

C. JOVIGNOT.

STOPPER FOR JARS, BOTTLES, OR THE LIKE.

APPLICATION FILED DEC. 9, 1902.

NO MODEL.

2 SHEETS—SHEET 1.

FIG.1.

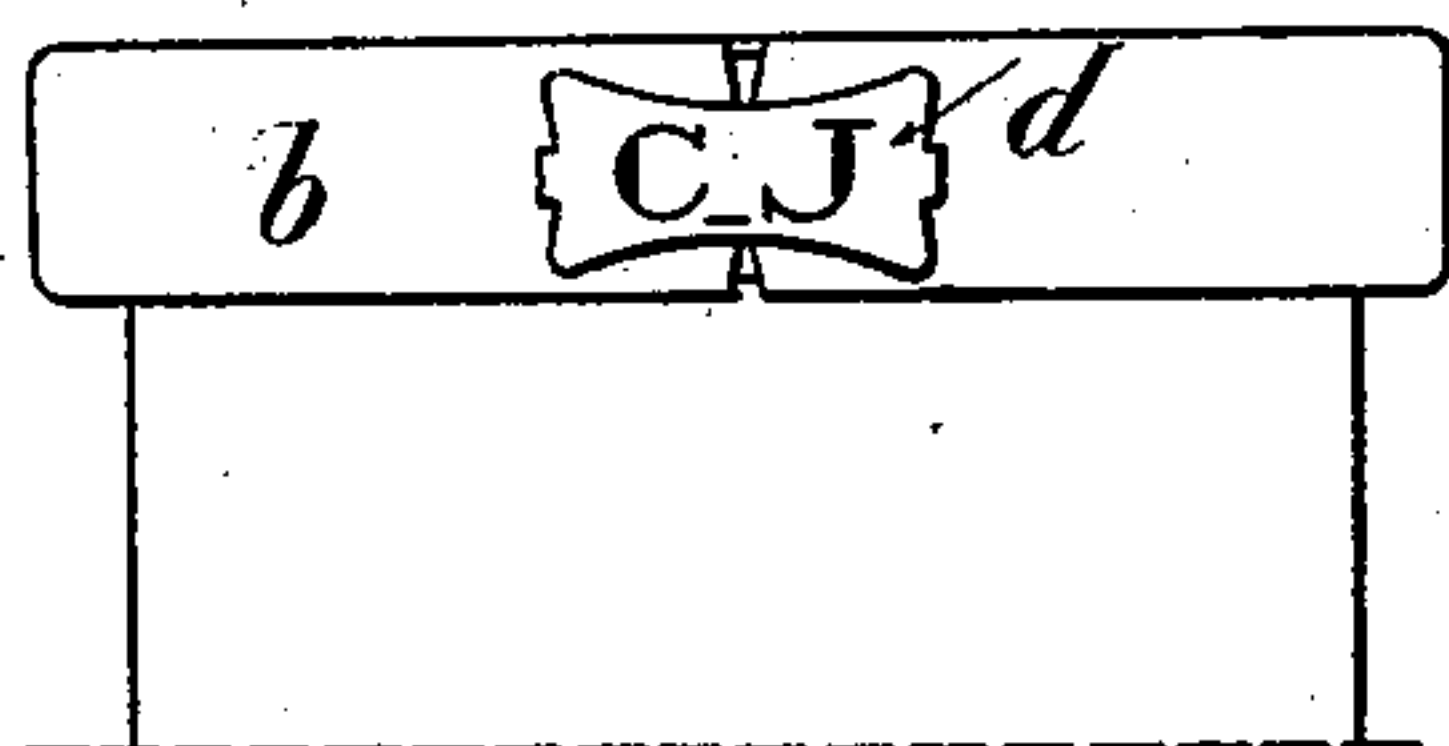


FIG.2.

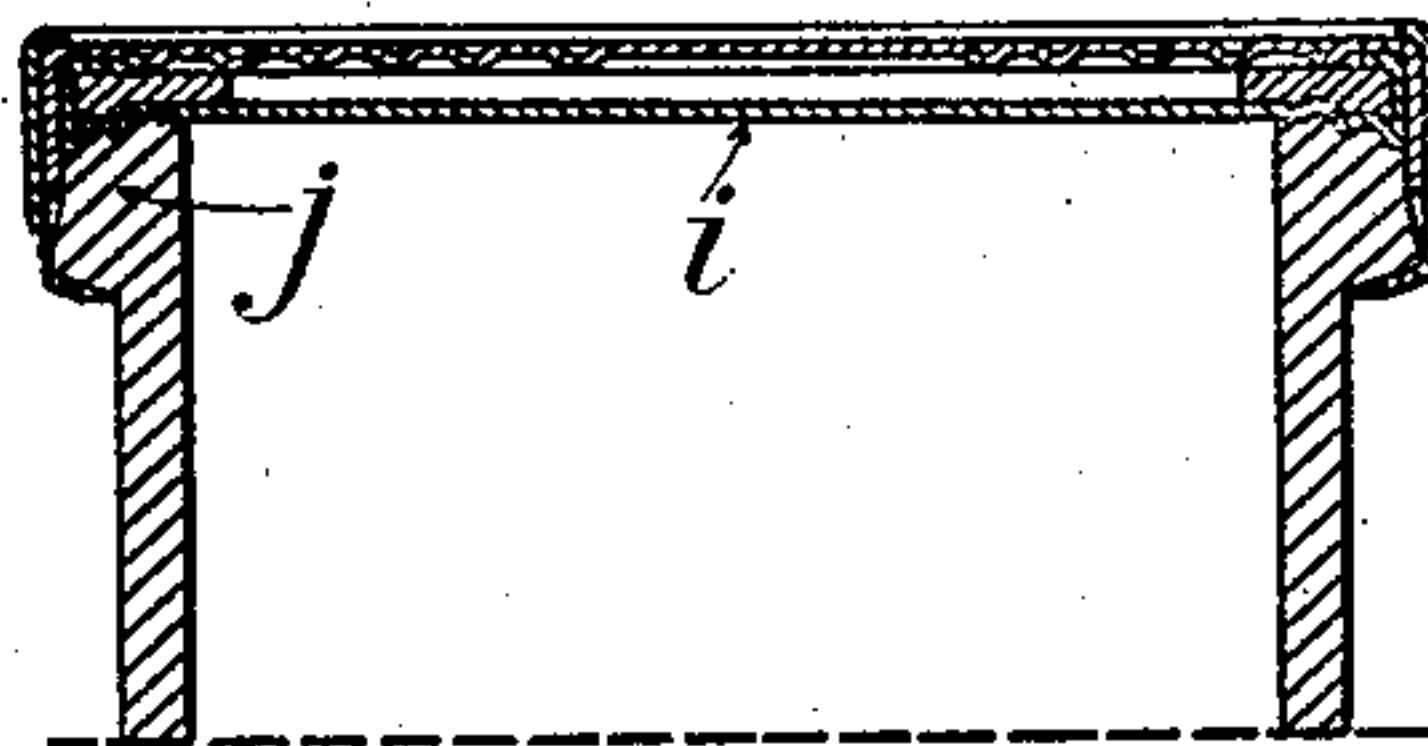


FIG.3.

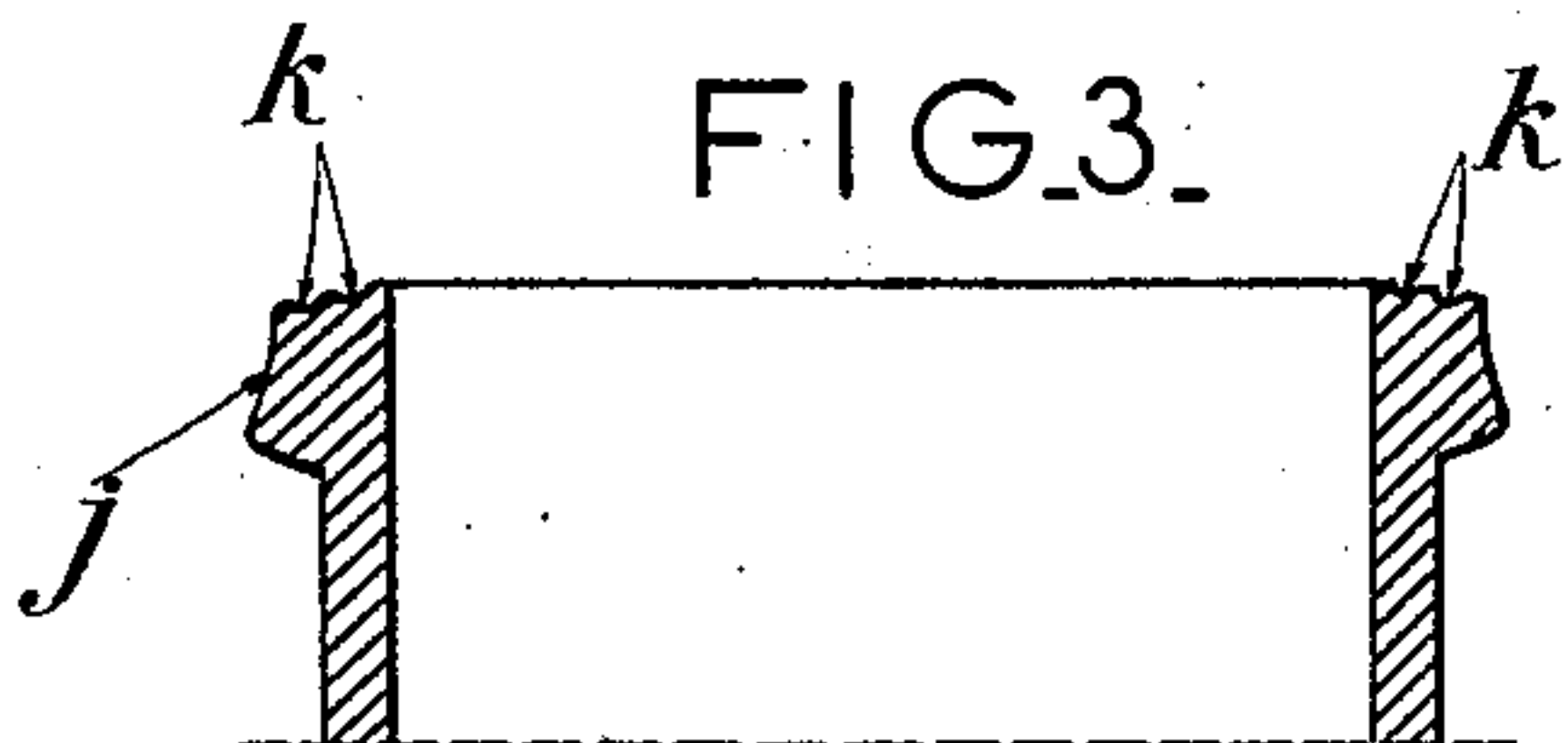


FIG.4.



FIG.5.

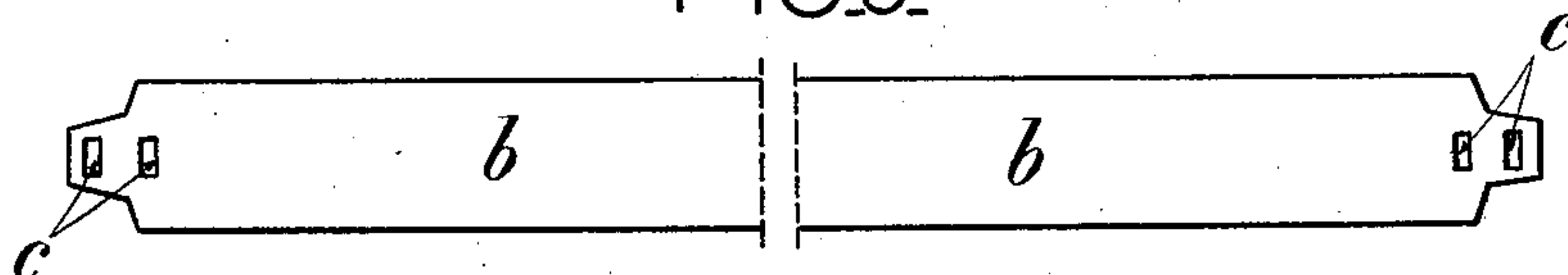


FIG.6.



FIG.10.



FIG.7.

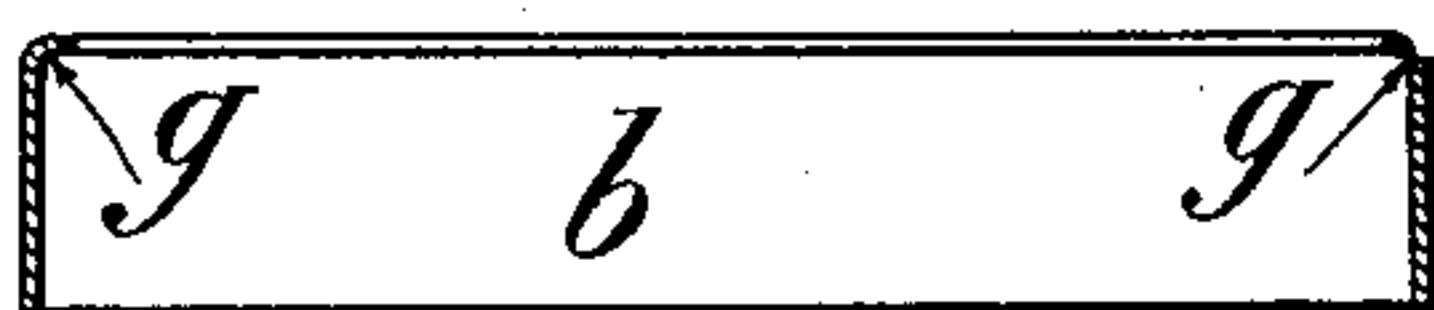


FIG.8. FIG.9.

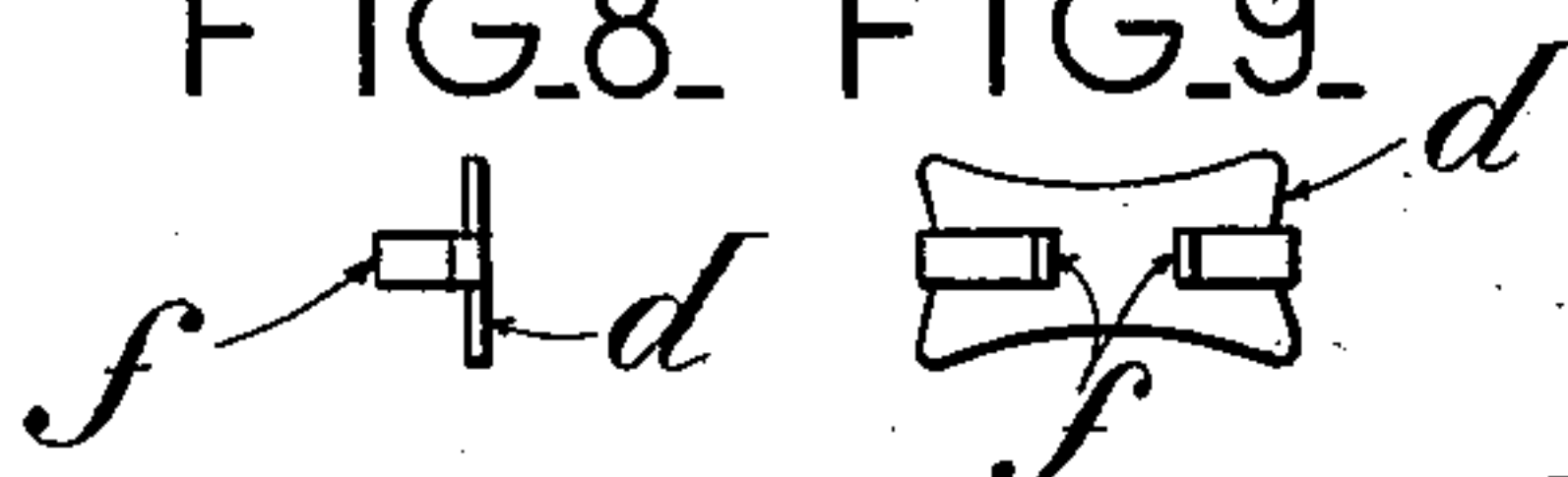


FIG.12.

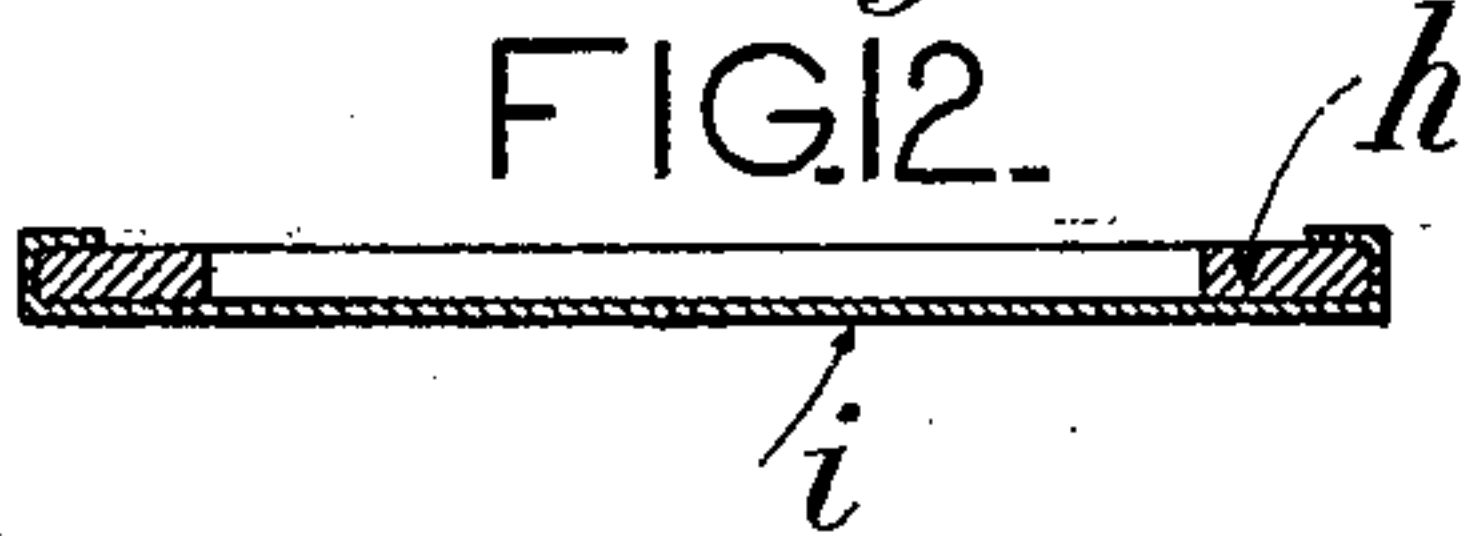


FIG.11.

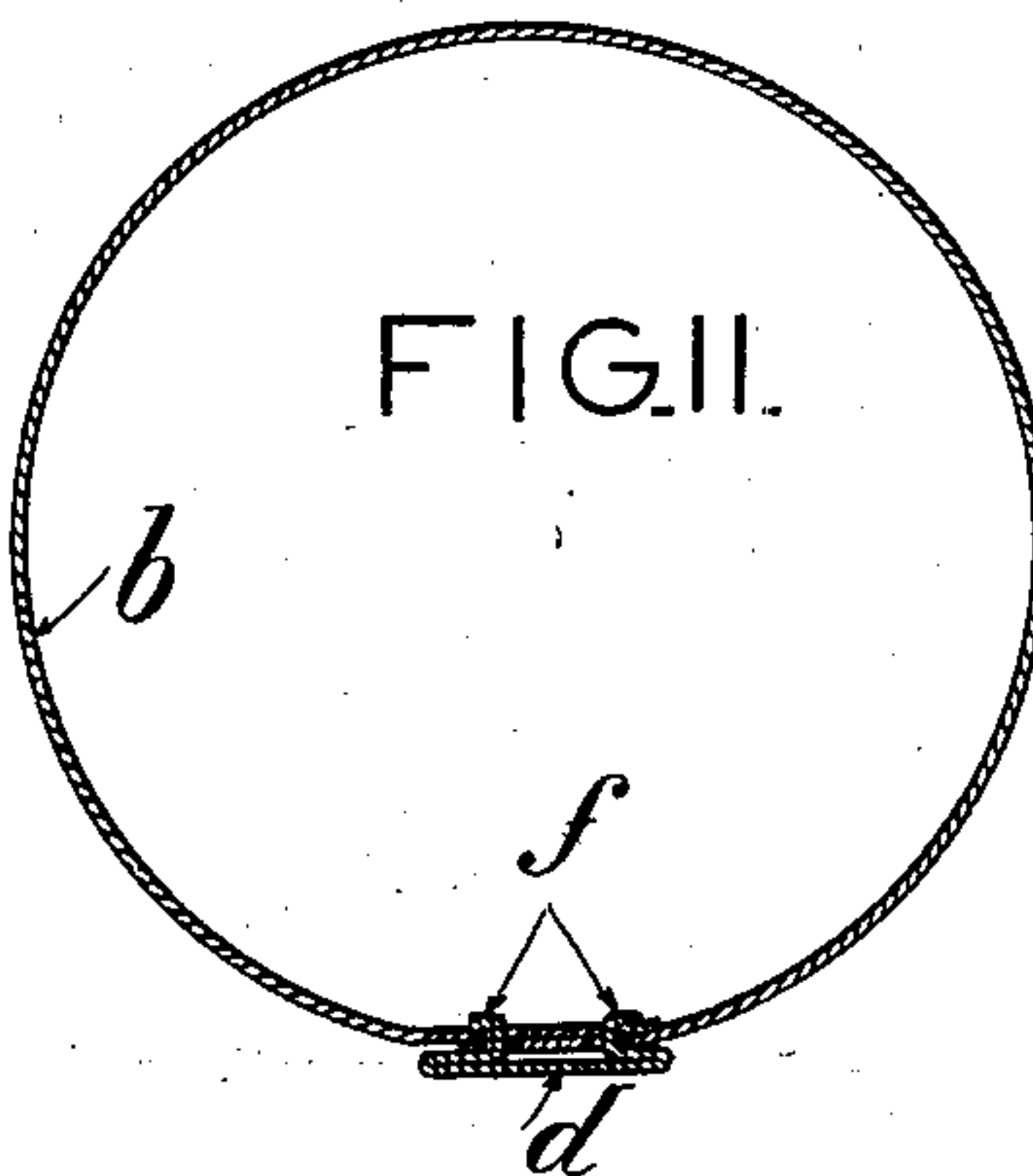
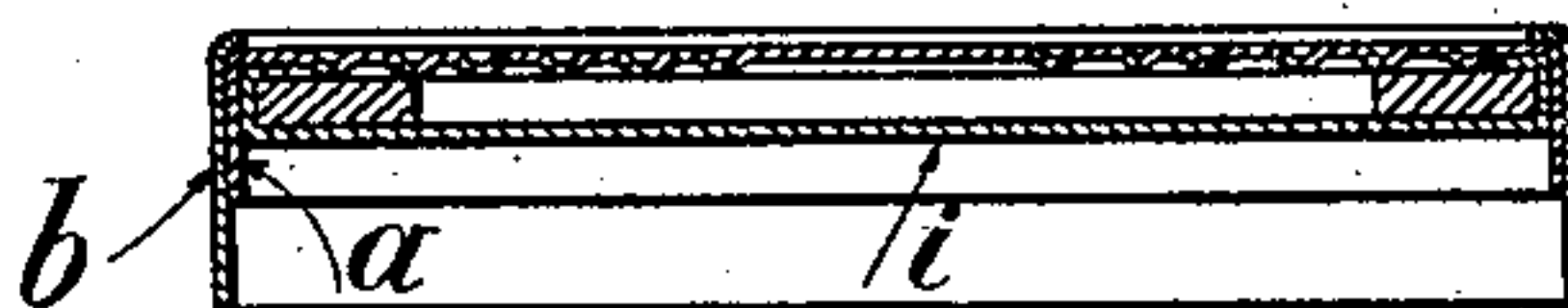


FIG.13.



WITNESSES

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No. 723,467.

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C. JOVIGNOT.
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APPLICATION FILED DEC. 9, 1902.

NO MODEL.

2 SHEETS—SHEET 2.

FIG. 14.

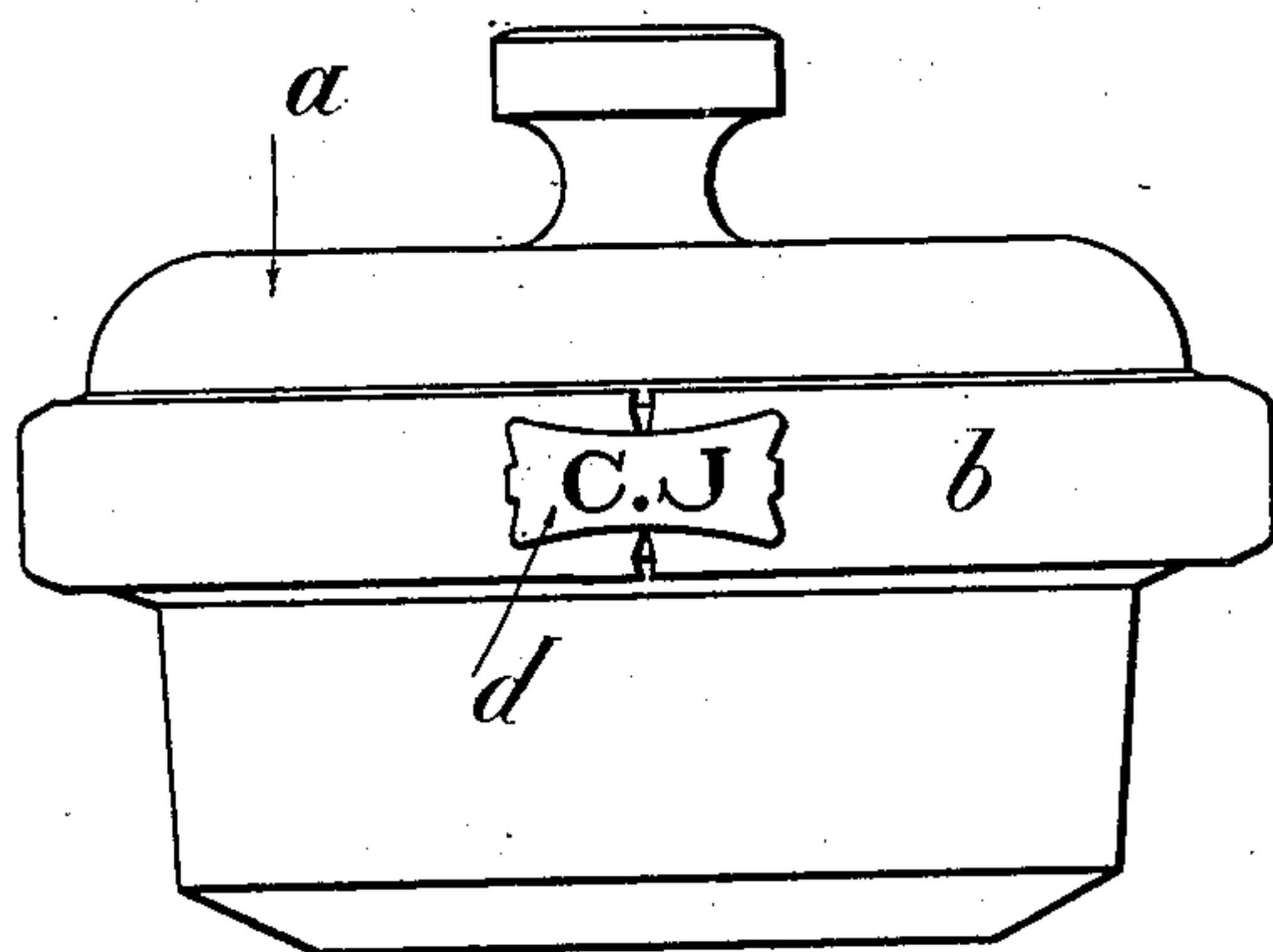
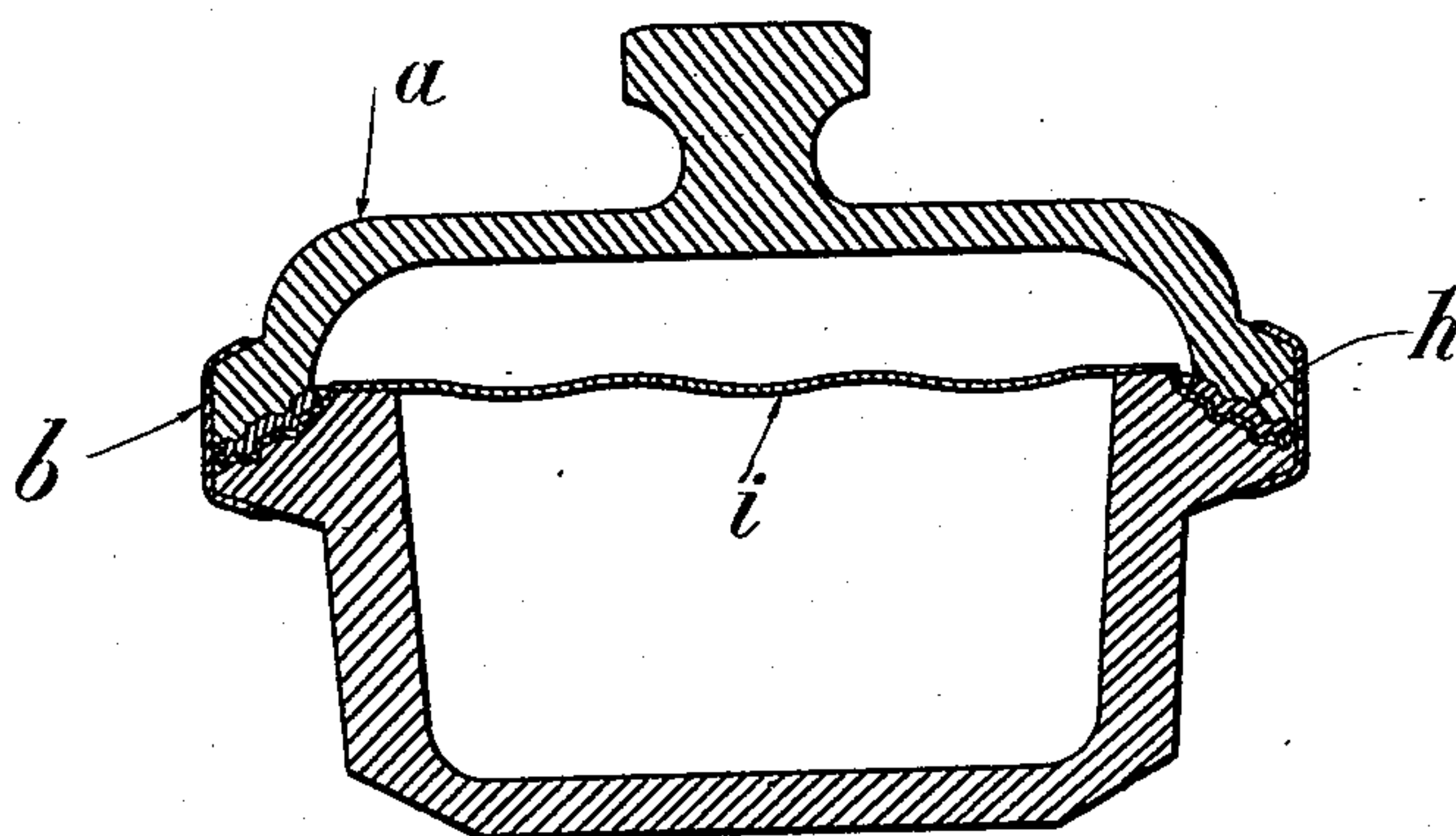


FIG. 15.



WITNESSES

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CHARLES JOVIGNOT, OF PARIS, FRANCE.

STOPPER FOR JARS, BOTTLES, OR THE LIKE.

SPECIFICATION forming part of Letters Patent No. 723,467, dated March 24, 1903.

Application filed December 9, 1902. Serial No. 134,511. (No model.)

To all whom it may concern:

Be it known that I, CHARLES JOVIGNOT, civil engineer, a citizen of the Republic of France, and a resident of 23 and 25 Avenue de Chatillon, Paris, in the Republic of France, have invented certain new and useful Improvements in Stoppers for Jars, Bottles, or the Like, of which the following is a specification.

10 This invention relates to improvements in stoppers for jars, bottles, and the like, and has for its object to provide a stopper which will assure the easy opening of the receptacles to which it is adapted, which will prevent fraud, and which will, besides, assure a hermetic sealing.

The invention consists in providing around the neck of the jar or receptacle an exterior flange or collar the upper and lower edges of which are conical and inclined in opposite directions the lower edge being smooth and the upper one being provided with annular ribs or corresponding hollows. This receptacle with that kind of neck is combined with an elastic joint adapted to rest on the upper edge of the neck, a cover resting on said joint, an opened ring, and a safety sealing-hook which joins the two ends of the ring before the latter is placed on the cover, so that said ring will embrace the neck and will then be pressed or set under the lower edge of the flange of the neck.

In the accompanying drawings, which illustrate clearly the invention, Figure 1 is an elevation of my improved stopper seen by the side of the safety sealing-hook and applied to an ordinary receptacle. Fig. 2 is a vertical section of the receptacle and of the stopper. Fig. 3 is a detail sectional view of the particular arrangement of the neck. Fig. 4 is a sectional view of the cover. Fig. 5 shows the ring opened flat. Fig. 6 shows the same ring rolled up and having its upper edge turned over. Fig. 7 is a vertical section of the ring rolled up. Fig. 8 is a side view, and Fig. 9 a back view, of the safety sealing-hook. Fig. 10 is an elevation view of the ring provided with its safety sealing-hook. Fig. 11 is a horizontal section of the ring, taken through line 1 2 of Fig. 10. Fig. 12 is a vertical section of the elastic joint. Fig. 13 is a vertical section of the stopper before it is

placed on the receptacle. Figs. 14 and 15 show a receptacle of a particular shape provided with my improved stopper.

The receptacles stoppered according to my invention have a neck formed of a projecting collar or flange *j*, the upper edge of which is conical and is provided with annular ribs *k* and the lower edge of which is also conical, but inclined in an opposite direction.

The stopper proper comprises four parts—viz., a cover *a*, Figs. 4 and 15, a locking-ring *b*, the ends of which are provided with slots *c*, Figs. 5 and 6, adapted to engage the lugs of a sealing-hook, a sealing-hook *d*, Figs. 8 and 9, formed of a small sheet-metal plate made integral with two lugs *f*, which are turned over its back face and then extend perpendicularly to said face, and, finally, a joint formed of an annular disk of compressible material *h* and an isolating-sheet *i*, adapted to prevent the contents of the receptacle from coming into contact with the disk *h*.

The stoppering of the receptacle is effected in the following manner: The ring *b* is first prepared with an upper edge *g*, turned inward around its circumference. The two ends of said ring are superposed, so as to make the slots *c* coincide with one another, as shown in Fig. 6. The lugs of the sealing-hook are then inserted in said slots *c* and bent against the inner face of said ring, as shown in Fig. 11. The cover *a* is then forced into the ring until its top rests on the edge *g* of said ring, producing thereby the covering of the inwardly-bent lugs of the sealing-hook. The joint is then placed at the bottom of the capsule, as shown in Fig. 13, and this whole is placed on the neck of the receptacle, whereupon the lower edge of the ring *b* is pressed under the collar or flange *j* by setting, as shown in Figs. 1, 2, and 15. This operation is facilitated by the conical shape of the lower edge of the collar or flange. On the other hand, the conical shape of the upper edge allows of applying perfectly the elastic joint upon said edge, owing to the pressure exerted from bottom to top on the ring during the setting, and, besides, the annular ribs with which it is provided assure by the crushing of said joint the hermetic sealing. Finally, the safety sealing-hook *d* assures the inviolability of the receptacles. It may be seen, indeed, that its lugs

being locked between the ring *b* and the cover *a* it is impossible to remove the hook without tearing said lugs. As each manufacturer can put his trade-mark on the sealing-hook, any attempt to violate the sealing would be immediately recognized contrarily to what exists in the actual stoppers, where the ring may be unhooked without destroying anything and then may be hooked again.

10 With the improved stopper above described the consumer can very easily open the receptacles. It is only necessary to remove the sealing-plate by tearing the lugs, the ends of which are clasped between the cover *a* and

15 the ring *b*.

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

20 The combination with a receptacle having a neck surrounded by a collar or flange *j* the upper edge of which is conical and is provided

with annular ribs and the lower edge of which is also conical, of a cover *a*, a ring adapted to embrace the cover and the neck, provided with slots *c* at its ends, and having an upper inwardly-bent edge and an overhanging lower edge adapted to be set against the flange of the neck, a sealing-hook *d* formed of a small sheet-metal plate having two lugs *f* integral therewith which engage the slots *c* of the ring and are bent against the inner face of said ring, and a joint formed of a compressible annular disk *h* and an isolating-sheet *i* which is to be placed between the top of the neck and the cover, substantially as and for the purpose set forth.

25 30 35

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

CHARLES JOVIGNOT.

Witnesses:

ANTOINE LAVOIX,
AUGUSTUS E. INGRAM.