

No. 616,553.

Patented Dec. 27, 1898.

D. L. NEWCOMB.
JAR AND CLOSURE.

(Application filed Aug. 16, 1898.)

(No Model.)

Fig. 1.

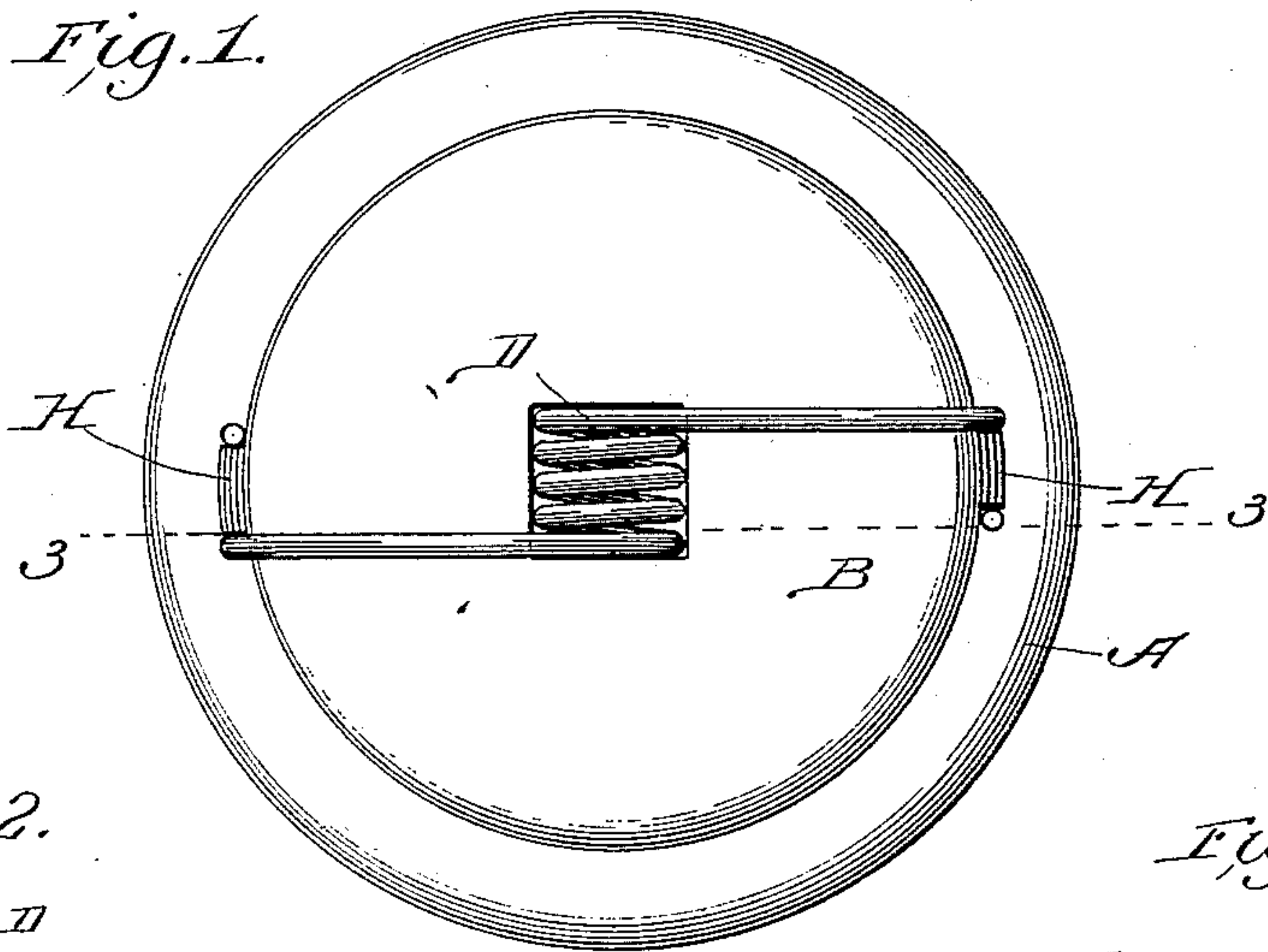


Fig. 2.

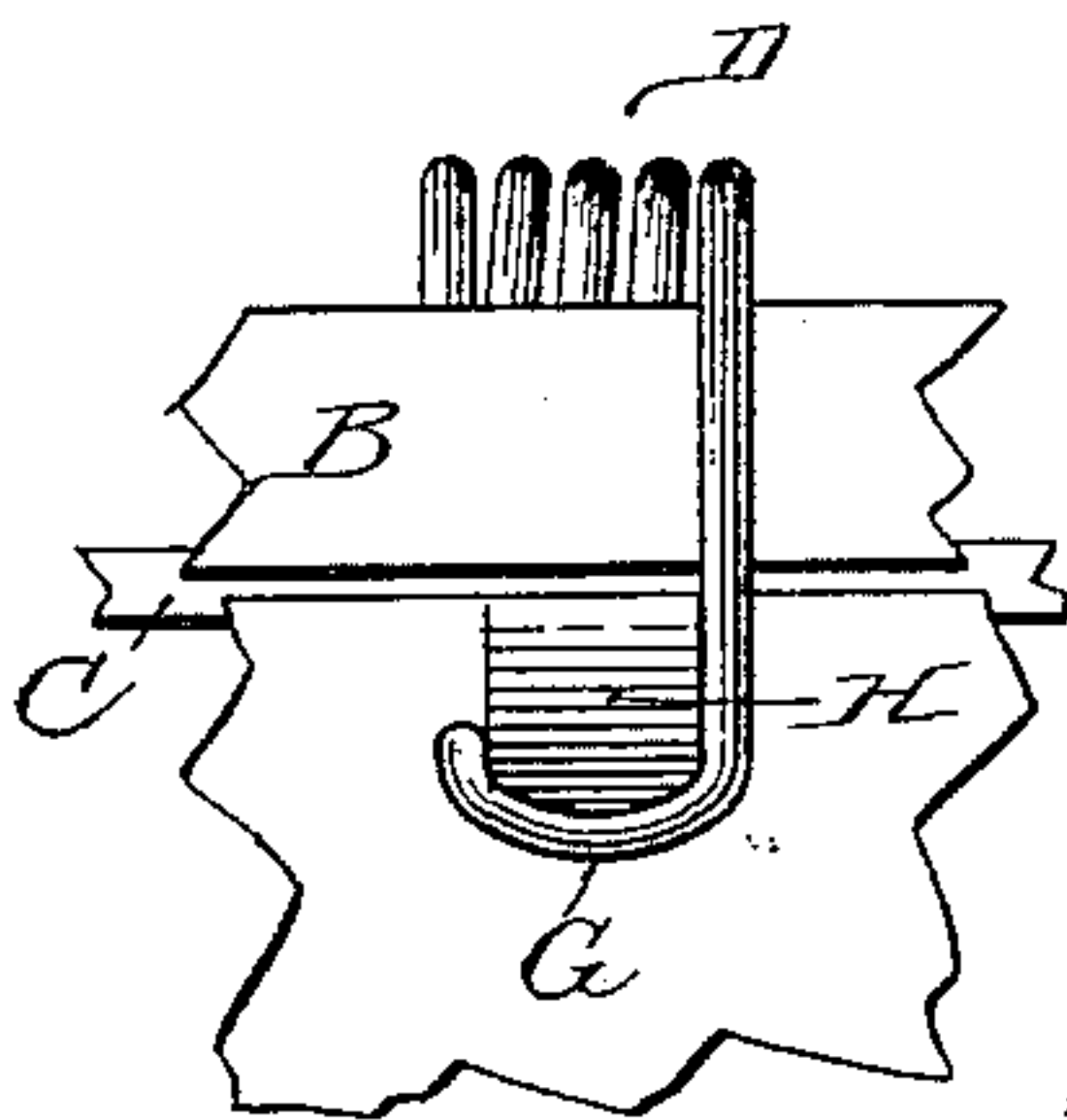


Fig. 4.

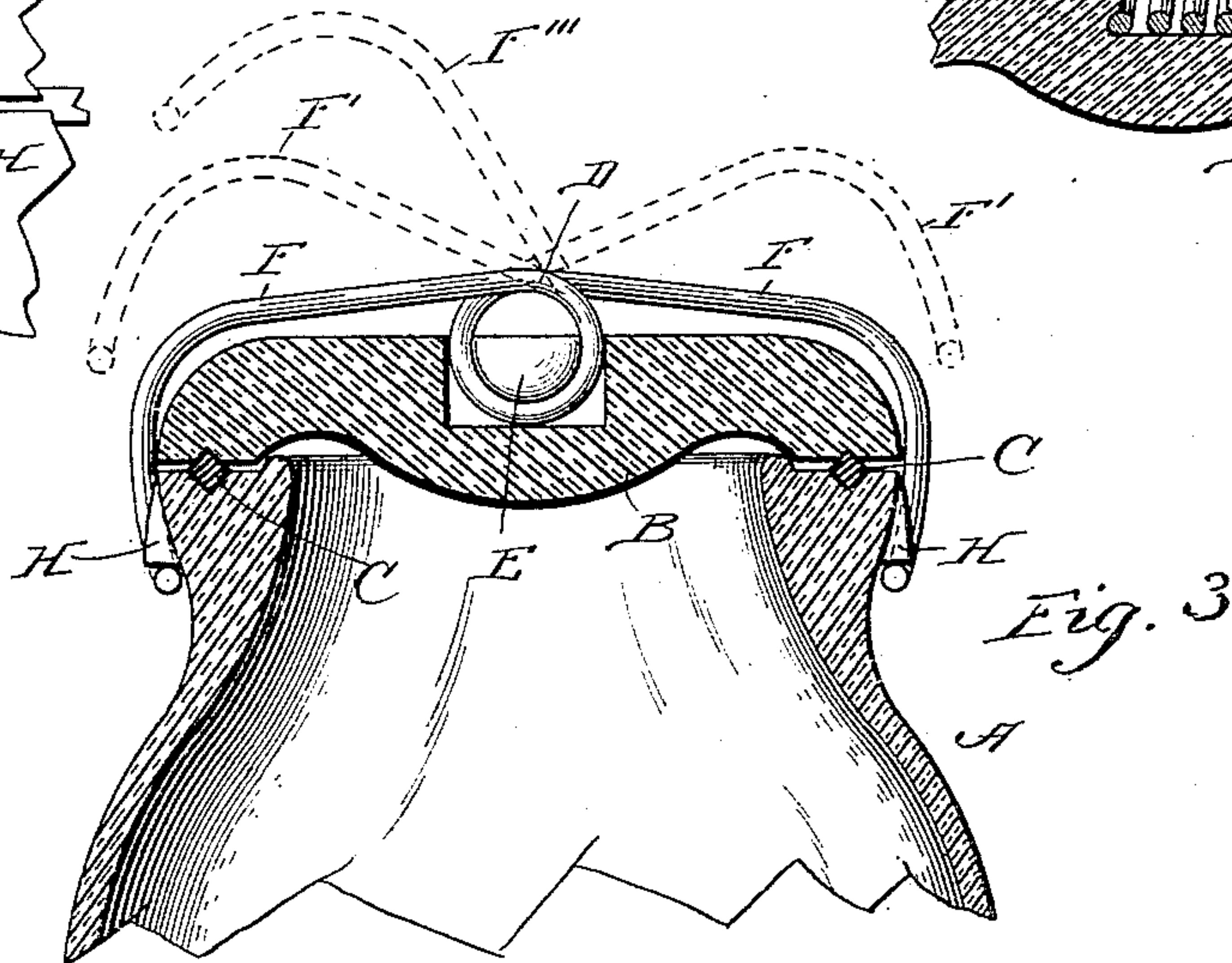
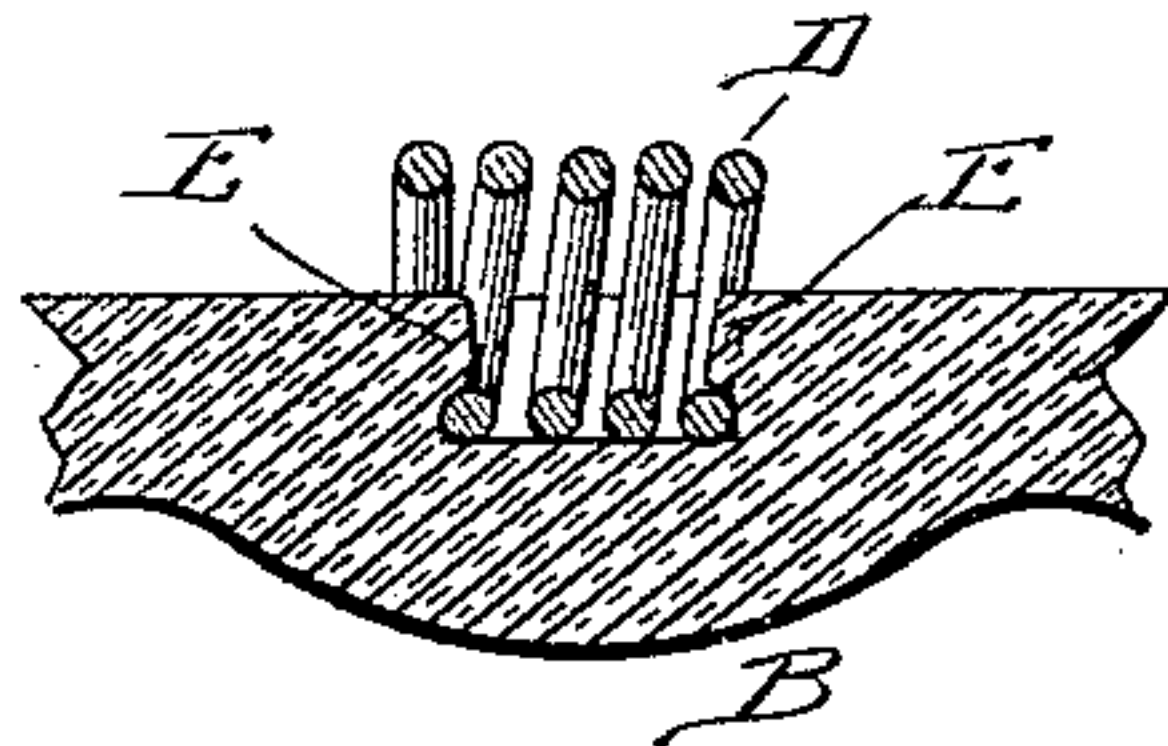
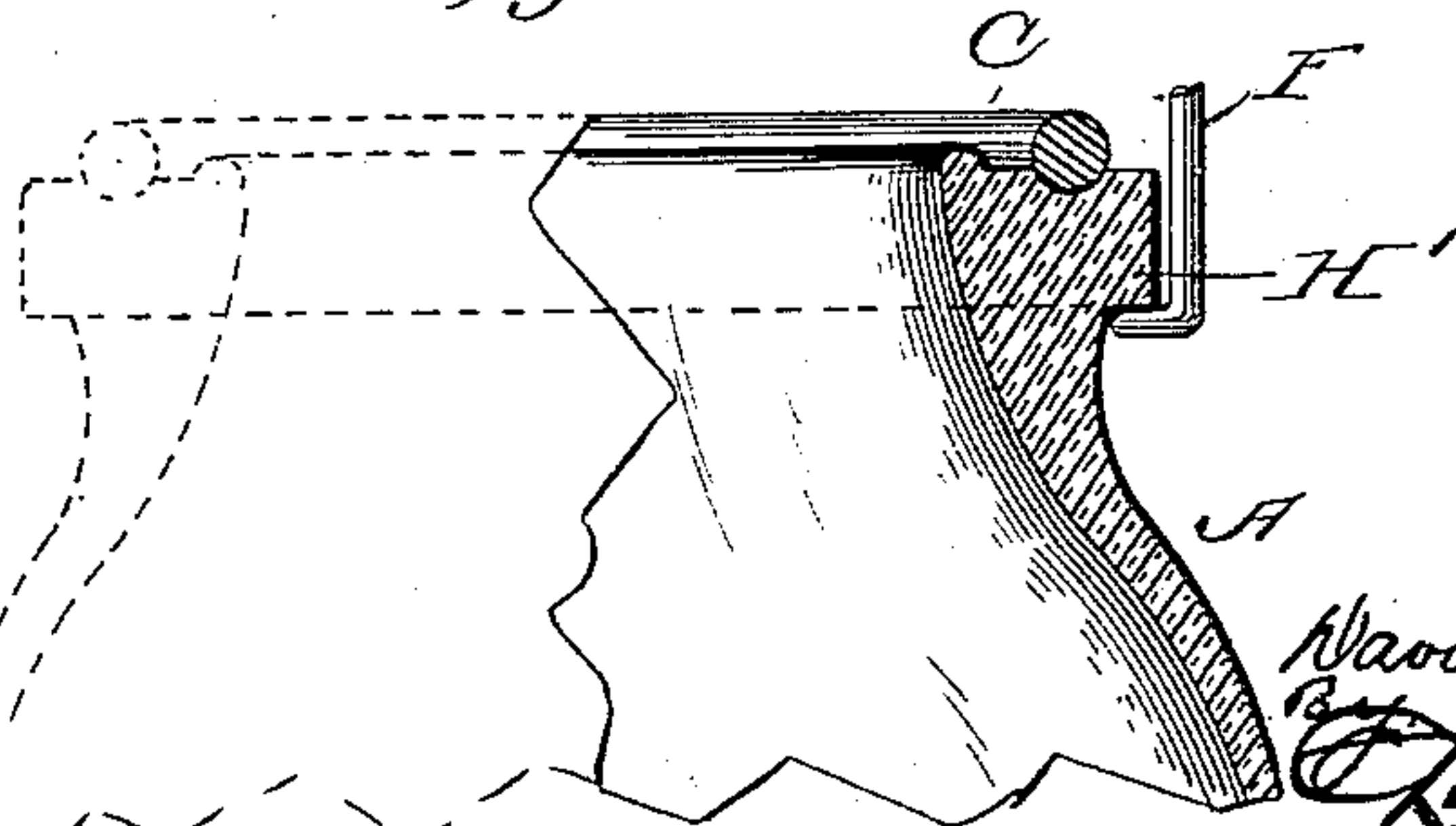


Fig. 5.



Witnesses

Harry S. Roberts
Wallace Brewer

Inventor

David L. Newcomb,
Charles P. Smith
Attorney

UNITED STATES PATENT OFFICE.

DAVID L. NEWCOMB, OF SAN DIEGO, CALIFORNIA.

JAR AND CLOSURE.

SPECIFICATION forming part of Letters Patent No. 616,553, dated December 27, 1898.

Application filed August 16, 1898. Serial No. 688,711. (No model.)

To all whom it may concern:

Be it known that I, DAVID L. NEWCOMB, a citizen of the United States, residing at San Diego, in the county of San Diego and State of California, have invented certain new and useful Improvements in Jars and Closures; 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 object of this invention is to provide a simple inexpensive closure that automatically adjusts itself and at all times applies a strong yielding pressure, giving and maintaining a perfect closure.

In the drawings, Figure 1 is a top plan of a jar provided with my devices. Fig. 2 shows a portion of the same devices in side elevation. Fig. 3 is a section on the line 3 3, Fig. 1. Fig. 4 is a section on the line 4 4, Fig. 1. Fig. 5 is a fragmentary section, similar to Fig. 3, showing slight modifications.

In the figures, A represents the upper portion of a jar of the usual general form, B a cover for the same, and C a ring of rubber or the like fitting in corresponding grooves in the jar below and the cover above, but of such thickness that the cover cannot meet the jar. Preferably the ring is square in cross-section and has one diagonal vertical, though it may be circular, as shown in Fig. 5. In either case it is wedged into the grooves when the cover is pressed toward the jar and the angle at the margins of the grooves bite into it on each side. The result is that we have a large contact-surface in proportion to the amount of rubber, with peculiar lines of closure at the angle above mentioned.

The cover is centrally recessed above to receive the lower half of a spring-coil D. The coil is of stout wire, and the winding is slightly open, so that the coil may be compressed endwise when pressed into the recess to pass projections E, which prevent accidental withdrawal of the coil. The end portions of the wire composing the coil extend outwardly upward from the upper side of the coil to form arms F F, whose outer portions are bent downward at approximately right angles and formed into hooks G G for engaging lugs H H upon opposite sides of the jar. The arms,

which normally have the positions shown at F', when bent down to engage the lugs swing about an axis above the horizontal plane of the lugs, which they pass by springing slightly. When thus in position, the coil lifts the hooks against the lugs with very great force, and by reaction the cover is forced down with like force. This force tends to draw the hooks still farther into engagement. In practical use the two arms are not usually swung down simultaneously, but the coil is slightly rotated, and one hook is engaged with its lug while the other arm is swung up to the position F'', and the latter arm is then forced down also, springing outward a little as its hook passes over its lug. The spring-pressure applied at the center of the cover is distributed properly even when one side of the ring yields more than the other, and when there is any permanent yielding of the ring the cover automatically follows and maintains perfect closure.

For unsealing the jar it is only necessary to force one of the hooks outward, and for this purpose no special appliance is necessary and no great force is required. The coil cannot accidentally disengage the cover, yet it is easily detached by endwise compression of the coil.

It is evident that the lugs H may be replaced by a shoulder extending entirely or partially around the jar, the hooks in that case being bent inward in the planes of the arms, as in Fig. 5, and it is further evident that either construction may be used with any form of packing-ring.

What I claim is—

The combination with the jar, of a cover having a central recess in its upper side, projections on the opposite walls of the recess, an open spring-coil adapted to be compressed to pass between said projections, and opposite arms extending from the coil and provided at their free ends with hooks to engage suitable devices upon the jar.

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

DAVID L. NEWCOMB.

Witnesses:

ESTHER M. STEVENS,
EDWARD R. STEVENS.