

A. W. STEPHENS.
STOPPER EXTRACTOR.
APPLICATION FILED APR. 2, 1910.

959,897.

Patented May 31, 1910.

Fig. 1.

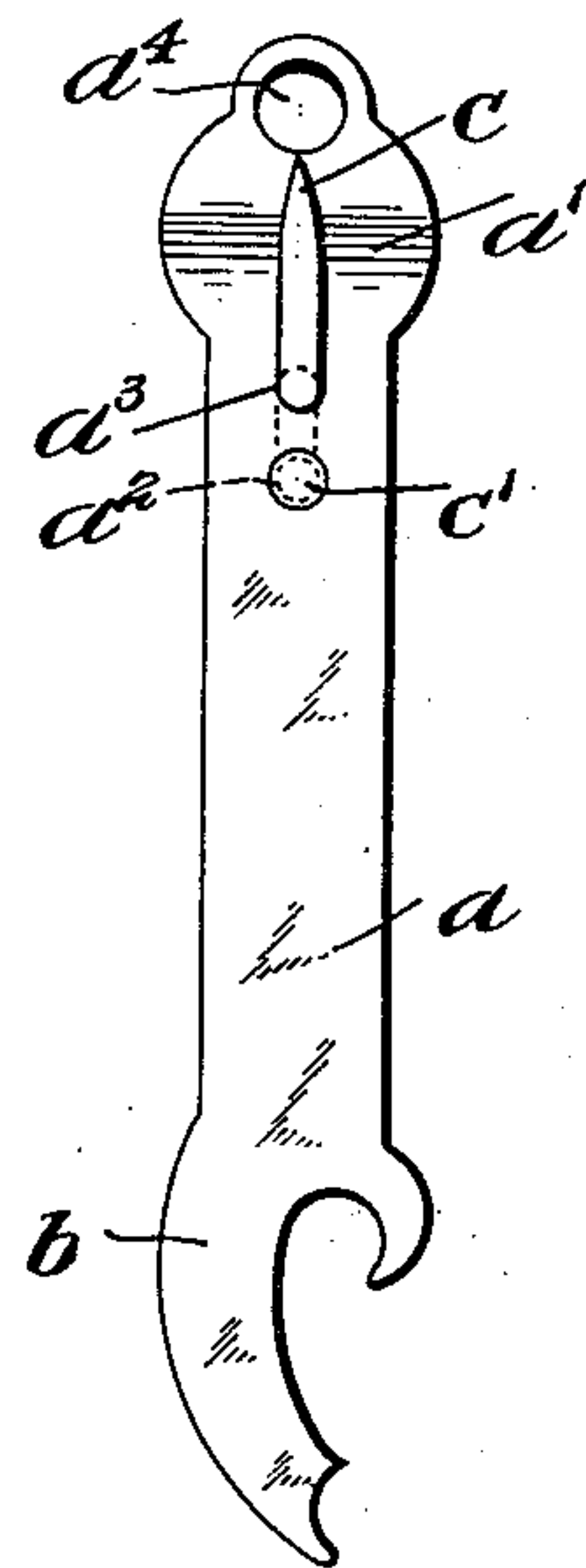


Fig. 2.

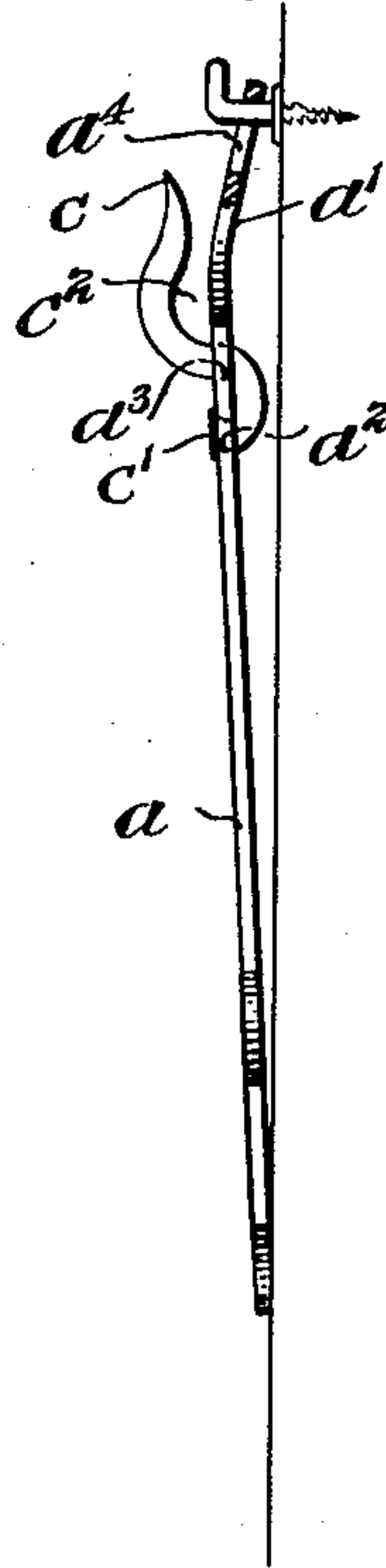


Fig. 3.

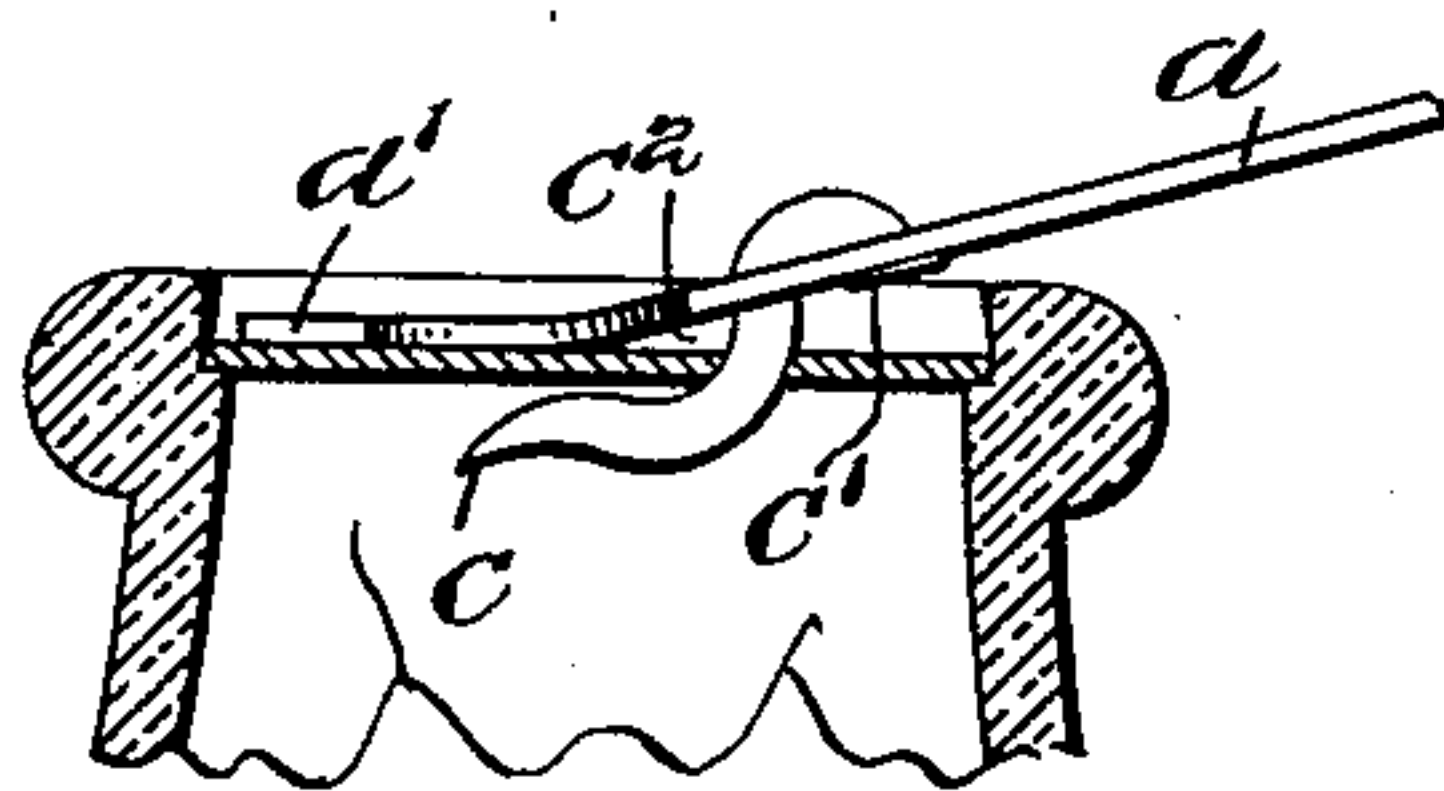
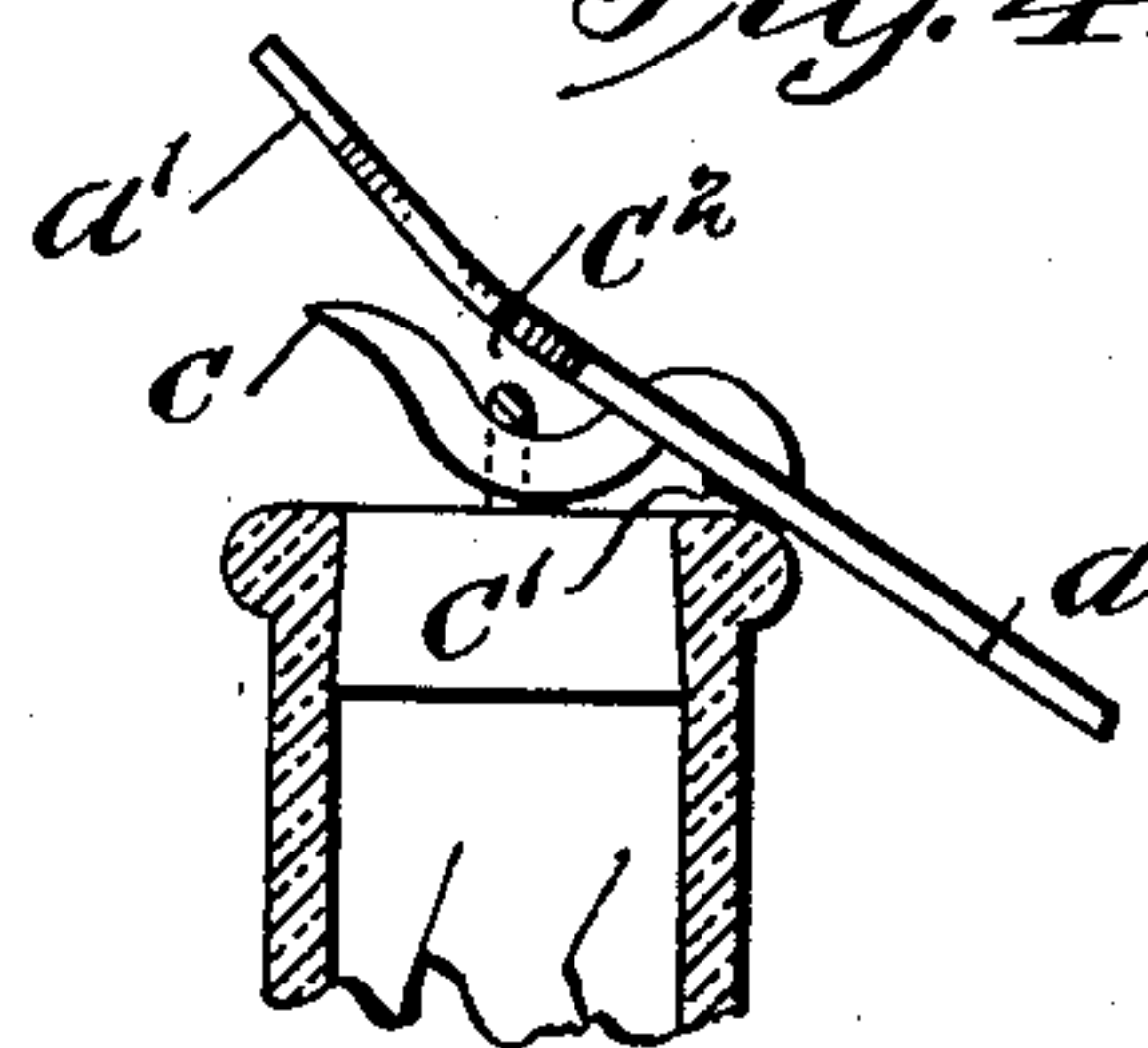


Fig. 4.



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UNITED STATES PATENT OFFICE.

AUGUSTUS W. STEPHENS, OF WALTHAM, MASSACHUSETTS.

STOPPER-EXTRACTOR.

959,897.

Specification of Letters Patent.

Patented May 31, 1910.

Application filed April 2, 1910. Serial No. 553,043.

To all whom it may concern:

Be it known that I, AUGUSTUS W. STEPHENS, of Waltham, in the county of Middlesex and State of Massachusetts, have
5 invented certain new and useful Improvements in Stopper-Extractors, of which the following is a specification.

This invention relates to implements for removing stoppers from bottles, and especially to that type which can be utilized in
10 connection with either one of a plurality of kinds of stoppers.

The object of the invention is to produce a device of this character which can be conveniently operated, and is of simple and
15 durable construction.

The invention consists in the stopper extractor constructed substantially as hereinafter described and claimed.

20 Of the accompanying drawings:—Figure 1 represents the device in elevation. Fig. 2 is a side view, partly in section, the device being shown as suspended from a hook. Fig. 3 is a detail view showing the device as in use
25 when removing a disk stopper from a milk bottle. Fig. 4 is a similar view showing the device being used to remove a plug stopper having the usual wire loop.

30 Similar reference characters indicate the same or similar parts in all of the views.

The body or handle *a* of the device is preferably cut or stamped from sheet metal, and may or may not be formed with a claw
35 *b* at one end for use in puncturing and removing "crown" stoppers. The blank or body *a* is formed with two holes *a*², *a*³, a widened portion or head *a'* beyond said holes, and with a larger hole or opening *a*⁴ close to the end of the blank.

40 Rigidly secured to the body or handle, but separate therefrom in manufacture so that it can be made of harder metal than the body, when desired, is an S-shaped tongue or hook having a sharp prong point *c* which is preferably of steel wire, the wire passing through
45 the two holes *a*² *a*³ and clenched or headed down as shown at *c'*. Back of the point *c* and close to the portion which passes through the hole *a*³, the wire is formed with a bend so as to be at a greater distance from
50 the body *a* than the point *c*, thereby presenting a recess *c*² one side of which has a wall nearly at a right angle to the plane of the

body or handle. The function of this wall and the adjacent recess is best shown by referring to Fig. 4 in which it will be seen
55 that when the tongue is passed through the loop of a plug stopper as far as it will go, and then the device tilted, the handle obtains a fulcrum on the edge of the bottle
60 neck so that the plug can be forced out without liability of slipping, or later falling out of the recess onto the floor.

The widened head *a'*, of a portion of it, is in a plane substantially parallel with the
65 plane of the portion of the wire tongue from its point to its recess, but is beyond said point, so that when the device is used in the manner shown in Fig. 3, the portion of the
70 tongue referred to lies flat under the disk stopper, while the head or a portion of it lies flat on the upper surface of the disk, the extreme end reaching to, or nearly to, the
75 recessed edge of the bottle neck so that when the other end of the handle is lifted, the disk is easily pried up.

The body *a* is bent so that the head *a'* constitutes a short arm which stands at such
an angle to the main or handle portion of said body, that when the said arm bears on
80 a stopper the handle portion is inclined and extends across one side of the neck of the bottle as shown by Fig. 3. The hook is adapted to be firmly engaged with the body
85 *a* by the insertion of its inner end portion in the holes *a*², *a*³, the S shape of the hook and the angled short arm *a'* enabling the device to be conveniently engaged with a flat
90 disk stopper and to effectively remove the same.

I claim:—

A stopper extractor comprising a body having a handle portion and a short arm at
an angle to said portion, said body having
95 two holes in its handle portion near the junction of the short arm therewith and an S shaped hook engaged with said holes, and having a pointed outer end projecting under the short arm.

In testimony whereof I have affixed my
signature, in presence of two witnesses.

AUGUSTUS W. STEPHENS.

Witnesses:

C. F. BROWN,
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