

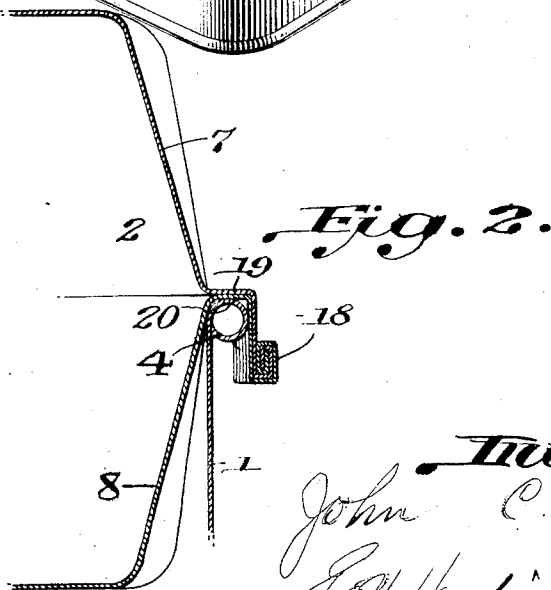
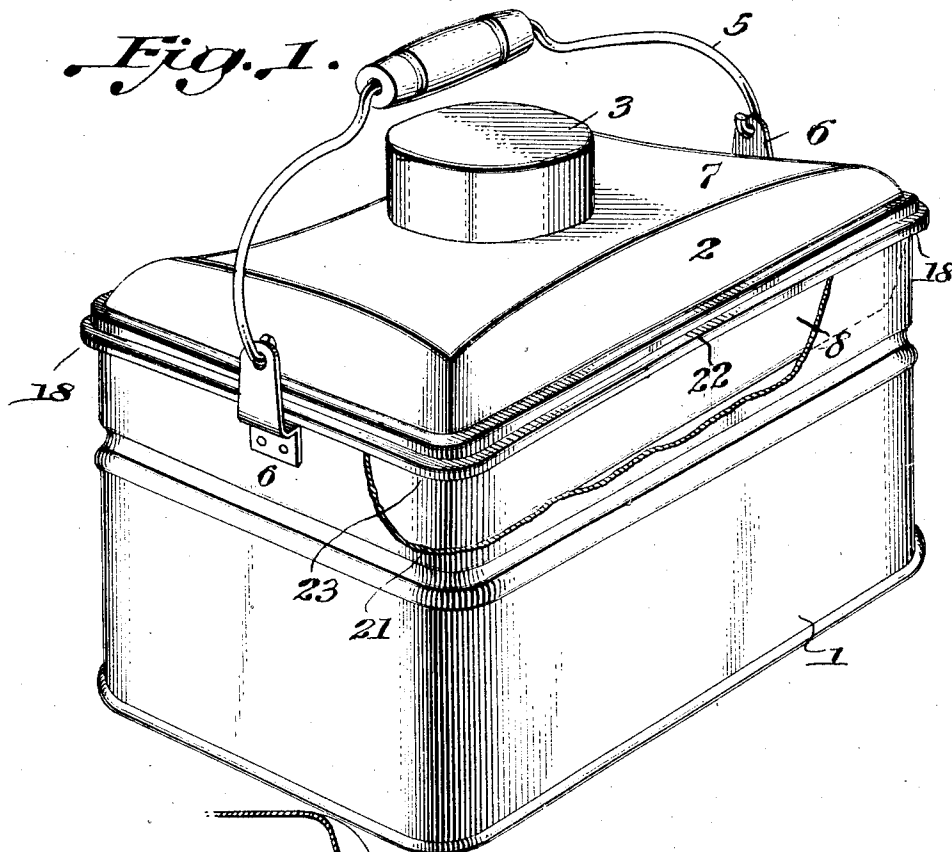
July 26, 1927.

1,637,144

J. C. FRITZGES
ALUMINUM DINNER PAIL

Filed Dec. 15, 1926

3 Sheets-Sheet 1



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3 Sheets-Sheet 2

Fig. 3.

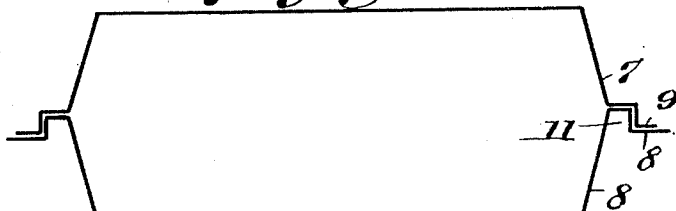


Fig. 4.

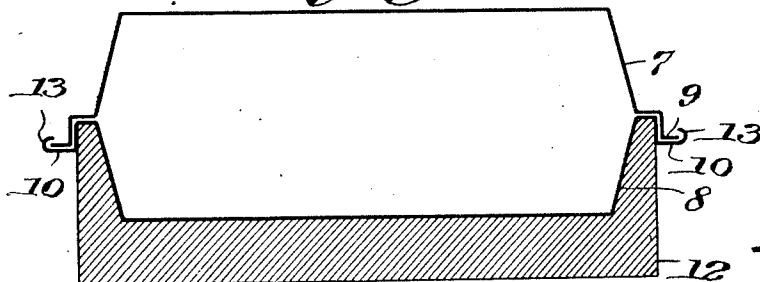


Fig. 5.

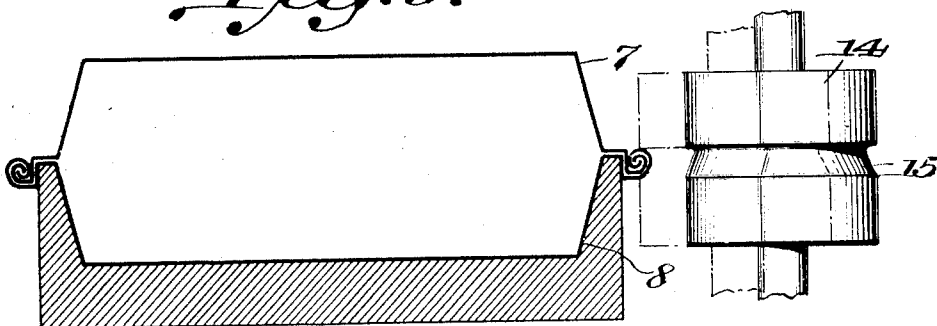
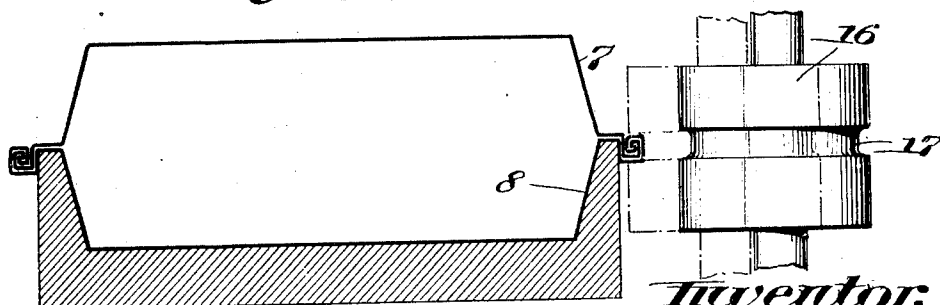


Fig. 6.



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3 Sheets-Sheet 3

Fig. 7.

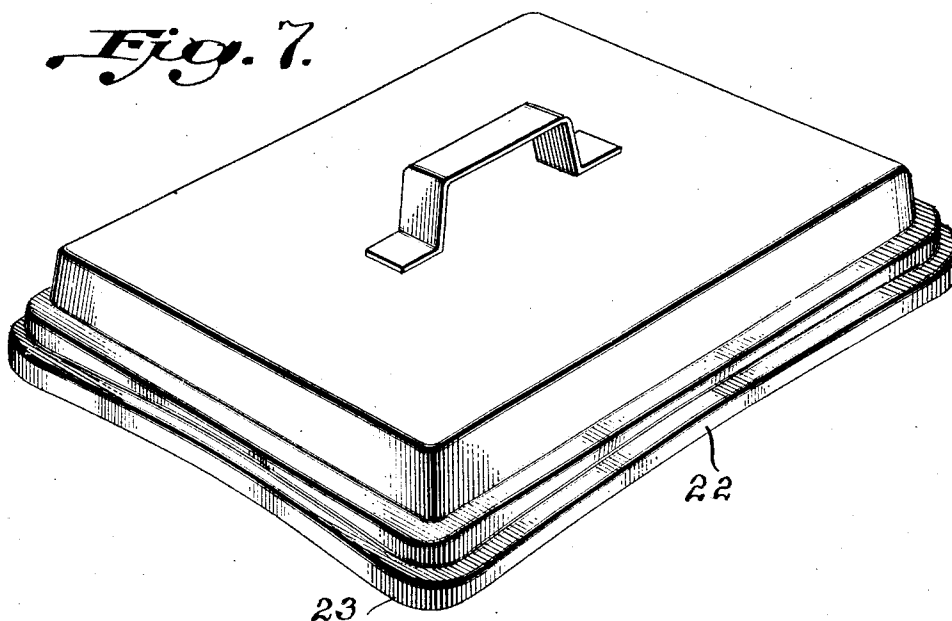
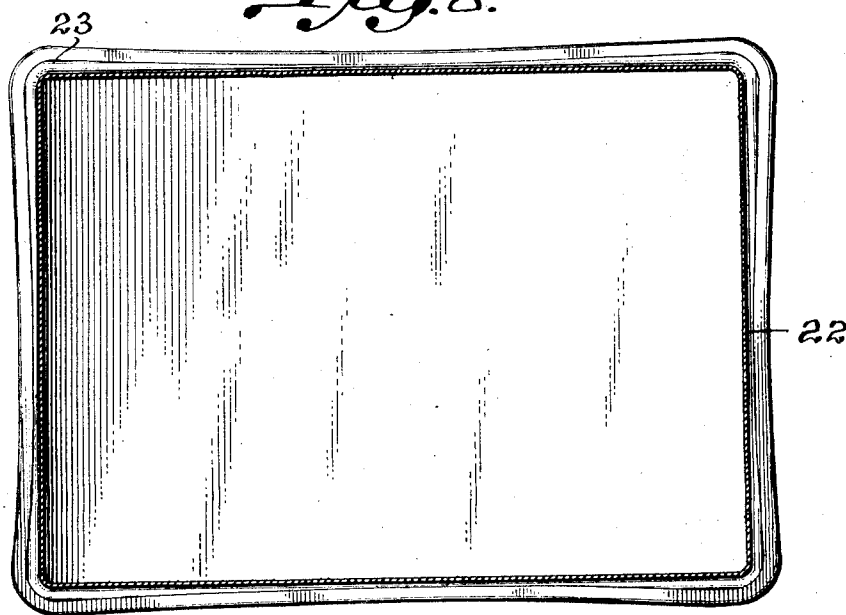


Fig. 8.



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UNITED STATES PATENT OFFICE.

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ALUMINUM DINNER PAIL.

Application filed December 15, 1926. Serial No. 154,931.

Aluminum is, in many respects, an ideal material for liquid and food containers and utensils and is extensively used for such purposes.

However, it is impractical, and almost impossible, to satisfactorily solder the seams or joints of aluminum receptacles. Where the construction of a utensil, container, or the like necessitates the use of a joint, seaming is usually resorted to.

My object is to provide an improved dinner pail having a body adapted to contain food, and provided with a combined liquid container and cover of two-part construction, the parts of which have an improved joint or seam which is liquid tight and is also so constructed that it cooperates with the beaded upper part of the food container to lock or clamp the liquid container in position and thus form a tight joint which is not easily disengaged and which will not rattle.

I have also designed improvements in the shape of the upper part of the liquid container which enables the liquid container to be readily snapped on or off of the pail without necessitating the use of spring ears, which are usually used to retain the cover.

The improved seam which constitutes the joint between the upper and lower sections of the liquid container is formed by a series of rolling operations effected in a new manner by a seaming wheel as will appear fully hereinafter.

In the accompanying drawings:

Figure 1 is a perspective view of my improved dinner pail, certain parts being broken away;

Figure 2 is an enlarged vertical section through the liquid container and the pail proper, showing the improved seam or joint and the manner in which the liquid container and pail are detachably connected together;

Figure 3 is a cross-sectional diagrammatic view showing the shapes of the bottom and top sections of the liquid container as they come from the press after being stamped and flanged;

Figure 4 is a similar view illustrating these sections in a chuck, the initial bend or turn of the seam having been made;

Figure 5 is a similar view illustrating the next step in the formation of the seam;

Figure 6 is a similar view showing how the final construction of the seam is effected;

Figure 7 is a perspective view of a cover

embodying the invention, showing the pressed-in form of the seam at the sides and ends, this cover having no liquid receptacle, hence better illustrating the construction by which the cover is retained; and

Figure 8 is a bottom view showing the cover of Fig. 7, applied to the pail, the latter being in section.

The food container of my improved dinner pail appears at 1; the improved liquid container or bottle is shown at 2, the latter having an opening in its top which is covered by a cup or cap 3 which is a common feature in dinner pails. The body 1 is provided around its upper edge with a bead 4 of any well known construction, and the pail has an ordinary handle 5 connected to ears 6 on the body 1.

The liquid container 2 is formed of upper and lower sections 7, 8.

These sections are seamed or joined together in a new manner so that the necessity for attempting to solder them is done away with and at the same time the joint is leak proof.

Referring to Figure 3, the sections 7 and 8 are shown in the condition in which they appear as they come from the press after having been stamped and flanged, the flanges appearing at 9 and 10, the latter being provided with a lateral part which is longer than the former. The space or channel 11 is of a width adapting it to snugly receive the bead 4, as shown in Figure 2.

The sections 7 and 8 having been placed in a chuck 12, a bead forming or crimping wheel is used to form the initial bend or turn of the lower flange 10 as shown at 13. The next step is to subject the flanges 9 and 10 to a crimping action by using a crimping or seaming rotary wheel 14, having a peripheral groove or channel 15 shaped to bring about a seaming action on the flanges 9 and 10 as shown in Figure 5.

The final step is to employ a rotary crimping or seaming wheel 16 having a channel or groove 17 adapted to compress the seam as shown in Figure 5 to the shape shown in Figure 6, and when this operation has been completed the seam has the finished appearance shown at 18 in Figure 2.

The joint thus effected between the sections 7 and 8 is a double joint which is very tight and is leak proof. In addition to this advantage, the thickness of the seam 18, is such that while the inherent springiness of

the outstanding flanges 19 and 20 is not interfered with for the purpose of snapping the parts together into the position shown in Figure 2 with the bead 4, snugly grasped; nevertheless, the thickness of the joint at 18 prevents accidental distortion, so that the pail will withstand considerable hard usage without interfering with the fit of the container 2 in respect to the body 1.

The section 8 is preferably formed with rounded corners 21. The seam 18 after receiving its rolling as shown in Fig. 6 is taken from the chuck and is given a press operation which slightly forces it inwardly, to cause the central parts 22 of the seam at the sides and ends of the cover to be drawn in deeper, and to gradually slope outwardly to the corners 23. This construction permits the easy snapping on and off of the container 2 and prevents rattling of the said container in respect to the body 1, as a lock is thus provided.

In Figures 7 and 8, this feature is emphasized by showing the seam on a cover 24 which is not provided with the sections 7 and 8. The construction shown at 22 and 23 is, however, provided on the embodiment shown in Fig. 1. The manner in which the lock thus provided, effectively holds the cover in place, will be clear from Figure 8.

A further advantage inhering in the double seam illustrated at 18, 19, 20, is the protection afforded against the entrance of dust or insects.

I claim:

1. In a sheet metal dinner pail, the combination with a body, of a combined top and receptacle comprising sections having an outstanding seamed joint overlying and embracing the edge of the body.

2. In a sheet metal dinner pail, the combination with a body, of a combined top and receptacle comprising sections which have an outstanding seam which is double substantially throughout its extent and is provided with a bead separated from the top by a channel which receives and embraces the upper edge of the body of the pail.

3. In a sheet metal dinner pail, the combination with a body, of a combined top and

receptacle comprising upper and lower sections, the upper section extending above the body and the lower section depending into said body, said sections being joined by a seam which is double throughout its extent and includes a laterally extending flange, and a vertically arranged double bead, the bead being spaced from the lower section of the said top by a channel, said channel snugly receiving and engaging the upper edge of the body.

4. In a sheet metal dinner pail, the combination with a body, of a combined top and receptacle therefor comprising sections which are connected by an outstanding double seam which receives and snugly engages the upper edge of the body, the lower one of said sections depending within the body and the seam being provided with alternating rounded and concave parts.

5. In a sheet metal dinner pail, the combination with a body, of a combined top and receptacle therefor comprising sections which are connected by an outstanding double seam which receives and snugly engages the upper edge of the body, the lower one of said sections depending within the body and the seam being provided with rounded corners and concave sides.

6. In a sheet metal dinner pail, the combination with a body, of a combined top and receptacle comprising sections which have an outstanding seam, which is double and is provided with a depending beaded flange separated from the top by a channel which receives and embraces the upper edge of the body of the pail, the depending part of the flange being pressed in at its center at the sides and ends of said flange, thence gradually sloping to its corners, said corners being rounded.

7. A combined cover and receptacle for a sheet metal dinner pail, said cover and receptacle having a seamed, snap-on depending flange adapted to embrace the upper edge of the pail, said seamed flange having certain parts concaved and certain parts rounded, causing it to grip the pail.

In testimony whereof I affix my signature.
JOHN C. FRITZGES.