

No. 806,602.

PATENTED DEC. 5, 1905.

R. UHL.
JAR CLOSURE.

APPLICATION FILED MAY 20, 1905.

Fig. 1.

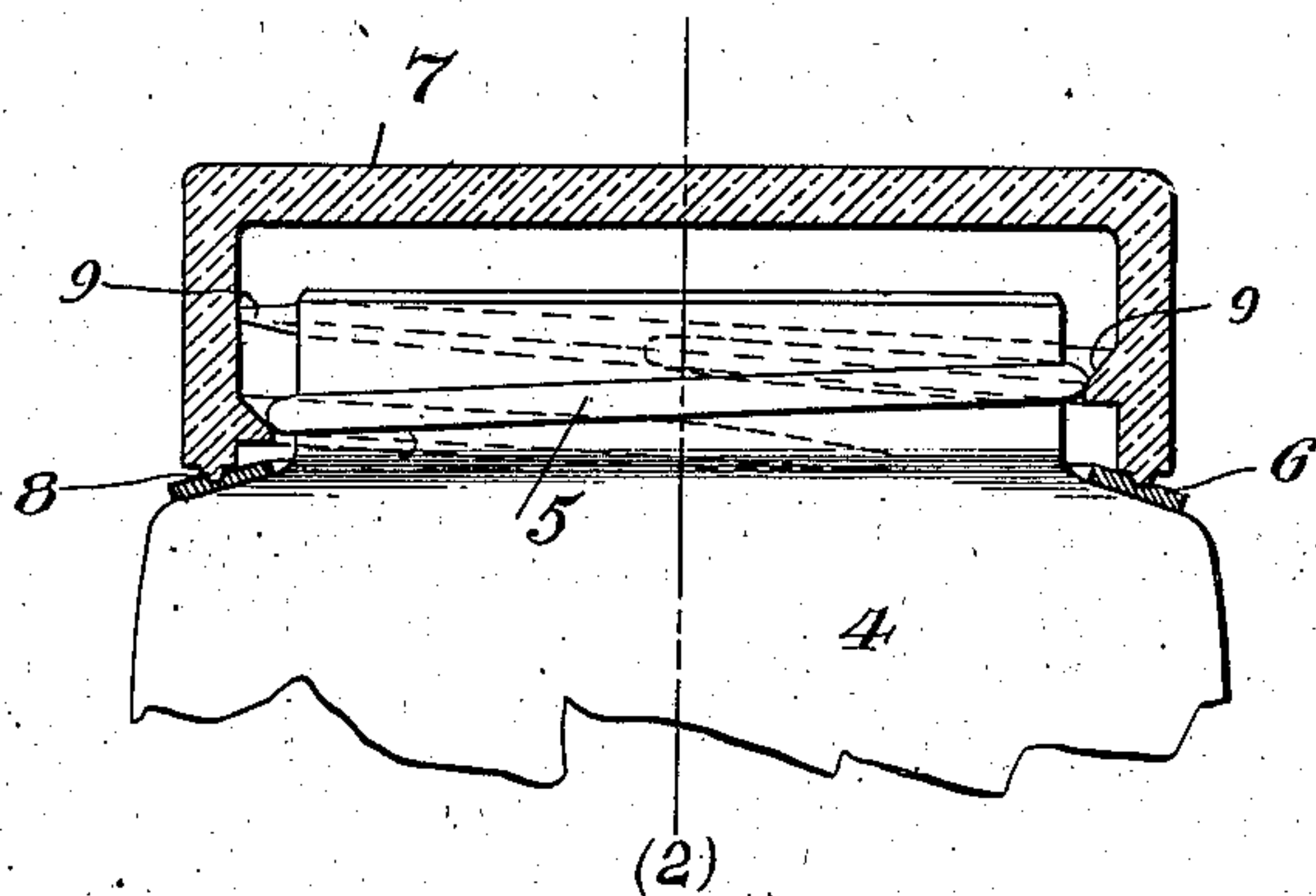


Fig. 2.

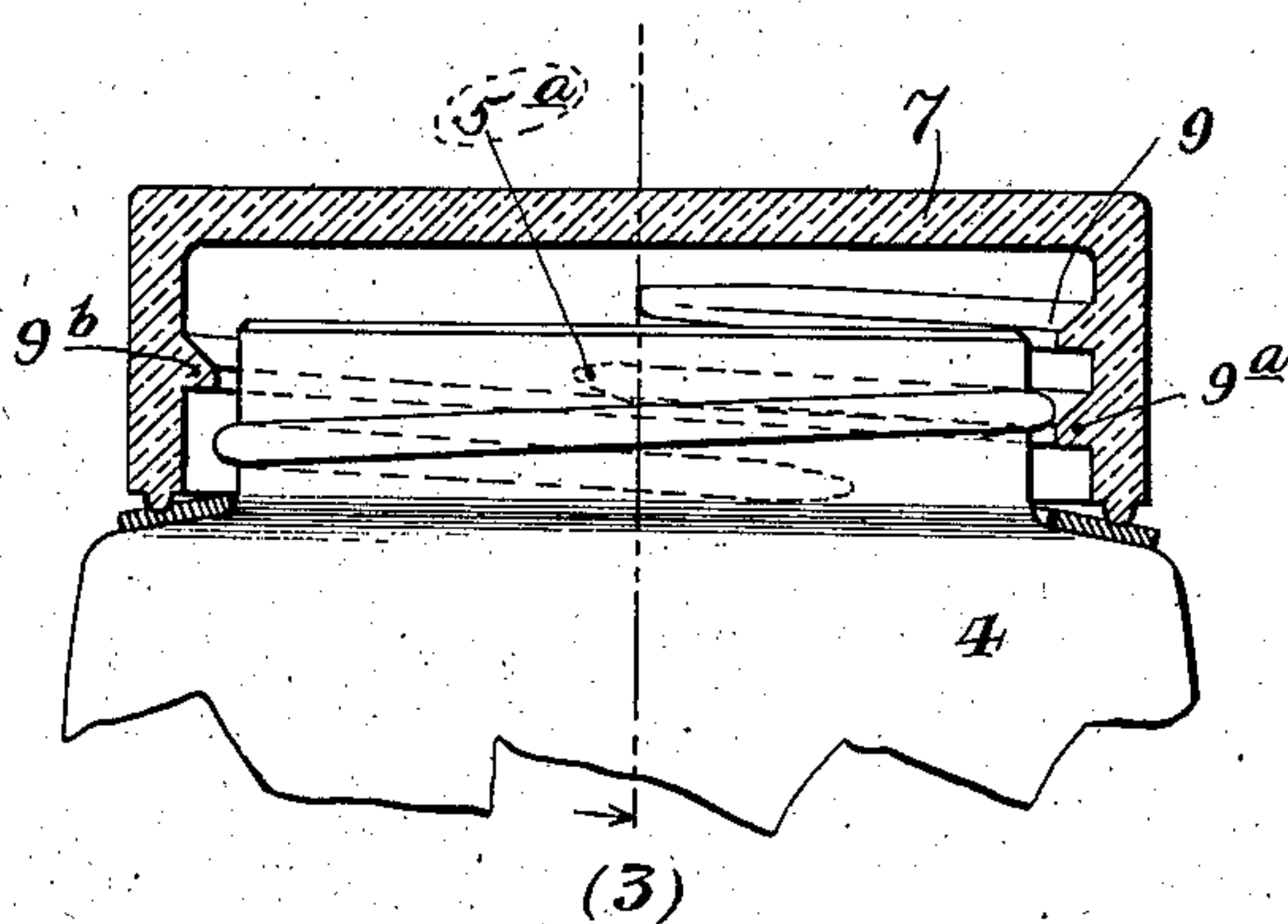
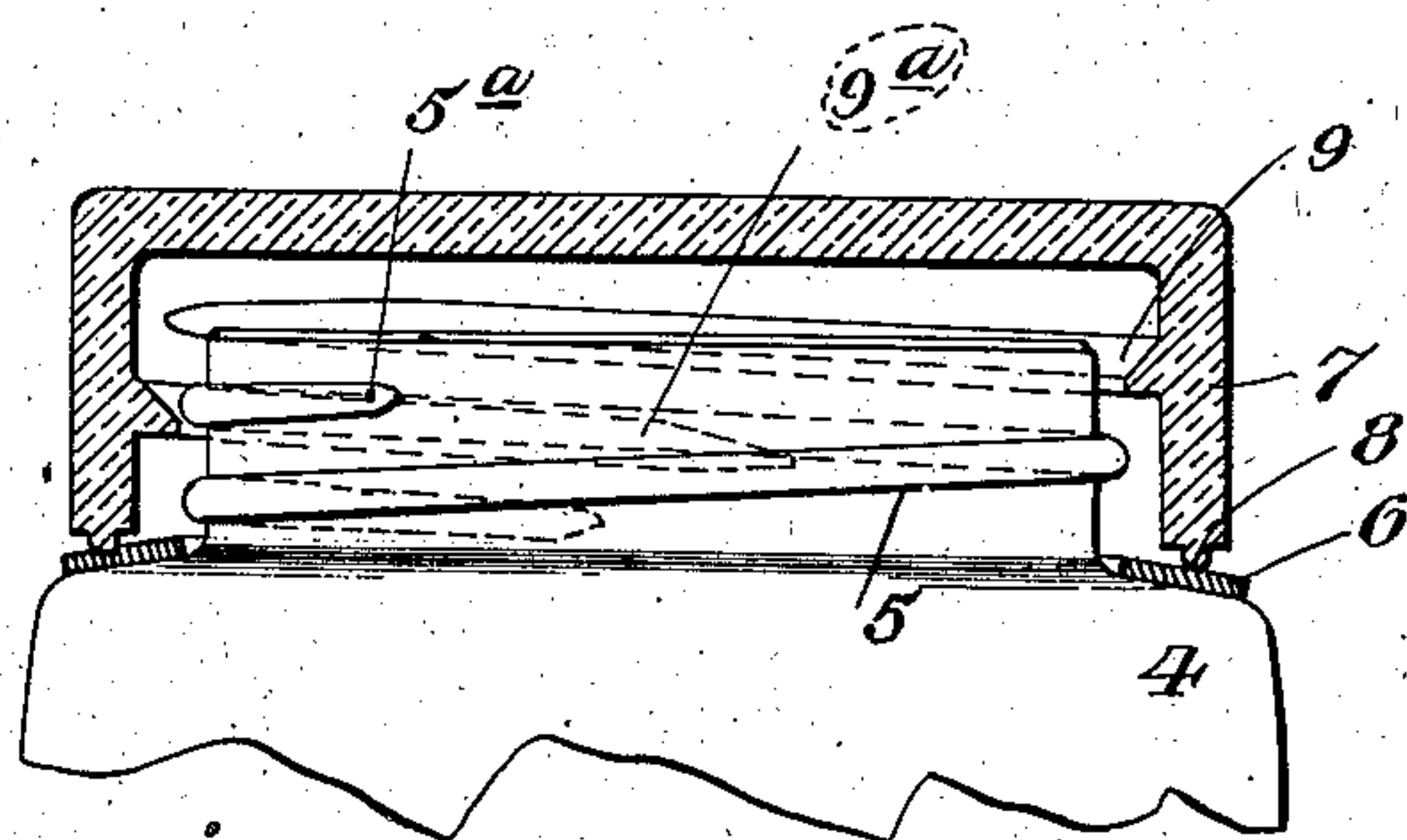


Fig. 3.



WITNESSES

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RUSSELL UHL, OF WILKESBARRE, PENNSYLVANIA, ASSIGNOR TO PERFECTION GLASS COMPANY, OF WASHINGTON, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

JAR-CLOSURE.

No. 806,602.

Specification of Letters Patent.

Patented Dec. 5, 1905.

Application filed May 20, 1905. Serial No. 261,319.

To all whom it may concern:

Be it known that I, RUSSELL UHL, a citizen of the United States, residing at Wilkesbarre, in the State of Pennsylvania, have invented certain new and useful Improvements in Jar-Closures, of which the following is a specification.

My invention relates to means for sealing the mouths of fruit jars and the like, and particularly to sealing devices designed to dispense with metallic parts and attach a glass cap upon a glass jar neck. The objects of the invention are, to provide a tight seal between the glass parts without using metallic fastening means, and to so design the glass cap as to render the attachment more operative, although the engaging means themselves may be irregular in size and shape. Other objects and advantages will hereinafter appear. I have shown a preferred form of the construction in the accompanying drawing, wherein—

Figure 1 is a side view of a common Mason jar neck, and a central vertical section of the glass cap attached thereto, shown in a closed position;

Figures 2 and 3 are central vertical sections taken at right angles to each other showing the positions of the engaging lug and the thread when the cap is first placed on and before it has been revolved in order to engage the same.

The common Mason jar having a rounded glass thread is a standard article in the market, and various unsuccessful attempts have been made to apply closing caps to said jars without the use of metal which is readily corroded by the contents of the jar and is otherwise objectionable. The principal difficulty has come from the impossibility of making threads upon a glass cap which will fit the jar and at the same time will not bind when the thread happens to be somewhat irregular in size or shape. The fitting of glass upon glass in such a closure has been generally regarded as an impossibility. I have discovered, however, that by designing the parts in certain proportions and operating them in a certain way this result may be accomplished. Thus, it will be seen by the drawing that the jar neck 4 has the usual half-round raised ridge or thread 5 which extends a little over one circumference

of the neck, and the jar has a shoulder to receive the rubber gasket 6. The cap as well as the jar is made of glass, and it will be seen that on the flanges of the cap 7 I have provided an annular bead 8, to properly engage the gasket 6. Inside of the cap is provided a spiral ledge 9 which extends a little over one circumference of the inside of the cap. This ledge is made of an inside diameter slightly less than the extreme outer diameter of the thread 5, but a good deal larger than the diameter of the neck itself, as will be plain from the figure. It has a sloping surface on top and is arranged as shown in Figures 2 and 3 so that when the cap is in a certain position as there shown, the cap may readily slide over the threads on the jar and be seated upon the gasket 6. This because the middle portion of the ledge 9, marked 9^b in Figure 2, is above the thread 5 and the end portion marked 9^a may therefore be slid under the end of the thread 5. The cap then being given about a half a revolution it will be seen that the ledge 9 will engage about half or a little more than half of the circumference of the thread 5 and lock the jar in place; but since it is not necessary to engage the entire circumference, the closure will be made whether the threads fit each other or not; and this is the essential thing in my invention.

In operation when the cap is put on in the position shown in Figures 2 and 3, which are sections taken in planes at right angles to each other in order to show the initial position, the cap may be given a turn moving the ledge 9^a on the cap for about half a revolution. It will not make any great difference whether this ledge touches the thread all the distance or only at occasional points, and in a certain position the combined action of the contact of the top of the ledge with the thread 5 and the seating of the cap upon the shoulder of the jar will cause a downward pressure of the cap upon the gasket, even though the cap should touch the thread of the jar at but one or two points; all of which will be evident from the drawing. Various advantages of this device will readily occur to those familiar with the art, as I have by this arrangement enabled the use of a glass cap upon a standard glass jar found in the market, without the usual difficulties in the way of fitting the two

together, and notwithstanding the customary irregularities of the thread.

Having thus described my invention and illustrated its use, what I claim as new, and
5 desire to secure by Letters Patent, is the following:

10 1. The combination with a glass jar having a thread thereon, of a glass cap provided with a sloping circumferential ledge inside having a diameter intermediate between the extreme
15 diameter of the thread on the jar and the neck of the jar itself, substantially as and for the purpose described.

2. The combination with a standard Mason
15 jar having the thread 5 thereon, of a glass cap having a ledge 9 extending a little more than one circumference and large enough to slide over the thread when in one position and to

lock with the thread on the jar when in another position, substantially as described. 20

3. The combination with a jar neck having a spiral glass thread, of a glass cap having a spiral glass ledge thereon of a slightly less diameter than the thread on the neck and arranged substantially as shown whereby the
25 cap may be seated upon the jar without engaging the thread and then by a turn of the cap the said ledge will engage the thread about half a turn, substantially as described.

In testimony whereof I have hereunto signed
30 my name in the presence of the two subscribed witnesses.

RUSSELL UHL.

Witnesses:

JULIUS P. MILLER, Jr.,
J. P. MILLER.