

No. 860,338.

PATENTED JULY 16, 1907.

J. R. SHEARMAN.

JAR CLOSURE.

APPLICATION FILED AUG. 27, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

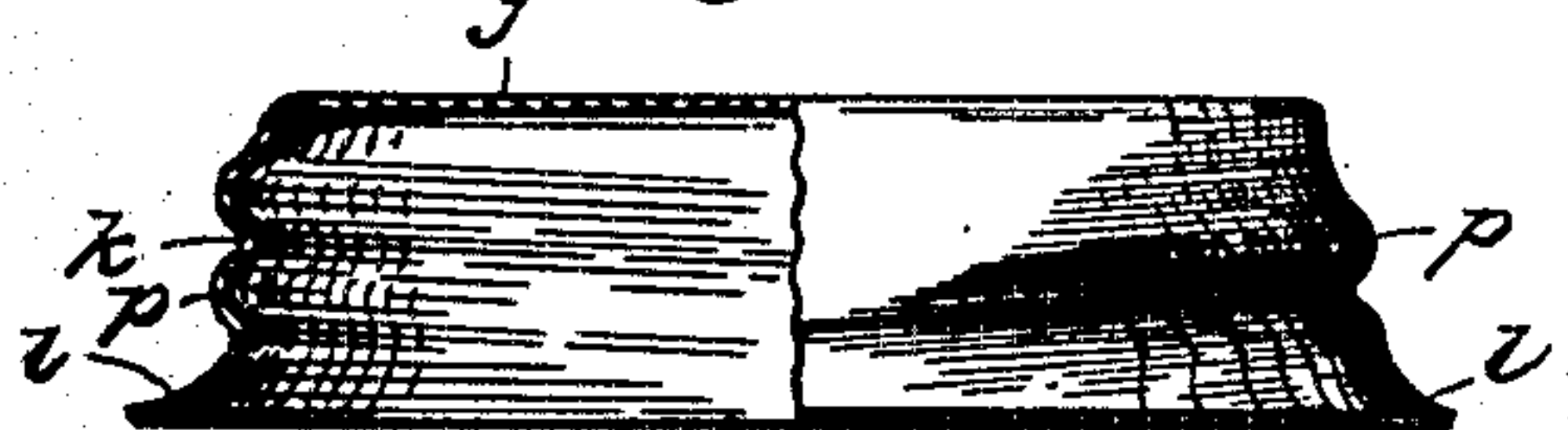


Fig. 2.

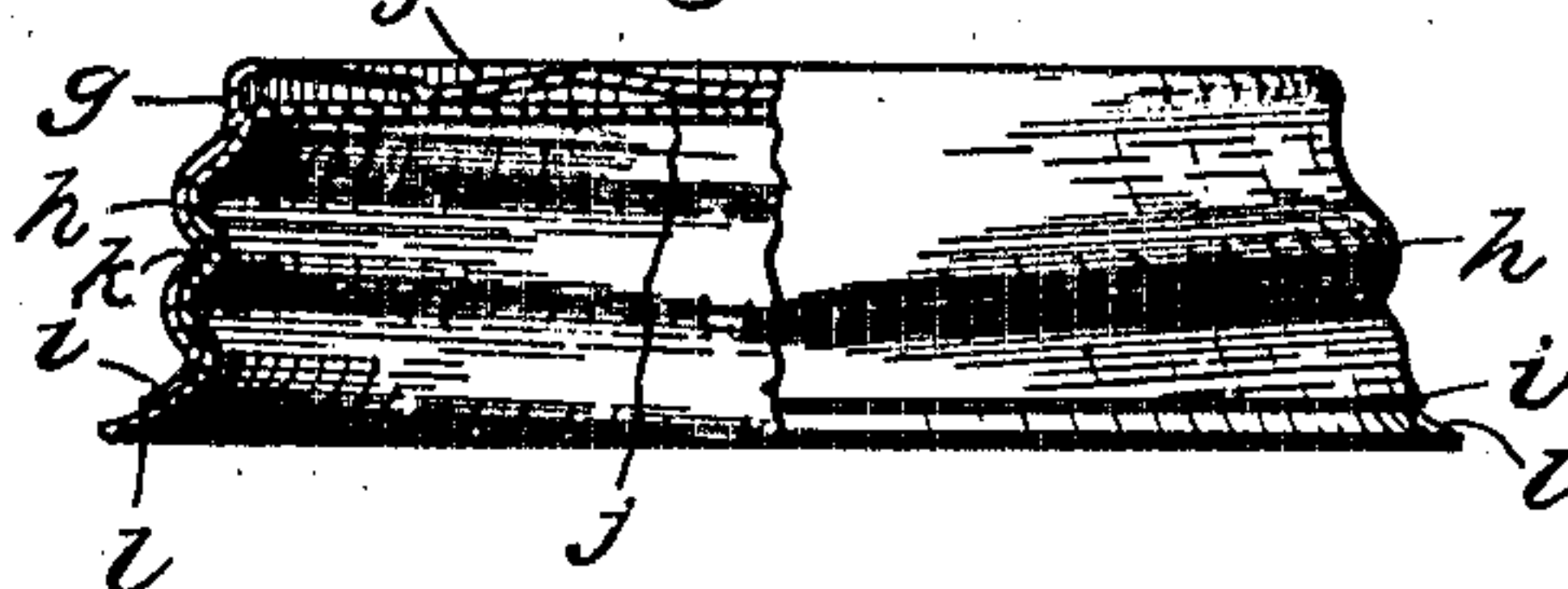


Fig. 3.

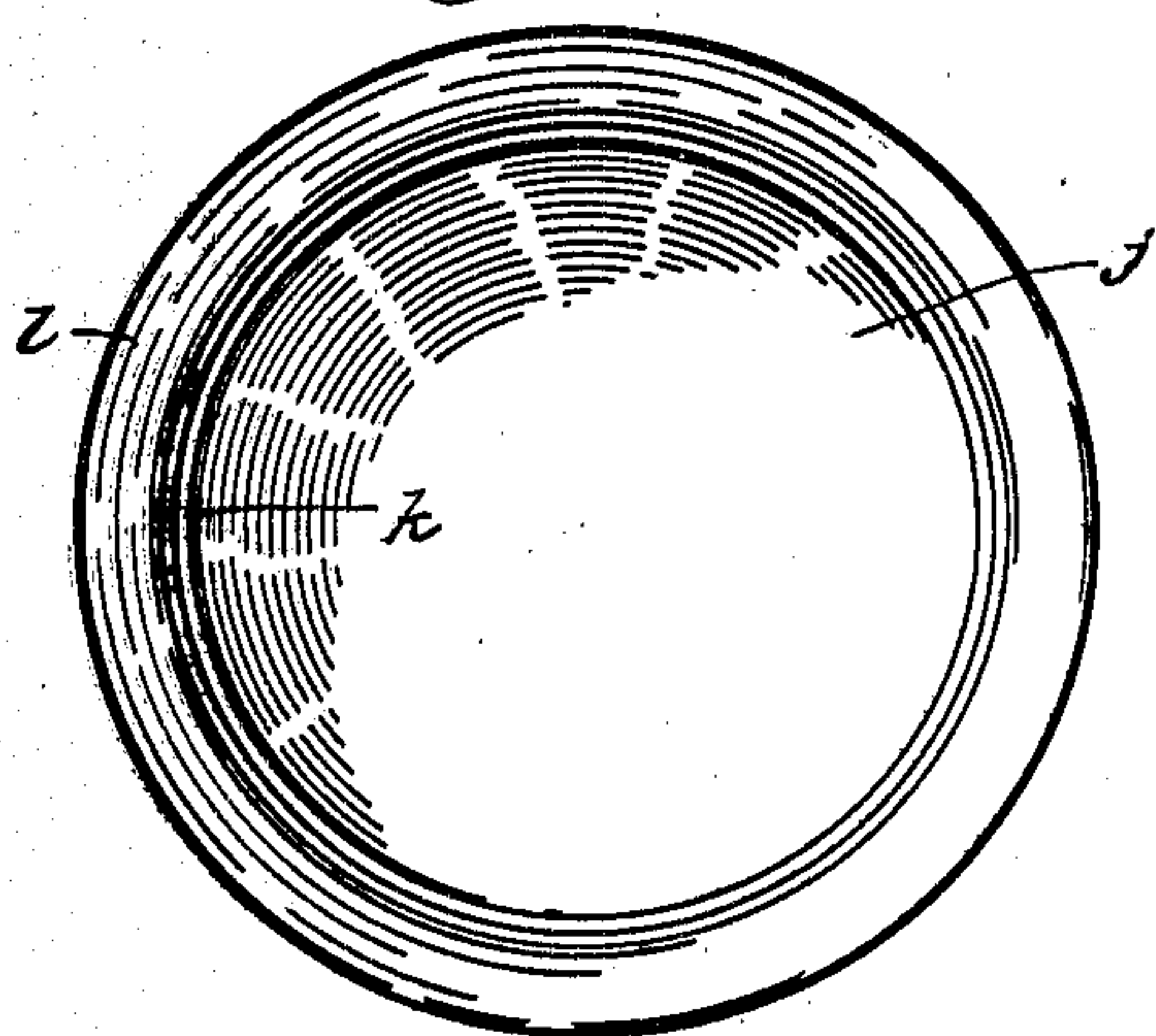


Fig. 4.

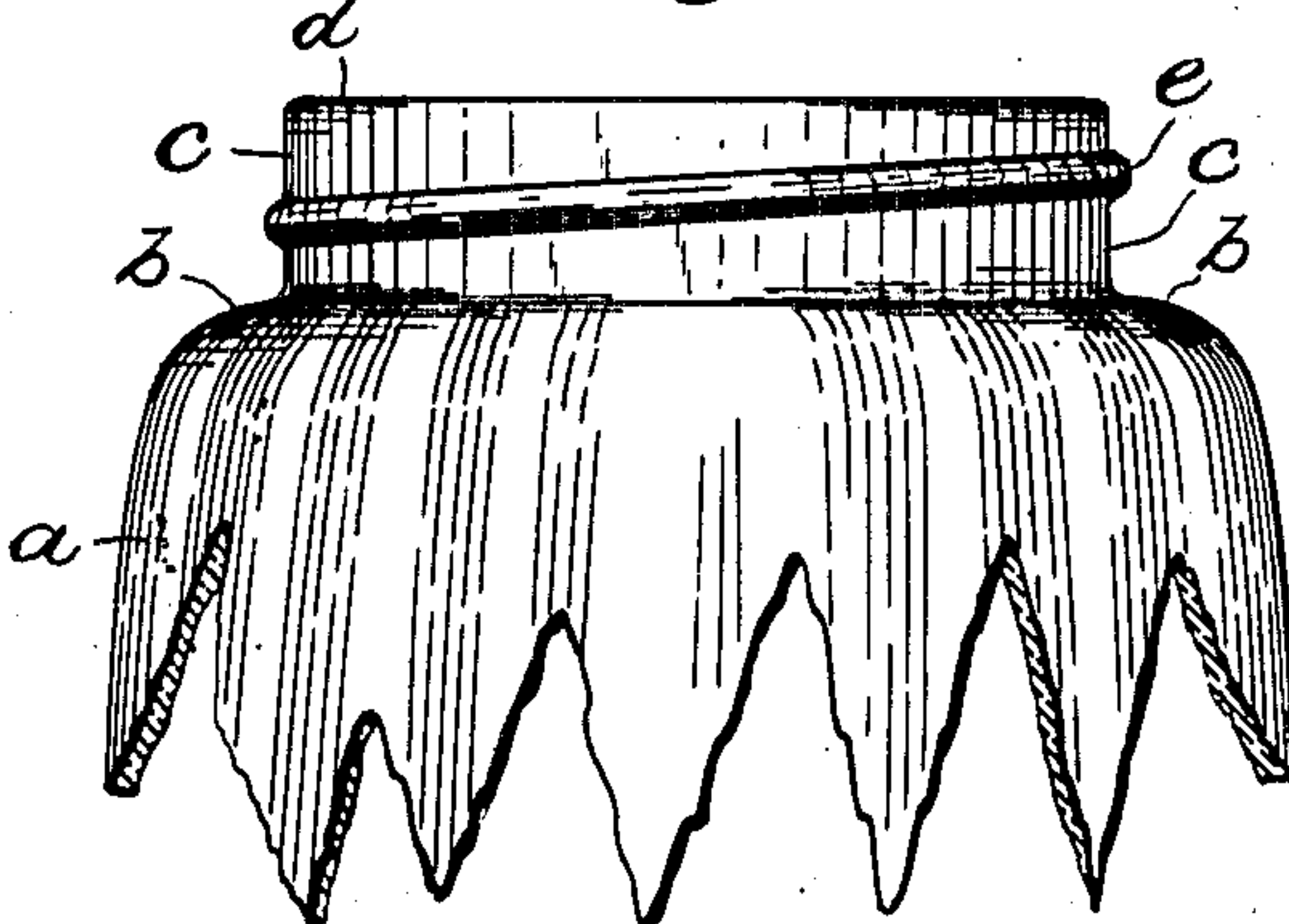


Fig. 5.

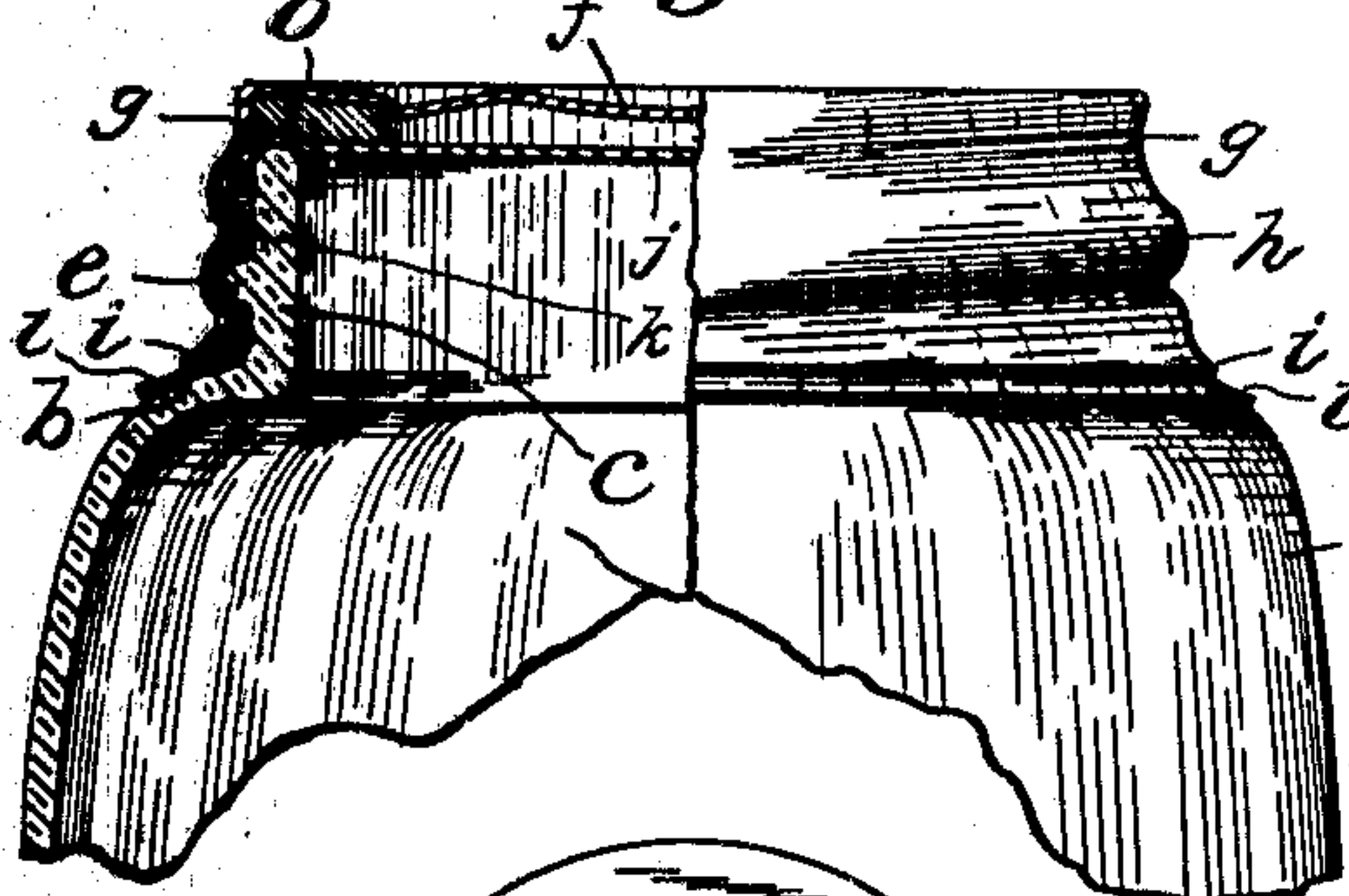


Fig. 6.

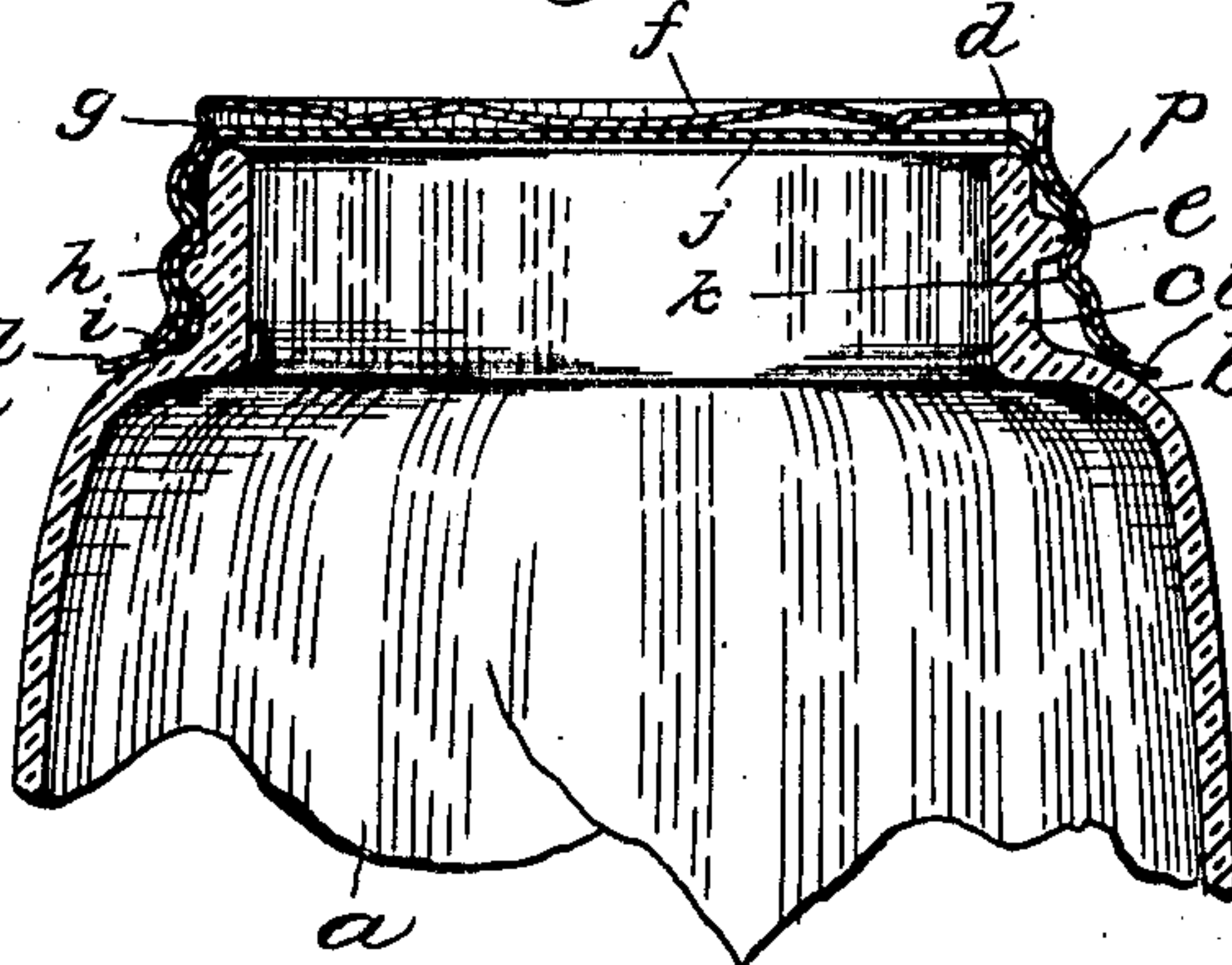
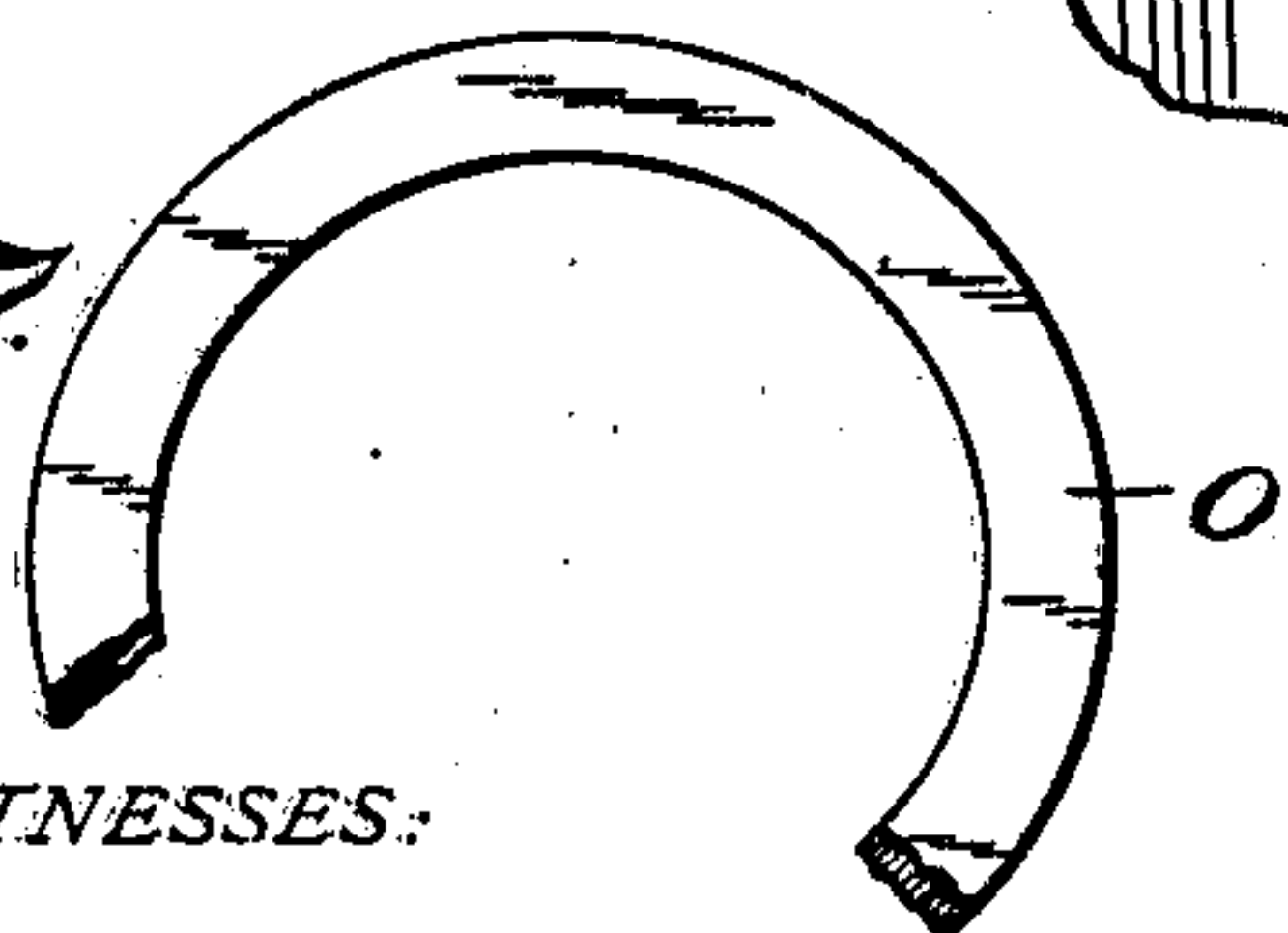


Fig. 7.



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2 SHEETS—SHEET 2.

Fig. 8.

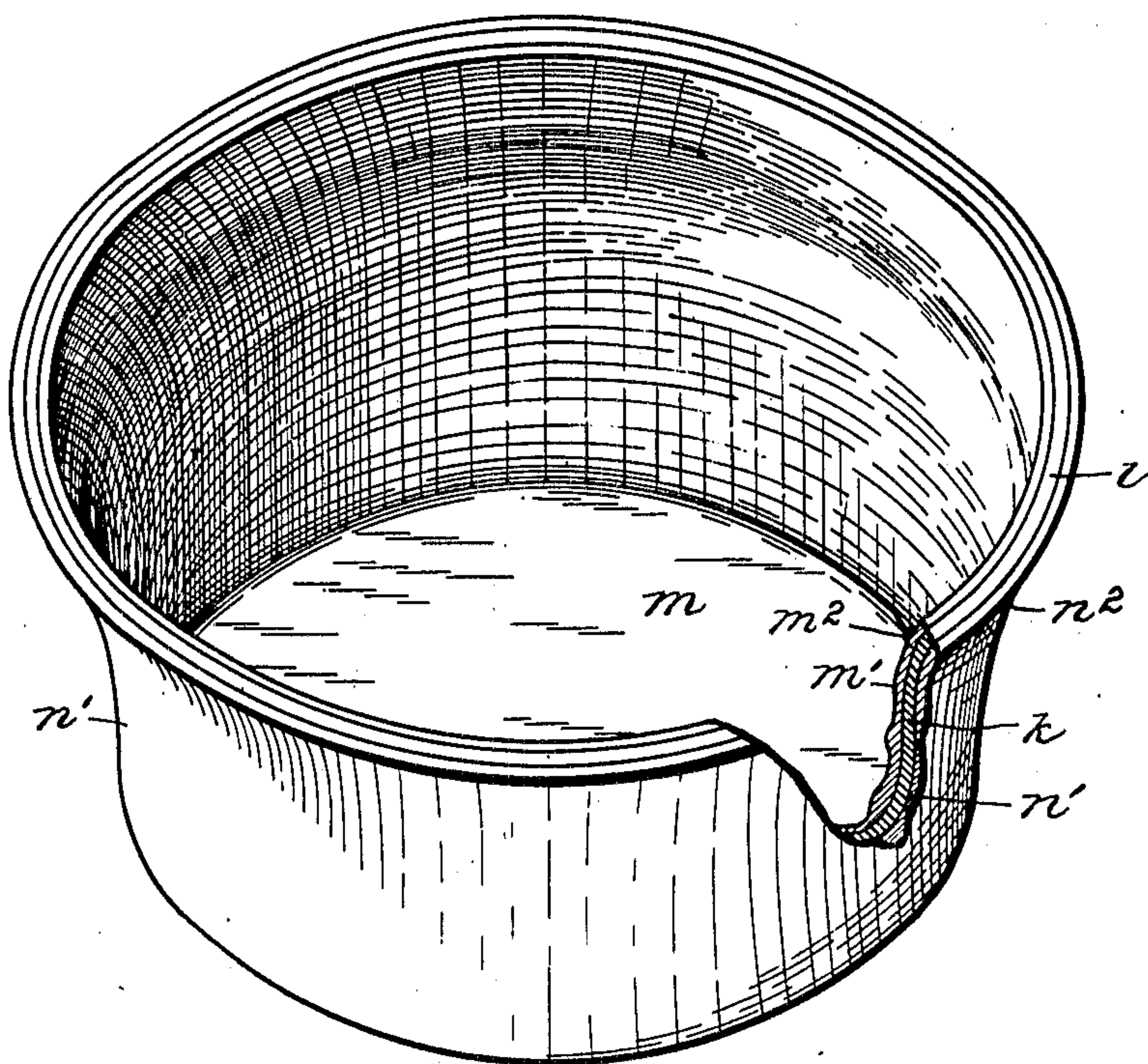
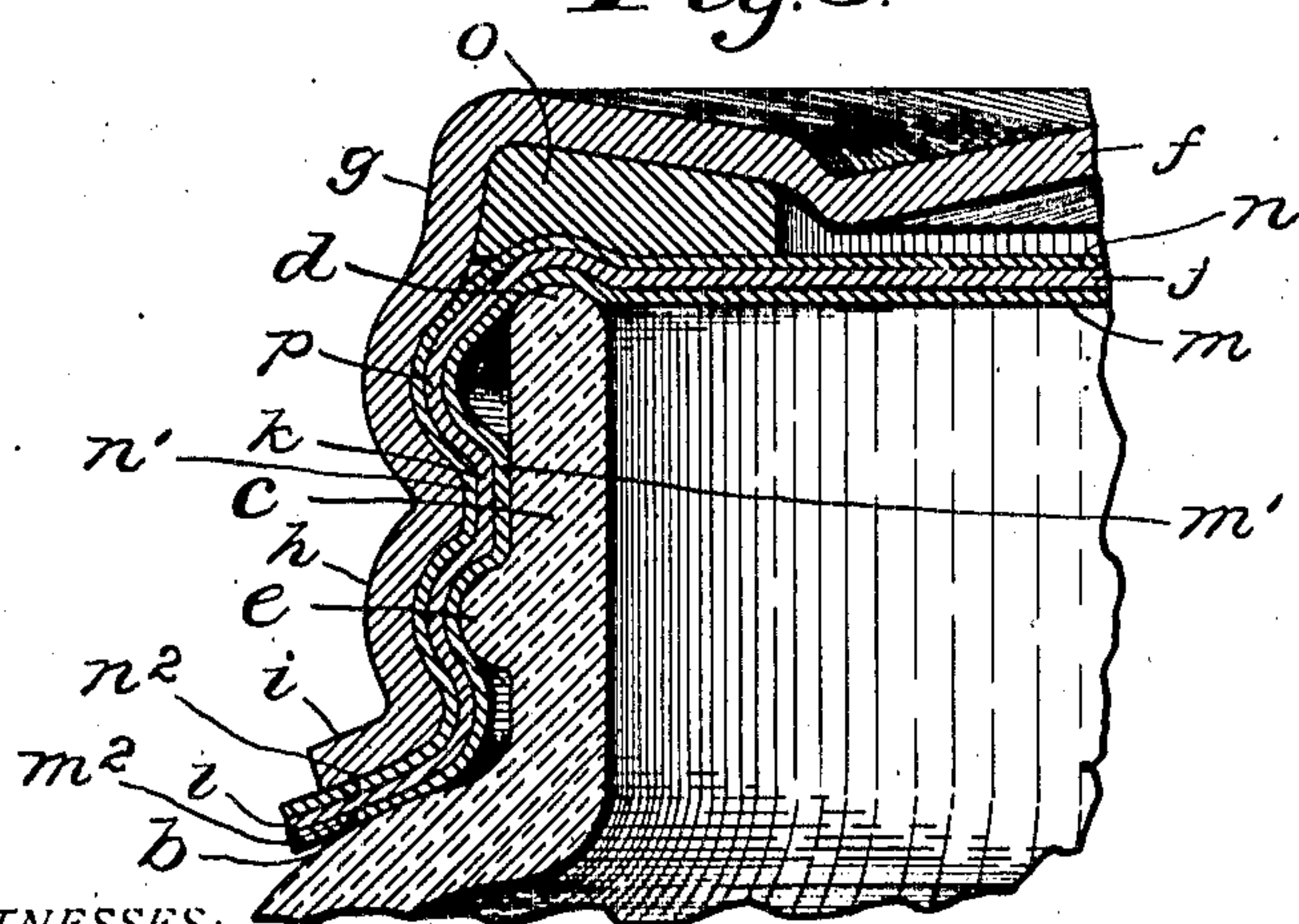


Fig. 9.



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UNITED STATES PATENT OFFICE.

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JAR-CLOSURE.

No. 860,338.

Specification of Letters Patent.

Patented July 16, 1907.

Application filed August 27, 1906. Serial No. 332,209.

To all whom it may concern:

Be it known that I, JOHN RUSSELL SHEARMAN, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented new and useful Improvements in Jar-Closures; and I do declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to jars or like vessels that may be used for preserving fruits or various articles of food, and the invention has reference particularly to combination devices for closing and sealing the vessels and preventing contact of the contents of the vessels with the covers or lids thereof.

Objects of the invention are to provide a simple and efficient sanitary jar closure that may be produced cheaply, and be convenient and economical in use; to provide a reliable sealing ring and holder therefor which may be produced so cheaply as to obviate the desirability of using a sealing ring a second time at the risk of violation of sanitary rules as has been the practice, and to provide a relatively inexpensive combined sealing ring and lid-lining adapted to be readily removed from the jar and also from the cover, and also adapted to facilitate the closing, sealing and unsealing of a jar.

Further objects are to provide an improvement in jar closures which will permit of the use of cheap material in the manufacture of covers or lids having screw threads or other devices for attachment to the jar necks, and to insure sanitary and hygienic methods in the closing and sealing of fruit jars and the like vessels.

With the above-mentioned and minor objects in view, the invention consists in a sealing-ring or packing-ring attached to a holder, said holder being adapted to extend over the top of a jar neck and hold the sealing-ring in place while applying the cover to the jar, or to hold the sealing-ring in the cover while being applied to the jar, as may be desired, said holder being adapted to also prevent contact of the contents of the jar with the cover; and, the invention consists further in the parts and combinations and arrangements of parts, as hereinafter particularly described and referred to in the appended claims.

Referring to the drawings, Figure 1 is a side and sectional elevation of the sealing-ring and holder composed of suitable material without having coatings of other material thereon; Fig. 2, a side and sectional elevation of a jar cover or cap having the sealing-ring and holder therein; Fig. 3, a plan view of the sealing-ring and holder inverted; Fig. 4, a fragmentary side elevation of a jar adapted to have the invention applied thereto; Fig. 5, a fragmentary side and sectional

elevation of the jar and the cover and also the sealing-ring and holder together with an auxiliary sealing-ring; Fig. 6, a fragmentary vertical central sectional view of the jar and cover and also the sealing-ring and holder; Fig. 7, a fragmentary plan view of the auxiliary sealing ring shown in operative position in Fig. 5; Fig. 8, a perspective view of the sealing-ring and holder provided with coatings and inverted; and, Fig. 9, a fragmentary vertical central sectional view of the jar-neck having the coated sealing-ring and holder and also the cover thereon, the auxiliary sealing-ring being also shown in its operative position.

Similar reference characters throughout the drawings designate corresponding elements or features of construction or arrangement of parts.

In the drawings, *a* designates the body part of a fruit jar; *b*, the shoulder on which sealing is usually accomplished at the top of the body part; *c*, the neck of the jar having a smooth top edge *d* on which sealing may be accomplished if desired, the neck being provided with an external screw-thread *e* to be engaged by the screw-thread of a retaining ring, or by a cover having a threaded flange, as has been customary.

Heretofore it has been the practice with a jar as above described to use a glass or porcelain lined lid or cover with a rubber or composition sealing-ring which contaminated the contents of the jar, and a threaded metallic retaining-ring; or, a metallic cover having a threaded flange effecting the sealing by means of a rubber ring on the shoulder of the jar, a method difficult in carrying out on account of the sealing-ring shifting its position while screwing on the cover, the cover being provided with a glass or porcelain lining for preventing the contents of the jar from having contact with the metallic cover, a faulty expedient in that the lining must be less in diameter than the neck of the jar and consequently the cover is exposed at the edge of the lining. By means of the present invention the expense of the separate lid or the lining above referred to is eliminated and the disadvantages thereof obviated.

In carrying out the present invention a cover *f* is provided which extends over the top of the neck of the jar and has a flange *g* with a screw-thread *h* adapted to extend about the neck and engage the thread *e*, the flange having a flared bearing part *i* adapted to engage and press a sealing ring on the shoulder *b* of the jar. The cover may be composed of any suitable material, such as the least expensive sheet metal adapted to be flanged either by pressing or by spinning.

The holder for the sealing-ring comprises a disk part *j* having an integral flange part *k* to which a sealing-ring *l* is integrally attached, the disk part being adapted to extend over the top of the neck of the jar and to be placed in the cover thereof, the sealing ring being flaring from the flange part so as to be easily

placed over the jar neck, and so as to lie upon the shoulder *b* of the jar, the flange part and the sealing-ring together being of suitable length so as to extend from the top *b* of the neck down over the shoulder 5 when the disk part *j* rests on the top *d*, and the sealing-ring proper is preferably wider than the bearing part *i* of the cover so as to extend outwardly on the shoulder *b*, when in place, beyond the bearing part. The combination device comprising the parts *j* and *k* and 10 sealing-ring *l* may be composed of any suitable material having the characteristics of paper with paraffin incorporated therewith homogeneously, so as to be more or less impervious to moisture, and so that the surfaces thereof will afford lubrication and thereby 15 insure ease of manipulation when applying or removing the cover, and to prevent the device from sticking fast either to the cover or to the neck of the jar, the material of the device being somewhat flexible and adapted to fill the requirements of a sealing-ring or 20 packing between the jar and its cover.

In some cases as shown in Figs. 8 and 9, the device may be composed of paper or other material having a suitable degree of flexibility, so as to be pressed over the screw-thread of the jar-neck, the disk part *j* having a coating *m* on the inner side thereof composed of paraffin or wax-like substance adapted to make a tight joint on the top edge *d* of the neck of the jar, there being a similar coating *m'* on the inner side of the flange 25 *k* to cause the flange to turn easily on the thread *e*, and a coating *m*² on the inner or under side of the sealing-ring *l* adapted to insure an air-tight joint when pressed by the bearing part *i* of the cover on the shoulder of the jar. The part *j* has a coating *n* on the outer side thereof, which however, may be omitted if desired, a coating *n'* is applied to the outer side of the 30 flange part *k*, and the sealing-ring *l* has a coating *n*² on the outer or upper side thereof, but the coatings *n'* and *n*² may in some cases be omitted, they being of advantage only when it is desirable to turn the cover 40 while the device remains stationary or to prevent the device from adhering to the cover.

An elastic auxiliary sealing-ring *o* is provided in some cases to be used when it may be desired upon the top *d* of the jar-neck between the disk part *j* and 45 the cover *f*.

The flange part *k* of the combination sealing-ring and holder is provided with a screw-thread *p* which may be formed either when making the flange or by means of the threaded neck and the cover when applying the cover to the jar. 50

In practical use the jar may be filled with fruit or other substance, then the combination device may be placed over the neck of the jar, and the cover may then be placed over the device and screwed onto the 55 neck at the same time forming the screw-thread *p* on the flange of the device; or the device may first be placed in the cover and then applied with the cover to the jar-neck. In either case the flange part *k* of the device will hold the sealing-ring in its proper place 60 and prevent it from being crowded out from between the bearing part *i* of the cover and the shoulder *b* of the jar, and a tight joint will result by reason of the

adaptability of the material to insure a tight joint on somewhat uneven surfaces. The auxiliary sealing-ring *o* may be used as a packing between the disk part 65 *j* and the cover *f* when it may be desired to take extra precaution to effect tight sealing, the ring causing the disk part *j* to be pressed closely upon the top *d* of the neck while the coating *m*² bears on the shoulder *b* and seals the joint. When it may be desired to remove 70 the cover from the jar it will be found that it may easily be unscrewed by reason of the wax-like substance between it and the jar-neck.

A supply of the sealing-rings may be kept on hand, and by their use the necessity for careful cleansing 75 of the jar covers, as has heretofore been imperative, will be obviated and hygienic conditions obtained.

Having thus described the invention, what is claimed as new is—

1. In a jar closure, a combination device comprising a 80 disk part, a flange part continuing from the disk part, and a sealing-ring part continuing from the flange part, all being integral and the whole being cup-shaped and of uniform thickness, and the sealing-ring part being flared outwardly from the extremity of the flange part, as shown 85 and described.

2. In a jar closure, a combination device comprising a disk part, a flange part continuing from the disk part, and a sealing-ring part continuing from the flange part, all being integral and flexible, and the whole being cup-shaped 90 and of uniform thickness, the flange part having screw-threads, and the sealing-ring part being flared outwardly from the extremity of the threaded flange part, as shown and described.

3. In a jar closure, a combination device comprising a 95 disk part, a flange part continuing from the disk part, and a sealing-ring part continuing from the flange part, all being integral and flexible, and the whole being cup-shaped and of uniform thickness, the flange part having screw threads and a coating on its surface, and the sealing-ring part being flared outwardly beyond the flange 100 part that has the screw-threads, as shown and described.

4. In a jar closure, a combination device comprising a disk part, a flange part continuing from the disk part, and a sealing-ring part continuing from the flange part, all being integral and flexible and the whole being cup-shaped 105 and of uniform thickness, the flange part having screw threads, and the sealing-ring part being flared outwardly beyond the flange part that has the screw-threads and having a coating thereon, as shown and described. 110

5. In a jar closure, a combination device comprising a disk part to rest on the top of a threaded jar neck, a flange part continuing from the disk part to extend over and beyond the threaded neck, and a sealing-ring part continuing from the flange part and flared outwardly to an appreciable extent to rest on the shoulder of the jar at the base of the neck, all being integral and flexible and of uniform thickness, each part of the device being coated, as shown and described. 115

6. The combination with a shouldered jar having a screw-threaded neck and screw-threaded cover for the jar having a bearing part to oppose the shoulder of the jar, of a combination device comprising a disk-part, a flange part having a screw-thread and joined to the disk-part, and a sealing-ring part joined to the flange part and flaring outwardly therefrom on the shoulder of the jar under the bearing part of the cover, all parts of the device being formed integral. 120 125

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

JOHN RUSSELL SHEARMAN.

Witnesses:

ETHEL WHITSETT,
M. A. SHEARMAN.