

(No Model.)

J. H. HETTINGER & B. P. KINCAID.

BOTTLE OR JAR CLOSURE.

No. 603,640.

Patented May 10, 1898.

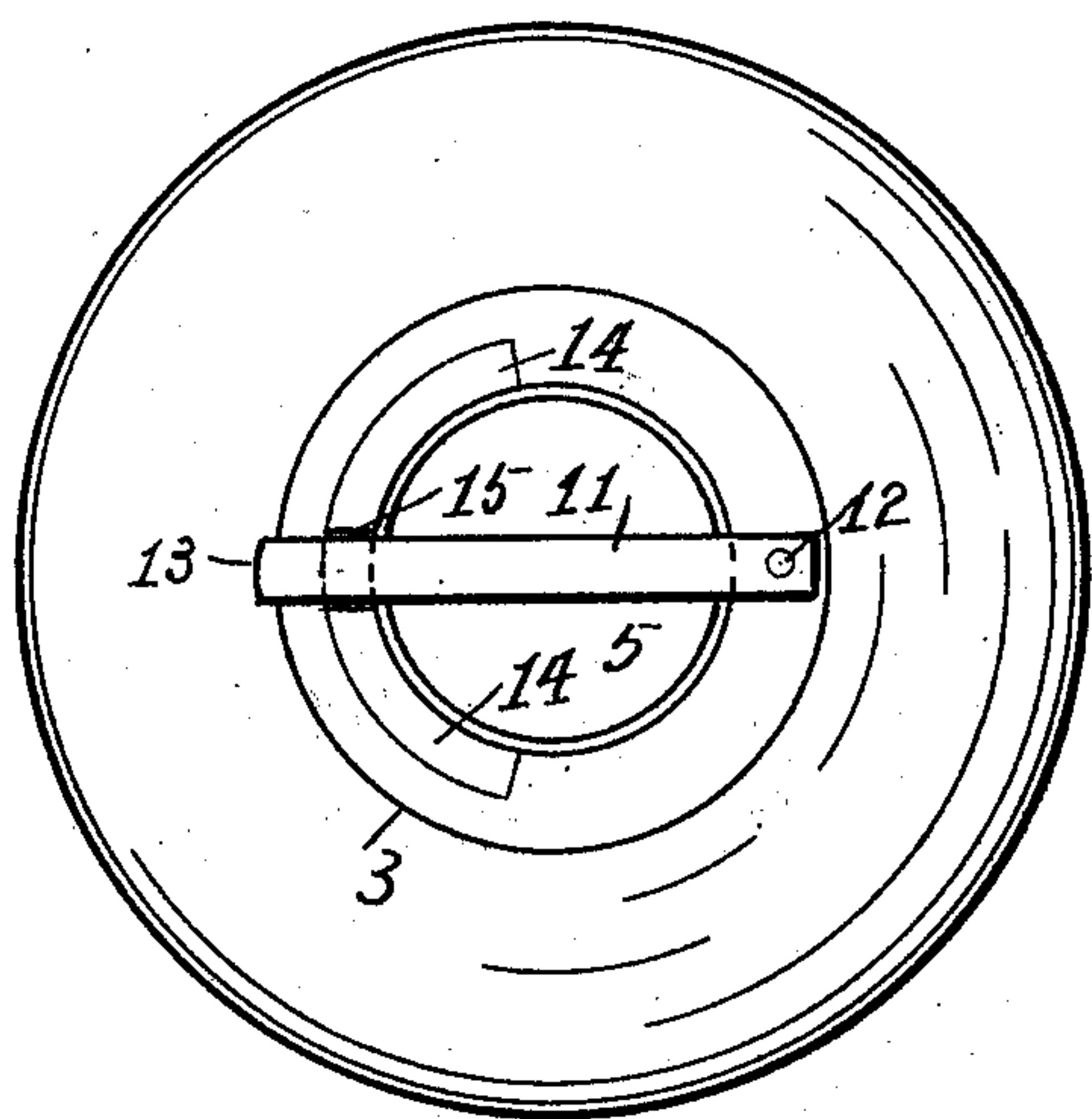


Fig. 1.

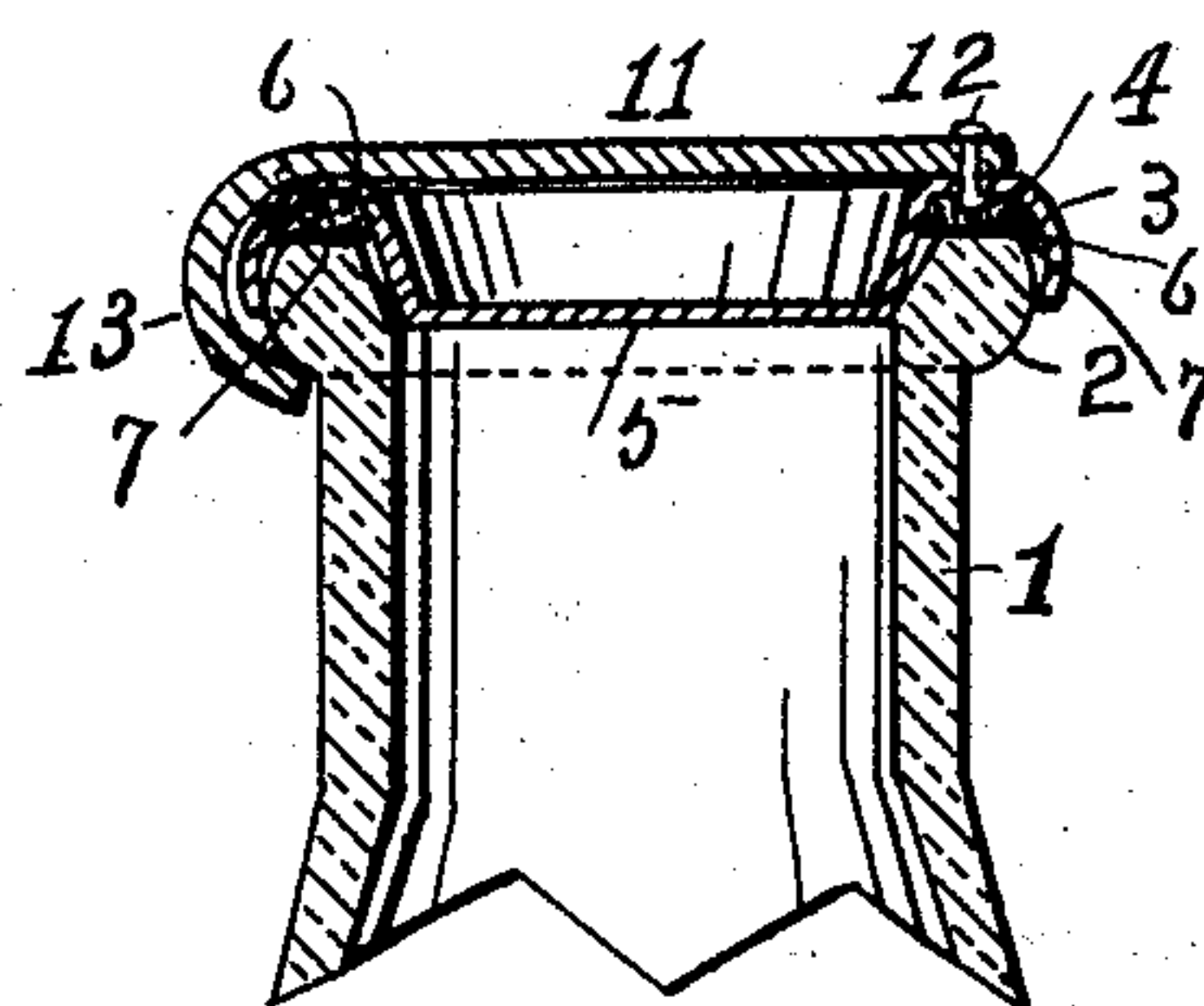


Fig. 4.

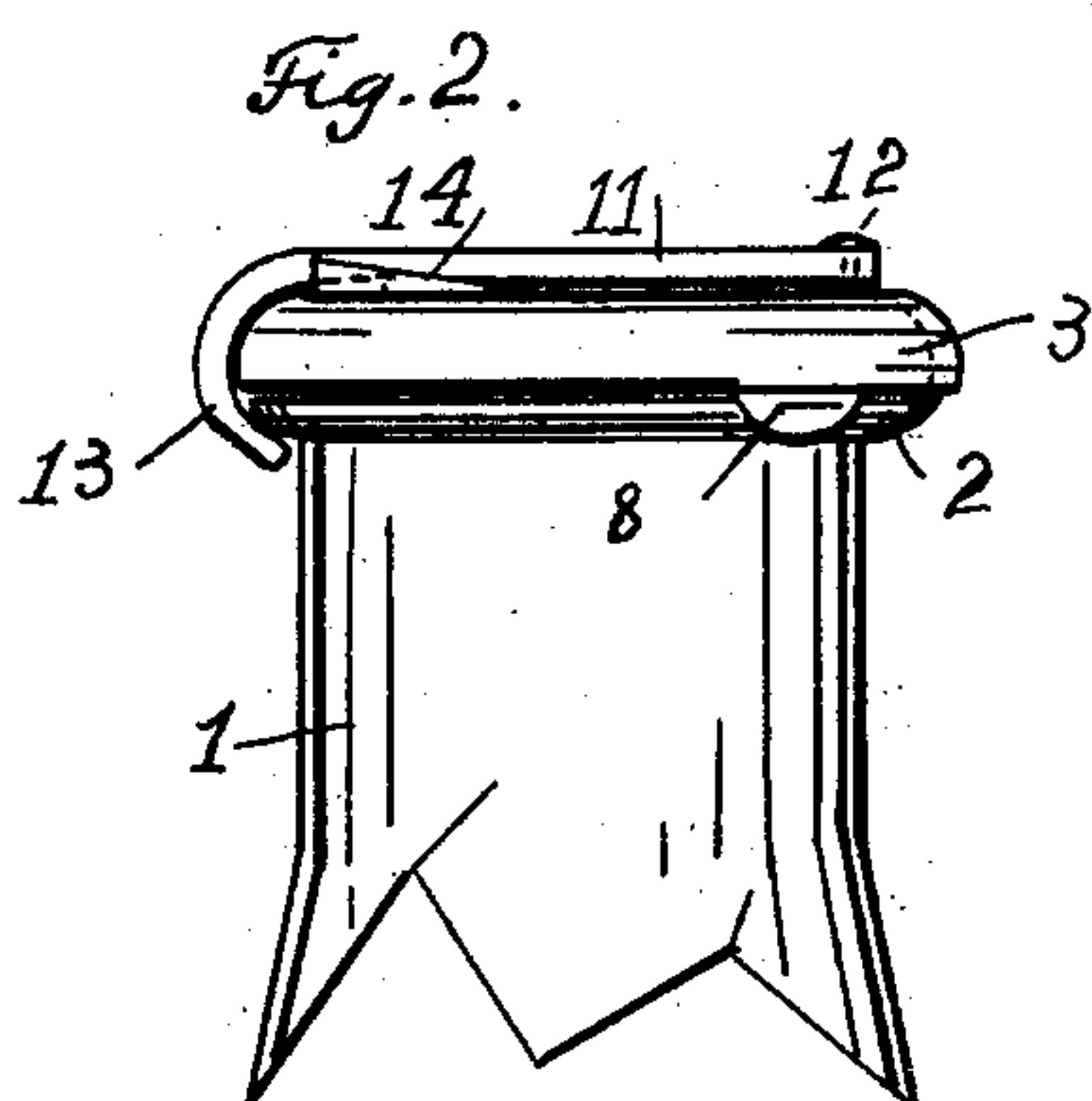


Fig. 2.

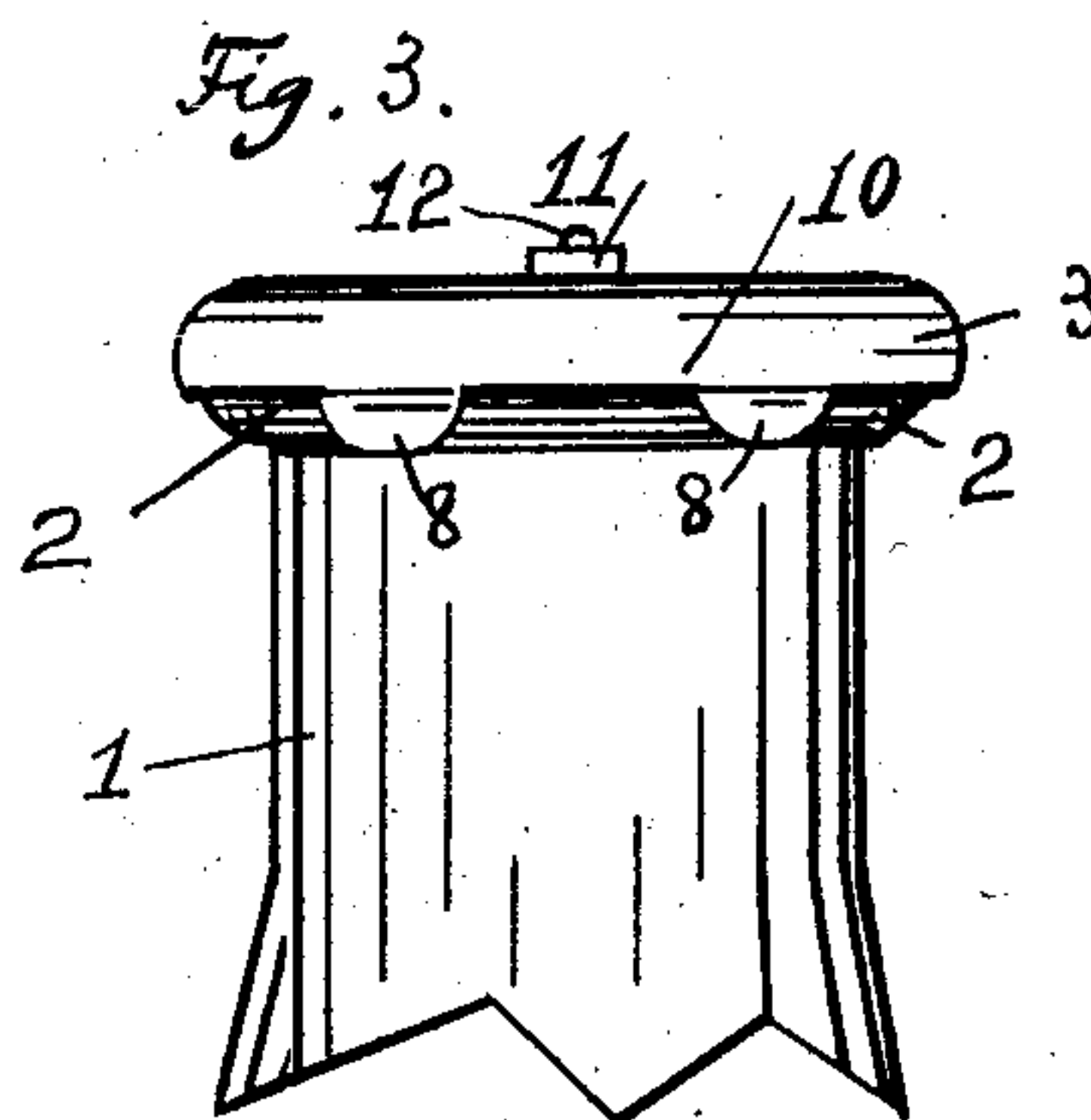


Fig. 3.

Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN HENRY HETTINGER AND BARRON P. KINCAID, OF BRIDGETON, NEW JERSEY, ASSIGNORS TO CLEMENT W. SHOEMAKER AND ROBERT E. SHOEMAKER, OF SAME PLACE.

BOTTLE OR JAR CLOSURE.

SPECIFICATION forming part of Letters Patent No. 603,640, dated May 10, 1898.

Application filed December 29, 1897. Serial No. 664,247. (No model.)

To all whom it may concern:

Be it known that we, JOHN HENRY HETTINGER and BARRON P. KINCAID, residents of Bridgeton, in the county of Cumberland and State of New Jersey, have invented certain new and useful Improvements in Bottle or Jar Closures; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

The invention relates to sealing-caps and to means for securing them upon bottles and the like; and its object is to simplify and cheapen such devices so far as consistent with their efficiency.

The invention consists in the construction hereinafter described and pointed out.

In the accompanying drawings, Figure 1 is a plan of a cap and bottle. Fig. 2 is a side elevation, the bottle being broken away. Fig. 3 is an opposite side elevation. Fig. 4 is a central section.

Numerals 1 denotes a bottle-neck, and 2 a bead or rib formed on it adjacent the mouth.

3 denotes a metal cap having a circumferential groove 4 in its top. The central part 5 of the cap is depressed below the groove, substantially as illustrated. The sunken part 5 of the cap may be situated at a level near or even below that of the lip of the bottle-mouth.

6 denotes a plastic packing, preferably having the general characteristics of shoemakers' wax, and 7 is a layer of parchment-paper covering the under side of the wax packing. The parchment-paper prevents the packing from being cut entirely through by the bottle-lip when pressed thereupon, and it also obviates adhesion of the packing to the lip, whereby it might be drawn out of its groove.

The cap provided with the packing above described or with any suitable or preferred equivalent is secured upon the mouth of a bottle or other vessel by the following-described means: 8 indicates hooks formed integrally with the narrow flange 10 of the cap. These hooks are adapted to fit the bead 2, as shown.

11 denotes a bar, and 12 a rivet whereby

one end of the bar is pivoted to the top of the cap near its circumference and on the annular projection or convexity formed by the groove 4. Within the groove the packing covers the inner end of the rivet and seals the pivot-hole.

The swinging bar 11 is provided at its free end with a hook 13, shaped to conform approximately to the bead 2.

14 denotes an approximately semicircular rib having its end inclined upwardly to a seat or depression 15.

The bar can be swung through the entire circle in either direction and freely, except for the small degree of friction on the inclines and except for the effect of the seat 15, which is adapted to receive and hold the bar 11 whenever the latter is swung about its pivot, so that its hook engages rib 2 at a point diametrically opposite the bar-pivot situated between the hooks 8.

The bottom of the depression or seat 15 is preferably above the level of the cap at the point where the bar is pivoted thereto. In practice the cap, provided with a suitable packing, will be placed on the mouth of the bottle in manner to engage hooks 8 under rib 2, and the bar will then be turned about its pivot and moved along on one side of the rib 14 until it springs down into the shallow seat 15, where it will be securely retained until sufficient force is applied to spring it out of said seat. When thus situated, the hook by its engagement with bead 2 holds its side of the cap upon the bottle, the opposite side being held by hooks 8.

The cap with the narrow flange and integral holding hooks or fingers made as herein shown and described is comparatively economical of material. It is also so constructed and combined with the fastening-bar that the holding-hooks accommodate themselves to inequalities in the bead surrounding the mouth of the bottle. The bar-hook is moved toward and in full engagement with the bead by an approximately tangential movement well adapted to draw the opposite hooks tightly to the bead and insure a firm hold notwithstanding any ordinary or small variations in the form or size of the parts, and however tight the hold

of the hooks they may readily be released, the bar-hook being easily moved aside after the bar has been sprung or lifted from its retaining-seat, and said bar can be freely moved
5 about its pivot in either direction, whether operated to fasten or release the cap.

In the drawings the caps have been shown on an enlarged scale as compared with the size of ordinary bottles. The improvement,
10 however, is not limited to bottles nor to vessels of any particular dimensions.

Having described our invention, what we claim is—

1. In combination with a bottle or the like
15 having a circumferential bead near its mouth, a cap having integral hooks 8 engaging the bead and a swinging bar pivoted to the cap near said hooks and in groove 4 and having at its free end a hook 13 directly engaging the
20 bead to hold the cap upon the bottle-mouth, and a packing seated in the cap and sealing the pivot-hole, substantially as described.

2. In combination with a bottle or the like having a circumferential bead near its mouth,
25 a cap having integral hooks 8 and a horizontally-swinging bar pivoted to the cap near said hooks and having at its free end a hook, all said hooks engaging the bead directly to hold the cap upon the bottle-mouth, and said
30 cap having a notch at its periphery opposite

the cap-hooks and near the end of the bar to receive and hold the bar, substantially as described.

3. In combination with a bottle or the like having a circumferential bead near its mouth, 35 a cap having integral hooks 8 and a swinging bar pivoted to the cap near said hooks and having at its free end a hook, all said hooks engaging the bead to hold the cap upon the bottle-mouth, and said cap having a notch op- 40 posite the cap-hooks to receive and hold the bar, substantially as described.

4. In combination with a bottle or the like having a circumferential bead near its mouth, a cap having integral hooks 8 and a swinging 45 bar pivoted to the cap near said hooks and having at its free end a hook, all said hooks engaging the bead to hold the cap upon the bottle-mouth, and said cap having an inclined rib provided with a notch opposite the cap- 50 hooks to receive and hold the bar, substantially as described.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

JOHN HENRY HETTINGER.
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Witnesses:

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