Dec. 10, 1929. E. F. HULBERT 1,738,951

CONTAINER

Filed Dec. 23, 1925

Fig. 1.

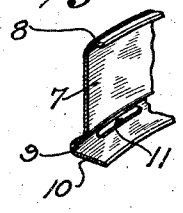


Fig. 2.

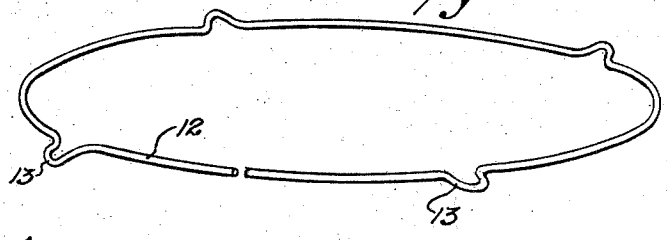


Fig. 3.

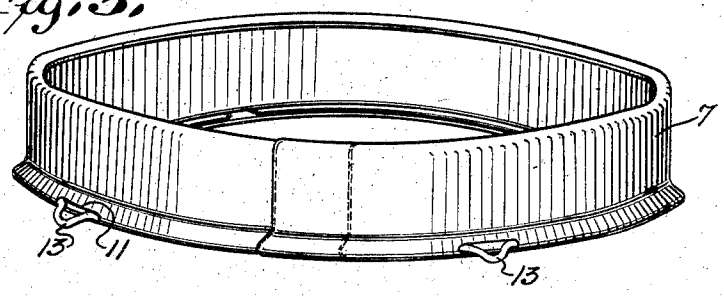


Fig. 4.

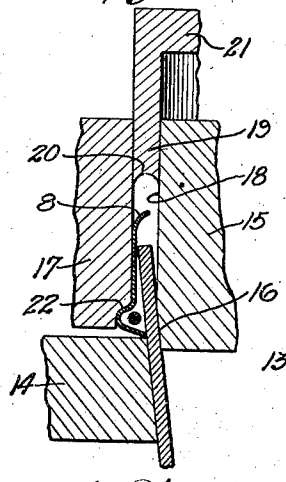


Fig. 6.

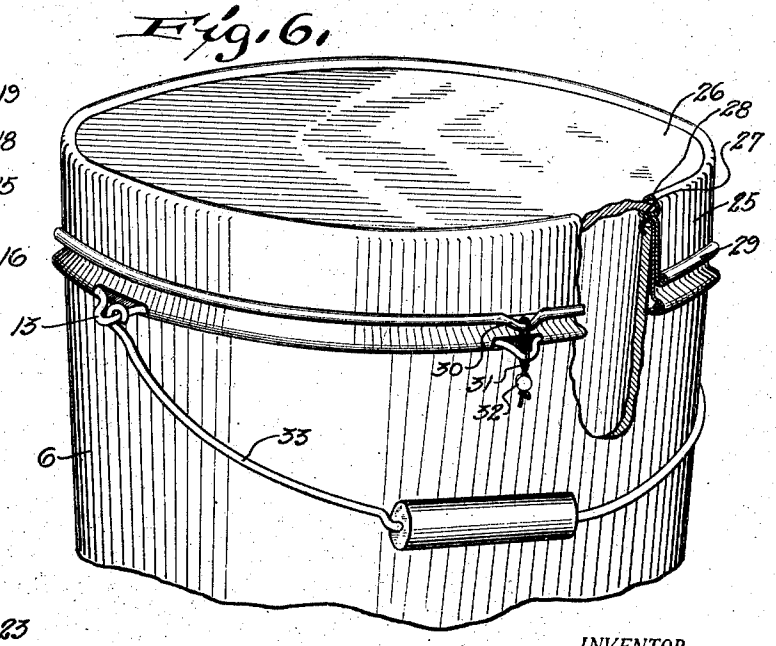
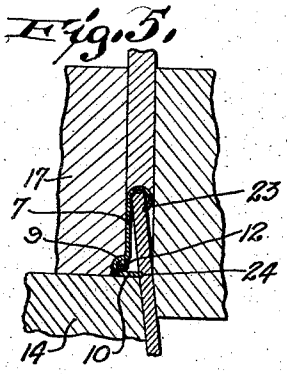


Fig. 5.



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UNITED STATES PATENT OFFICE

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CONTAINER

Application filed December 23, 1925. Serial No. 77,287.

The invention relates to fibre pails or containers.

One object of the invention is to provide a metal reinforcement for the mouth of the pail, which is secured thereto in a novel manner and carries parts which cooperate with parts on the cover of the pail to secure the cover to the pail and also act as bail ears.

The invention further consists in the several features hereinafter set forth and more particularly defined by claims at the conclusion hereof.

In the drawings, Fig. 1 is a detail perspective view of the metal band, as initially formed, used to reinforce the pail mouth;

Fig. 2 is a perspective view of a wire member associated with the metal band;

Fig. 3 is a perspective view of the metal band and wire member as initially assembled;

Fig. 4 is a detail sectional view through the container parts in the forming apparatus;

Fig. 5 is a view similar to Fig. 4, showing the container parts in finished condition in the forming apparatus;

Fig. 6 is a perspective view of the container, parts being broken away and parts being shown in section.

The siding or body 6 of the container is composed of fibre tubing, usually made up of a number of wrappings of paper or fibre sheets. As shown, the tubing is wrapped in the form of a tapered or conical body to form the siding of a pail, but the siding may also be of straight, cylindrical form.

For forming the reinforcement for the pail mouth, a strip of sheet metal, preferably of sheet steel or other suitable sheet metal, is rolled into a band 7, shown in Fig. 3, having a cross-section as shown in Fig. 1, in which the upper end or edge 8 of the band is given an initial inward curve and the lower end or edge of the band has an annular channel portion 9 and an inclined flanged portion 10, and elongated slots or openings 11 are formed in the channel of the band. A split ring 12, formed of heavy round wire, is provided at spaced points with outwardly projecting loops or ears 13, which loops are designed to extend through the openings 11 in the band 7, the rest of the wire being disposed within the channel 9.

The band 7 with the ring 12 inserted within it, as shown in Fig. 3, is placed over the top portion of the siding, as shown in Fig. 4, and the siding is held against endwise movement by an external contractible chuck 14 and a plunger 15 whose lower end 16 is tapered to fit the taper of the siding. Another plunger 17 cooperates with the plunger 15 to form an annular space 18 in which the annular portion 19 of a forming tool works, the lower end of said tool having a curved edge 20. The tool 19 is carried by a plunger 21. The lower end of the plunger 17 is curved at 22 so as to engage over the upper portion of the channel 9.

With the parts positioned as shown in Fig. 4, the forming tool 19 is moved downwardly, and by its pressure upon the curved edge 8 curls said edge over the top of the siding and into crimped or embedded engagement with the interior part thereof, as at 23, as shown in Fig. 5, and at the same time tightly clamps the band to the upper end of the siding. During this forming operation the plunger 17 moves downwardly, thereby compressing the channel 9 between it and the chuck 14, and thereby securing the sides of the channel against the wire ring 12 and also forcing the edge 24 of the flange 10 into the outer portion of the siding so as to embed itself therein, with the result that the band 7 is firmly secured to opposite sides of the siding and the wire member 12 is firmly anchored in the band.

The head structure may be of any suitable form having fastening means designed to cooperate with the loops 30 of the pail mouth, but I prefer to provide a cover composed of a metal sheathing or band 25, preferably of thin sheet steel, designed to clampingly receive the flat head 26 of fibre or other suitable material within a portion of the band.

The sheathing 25 is formed from a sheet of sheet metal which has a folded-together portion intermediate its top and bottom edges forming a flange 27 upon which the bottom of the head seats, and its upper edge 28 is rolled over into clamping engagement with

the head 26, whereby the head adjacent its outer edge is firmly held or clamped within the recess thus formed, the strip being bound around the head with its ends secured together in any suitable manner, the rolling of the top edge being done when the head is in position within the band. The lower edge 29 is preferably beaded to stiffen and strengthen it so as to reinforce the head band and at points adapted to register with the ears 13 portions 30 of this beaded edge are struck upwardly to form ears or loops which with the loops 13 are designed to receive a fastening means, such as a wire tie 31, whose ends are twisted together and secured against unauthorized tampering by a lead seal 32. At least two of the ears 13 are disposed at diametrically opposite points so that they form ears to receive the bail 33 of the pail.

With this construction the main body portion of the band 25 is designed to slidably fit over the band 7, and it will be apparent that these parts form an efficient wear-resisting surface, and that they also efficiently reinforce the siding and head of the container.

I desire it to be understood that this invention is not to be limited to any particular form or manner of making the parts except in so far as such limitations are specified in the claims.

What I claim as my invention is:

1. In a container, the combination with the siding, of a reinforcing metal band for the mouth of the container, said band extending over the top edge of the container and crimped to both sides thereof and having a channel portion intermediate its ends provided with slots, and a ring member seated within said channel provided with loops projecting through said slots.

2. In a container, the combination with the siding, of a reinforcing metal band for the mouth of the container, said band having a channel portion intermediate its ends provided with slots, a ring member seated within said channel provided with loops projecting through said slots, a cover provided with loops, and fastening means passing through the loops of the cover and some of the loops of said wire member.

3. In a container, the combination with the siding, of a reinforcing metal band for the mouth of the container, said band having a channel portion intermediate its ends provided with slots, a ring member seated within said channel provided with loops projecting through said slots, a cover provided with loops, fastening means passing through the loops of the cover and some of the loops of said wire member, and a bail secured to oppositely disposed loops of said wire member.

4. In a container, the combination with the siding, of a sheet metal band in crimping engagement at its upper and lower edges with the siding, a wire member mounted within said band intermediate its ends and having bent portions extending through openings in the band, a cover comprising a reinforced metal band removably fitting over said first-named band, and a head member clamped to said cover band, said cover band having ears struck therefrom at points to register with the ears of said wire member, and fastening means passing through alined ears on the cover band and first-named band to hold the cover closed.

5. In a container, the combination with the fibre siding, of a reinforcing metal band for the mouth of the container extending over the top edge and crimped to both sides of said siding, and a removable cover including a fibre disk and a reinforcing and head-attaching band fitting over said mouth-band and having an inwardly extending cover-seating flange seating on the top of said metal mouth-band and an upper flange spaced therefrom, said flanges receiving and clamping said disk between them with the edge of said upper flange in clamped engagement with said disk.

In testimony whereof, I affix my signature.

EDWIN F. HULBERT.