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PATENTED JUNE 26, 1906.

H. M. HARTSHORN.
JAR OPENER.

APPLICATION FILED NOV. 1, 1905.

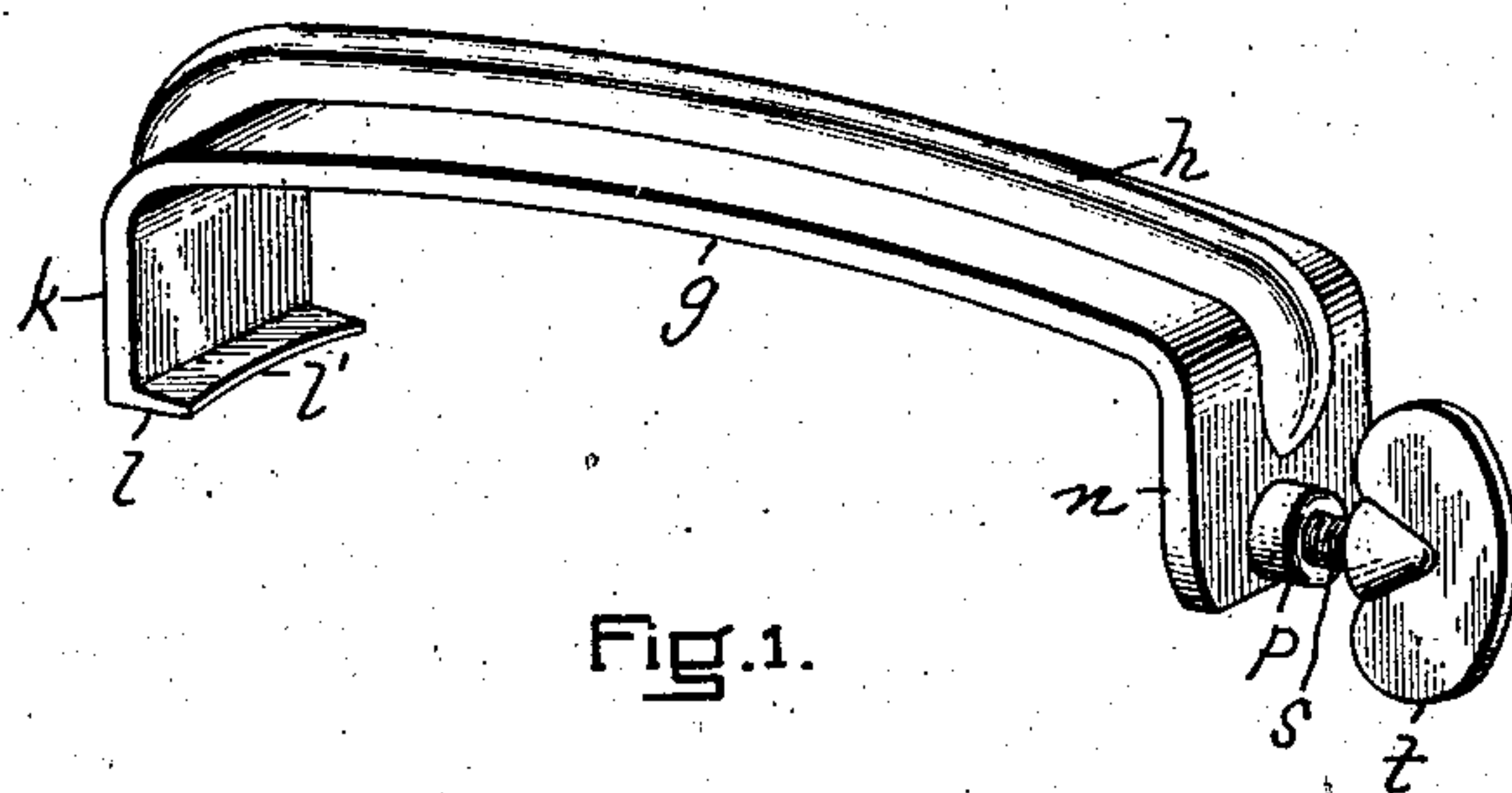


Fig. 1.

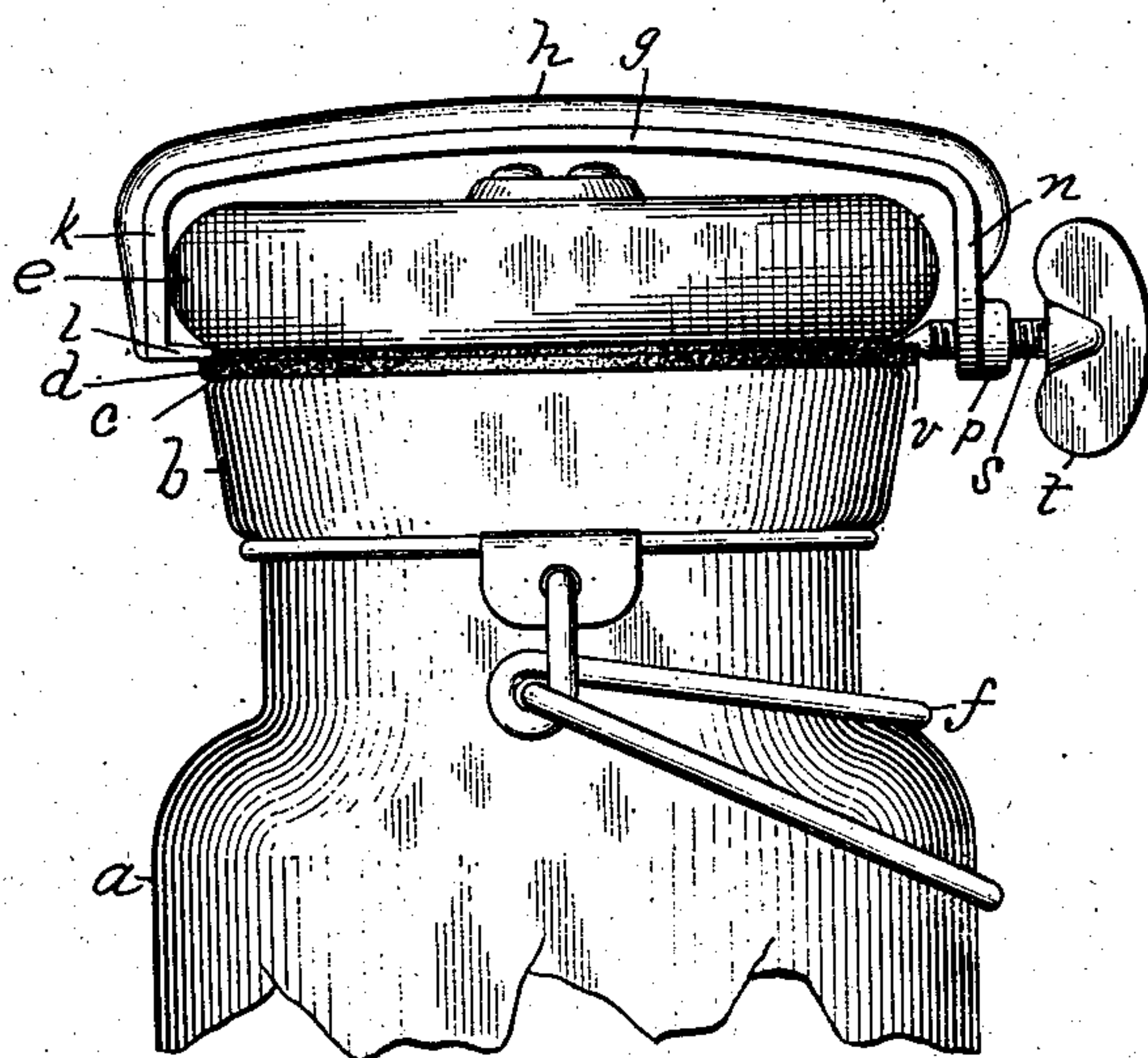


Fig. 2.

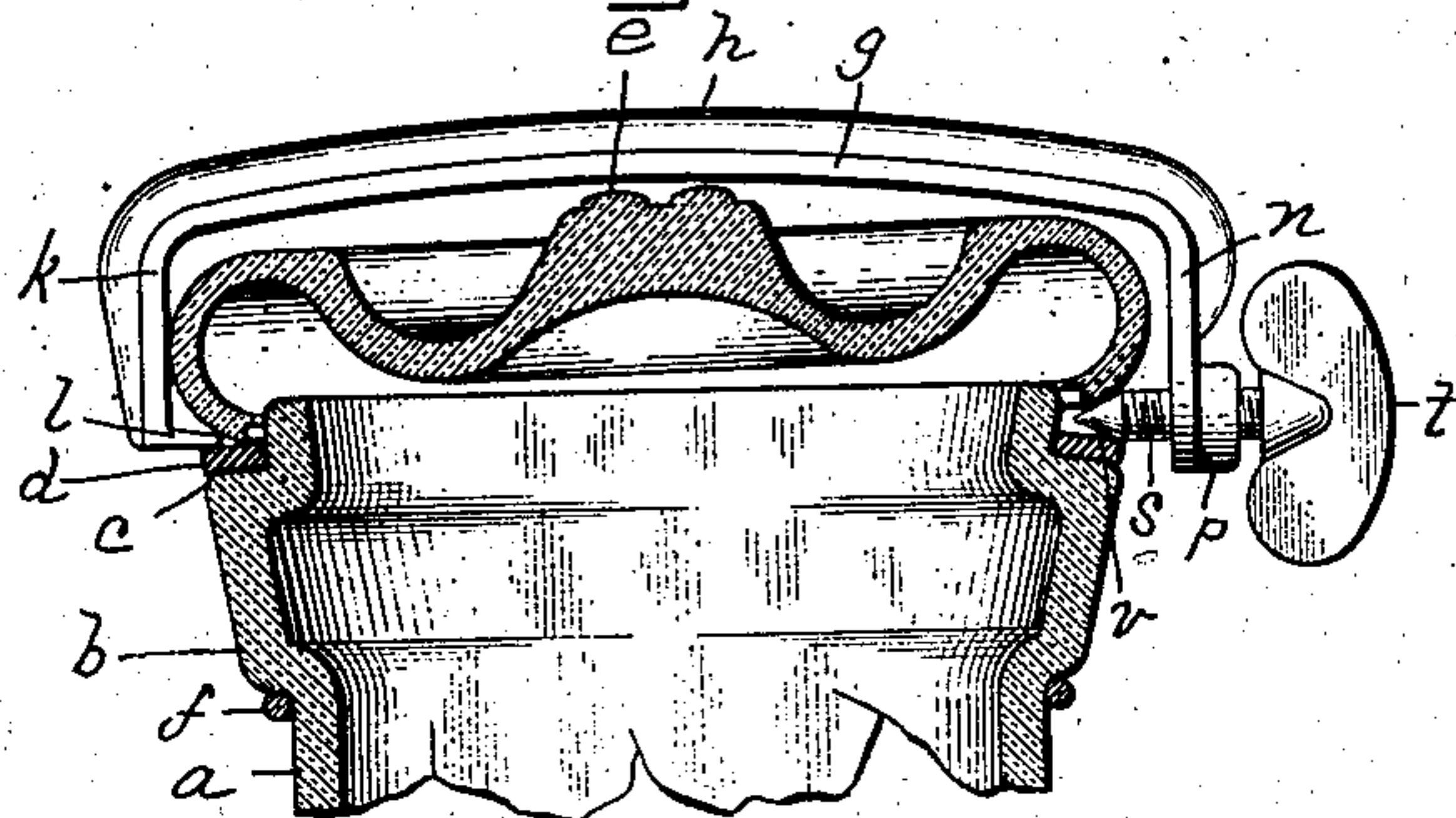


Fig. 3.

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HENRY M. HARTSHORN, OF MALDEN, MASSACHUSETTS.

JAR-OPENER.

No. 824,114.

Specification of Letters Patent.

Patented June 26, 1906.

Application filed November 1, 1905, Serial No. 285,395.

To all whom it may concern:

Be it known that I, HENRY M. HARTSHORN, a citizen of the United States, residing in Malden, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Jar-Openers, of which the following is a specification.

This invention relates to instruments or appliances for removing the covers from jars or similar receptacles, and it is adapted especially for use in opening fruit-jars, preserve-jars, and the like, and more particularly glass fruit and preserve jars in which the cover is not screwed into position, but lies on the top of the jar (usually on a gasket resting on a shoulder formed on the body of the jar) and is held securely in position by a fastener or lock usually constructed of wire.

In practice when it is desired to remove the cover from the jar it is found that after releasing it from the fastening or locking contrivance it is held firmly in position on the rubber gasket, which usually constitutes its seat, by atmospheric pressure, and it is very difficult and usually impossible to remove or lift off the cover with the unaided hand. As with a well-constructed jar of this character there is no opportunity for the air to enter at any point between the cover and body of the jar, it is a very difficult matter for the average woman to remove the cover, and such removal is usually attempted by endeavoring to rotate the cover and accomplished by some ill-adapted tool, such as a pair of scissors or a knife, either of which is apt to become broken in the attempt to pry off the cover. My invention has for its object to produce a tool or instrument which will operate on the cover in such a manner as to render it instantly and easily removable.

The nature of the invention is fully described below and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved jar-opener. Fig. 2 is a side elevation of the upper portion of a fruit or preserve jar with my opener applied to it and in the position assumed just before it is operated. Fig. 3 is a vertical section of the upper portion of a fruit-jar, showing my cover in elevation applied thereto and in the position assumed when it has been operated and has lifted one side of the cover sufficiently to allow of the admission of air.

Similar letters of reference indicate corresponding parts.

a represents the body, and *b* the neck, of a fruit or preserve jar of well-known construction, said neck being provided with a shoulder *c*, on which lies a rubber gasket *d*.

e represents the cover.

f represents a fastening or locking contrivance of well-known construction, which after the jar has been filled is usually swung over the top to press it firmly upon the gasket.

g represents a bar, preferably somewhat arch-shaped, sufficiently broad to provide suitable rigidity and preferably, but not necessarily, provided with a longitudinal strengthening-rib *h*. One end of this bar is bent downward at substantially right angles into the portion *k*, whose lower edge is bent inward at right angles, thus forming a lip *l*, whose inner edge *l'* is curved to correspond with the curvature of the edge of the cover *e*. At the opposite end of the bar *g* it is bent downward at substantially right angles into the portion *n*, and said portion is provided on its outer surface with a boss *p* around a threaded opening in which a screw *s* is placed, said screw being provided with a suitable thumb-piece *t* and being tapered and preferably pointed at its inner end, as shown at *v*.

In operation after the wire fastener or lock *f* has been swung down into the position indicated in Fig. 2 the opener is applied in the position indicated in said figure—that is, with the lip *l* directly under one edge of the cover and preferably, but not necessarily, resting on the gasket, the screw *s* having been previously withdrawn or unscrewed sufficiently to allow the portion *n* to drop over the edge of the cover directly opposite the portion *k*. The screw is then given one or two turns, as may be required, with the effect that its tapered or conical end *v* operates as a wedge and slightly lifts that edge of the cover, and thus provides an air-passage at that point between the cover and the upper edge of the body of the jar, equalizing immediately of course the air-pressure inside and outside the jar. The atmospheric pressure having thus been removed, the cover is taken off by the thumb and finger in the ordinary manner.

In Fig. 3 the screw is illustrated as having been forced between the gasket and the cover. It is not necessary, however, that

care should be taken to insert the pointed end of the screw between the gasket and the cover. There need be no particular care taken in applying the holder, for when the
5 screw is turned, whether its point is lying on the gasket or against it, it operates to pry up the cover at that side and provide an air-passage, instantly relieving it from pressure.

Having thus fully described my invention,
10 what I claim, and desire to secure by Letters Patent, is—

1. In a jar-opener, a bar or frame, means for holding the opener in working position on the jar, and a screw supported by said bar or
15 frame in position to be driven between the cover and the mouth of the jar for the purpose of lifting that side of the cov r.

2. In a jar-opener, a bar or frame, means for holding the opener in working position on the jar, and a screw tapered at its inner end
20 and supported by said bar or frame in position to allow its tapered end to be driven between the cover and mouth of the jar for the purpose of lifting that side of the cover.

25 3. In a jar-opener, a bar or frame adapted to extend from one side of the cover of the jar to the other, a lip adapted to extend from

said bar or frame between the outer portion of the edge of the cover and the jar for the purpose of holding the opener in working po- 30
sition, and a screw cone-shaped at its inner end and supported by said bar or frame in position to allow its conical end to be driven between the cover and the mouth of the jar for the purpose of lifting that side of the 35
cover.

4. In a jar-opener, a bar adapted to extend from one side of the jar to the other, arms extending from the opposite ends of said bar on opposite edges of the cover, means 40
extending from one of said arms into engagement with the jar whereby the bar is held in working position thereon, and a screw supported in engagement with the other arm in position to allow its inner end to be forced be- 45
tween the cover and the neck of the jar for the purpose of lifting that side of the cover.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY M. HARTSHORN.

Witnesses:

HENRY W. WILLIAMS,
A. K. HOOD.