

No. 673,048.

Patented Apr. 30, 1901.

S. J. DUNKLEY.

JAR.

(Application filed Mar. 30, 1900. Renewed Mar. 13, 1901.)

(No Model.)

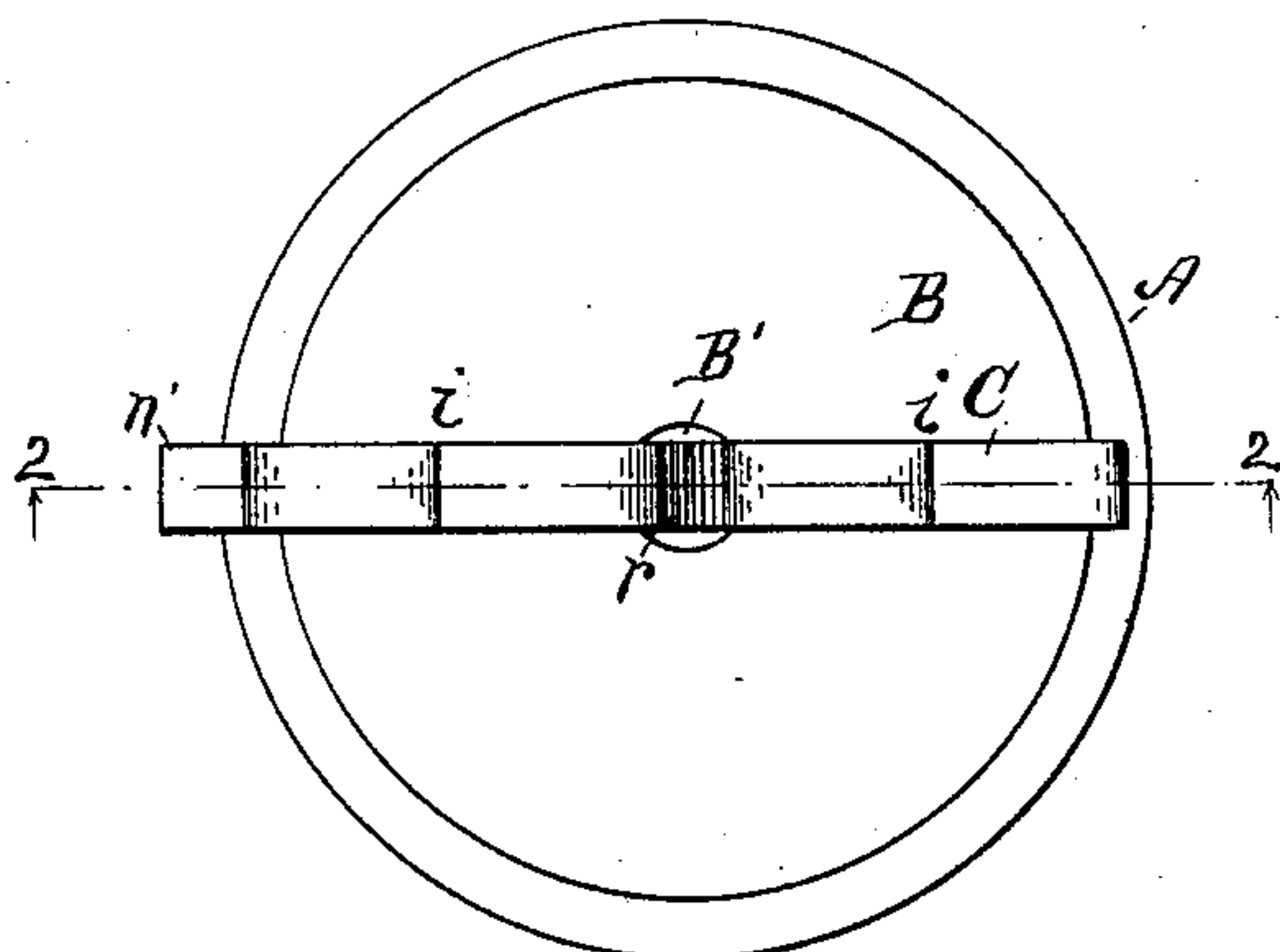


Fig. 1

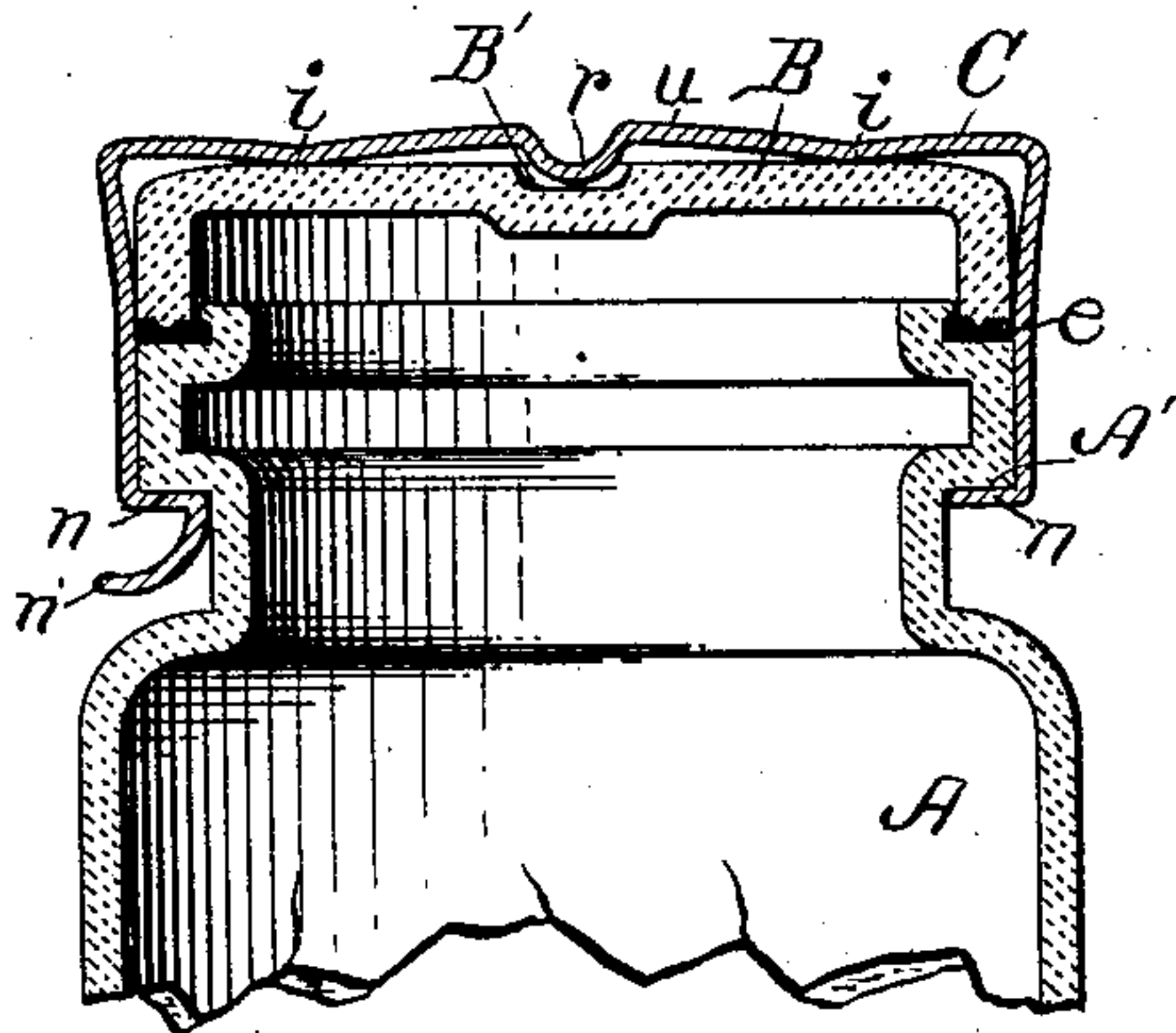


Fig. 2

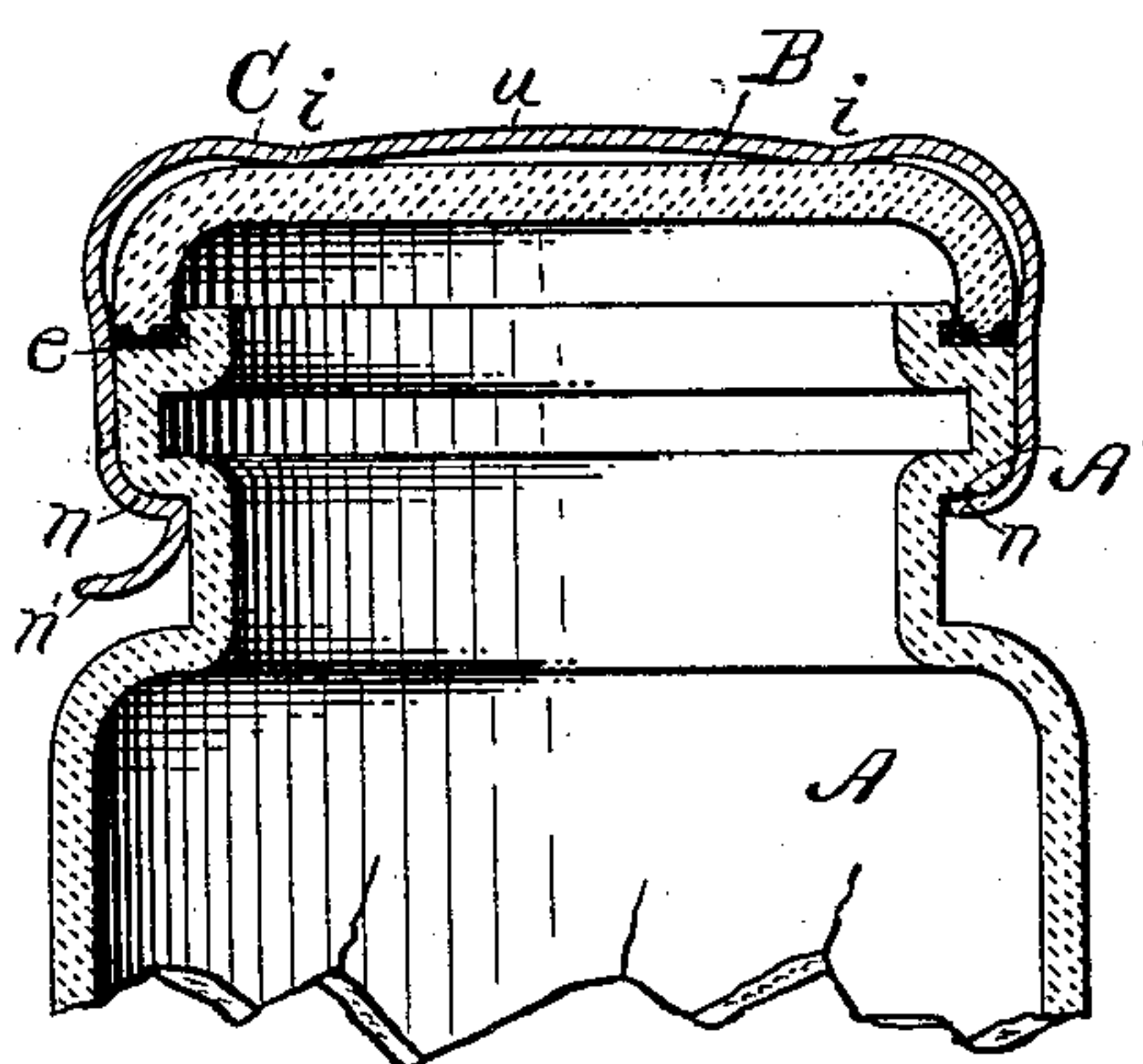


Fig. 3

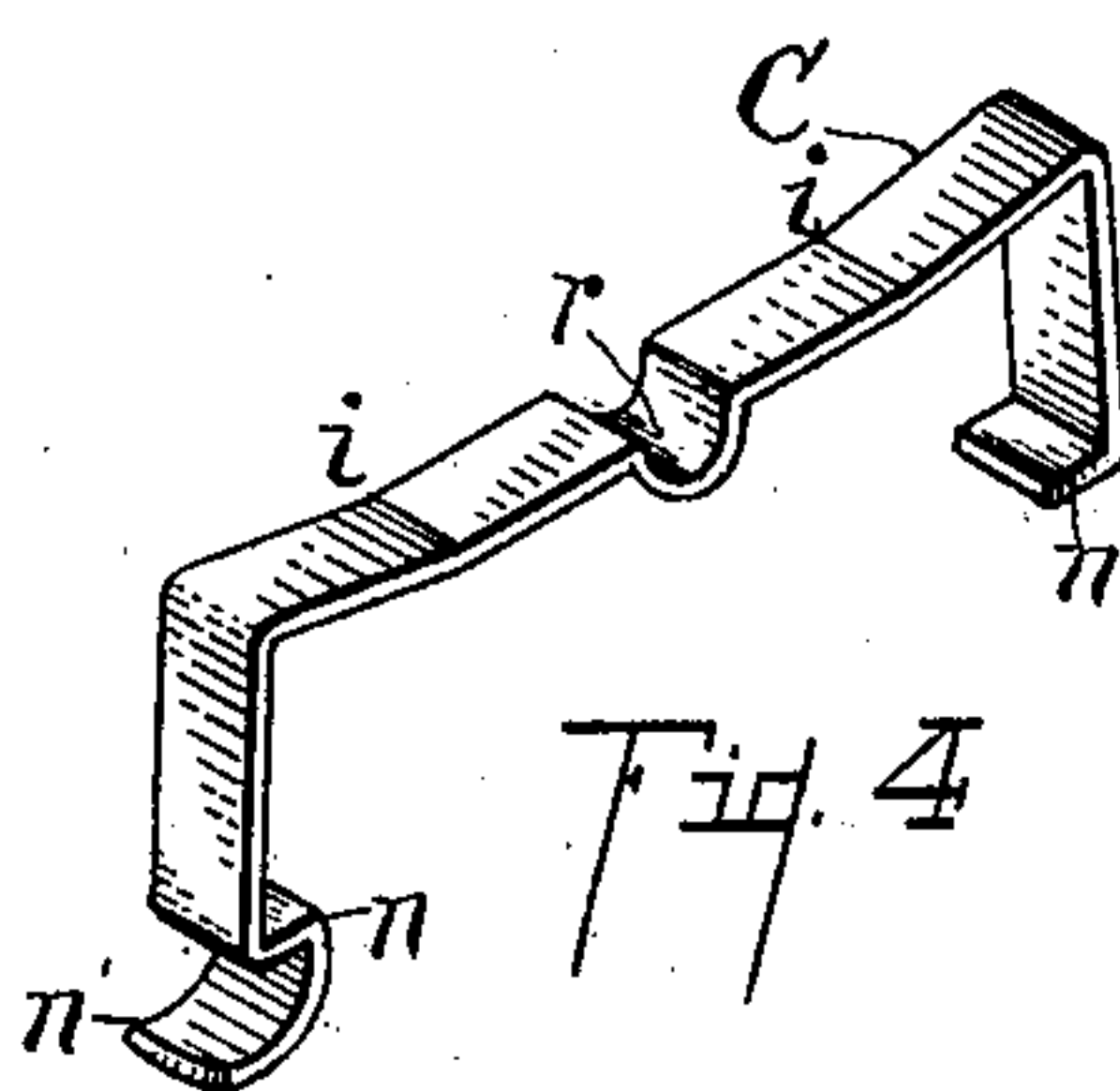


Fig. 4

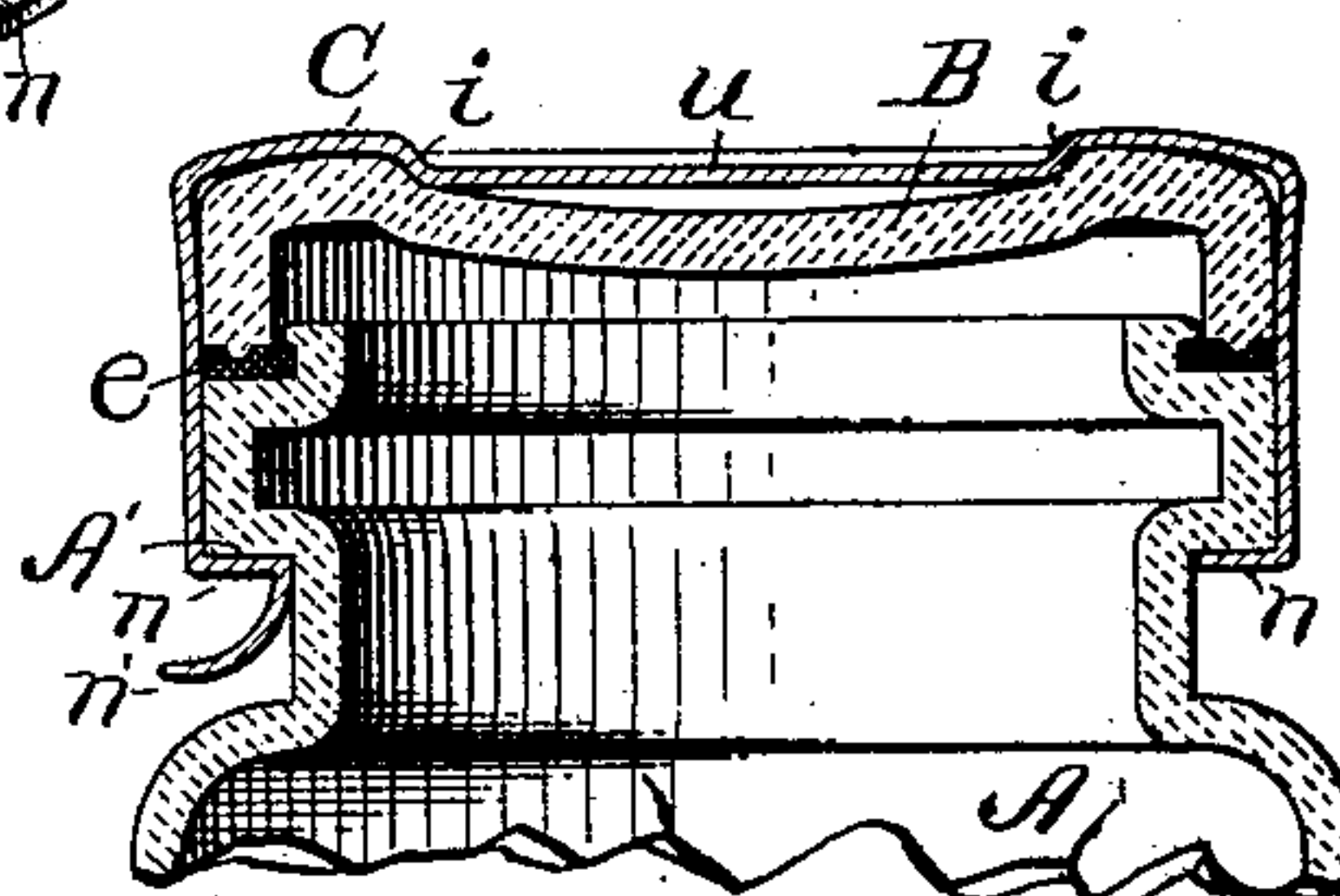


Fig. 5

Witnesses:

Alice Houghton

Otis A. Earl

Inventor,

Samuel J. Dunkley

By Fred L. Chappell

Att'y.



# UNITED STATES PATENT OFFICE.

SAMUEL J. DUNKLEY, OF KALAMAZOO, MICHIGAN.

## JAR.

SPECIFICATION forming part of Letters Patent No. 673,048, dated April 30, 1901.

Application filed March 30, 1900. Renewed March 13, 1901. Serial No. 51,013. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL J. DUNKLEY, a citizen of the United States, residing at the city of Kalamazoo, in the county of Kalamazoo and State of Michigan, have invented certain new and useful Improvements in Jars, of which the following is a specification.

This invention relates to improvements in glass jars, and more particularly to an improved means of securing a cover or top on such jars.

The objects of the invention are, first, to provide a fastening for the tops of glass jars which can be easily applied and removed; second, to provide a spring-fastening for the tops of jars which readily springs into position in applying the same, but wherein the spring has a comparatively short leverage in holding the top in position, so that while it is easy to apply it is very secure when in place on the jar.

Further objects will definitely appear in the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in this specification.

The invention is clearly defined and pointed out in the claims.

A structure embodying my invention is fully illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan view of a jar with my improved fastening in its most approved form in position. Fig. 2 is a detail sectional elevation of the same, taken on line 2 2 of Fig. 1, the upper portion of the jar only being shown. Fig. 3 is a view of the structure slightly modified, the cover and flange of the jar being slightly rounded. Fig. 4 is a perspective view of the spring detached from the jar-top. Fig. 5 is an illustration of a second modification, in which the fulcruming-point is formed more especially by an annular ridge in the cover.

In the drawings all of the sectional views are taken looking in the direction of the little arrows at the ends of the section-lines, and similar letters of reference refer to similar parts throughout the several views.

Referring to the lettered parts of the drawings, A is the jar, which is preferably formed

at the top with a broad neck, with a shoulder at A'.

B is the top or cover, made of glass and provided with a suitable rib on the under side to press into the rubber gasket E. A small cavity B' is in the center of the top of the cover.

The fastening is formed of a strip of spring-steel folded downwardly at each end and hooked under at *n* to engage beneath the shoulder at A' of the jar. At a short distance within the periphery of the top or cover the spring receives a sharp bend *i* downwardly, which forms a fulcrum at this point, on which the central portion *u* of the spring acts to produce a strong leverage on the hook portions *n* to retain the cover in position. In the preferred construction a sharp depression at *r* is made in the spring, which extends just within the little cavity B' and serves to prevent the fastening being moved laterally off from the jar. A little ear *n'* projects from one end of the fastener for convenience in withdrawing the fastening.

In Fig. 3 I show a modification which is not provided with the abrupt depression B' at the center of the cover, and in Fig. 5 I illustrate still another modification, in which an annular ridge on the jar-top serves as a fulcruming-point for the spring, although the spring is bent downwardly at that point to engage within the ridge and serve to retain the spring from lateral movement. This form has some advantages peculiar to itself and is preferred by many users of the can. It will be observed that there is in this structure no departure from the principle of the other structures, except that there is a slight change of form.

Having thus described my fastener and jar, I wish to state that it can be considerably varied without departing from my invention so long as a suitable curve at *i* or other device is provided whereby a fulcrum is formed for the fastening well out toward the periphery of the cover. While the little ear *n'* serves a very useful purpose, it can be omitted and other devices used for removing the fastening. The same is true of the indentation at *r*. I illustrate this feature omitted in Fig. 3; but of course when it is omitted its function of retaining the fastening in position is also omitted.



The same contours of springs or fasteners I have shown might be preserved with wire; but the flat spring will be preferred, because it leaves a flat surface for packing the cans  
5 away.

I have stated that my approved spring-fastening is for use on glass jars. It is obviously applicable to jars of any material, and by reducing the size it can be readily adapted for  
10 use on bottles and by increasing its length and proportions could be used on much larger packages than fruit-jars ordinarily are.

I have referred to the jar as being formed with a shoulder. It is obvious that this  
15 shoulder can be formed in any suitable manner and need not extend entirely around the jar. It might be notched in.

Having thus described my invention, what I claim as new, and desire to secure by Letters  
20 Patent, is—

1. In a jar, the combination of the body portion A having a shoulder A' toward the top; a cover therefor having a depression B' at the center; and a fastener formed of spring-steel  
25 formed into hooks *n, n*, at its ends and kinked at *i* to form a fulcrum and having a depression *r* to engage in the depression B' of the cover; and an ear *n'* at one end to facilitate the removal of the fastener all coacting, for  
30 the purpose specified.

2. In a jar the combination of the body por-

tion A having a shoulder A' toward the top; a cover therefor having a depression B' at the center; and a fastener formed of spring-steel  
35 formed into hooks *n, n*, at its ends and kinked at *i* to form a fulcrum and having a depression *r* to engage in the depression B' of the cover, for the purpose specified.

3. In a jar, the combination of the body portion A having a shoulder A' toward the top; a cover therefor; and a fastener formed of  
40 spring-steel formed into hooks *n, n*, at its ends and kinked downwardly at *i* to contact with the cover toward each side to form fulcrums, for the purpose specified.

4. In a jar, the combination of a body portion having a shoulder toward its top; a cover therefor; a spring-fastener with the ends  
45 downwardly and inwardly curved to engage the said shoulder, the said top and spring being formed to contact at points toward the ends of the fastener to form fulcrums near the periphery of the cover so that the pressure for holding the cover in position is applied at the points of fulcruming as specified.  
50 55

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

SAMUEL J. DUNKLEY. [L. S.]

Witnesses:

S. A. EARL,

OTIS A. EARL.