

(No Model.)

J. B. WILSON.

FRUIT JAR.

No. 312,596.

Patented Feb. 17, 1885.

Fig. 1.

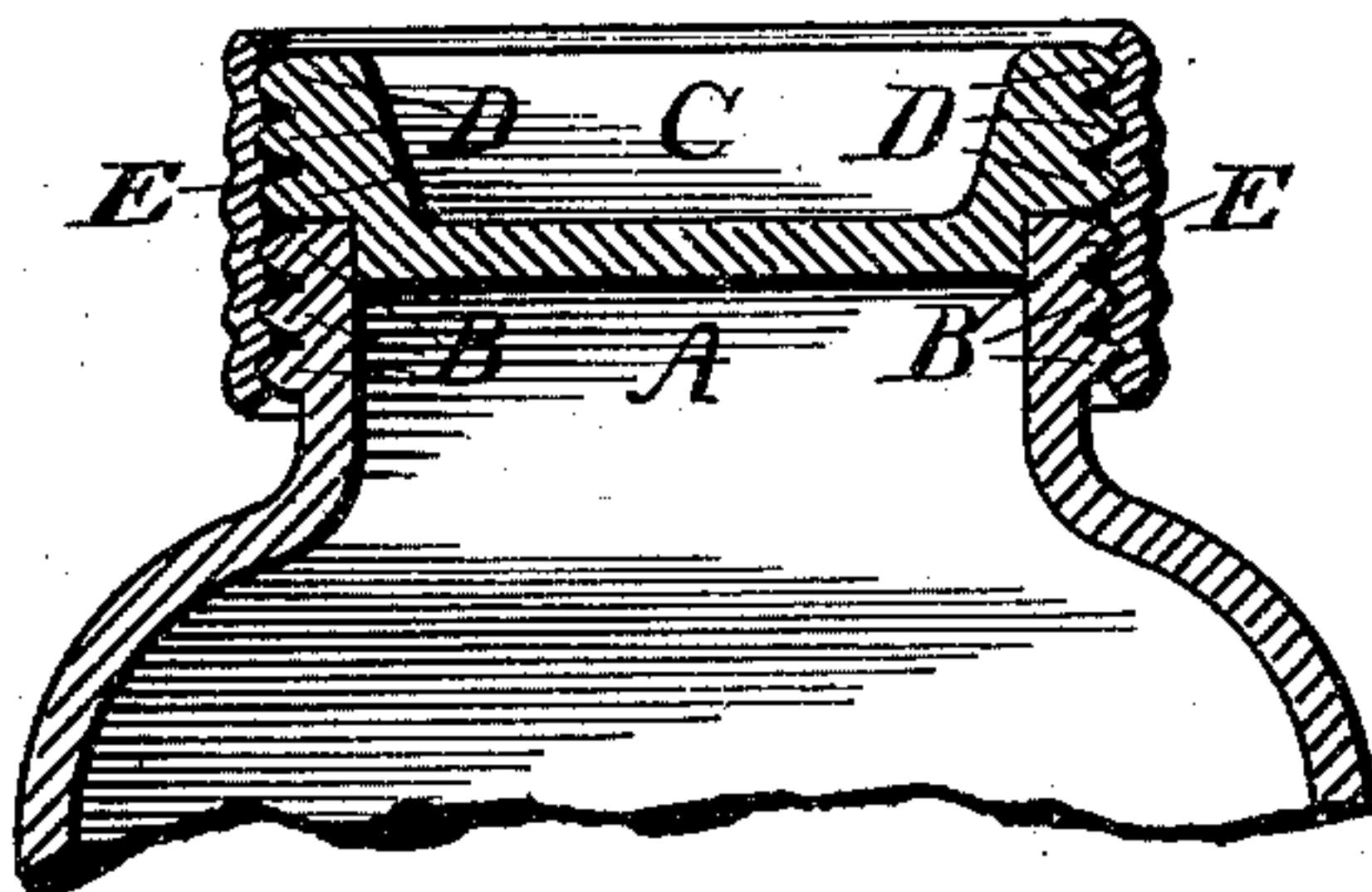


Fig. 2.

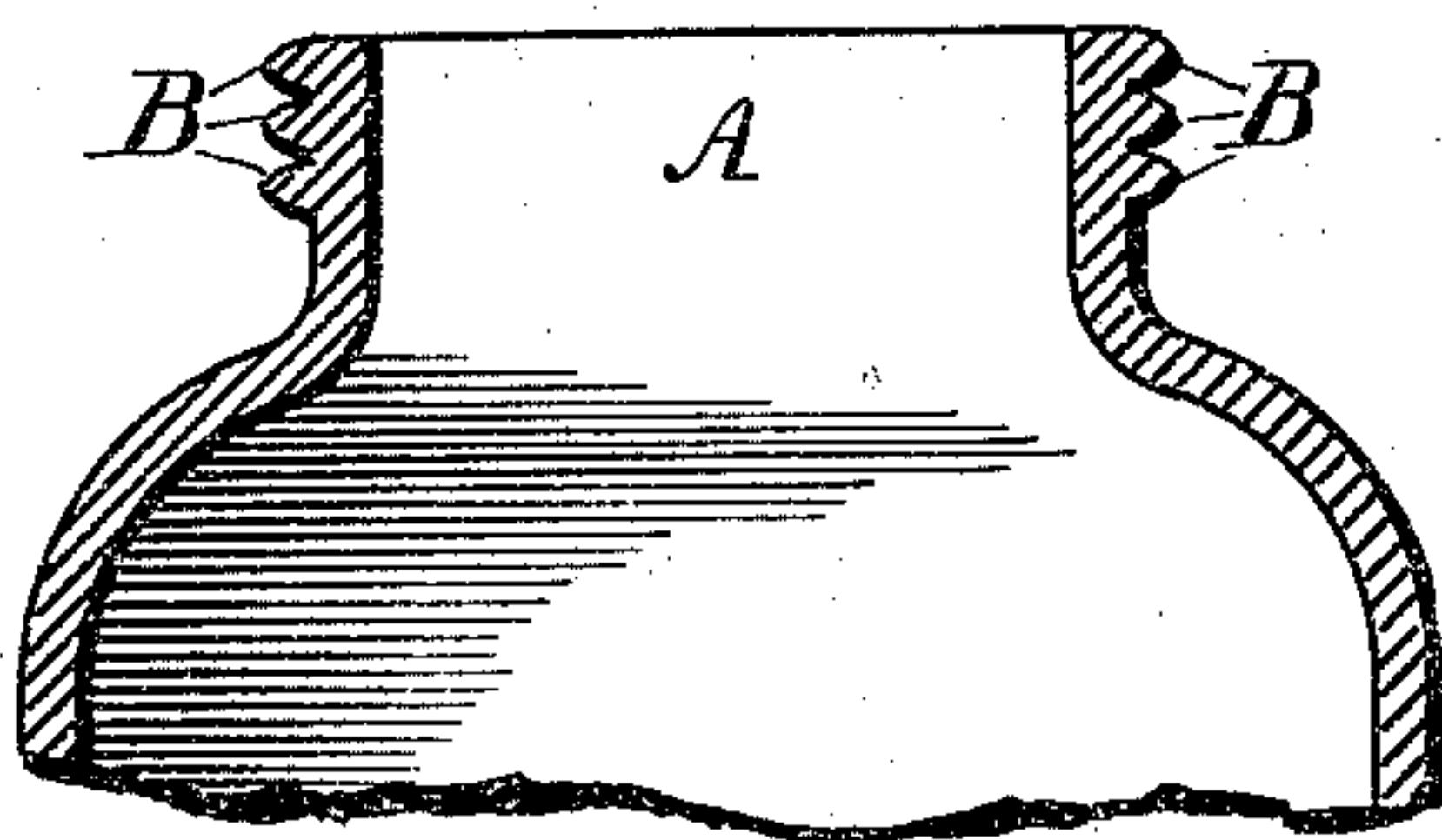


Fig. 3.



Fig. 4.

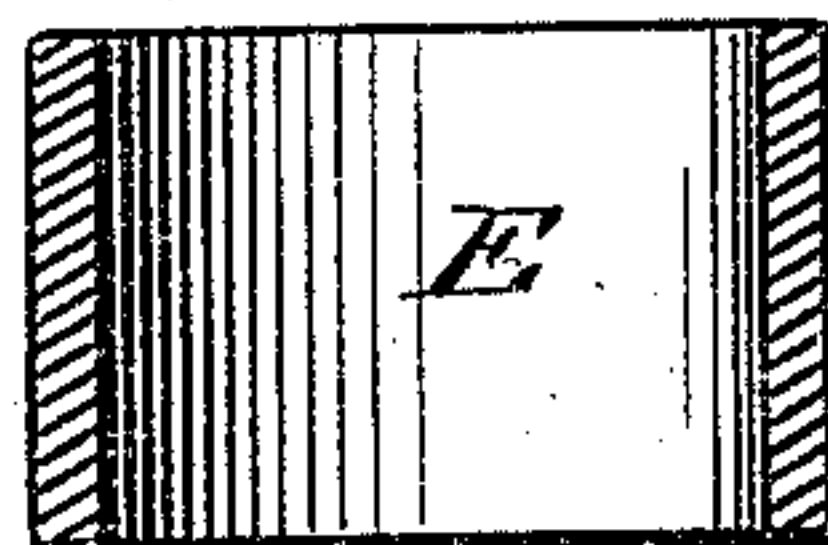


Fig. 5.

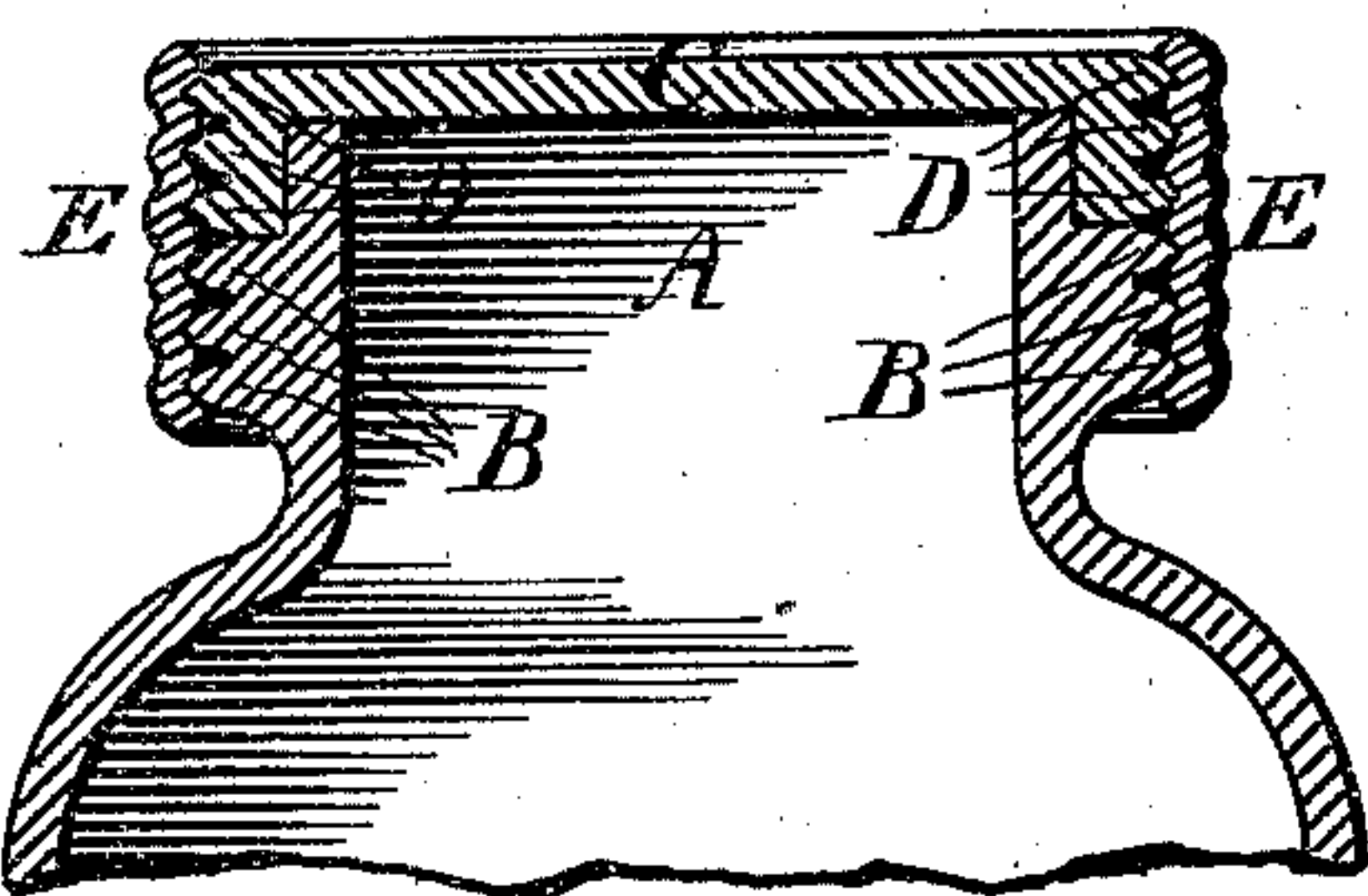


Fig. 6.

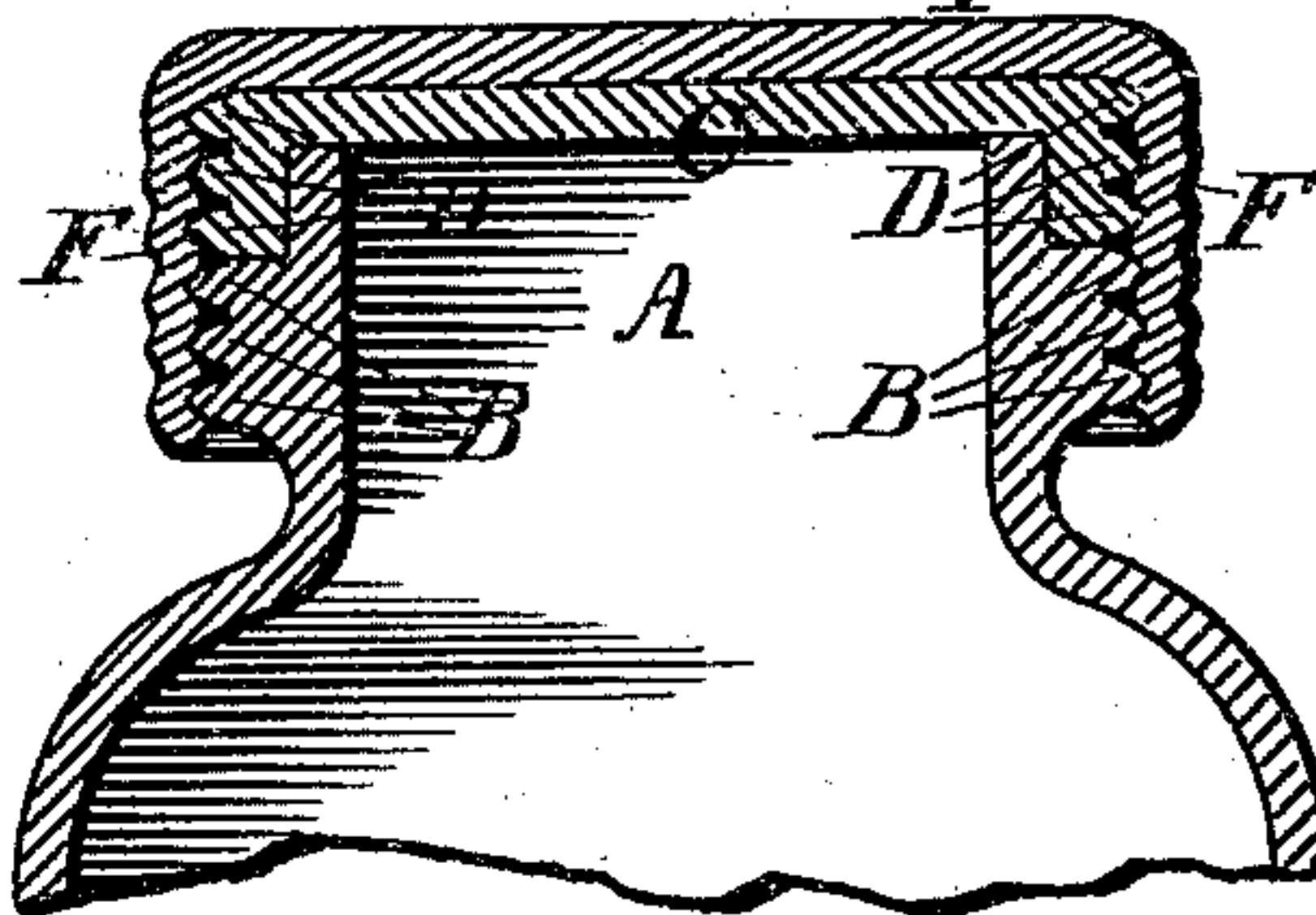
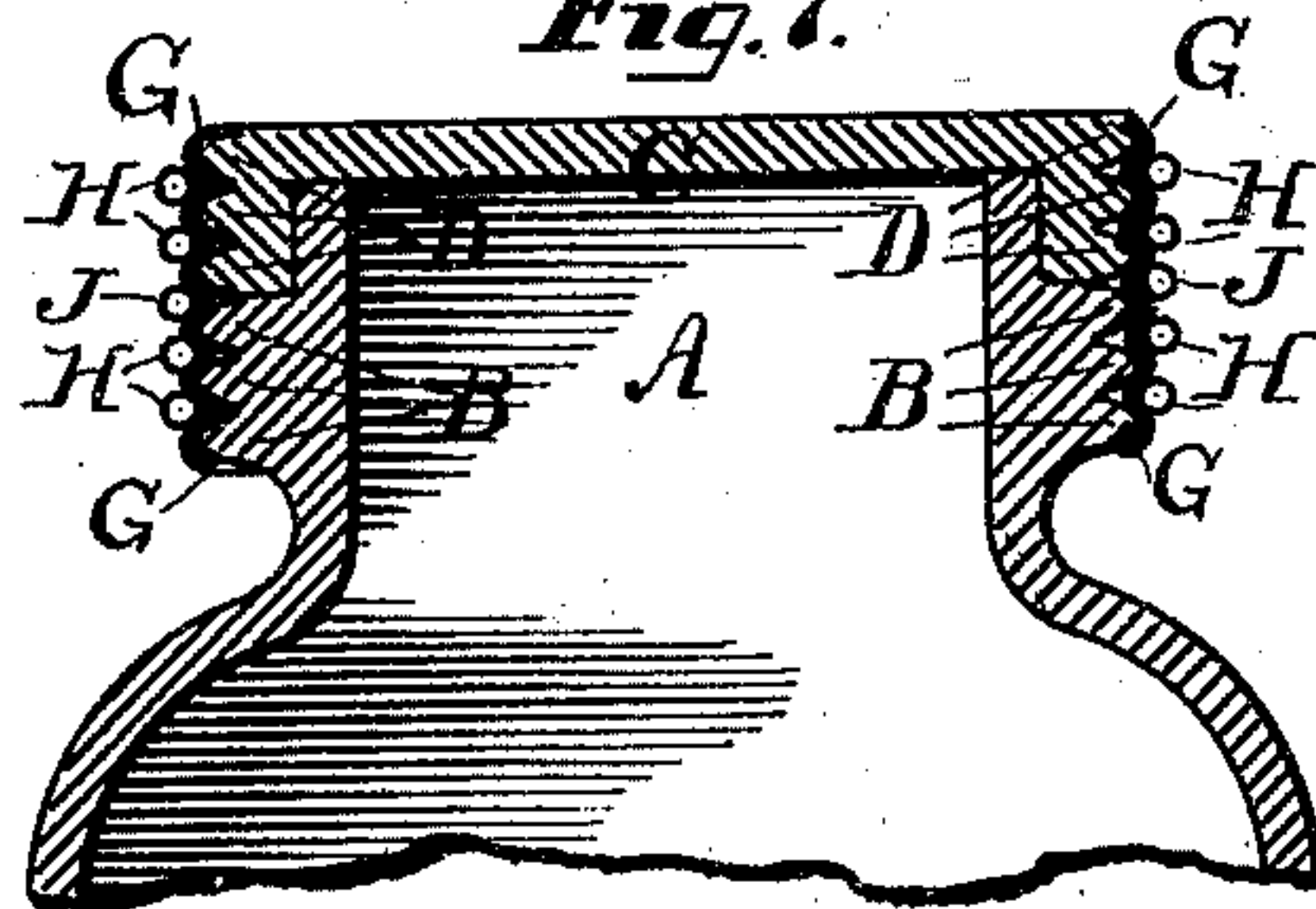


Fig. 7.



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FRUIT-JAR.

SPECIFICATION forming part of Letters Patent No. 312,596, dated February 17, 1885.

Application filed May 15, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH BAREFORD WILSON, a citizen of the United States, residing at Clayton, in the county of Gloucester and State of New Jersey, have invented certain new and useful Improvements in Fruit-Jars; and I do hereby declare the following to be a sufficiently full, clear, and exact description thereof to enable others skilled in the art to make and use the said invention.

This invention relates to fruit-jars of glass or earthenware in which alimentary substances are preserved by excluding the atmosphere therefrom, and has for its object the reduced cost of manufacture, greater cleanliness, convenience and facility of opening and closing, and increased durability of the sealing bands or packings.

The nature of this invention consists in providing upon a jar-neck a series of circumferential ridges or bands and a similar series of ridges upon the stopper or cover, around which ridges a contractible sealing-band is placed, impervious to air, which, by fitting closely on the series of ridges both on the jar and on the cover, prevents air from entering the jar, and by reason of being external to the jar avoids all contact of the sealing-band with not only the contents of the jar, but also with any part of the surface of the jar over which the contents are poured in emptying the jar. It is preferable to have the neck and stopper of the jar of such form as to be self-centering; but the invention can be successfully used when this feature is omitted.

I will now proceed to particularly describe my invention, referring in so doing to the drawings annexed and the letters of reference marked thereon.

Figure 1 shows a vertical central section of a jar-neck and stopper containing my invention; Figs. 2, 3, and 4, the segregated parts thereof in section. Figs. 5 and 6 show modifications in form of the invention, also in section, the form of the body of the jar not being involved in the invention, that portion is not drawn. Fig. 7 shows in section the means for closing and sealing the jars when india-rubber bands are not procurable.

The same letters of reference apply to the same parts in the several figures.

A represents the jar-neck, provided with a series of annular ridges, B, which are preferably made narrow upon their periphery, but not so sharp as to cut caoutchouc or vulcanized india-rubber. C is the lid or stopper, also provided with a series of circumferential ridges, D.

As shown in Figs. 1, 2, and 3, a portion of the stopper C fits into the neck A and centers it therein. In the form shown in Figs. 5, 6, and 7 the stopper fits over a portion of the neck of the jar, and thus centers it thereon.

Around the ridges B and D, when the stopper is in position, is placed a short contractible tube or covering, E, (shown detached in Fig. 4,) which is, if of elastic material, before its application of considerably less diameter than the ridges B and D, and when applied, as shown in Figs. 1 and 5, the band E, by its elasticity, contracts upon and applies itself so closely to the ridges B and D as to hermetically seal the stopper C to the jar-neck A, and by reason of engaging in several ridges upon both the cover and neck, acquires such hold thereon that the contraction of the band at the part embracing the joint of the neck and cover draws the cover firmly down on the jar-neck.

As shown in Fig. 6, instead of the india-rubber tube or band E, a cap or inverted cup, F, of the same material is used. This has the advantage of covering the stopper C, and making a neater finish, but is more expensive and not any more effective in sealing.

The neck A of the jar should be turned off evenly by grinding on the edge, and the stopper C so molded and handled in the annealing process as to fit snugly without rocking upon the neck A.

When the jars are heated and the stopper put on and the india-rubber tubes applied, the tubes E fit closely upon the ridges B and D, and as the jars cool, the elastic force of the air or vapor in the jar diminishes, and the atmospheric pressure forces the bands E or caps F more firmly against the ridges B and D, insuring a fluid-tight seal, and draws the cover firmly down upon the neck.

It is obvious from the construction of the jar-neck and stopper that the contents of the jar do not come in contact with the part of the jar or stopper to which the sealing-band E is

applied, and the jars are therefore more cleanly than those where the contents pour over the surfaces upon which sealing-gaskets are seated.

The tubes are easily made without waste by cutting from rectangular sheets and closing the seam, and afterward dividing the tubes into proper lengths.

When such jars are used in localities where vulcanized rubber fabrics are not procurable, they may be sealed by wrapping strong waxed paper or cloth or bladder, G, as shown in Fig. 7, around the ridges of the stopper and neck, and tying a cord tightly around the contiguous ridges B B and D D, and afterward between the lower ridge B of the neck and the upper ridge D of the stopper.

By first tying the cord H over the waxed cloth, so as to bind it between the contiguous ridges B B of the neck and D D of the cover, the cloth is closed tightly and strained into close contact with the ridges, and when the cord J is afterward tied between the upper rings D and lower rings B it tightens the cover securely against the neck.

I am aware that jars have been made with a single rim upon the neck and a single rim upon the cover, which were embraced by a band for the purpose of sealing the same by an elastic band. Such jars are objectionable in not holding the cover tightly against the neck, and are only susceptible of being closed by continuous bands of elastic material, and are

hereby disclaimed, while the jars made as I have described effect such a hold upon the several rings on the lid and cover as to enable the contractible band to be stretched in the direction of the axis of the jar between the neck and cover, and by its reaction to firmly draw the cover down upon the jar-neck, and thus produce a more secure and reliable sealing, and permit the use of such jars when elastic bands are not procurable.

Having described my invention, what I claim is—

1. A fruit-jar provided with a series of circumferential ridges upon the neck, in combination with a cover provided with a similar series of ridges, and a contractible band surrounding said ridges and adapted by its contraction as strained upon such ridges to draw the cover and jar toward each other, substantially as and for the purpose set forth.

2. A fruit-jar provided with a series of circumferential ridges upon the neck, in combination with a series of circumferential ridges upon the cover, both series of ridges being adapted to receive and effect a seal when surrounded by a contractible band, substantially as set forth and described.

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