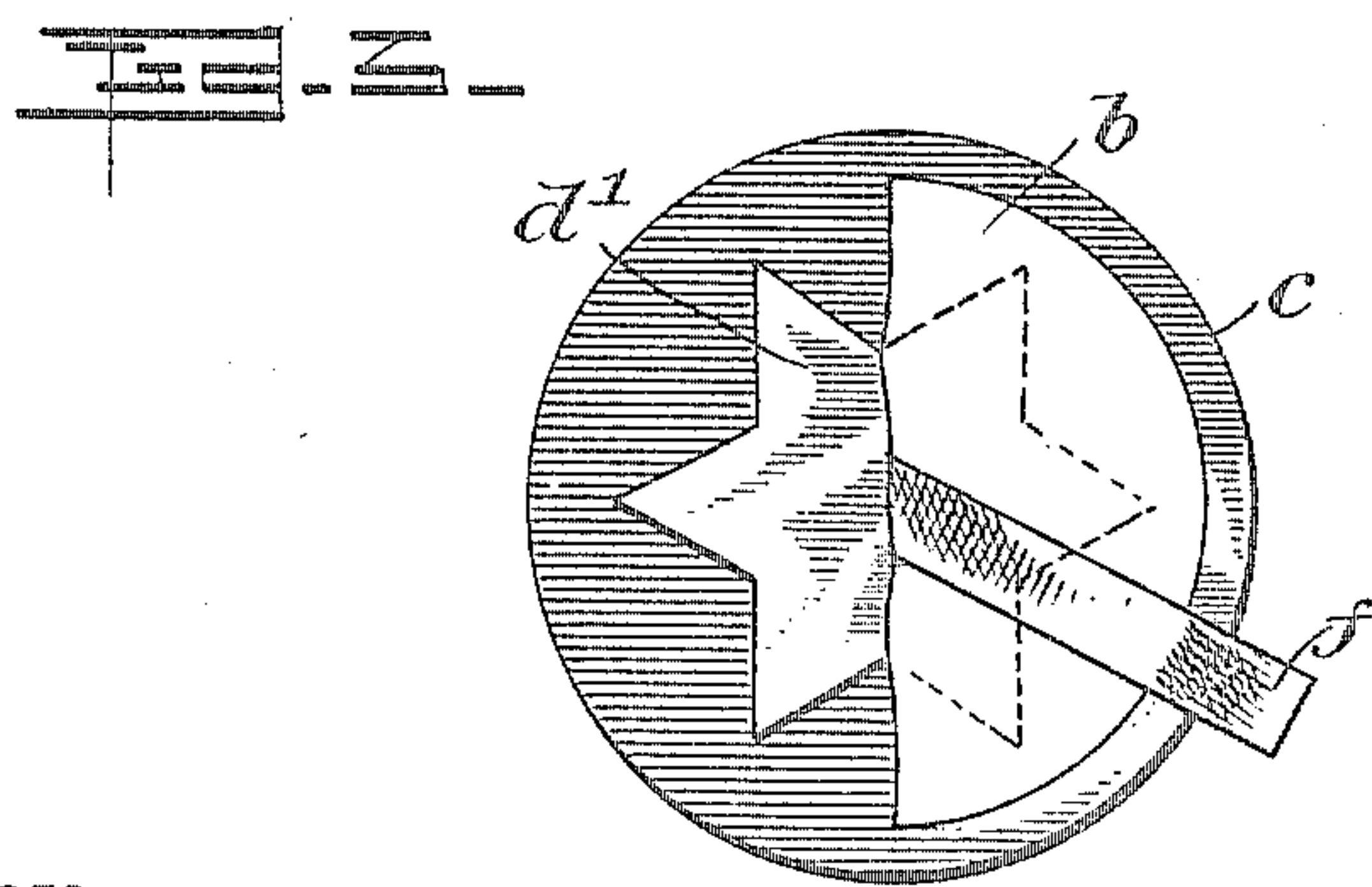
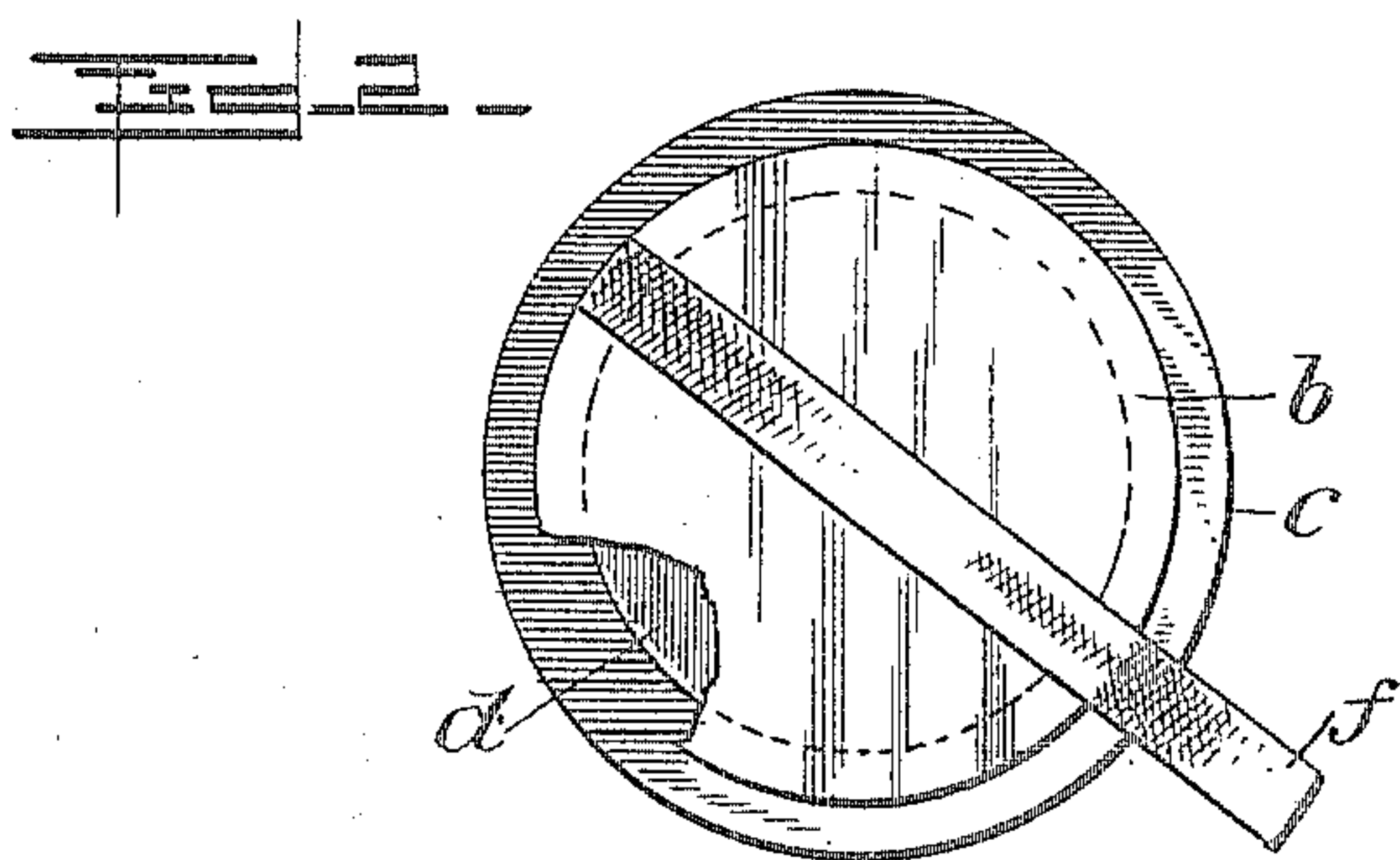
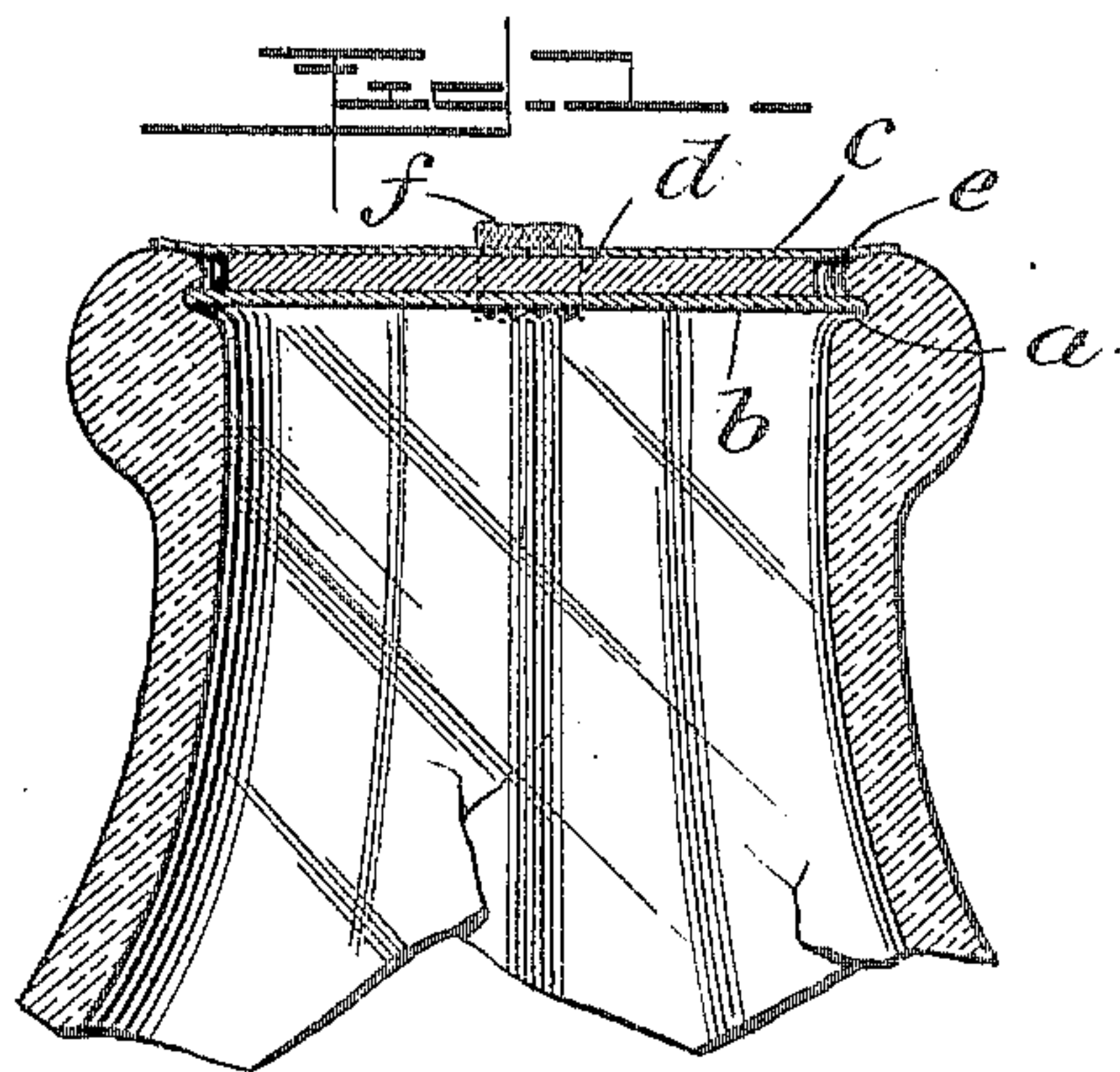


No. 804,619.

PATENTED NOV. 14, 1905.

H. A. OLSSON.
BOTTLE CLOSURE.

APPLICATION FILED JUNE 14, 1906.



WITNESSES:

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BOTTLE-CLOSURE.

REISSUED

No. 804,619.

Specification of Letters Patent.

Patented Nov. 14, 1905.

Application filed June 14, 1905. Serial No. 265,159.

To all whom it may concern:

Be it known that I, HENRY ALBERT OLSSON, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Bottle-Closure, of which the following is a full, clear, and exact description.

The principal object of my invention is to provide means for effectually closing the tops of bottles and other receptacles, and while it is capable of general use it is especially adapted for use on milk-bottles. Many schemes have been tried for closing receptacles of this kind in such a manner as to prevent the contents from being spilled and also to prevent foreign matter from entering them. One of the great troubles with milk-bottles is that they are placed in ice-boxes with ice and other bottles above them, so that a fragile cover is likely to be broken or bent, and the sediment from the ice necessarily settles in a pool on the top of the closure when the ordinary paper disks are employed. Practically all of the other closures which have been adopted for this purpose are expensive, and they also have faults which render them of very little more value than the paper disks.

My invention comprises means for effectually closing bottles of this character and also for protecting the interior of the bottle from the entrance of dirt and the like, the whole device being formed in such a manner as to render it inexpensive and easily constructed and employed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical sectional view of the top of a milk-bottle, showing a closure comprising the features of my invention. Fig. 2 is a bottom plan view of the closure shown in Fig. 1; and Fig. 3 is a similar view to Fig. 2, showing a modification.

Bottles of this character are usually provided with a depression *a* near the top, which is adapted to receive the ordinary paper disk now extensively employed. In this depression I place a disk *b*, similar to the old style, but provided with a covering-sheet *c*, having a larger diameter than that of the disk *b* and extending above the top edge of the bottle,

so as to prevent the entrance of foreign matters between it and the top of the bottle. These two disks or sheets are separated from each other by means of a third disk *d*, which is smaller in diameter than either of the others, so that the disk *b* projects beyond the disk *d* all around and affords resilient flanges which hold the closure in the bottle-neck. The construction described provides an air-space *e* between the disks *b* and *c* and between the disk *d* and the neck of the bottle. This air-space is effectually closed when the closure is applied to the bottle and assists in holding the article in place by suction. As the milk expands upon being kept in the receptacle, this air-space also affords means for receiving the surplus and prevents it from lifting the closure.

From the description given it will be clear that the lower disk *b* accomplishes every purpose which the ordinary single disk can accomplish, and in addition thereto the top disk or sheet *c* effectually protects the bottle as described, and also that the air-space *e* has the important function mentioned above. The device can be readily put in position without any additional trouble, and it can also be removed when desired by placing a knife under the edge of the sheet *c* and, if necessary, engaging the end of the knife with the disk *d*. If this is not sufficient, the closure may be supplied with a strip *f* of cloth or the like across the bottom of the disk *b* and projecting at the sides for convenience in detaching it from the bottle.

The two disks *b* and *c* are preferably made of paraffin paper, while the central disk may be made of one or several sheets of strawboard, or it may be formed by a block of wood. The three parts may be secured together in any desired way—as, for instance, by shellac.

In the form shown in Fig. 3 the disk *d* is replaced by a block *d'*, having a different shape, but affording air-spaces of a larger size.

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

1. A bottle-closure comprising two parallel disks, and means for holding them at a distance from each other, the disks being separated from each other at their edges, whereby a marginal air-space is afforded when the closure is in position in a receptacle.

2. A bottle-closure comprising two parallel

disks of different diameters, and means for holding them at a distance from each other and affording an air-space between them, said means comprising a disk of the same shape as the first-mentioned disks but of smaller diameter.

3. A bottle-closure comprising a disk adapted to enter the mouth of a bottle, and a sheet secured to the disk at a distance from the latter and adapted to cover the mouth of the bottle.

4. A bottle-closure comprising a disk adapted to enter the mouth of a bottle, a sheet secured to the disk at a distance from the latter and adapted to cover the mouth of the bottle, and a third disk between the first two and of a smaller diameter than either.

5. A closure for open-mouthed receptacles, comprising a sheet adapted to project over

and cover the mouth of a receptacle, and a disk of smaller diameter than the sheet, separated from it by an air-space, and adapted to enter the mouth of the receptacle.

6. A milk-bottle closure, comprising a pair of disks, one located above the other, the upper one being of larger diameter than the lower, a third disk located between the other two and of smaller diameter than either, and a strip of flexible material secured to the bottom of the lower disk and adapted to project above the upper disk.

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

HENRY ALBERT OLSSON.

Witnesses:

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WILLIAM J. PAPE.