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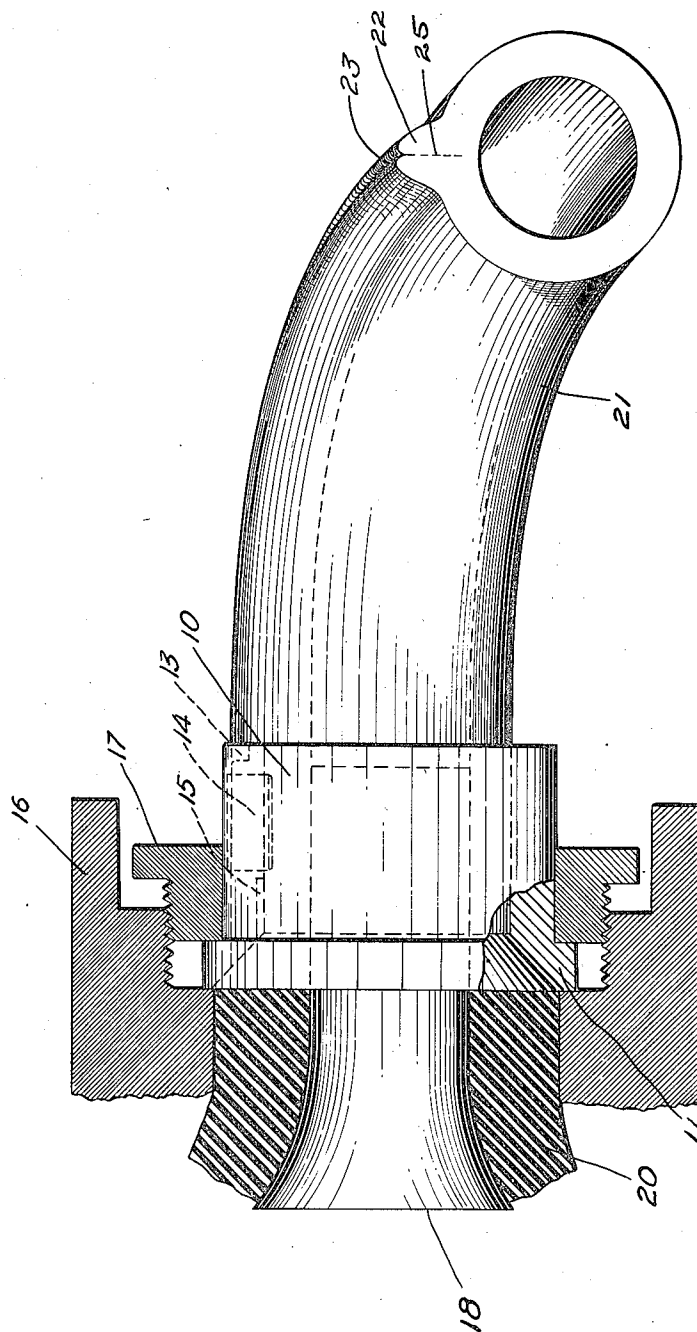
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2,446,493

JAR RING

Filed Dec. 7, 1945

2 Sheets-Sheet 1



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Fig. 2

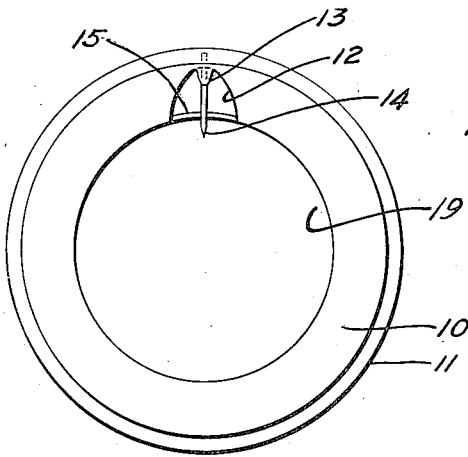


Fig. 3

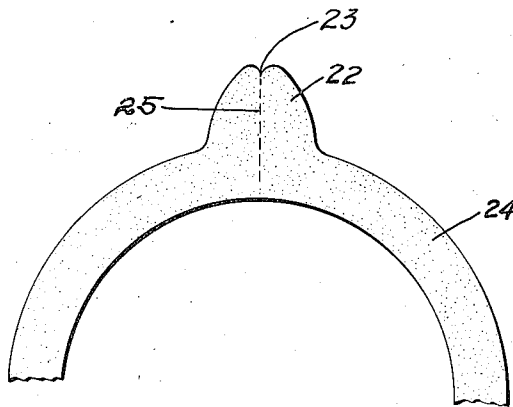
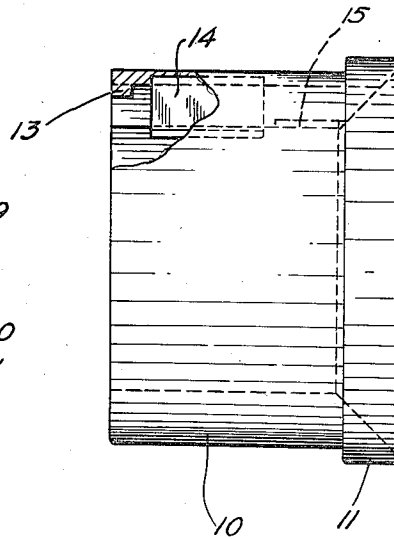


Fig. 4

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JAR RING

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4 Claims. (Cl. 288—20)

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This invention relates to a new and improved sealing ring for use in sealing preserving jars and to a novel method of producing the ring. Such jars are commonly unsealed by forcing a knife under the cover and into the sealing ring to permit air to enter the jar and break the vacuum or by breaking the vacuum by pulling outwardly on a projecting lip provided on the ring. The former method may result in injury or a chipping of the jar and the latter method requires considerable effort and difficulty in grasping the lip and exerting sufficient force to unseal the jar. We have invented a novel ring with a bifurcated lip that may be readily grasped and the unsealing operation easily effected by tearing the lip apart along a line of cleavage between two bifurcated portions thereof. The production of an improved sealing ring of this nature comprises the primary object of the invention.

Our invention contemplates the extruding of rubber through a die of a configuration to form a tube with an outwardly projecting lip, the severing of the lip longitudinally into two portions as it passes through the die, the subsequent re-sealing of the two portions together and the slicing of jar rings from the resulting tube. The jar ring thus formed comprises a flat rubber annulus having an outwardly protruding lip integral therewith and weakened along a severing line which extends through the lip and inwardly of the ring. Rubber which has been thus cut and resealed is weaker along the line of cut and jars employing our improved ring can be easily and conveniently unsealed merely by grasping the two bifurcated portions and tearing them apart along the weakened line. The production of an improved ring having these characteristics comprises a further object of the invention.

These and other features of the invention will be best understood and appreciated from the following description of a preferred embodiment thereof selected for purposes of illustration and shown in the accompanying drawings in which,

Fig. 1 illustrates in side elevation, partially in section, the extruding of a jar ring forming tube in accordance with our invention,

Fig. 2 is a rear end elevation of the tubing die,

Fig. 3 is a side elevation of the tubing die, partially in section, and

Fig. 4 is a fragmentary elevation of a jar ring cut from the formed tube.

In the drawings, 10 indicates a tubing die having one end flanged at 11 and clamped in a tubing machine head 16 by a sleeve nut 17. A spindle 18, also supported at its forward end

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by the tubing head, is disposed centrally of and extends into the die to provide an annular tubing passage between the die and spindle. Disposed longitudinally of and adjacent to and extending horizontally along the periphery of the passage 19 through the die is a trough 12 open from end to end through the die. A severing knife 14 is mounted in the die outwardly of and extending radially through the trough and inwardly of the passage 19.

Rubber 20 is forced through the die 10 about the spindle 18 and is extruded therethrough in the form of a tube 21. The rubber also passes into and through the trough 12 and forms an outwardly projecting rib 22 on and along the extruded tube. The rubber passing through the trough and past the knife 14 is bifurcated into two portions which thereafter reseat together along the severing line 25. A bridge 15 is also preferably provided between the trough 12 and the passage 19 for somewhat checking and retarding the flow of the rubber which would otherwise be forced too rapidly through the enlarged cross section of the combined passage and trough. As the tube leaves the die a V-shaped lug 13 depending into the trough serves to form a V-shaped division 23 in and along the periphery of the rib 22 in alignment with the severing line 25.

Jar rings 24 of the desired thickness are formed by severing the same from the tube 21 in the conventional manner of forming jar rings. In the bifurcated lip at 22 are embodied two portions disposed at opposite sides of the line 25 and extending outwardly beyond the circumference of the body portion of the ring. These portions of the tube are resealed together along the line 25 rearwardly or beyond the knife 14 but their junction along this line is so substantially weakened that the portions may be separate along that line when pulled apart.

As illustrated in Fig. 4 the jar ring 24 is provided with an outwardly projecting lip 22 bifurcated into two portions along a resealed and weakened line 25 extending radially inward from the apex of a V-shaped outer recess 23 to a point somewhat short of the inner wall of the ring. The ring is used and functions in the usual manner to perform the jar sealing operation. When it is desired to unseal the jar the two portions of the lip 22 at opposite sides of the line 25 are grasped and pulled apart. The lip is weakest along the line 25 and therefore separates therealong and permits air to enter the jar and break the vacuum. The jar cover can then be easily removed. Our invention therefore eliminates the

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unsealing difficulties heretofore present and hereinabove described and provides a new and improved jar ring that can be easily and conveniently parted to effect the unsealing operation.

Having now disclosed our invention what we claim as new and desire to secure by Letters Patent is:

1. A jar ring comprising a flat rubber annulus having an outwardly protruding lip integral therewith and weakened along a line extending through the lip and inwardly of the ring from a point on the outer periphery of the lip, the rubber comprising the ring being bonded into a unit throughout said annulus and across said weakened line.

2. A jar ring comprising a flat rubber annulus having an outwardly protruding lip integral therewith and weakened along a line extending through the lip and inwardly of the ring from a point on the outer periphery of the lip to a point adjacent to but short of the inner circumference of the ring, the rubber comprising the ring being bonded into a unit throughout said annulus and across said weakened line.

3. A jar ring comprising a flat rubber annulus having an outwardly projecting lip integral

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therewith and weakened along a line extending substantially radially through the lip and inwardly of the ring from a point on the outer periphery of the lip, the rubber comprising the ring being bonded into a unit throughout said annulus and across said weakened line.

4. A jar ring comprising a flat rubber annulus having an outwardly projecting lip integral therewith and comprising two portions disposed at opposite sides of a line extending therethrough and inwardly of the ring from a point on the outer periphery of the lip, said portions having independent faces adhered together in contact in a common plane along said line.

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