

No. 631,845.

Patented Aug. 29, 1899.

W. R. BUTTER & A. MARR.

BUCKET EAR.

(Application filed Oct. 14, 1898.)

(No Model.)

Fig. 1.

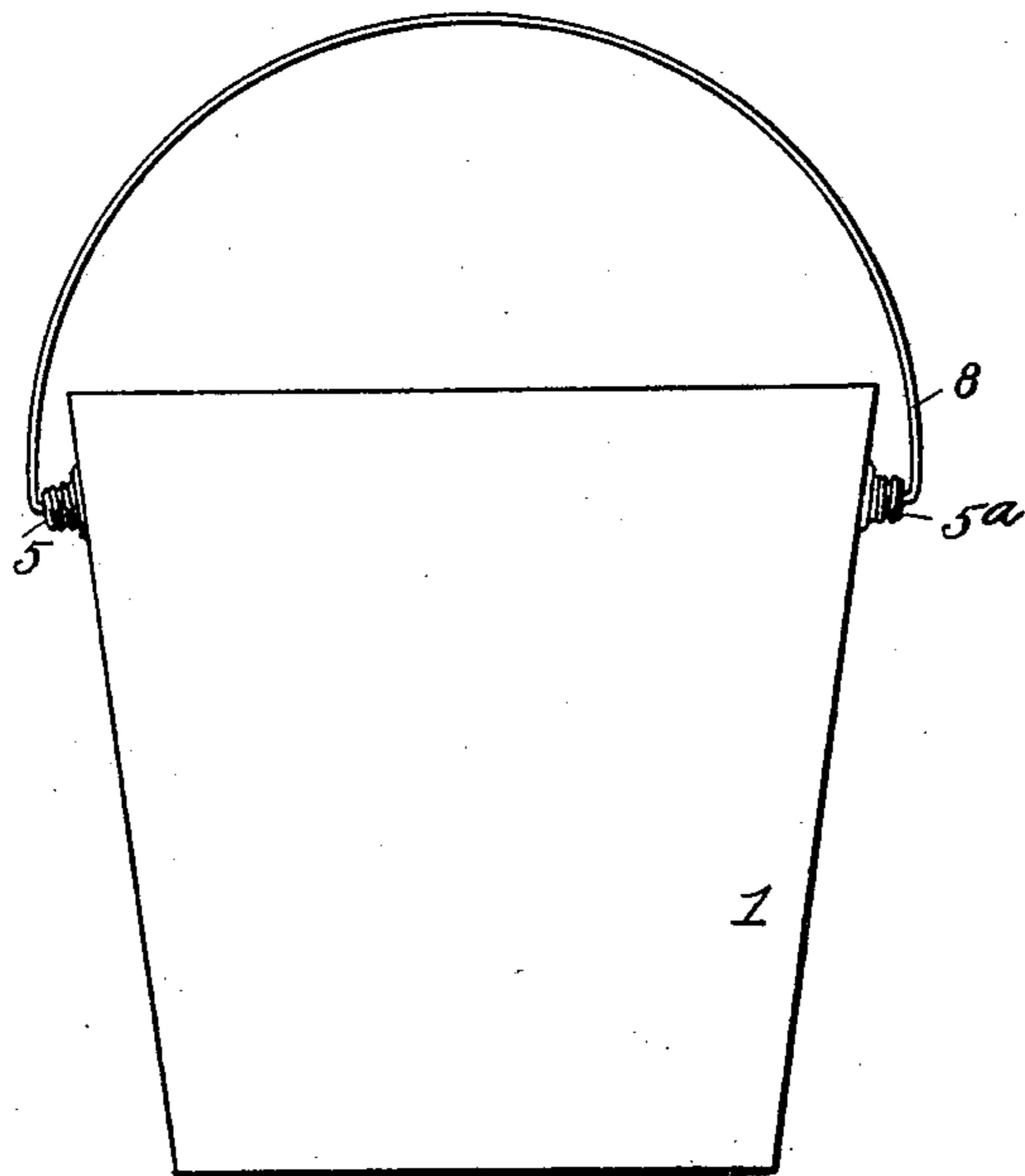


Fig. 2.

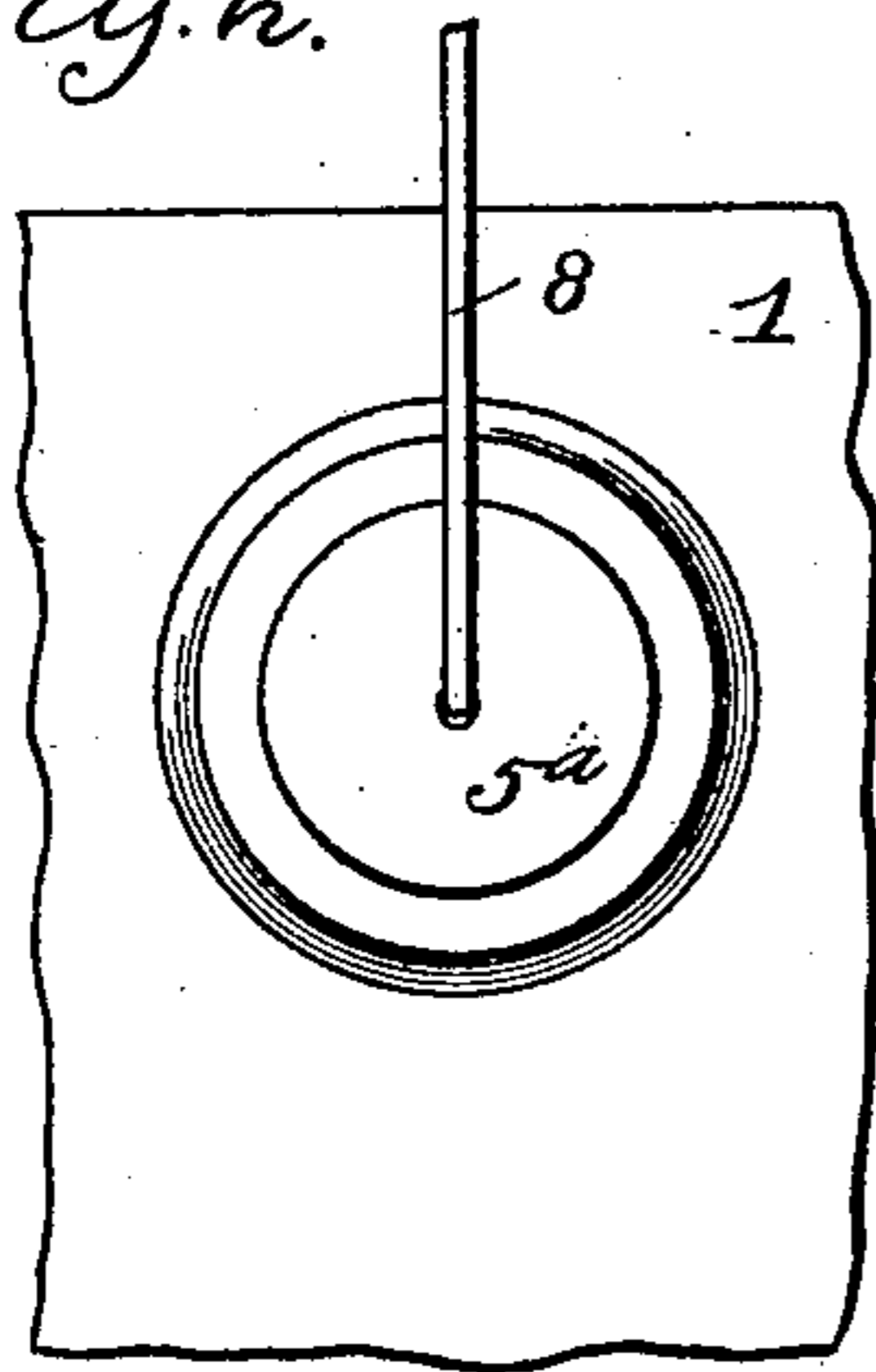


Fig. 3.

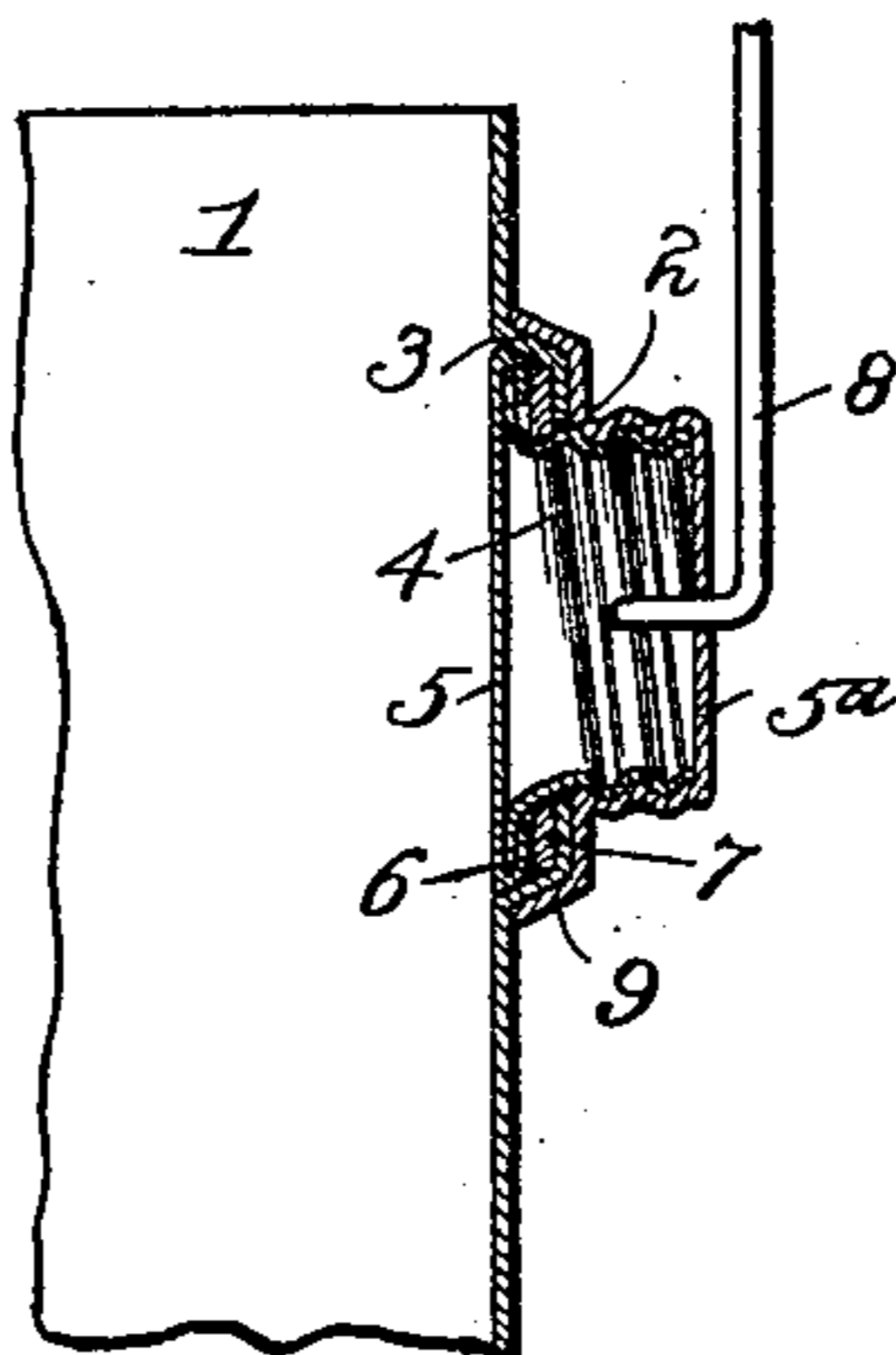
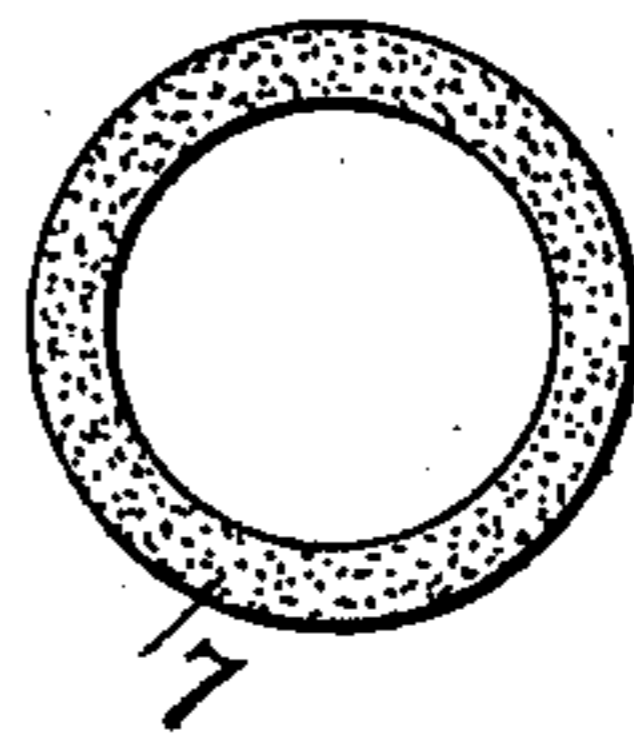


Fig. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

WALTER R. BUTTER, OF MAYWOOD, AND ANSTER MARR, OF CHICAGO,
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BUCKET-EAR.

SPECIFICATION forming part of Letters Patent No. 631,845, dated August 29, 1899.

Application filed October 14, 1898. Serial No. 693,480. (No model.)

To all whom it may concern:

Be it known that we, WALTER R. BUTTER, of Maywood, and ANSTER MARR, of Chicago, Cook county, Illinois, have invented certain
5 new and useful Improvements in Bucket-Ears, of which the following is a specification.

Generally stated, the object of our invention is to provide a bucket-ear which will be easy to attach, strong and permanent, cheap in
10 construction, and which without the use of solder will have a perfectly tight connection.

More specifically, our invention contemplates the provision of a bucket-ear comprising a hole or opening stamped in the material
15 of the bucket, a screw-lug projecting through said opening from within, and a flanged screw-cap secured to said lug upon the outside of the bucket.

It is old in the art to attach bucket-ears
20 by solder and also by means of pressed or stamped connection. The use of solder is not only slow and expensive, but also objectionable in any class of work where the joint is liable to be exposed to any considerable degree
25 of heat—as, for example, in the case of lard-pails where the lard upon being poured into the bucket not infrequently raises the temperature to such a degree that the ear is loosened and comes off. The stamped or
30 pressed ears are objectionable because they are either made in such manner as to weaken the connection by the sharp corner or corners that are formed where the ear is attached or else because there is great liability to leakage
35 around the joint where the ear is inserted in the hole or opening in the body of the bucket. It is also old in the art to attach an ear to a bucket by screwing an outer knob or piece upon a lug that projects through a hole in the
40 bucket from the inside thereof; but such construction as heretofore used has not been provided with an adequate or special bearing face or flange upon the outside of the bucket. If a heavy weight were placed in a bucket
45 made according to the plan referred to, there would be a very strong tendency of the metal of the bucket surrounding the opening through which the lug projects to bend, that above the lug tending to bend inwardly and that below
50 the lug outwardly, resulting not only in injury

to the bucket itself in construction and appearance, but also rendering the bail liable to loose its hold upon the ear.

In the practice of our invention we aim to overcome all of the above-mentioned difficulties by the provision of a construction which
55 is illustrated in preferred form in the accompanying drawings, in which—

Figure 1 is a diagrammatic view of a bucket having our improvement applied thereto. 60
Fig. 2 is an enlarged view showing the face or outer surface of the ear. Fig. 3 is a section illustrating the relative arrangement and construction of the various parts in detail, and Fig. 4 shows a form of gasket which we
65 propose to use.

In the practice of our invention we first take the material or sheet of metal 1 from which the bucket is to be formed and at the point where the ear is to be attached we stamp or
70 punch an opening, as at 2, the metal immediately surrounding the opening being pressed or dished outwardly in the manner shown at 3, so as to countersink the lug of the ear so that the inside surface of the bucket or pail
75 will be flush or smooth. We next take a screw-lug 4, formed with a bottom 5 and a flange or annular projection 6, and insert this lug through the opening 2, putting some form of gasket—such, for example, as an asbestos
80 ring 7—between the flange on the lug and the countersunk part of the metal of the body of the bucket.

Upon the outer end of the lug 4 is screwed a cap 5^a, preferably of the shape shown in
85 Fig. 3, and in the face of the cap 5^a we make an opening into which the bail 8 is secured.

The bottom, wall, or abutment 5 is arranged in such a way as to prevent the contents of the can or vessel from leaking out through
90 the opening into which the bail is secured, and it is preferable to arrange such wall or abutment in a plane coincident with the plane of the flange of the screw-lug, so as to avoid the formation of a recess or projection where-
95 in the contents might find a lodgment.

It is evident that when the cap 5^a is screwed tightly into place the flange 6 will bear hard against the inside of the countersunk portion of the body of the bucket and not only make
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a tight joint, but also be drawn in so as to make the inside surface of the bucket flush or smooth. The use of a gasket 7 is an additional aid in securing a perfectly tight joint; but if the work is otherwise accurately and neatly done the connection will be reasonably tight without any gasket. The formation of the cap 5^a with a conical bearing at 9 is also an aid in making a tight joint.

The conical bearing 9, together with the part between it and the screw-cap body, forms, as it were, a kind of flange, which serves also to distribute the strain derived from the weight of the contents of the can or bucket over a larger surface and to better advantage than is possible with the constructions heretofore proposed, and on this account in the practice of our invention there is less liability of the body of the bucket becoming bent or distorted from carrying a very heavy weight than there would be in the use of such prior constructions.

While we have shown and described a construction which appears to us to be specifically the one to be preferred, we do not desire to limit ourselves to the exact details shown. It is obvious that many modifications as to minor points could be made without departing materially from the spirit of our invention, and we desire to be understood as regarding all such minor modifications as clearly within the scope of our claims.

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

1. A bucket-ear comprising an opening in the body of the bucket, said opening being countersunk or dished outwardly, a screw-lug projecting through said opening, and a screw-cap secured to said lug.

2. A bucket-ear comprising an opening in the body of the bucket countersunk or dished outwardly, a screw-lug projecting through said opening and provided with a flange adapted to bear upon the inner side of said coun-

tersunk part, and a cap secured to said screw-lug.

3. A bucket-ear comprising an opening in the body of the bucket countersunk or dished outwardly, a screw-lug projecting through said opening and provided with a flange adapted to bear upon the inner side of said countersunk part, a cap secured to said screw-lug, and a gasket arranged between said flange and said countersunk part around said opening.

4. A bucket-ear comprising an opening in the body of the bucket countersunk or dished outwardly, a screw-lug projecting through said opening and provided with a flange adapted to bear upon the inner side of said countersunk part, a cap secured to said screw-lug, and a gasket arranged between said flange and said countersunk part around said opening, said cap being provided with a conical bearing upon the outer side of the body of the bucket.

5. A bucket-ear comprising an opening in the bucket, a flanged screw-lug arranged to project through said opening, said lug being closed against leakage from the inside of the bucket, and a flanged screw-cap engaging said lug, said lug and cap clamping the body of the bucket on opposite sides.

6. A bucket-ear comprising an opening in a bucket, a flanged screw-lug arranged to project through said opening, said lug being closed against leakage from the inside of the bucket by a wall or abutment which is flush with the projecting flanges of the lug, a flanged screw-cap engaging said lug, said cap and lug clamping the body of the bucket on opposite sides and means for connecting the bucket-bail to said flanged screw-cap, substantially as described.

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Witnesses:

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