

No. 612,312.

Patented Oct. 11, 1898.

W. DANIEL.  
JAR AND COVER THEREFOR.

(Application filed Feb. 11, 1898.)

(No Model.)

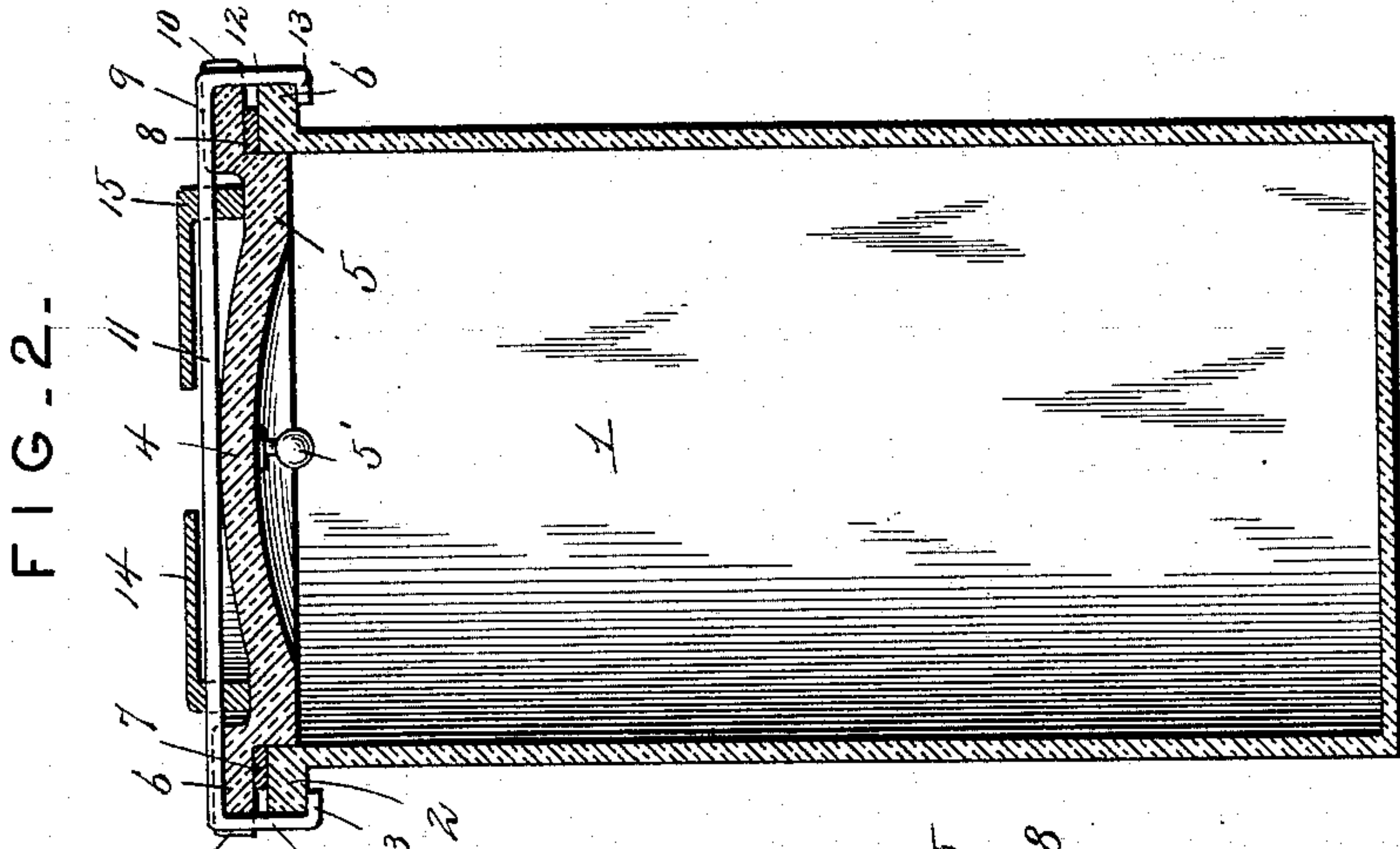


FIG. 3.-

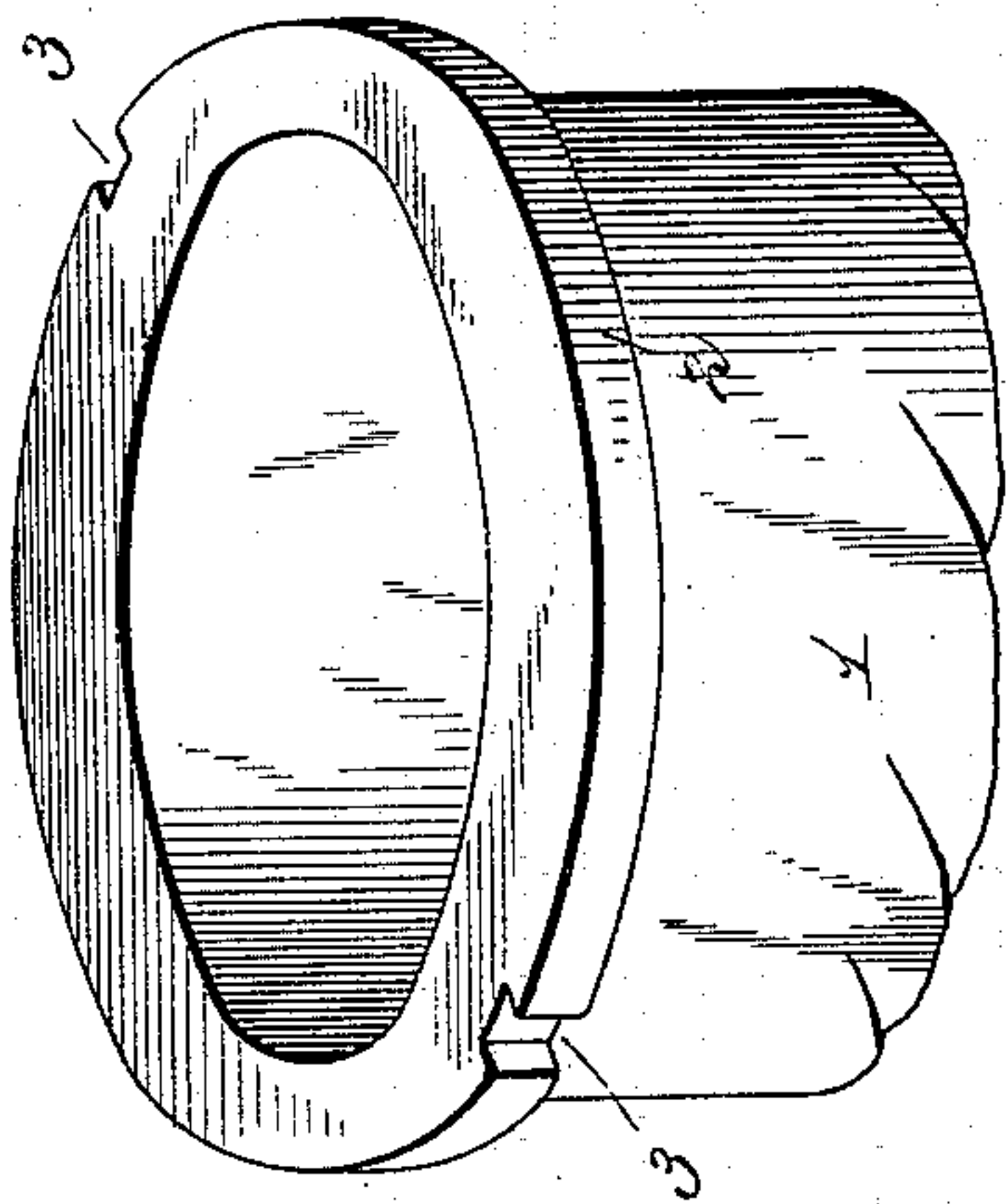


FIG. 4.-

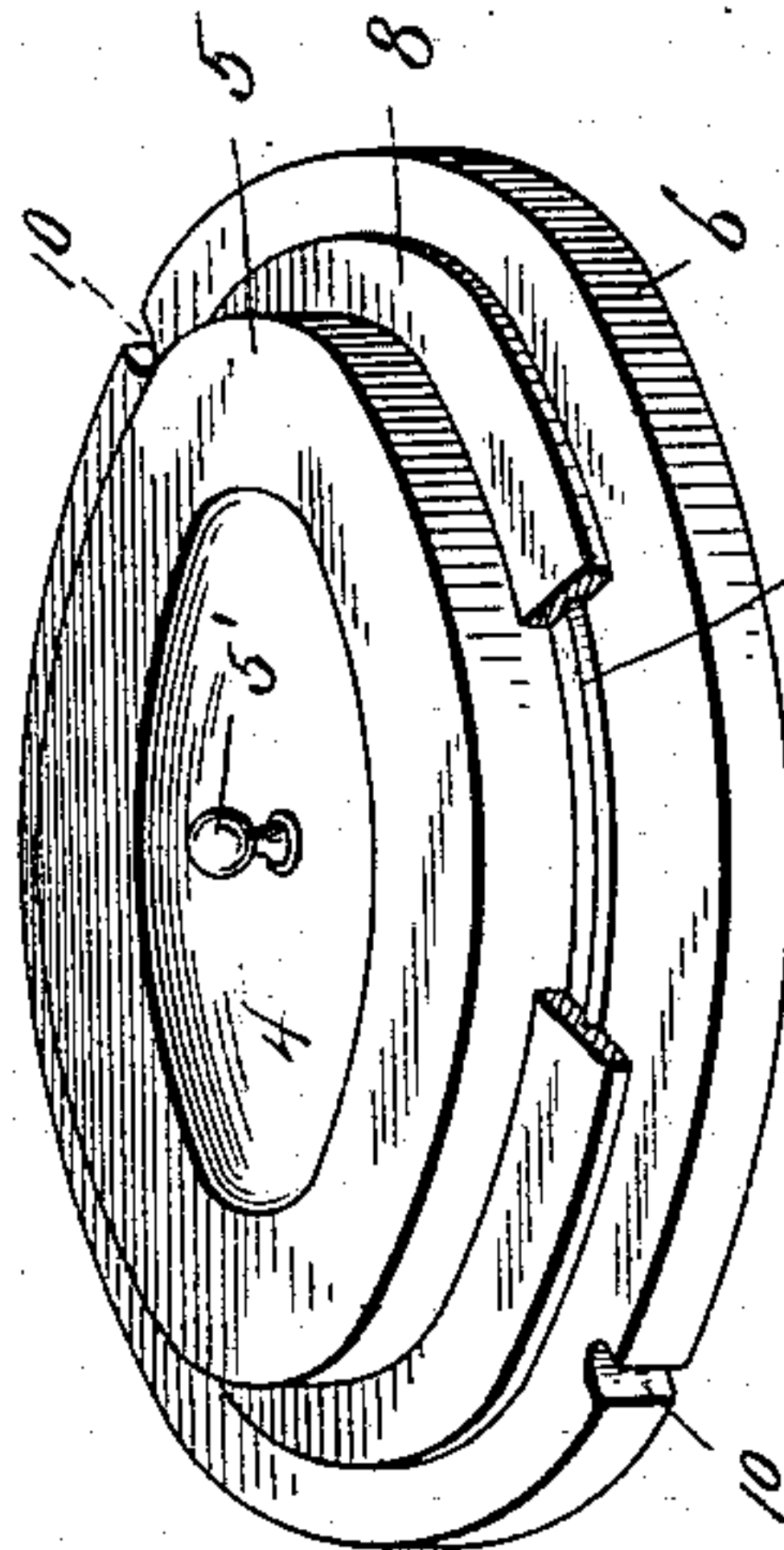


FIG. 5.-

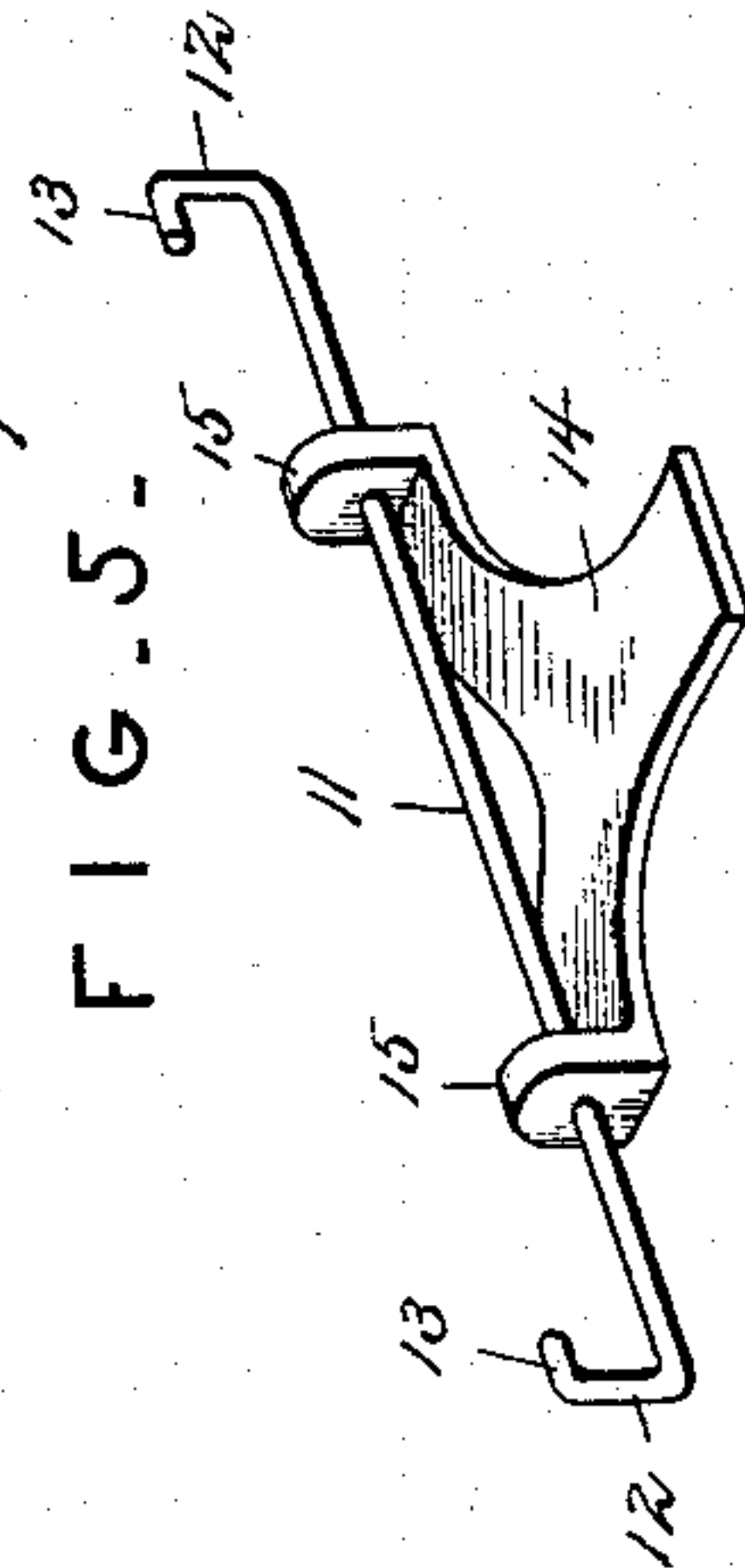
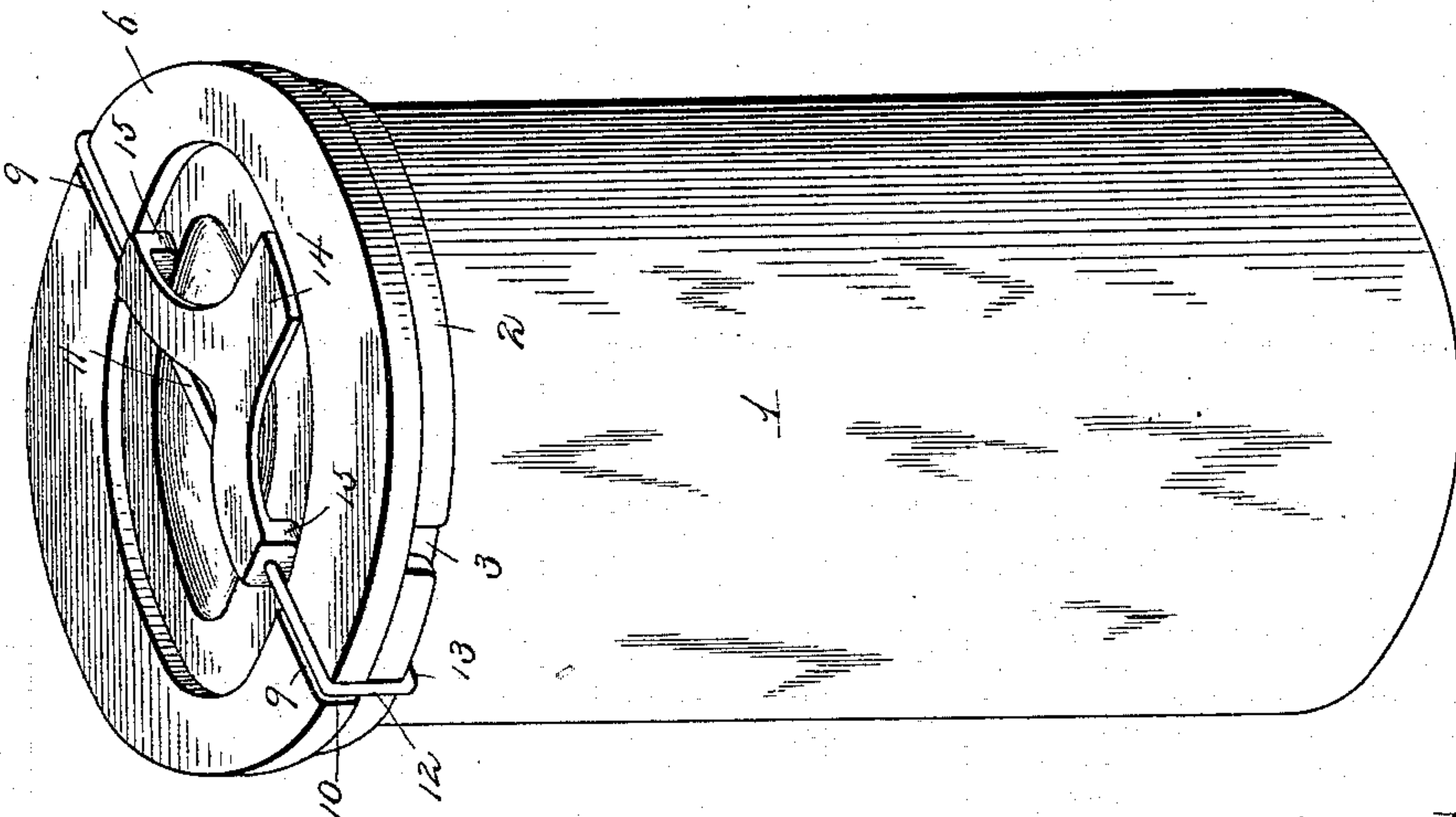


FIG. 1.-



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# UNITED STATES PATENT OFFICE.

WILLIAM DANIEL, OF CORYDON, INDIANA.

## JAR AND COVER THEREFOR.

SPECIFICATION forming part of Letters Patent No. 612,312, dated October 11, 1898.

Application filed February 11, 1898. Serial No. 669,952. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM DANIEL, a citizen of the United States, residing at Corydon, in the county of Harrison and State of Indiana, have invented certain new and useful Improvements in Jars and Covers Therefor; and I 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 appertains to make and use the same.

The invention has reference to a jar and cover therefor.

The object is to provide a wide-mouthed jar for the purpose of canning fruits, meats, preserves, and other purposes to which it may be found applicable and one that can be more easily filled, emptied, and cleaned than jars of the ordinary construction. Further, to provide a cover for the jar whereby the latter can be instantly and permanently made airtight and that can also be easily and quickly opened and in which in applying the cover the pressure shall be so regulated and controlled that it will always and under all circumstances and temperatures be substantially the same, thereby preventing loosening of the joint when the jar cools and the entrance of bacteria-laden air to the contents of the jar, also preventing breakage by expansion of the parts forming the joint when subjected to a higher temperature after being sealed and to prevent breakage in the sealing of the same.

The construction of the jar and cover by which the foregoing objects are attained will be fully understood from the following description and claims, reference being had to the accompanying drawings, in which—

Figure 1 represents a perspective view of the jar and cover complete. Fig. 2 represents a vertical section through the same; Fig. 3, a perspective view of the top of the jar with the cover removed; Fig. 4, a perspective view of the cover inverted, with the rubber gasket applied and partly broken away to more fully show the construction; and Fig. 5, a perspective view of the cover-fastening and locking devices inverted.

1 represents the body of the jar, 2 an an-

nular flange extending around the mouth or neck of the jar and flush on its upper face with the upper end of the jar, and 3 3 oppositely-disposed vertical slits or notches extending through the annular flange. The jar is preferably made of glass or porcelain; but other suitable material may be employed. It is also preferably made cylindrical in form and of uniform diameter throughout its length, with the exception of the annular flange surrounding its mouth and neck; but any suitable form of jar may be employed. The walls of the slits through the annular flange are preferably made flaring downwardly to provide for the more ready application of the cover-fastening devices hereinafter described.

4 represents the cover, provided on its lower face with an annular ledge or flange 5, adapted to enter and fill the mouth of the jar for preventing lateral movement of the cover, and with a pendent knob 5' of the proper length, size, and shape for the attachment of a cord to control and suspend specimens, &c., and surrounding said pendent flange is an annular lip or projection 6 of sufficient width to extend slightly beyond the annular flange 2 on the mouth or neck of the jar. The cover is further provided intermediate the pendent flange 5 and the outer edge of the annular lip 6 with an annular V-shaped rib 7, adapted when in place to rest upon the annular gasket 8, used for closing the mouth of the jar, and which when in place rests upon the annular mouth of the jar, as indicated in Fig. 2. By this construction the cover is provided with a narrow bearing adapted to rest upon the gasket, and thereby to more easily and quickly close the mouth of the jar.

The lid or cover is provided with a central depression giving to the annular lip 6 an elevation above the body portion of the cover, and this raised annular portion is provided with oppositely-disposed horizontal notches 9, terminating in vertical notches 10, extending through the outer edges of the lid or cover for a purpose which will appear.

11 represents the fastening device, made, preferably, of spring-wire and of a length sufficient to extend diametrically across the cover,



with its ends resting in the notches or recesses 9 and provided at its ends with pendent arms 12, terminating in inturned hooks 13, adapted to underlie the lip 6 for engaging the fastening-wire permanently therewith. These hooks 13 are adapted to pass through the notches 3 in the annular flange, and the pendent arms 12 are of sufficient length to allow the hooks or inturned arms 13 to pass under the notched annular flange 2 for engaging the same. Upon the body of the wire 11 is mounted a locking-lever 14, which rests normally within the depressed center of the cover. This lever is provided with perforated lugs or eccentrics 15, through which the body of the fastening-wire 11 extends, said lugs resting in the annular depression adjacent to the lip 6. These lugs are preferably made cam-shaped in such manner that when the lever 14 is turned into the position shown in Figs. 1 and 2 they bear snugly upon the cover and serve to force the same down upon the rubber gasket by drawing upward upon the hooks 13, thereby locking the cover in place upon the jar in a manner that will be readily understood.

The lid or cover is preferably made of glass or porcelain, but, like the jar, may be made of any usual or suitable material for the purpose for which it is intended.

By the construction of the jar and the lid with its fastening device, as described, it will be seen that the lid-fastening device is permanently attached to the lid or cover and, in connection with the locking-lever, serves as a handle for the ready manipulation of the same. The projecting annular lip, with its notches, prevents lateral movement of the fastening-wire, and the underturned hooks effectually prevent disengagement of the wire from said lid or cover, while at the same time permitting the vertical movement of the wire relative to the cover within the limits of the space between the body of the wire and the hooks 13. This permits the wire, with its locking-lever, to be used as a handle for manipulating the cover, and by means of the same the lid or cover, before being applied to the jar which is to be sealed thereby, can be dipped in boiling water for sterilizing it and then instantly applied to the jar for sealing the same, the pendent hooks passing through the notches in the annular flange of the jar, when by rotating the cover, with its fastening device, slightly in either direction the hooks are made to engage the flange, after which the locking-lever is turned into the position shown in Fig. 1 and the jar is effectually sealed.

The long reach of the body portion of the clamping-wire extending between the two eccentrics forms a spring in which the reserved power is stored to equalize and regulate the tension of the joint and prevent loosening of the same and leakage of air incident to con-

traction of the parts upon cooling; also, to insure safety from breakage from expansion of parts when exposed to a higher temperature than that to which the parts are subject at time of sealing, and also to insure against undue pressure and breakage from overpressure of eccentrics in the act of sealing upon the cover or flange of jar.

Having thus described the invention, what is claimed as new, and sought to be secured by Letters Patent, is—

1. The combination with a jar having an annular flange upon its open end provided with oppositely-disposed, vertical notches, of a lid or cover provided with a raised and projecting annular lip having oppositely-disposed notches or recesses in its outer edge for engaging the pendent arms of the fastening-wire, and a fastening-wire extending diametrically across the lid and having pendent arms engaging the oppositely-disposed notches in the cover and inturned hooks underlying said lip of the cover, substantially as described.

2. A lid or cover for jars provided with a raised annular lip having oppositely-disposed vertical notches in its outer edge, in combination with a wire for securing said cover to the jar extending diametrically across the lid or cover and provided with pendent arms engaging the oppositely-disposed vertical notches in the outer edge thereof, and with inturned hooks underlying said lip, and a locking-lever mounted on the wire to lie within the depressed central portion thereof and provided with cam-shaped lugs or ears, for the purpose and substantially as described.

3. A lid or cover for jars having a pendent annular shoulder adapted to fit within the mouth of the jar, and a projecting annular lip adapted to rest upon the open end of the jar and provided with a notched, annular, outer edge rising above the body of the cover, in combination with a wire-fastening device made up of a horizontal or body portion adapted at its ends to engage oppositely-disposed notches in the raised edge and provided with pendent hooks for engaging the flange of the jar, said hooks underlying the annular lip, and a locking-lever engaging the horizontal portion of said wire and provided with eccentrically-arranged fulcrum-points, said lever being arranged to lie within the depressed central portion of the cover, substantially as described.

4. The combination with a jar made of uniform diameter throughout its entire length and having an outwardly-extending annular flange at its upper end provided with flaring slots at diametrically opposite points, of a lid or cover having a projecting lip adapted to rest upon said annular flange, a depending annular ledge or shoulder adapted to fit within said jar, a rubber gasket surrounding said depending shoulder, a wire-fastening device made up of a horizontal portion extending



transversely of said lid or cover and resting  
in the notched edges thereof, said wire-fasten-  
ing device being provided at its ends with  
pendent hooks adapted to pass through said  
5 slots or recesses and engage the under side of  
the annular flange, and a locking-lever en-  
gaging the horizontal portion of said wire and  
provided with eccentrically-arranged ful-

crum-points, all substantially as shown and  
described. 10

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

WILLIAM DANIEL.

Witnesses:

FRANK SELF,  
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