

No. 636,339.

Patented Nov. 7, 1899.

H. H. HULL.  
PACKING VESSEL.

(Application filed Dec. 29, 1898.)

(No Model.)

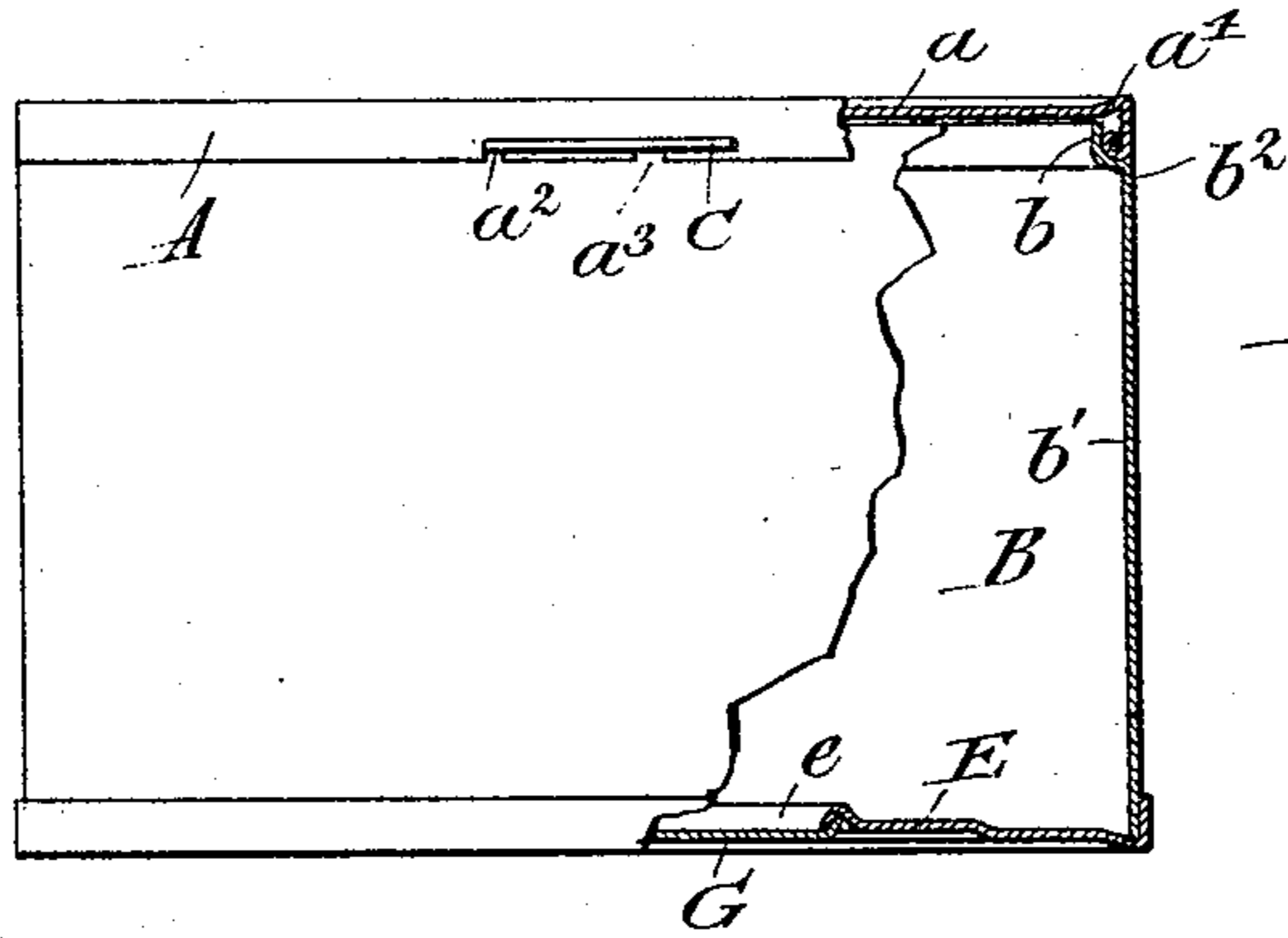


Fig. 1,

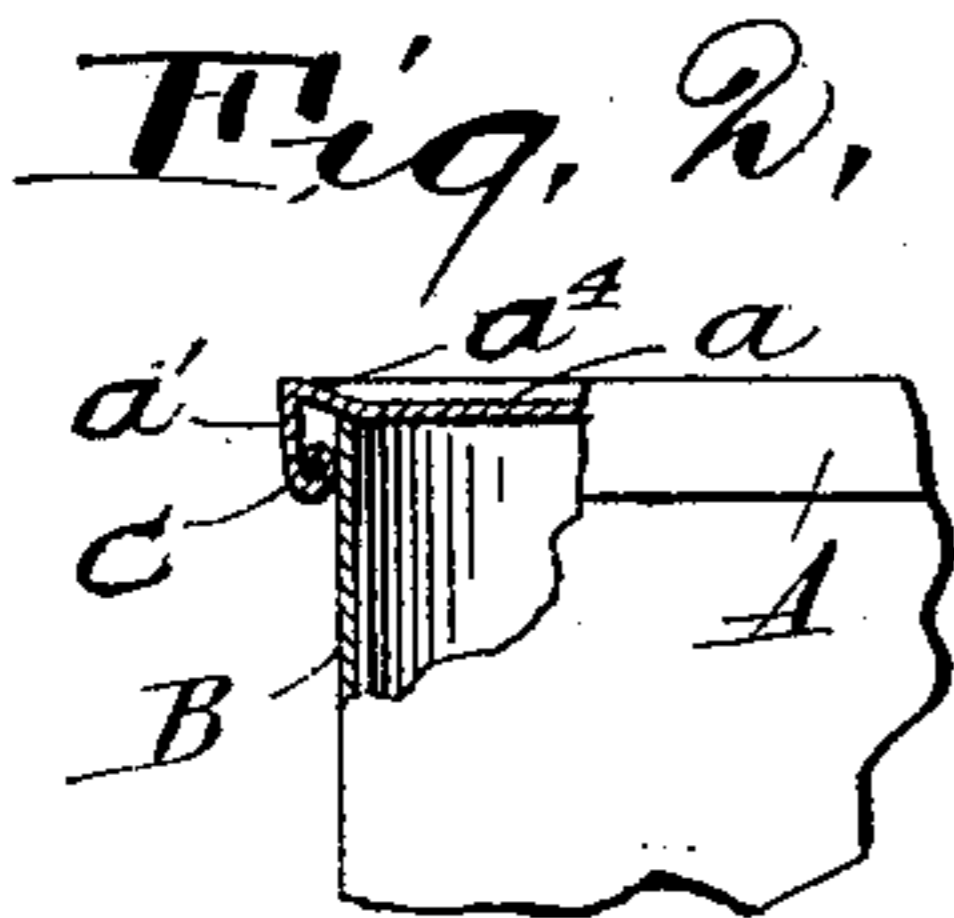


Fig. 2,

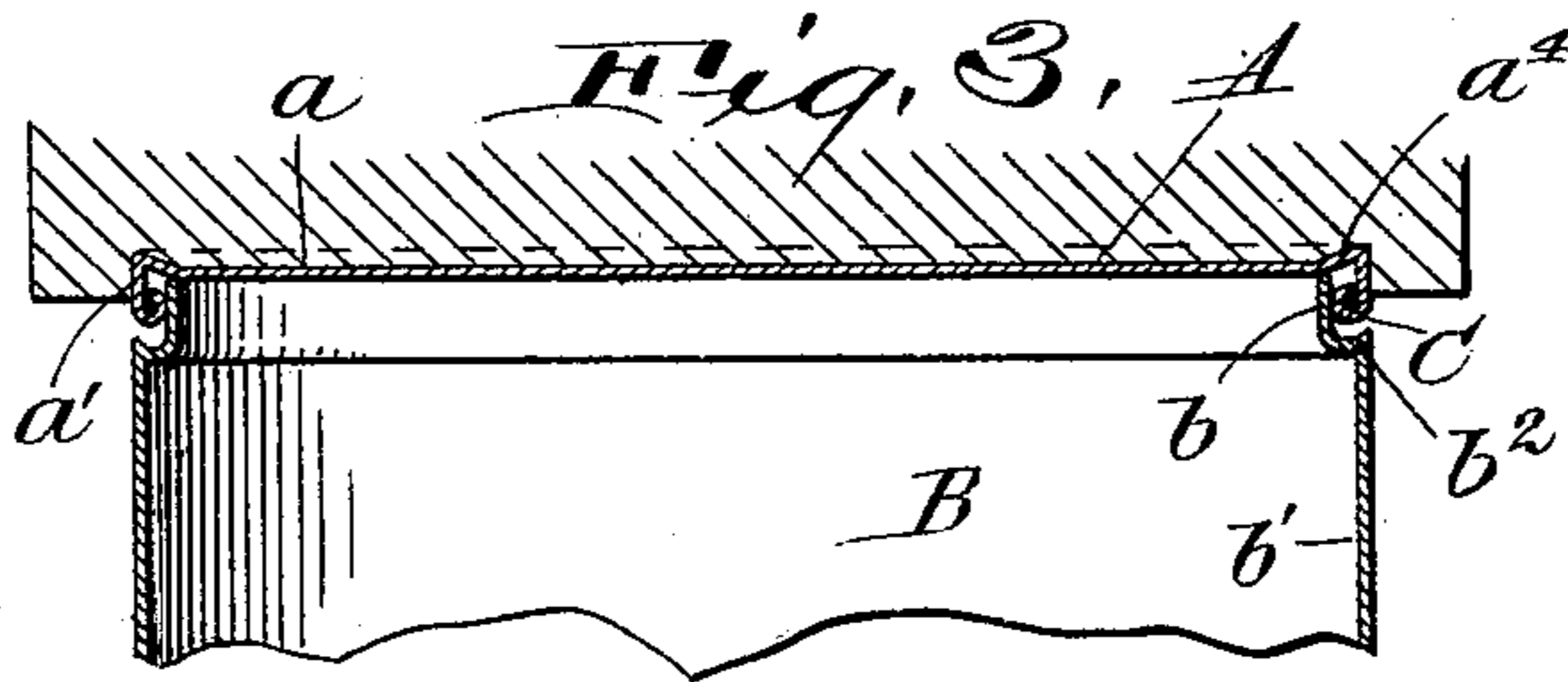


Fig. 3,

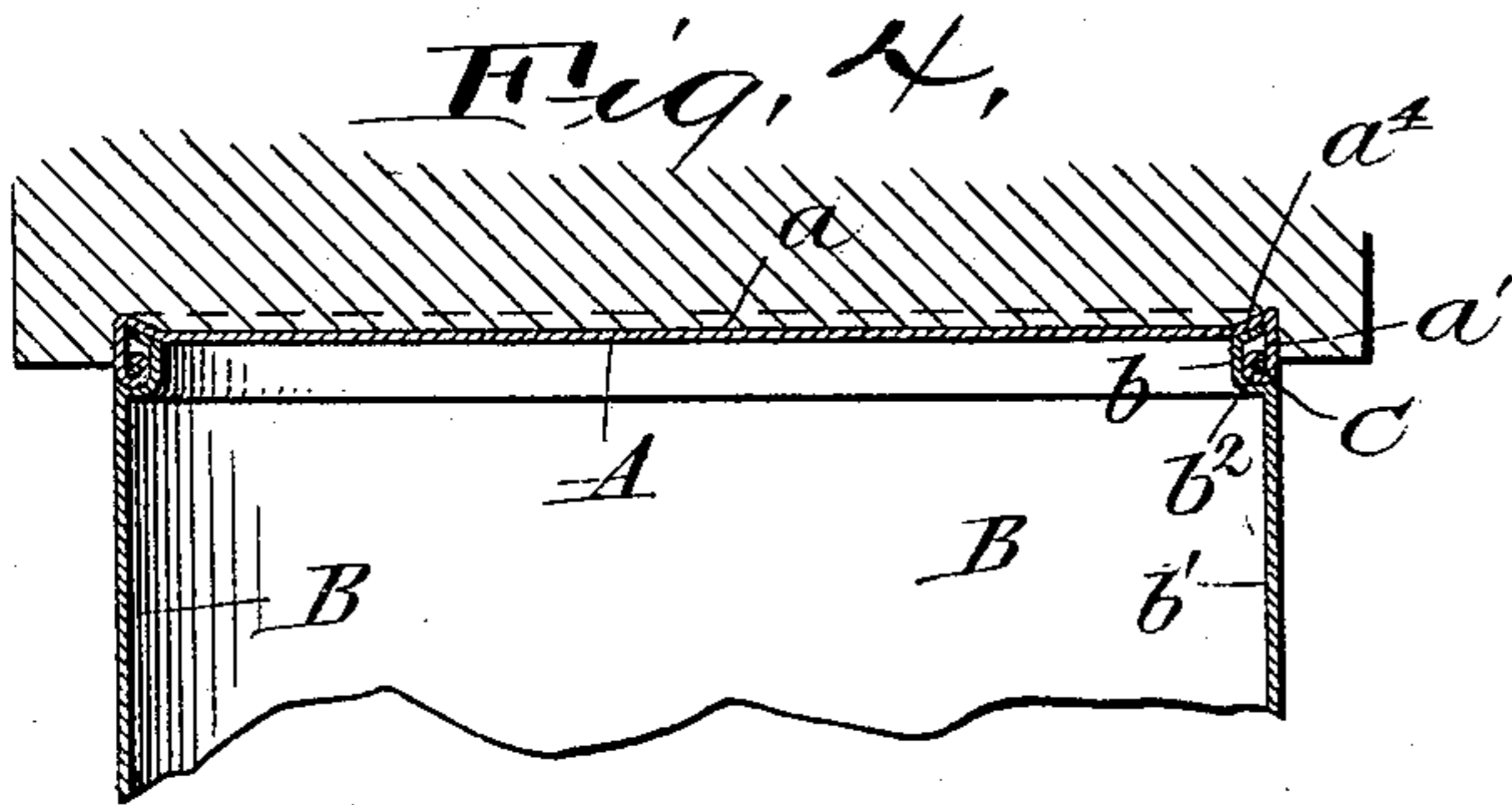


Fig. 4,

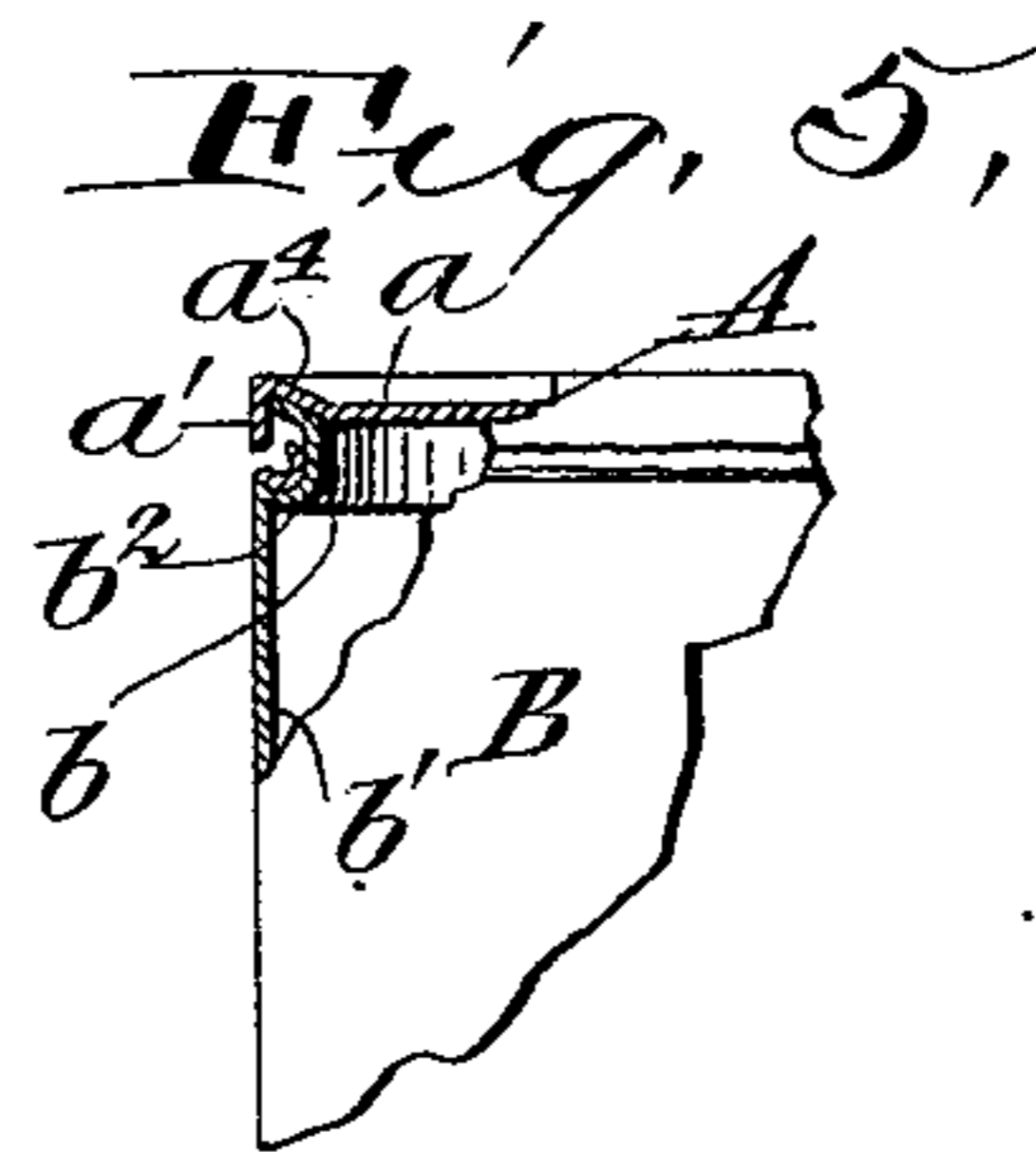


Fig. 5,

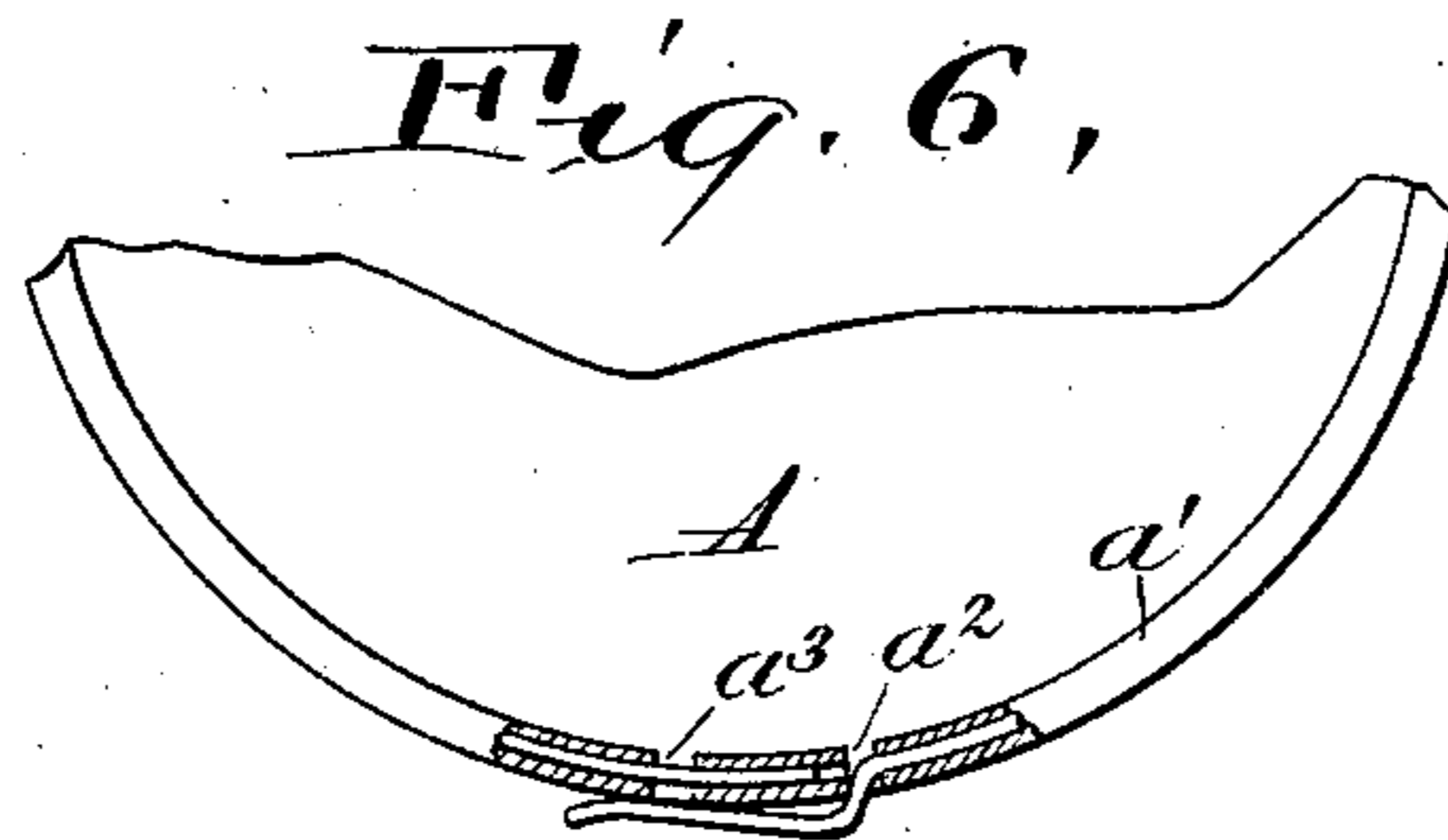


Fig. 6,

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Inventor,  
Herbert H. Hull,  
By his Attorneys,  
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# UNITED STATES PATENT OFFICE.

HERBERT H. HULL, OF CLEVELAND, OHIO.

## PACKING VESSEL.

SPECIFICATION forming part of Letters Patent No. 636,339, dated November 7, 1899.

Application filed December 29, 1898. Serial No. 700,579. (No model.)

*To all whom it may concern:*

Be it known that I, HERBERT H. HULL, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Packing Vessels, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

The invention relates particularly to cans adapted for containing and preserving various kinds of food, paint, and the like.

The object of the invention is to provide such a can which can be cheaply made, is neat in appearance, and is capable of being easily opened.

The invention pertains to the construction of a cap to close one end of the can (the end to be opened) and to the combination of the same with the can, as hereinafter described, and pointed out definitely in the claims.

In the drawings, Figure 1 is an elevation, partly in section, of a can containing my invention. Fig. 2 is a view, partly in section, of one corner of a modified construction. Figs. 3 and 4 represent sectional views of the can and its cap and a die by means of which the cap may be pressed down upon the can with the result of causing the edges of the can to flare outward. Fig. 5 is a sectional view of one corner of the can after the same has been opened by pulling on the ripping-wire. Fig. 6 is a bottom view, partly in horizontal section, of the cap.

Referring to the parts by letters, A represents a cap capable of embracing and closing one end of the can B. This cap consists of a top  $a$  of suitable shape (which will commonly be circular) and an annular cylindrical flange whose lower edge  $a'$  is rolled inward and embraces a ripping-wire C. In this rolled lower edge are two notches  $a^2 a^3$ . The ripping-wire C crosses one of these notches  $a^3$ , extends around the cap, and out through the other notch  $a^2$ , the end outside the cover being sufficiently long to be conveniently taken hold of by a suitable key or other instrument, by which it may be forcibly pulled out and the cap-flange cut thereby. A drop of solder may be employed to seal each of these two notches. In sealing the notch  $a^3$  the solder also attaches the wire to the cap, whereby when the

free end of the wire is forcibly pulled upon the wire will not be pulled out, but will cut the cover loose. It will not commonly be necessary to seal these notches and fasten the wire to the cap, as described, by an independent operation, because the cap is capable of being soldered to the can by the kind of machines now commonly used for such purposes, and these two notches may be filled with solder during this operation. The can which is preferably used with this cap is shown in Fig. 1. It has a short cylindrical neck  $b$  of less diameter than that of the body of the can and a trifle less than the interior diameter of the rolled edge of the cap, whereby the cap may be easily placed over this neck. The diameter of the body  $b'$  of the can is substantially the same as the external diameter of the cap. The formation of this neck leaves a shoulder  $b^2$ , against which the lower rolled edge of the cap impinges and to which it is soldered. This shoulder is preferably concave, thereby to more exactly conform to the lower edge of the cap. When the shoulder is concave, as described, less solder will be used in fastening the cap to the can. This construction is illustrated in Figs. 1, 3, and 4. Fig. 2, however, shows the cap used to close the end of a can which has no contracted neck.

An upwardly and outwardly beveled bead  $a^4$  is formed around the edge of the top of the cap by bending the metal. The diameter of this bead at its inner edge is less than the diameter of the end of the can. It is of course not necessary that the cap shall have this beveled bead to perform the functions heretofore described; but the bead may serve a further useful purpose. If, for example, the cap is pressed down upon the can with sufficient force by a die, substantially as shown in Figs. 3 and 4, the upper edge of the can will by reason of the beveled bead be caused to flare outward, as shown in Fig. 5, so as to fit with more or less exactness inside the flange of the cap. When now by pulling on the wire C the lower edge of the cap has been cut loose from the can, as shown in Fig. 5, the cap fits the outwardly-flared end of the can, wherefore the cap becomes a more or less tight-fitting cover, which may be taken off or replaced at will. When the can is used

to contain paint or some analogous substance, this is a valuable feature. When, however, the can is used to contain something else, as fruit or vegetables, it is customary to use the entire contents of the can at one time, and therefore this flaring of the upper end of the can has little practical value and need not be used. In other words, the cap need not have the bead  $a^4$ , or if it does the cap need not be forced down upon the can, so as to curve the top of the can outward, as described. The other end of the can may be closed by a cap E, having a hole  $e$ . The can may be filled through this hole, which may be closed by a cap-plate G, soldered over the same. What is the bottom of the can while it is being filled—namely, the end which is closed by the wired cap A—becomes the top of the can when the can is opened.

Having described my invention, I claim—

1. A cap for closing the end of a packing vessel, which cap consists of an end plate and an annular flange whose lower edge is rolled inward and has two notches  $a^2$   $a^3$ , and a ripping-wire embraced by said rolled edge, which wire extends across one of said notches around the cap and out through the other notch, substantially as and for the purpose specified.

2. The combination of a can and a cap therefor which has an annular flange fitting over the outside surface of the can, said flange having its lower edge rolled inward and having two notches in said edge, and a ripping-wire embraced by said rolled edge which wire extends across one of said notches around the cap and out through the other notch whereby the same solder which holds the cap to the can may hold the end of the ripping-wire within the cap so that a pull on the wire may cut the cap, substantially as and for the purpose specified.

3. In a packing vessel, the combination of a can having a neck of smaller diameter than

the body and having the annular upwardly-concave shoulder  $b^2$ , with a cap having an annular flange with an inwardly-rolled lower edge, which flange embraces the neck of the can and its lower edge fits said concave shoulder and is soldered thereto, and a ripping-wire embraced by said rolled edge, one end of said wire being extended out through a notch therein, substantially as and for the purpose specified.

4. A cap consisting of a plate having at its edge an outwardly and upwardly beveled bead and an annular flange depending therefrom and having its lower edge rolled inward, and a ripping-wire embraced by said rolled edge and extending out through a notch therein, combined with a can having a reduced neck which extends upward substantially parallel with the sides of the can and when the cap is forced down onto the can bends the edge of said neck outward beneath the bevel of the cap, substantially as and for the purpose specified.

5. In a packing vessel, the combination of a can having a neck of smaller diameter than the body, said neck continuing substantially parallel with the body, with a cap having an annular flange with an inwardly-rolled lower edge the external diameter of said flange being substantially that of the can and the length of the flange being sufficient for said rolled lower edge to fit against the shoulder formed by the neck with the body of the can, there being within said rolled lower edge a ripping-wire one end of which is extended out beyond the cover, substantially as and for the purpose specified.

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

HERBERT H. HULL.

Witnesses:

ALBERT H. BATES,  
PHILIP E. KNOWLTON.