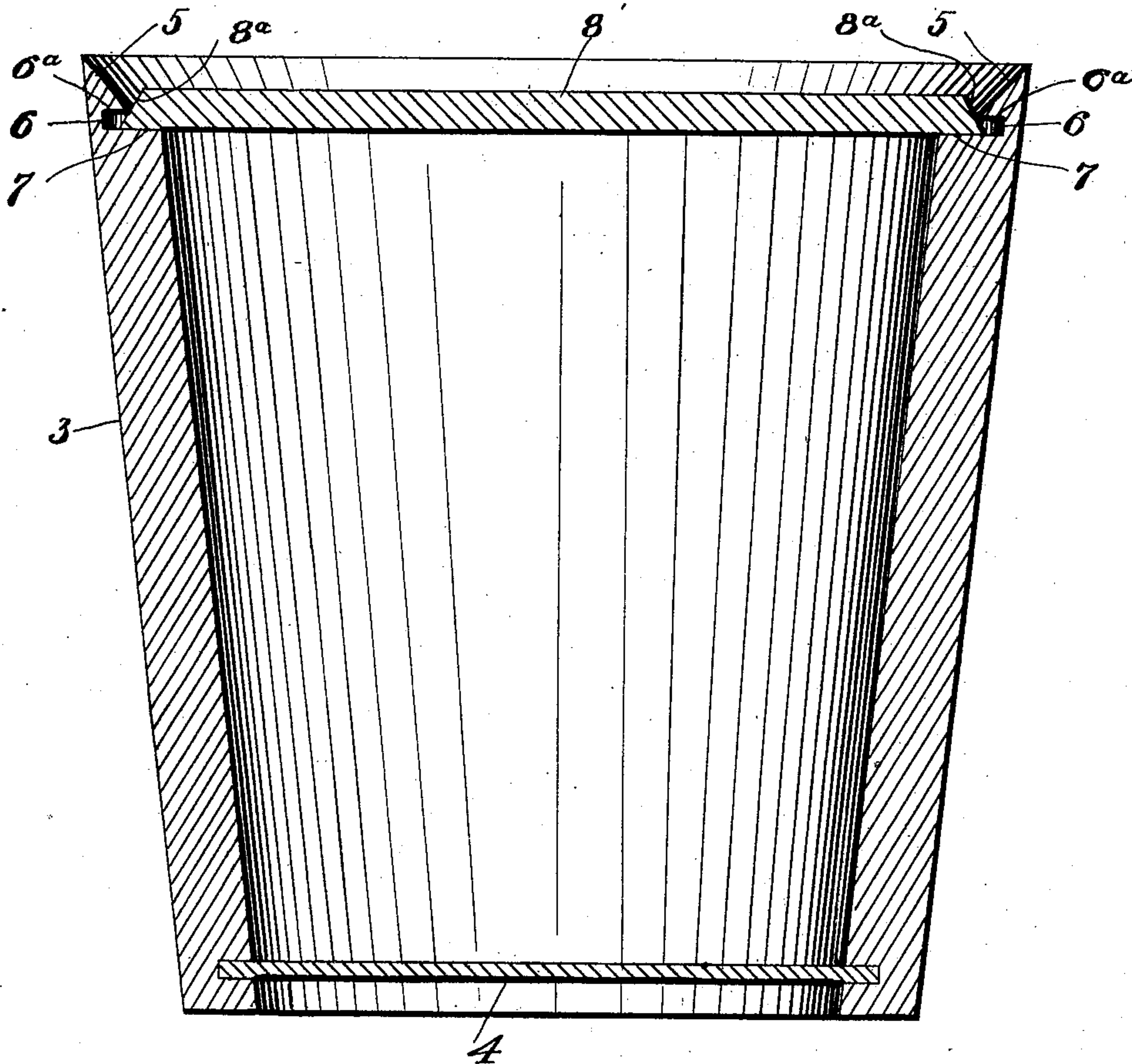
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F. J. GARVEY.
PAIL.

Patented June 3, 1902.

(Application filed Oct. 2, 1901.)

(No Model.)



WITNESSES:

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SPECIFICATION forming part of Letters Patent No. 701,706, dated June 3, 1902.

Application filed October 2, 1901. Serial No. 77,312. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS J. GARVEY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Pails; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to pails, and particularly to pails having a cover to confine the contents thereof; and it consists in certain changes in the croze, in which the cover or head is seated, and in the staves or body of the pail, as hereinafter described.

My invention particularly applies to tubs or pails used for shipping and storing lard and similar semiliquid substances. In the present state of the art the operation of heading such pails in such manner as to effectively retain the contents thereof requires the services of skilled coopers, and time and dexterity are required to fit the head of a pail in the croze in such manner as to form a tight joint. In existing pails, by reason of the narrow edge, and consequent small purchase, of the head within the croze, nailing is necessary to retain the head in position. In large butter and lard manufacturing concerns the services of a considerable number of coopers are required to head and nail pails. Also in pails having a shallow croze, as in the existing art, the head has such slight purchase on the staves or body that when the pails are piled one upon the other the weight frequently causes the head of one of the lower pails to break or turn. The heads of such pails are frequently broken in during cartage and transportation.

The object of my invention is to obviate these defects and to construct a pail in which the head can be more readily and speedily inserted and retained without nailing, and which will also resist external shock and pressure.

It is obvious that by simply making the croze deeper the defects would not be remedied, because a larger head or one having greater purchase at the croze could not be in-

serted, at least without loosening the staves, which would be undesirable, because of the time and labor necessary, if not impossible, because of leakage of the contents of the pail. Hence my invention embodies the idea of making the croze deeper and of cutting away the stave above the croze, forming a beveled yielding tip or end of the staves, within which the heads may be sprung. Also by this means a broad ledge is formed upon which the head rests and against which it is confined.

In the drawing the figure is a vertical section of a pail embodying the invention.

The body or drum of the pail is indicated at 3 and may be formed of staves or integrally of fiber or the like. The bottom of the pail is indicated at 4, and may be secured to the drum in any suitable or preferred manner. In the inner face of the drum, near the top thereof, is formed a narrow circumferential groove or croze 6, which is preferably cut in at right angles to the axis of the drum and of such depth that the neck remaining is sufficiently thin to allow the upper end or edge of the drum to yield outwardly when the head is inserted. The upper wall of the croze (indicated at 6^a) is of considerably less depth or width than the lower, and from the upper wall of the croze the inner wall of the drum is beveled, as indicated at 5, preferably to a moderately sharp edge at the top of the drum. The chime or portion above the croze is thus considerably thinner in cross-section than the drum below the croze, and an inwardly-extending ledge or step 7 is thus produced.

The cover of the pail is indicated at 8, and the inner surface thereof is flat to the edge, where it joins the bevel 8^a, inclined inwardly therefrom.

It will be seen that by the construction indicated a joint of considerable width is formed between the inner surface of the cover and the ledge 7; also, that another joint is formed between the edge of the wall 6^a and the bevel 8^a of the head; also, that by making the head the proper size the chime binds inwardly against the head and forces and confines it tightly against the ledge 7.

The operation of heading pails so constructed is very simple and quick. The head being placed upon the pail rests upon the bevel 5 and may then be sprung into the

croze by a rap with a mallet or by appropriate pressure. It will be seen that no nailing is required to retain the head and that such a broad support is provided for the head that
5 there is little or no danger that it will be turned or broken by any ordinary weight.

If the pail be made of staves, it is unnecessary to loosen the hoops to insert the head, since the neck of the staves will yield sufficiently for that purpose.
10

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

1. In a pail or the like, in combination, a
15 drum having a deep croze therein forming a relatively thin elastic neck, a chime above the croze of less thickness than the drum below the croze, said chime having a bevel extending from the upper wall of the croze and
20 forming an acute-angled shoulder therewith, and a head having a chamfer engaged by the apex of the shoulder.

2. In a pail or the like, in combination, a drum having a croze of sufficient depth to form an elastic neck, the lower wall of the
25 croze extending inwardly beyond the upper, whereby an inwardly-extending ledge is formed, a chime having a bevel extending from the upper wall of the croze and forming an acute-angled shoulder therewith, and a
30 head the lower surface of which rests flatly upon said ledge forming a wide joint therewith, and the upper surface of which has a chamfer engaged by the apex of the shoulder, the said neck being spaced from the edge of
35 the head within the croze so that a constant pressure is exerted by the neck to bind the head against the ledge.

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

FRANCIS J. GARVEY.

Witnesses:

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HARRY G. BATCHELOR.