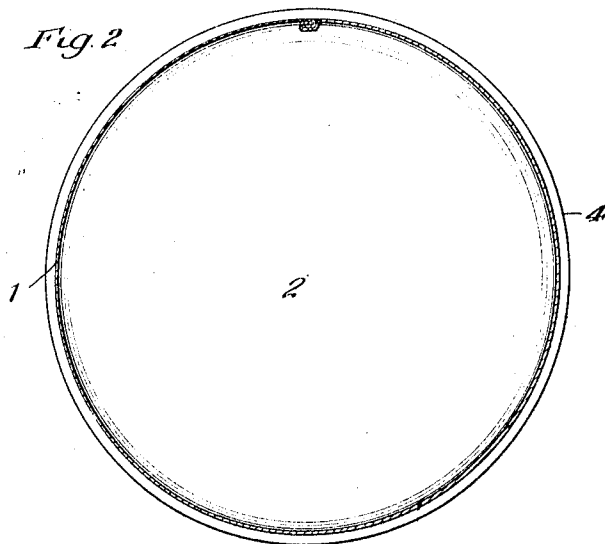
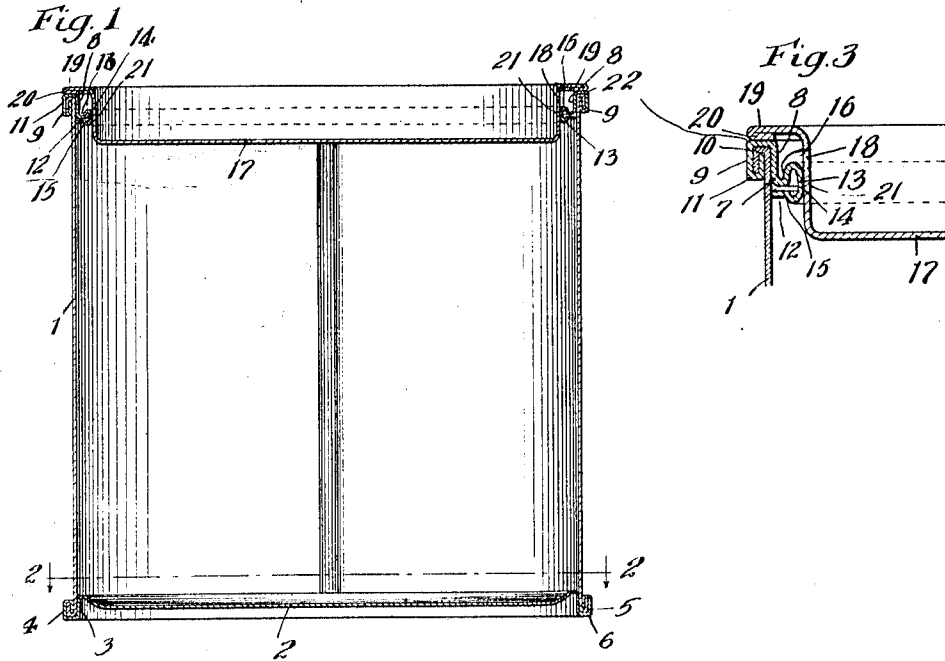


R. M. BRECKENRIDGE.
 FRICTION TOP CAN.
 APPLICATION FILED APR. 7, 1911.

1,031,238.

Patented July 2, 1912.



Witnesses:

Wm. Geiger
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 his Attys

UNITED STATES PATENT OFFICE.

ROELIFF M. BRECKENRIDGE, OF BRONXVILLE, NEW YORK, ASSIGNOR TO AMERICAN CAN COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

FRICTION-TOP CAN.

1,031,238.

Specification of Letters Patent.

Patented July 2, 1912.

Application filed April 7, 1911. Serial No. 619,470.

To all whom it may concern:

Be it known that I, ROELIFF M. BRECKENRIDGE, a citizen of the United States, residing in Bronxville, in the county of Westchester and State of New York, have invented a new and useful Improvement in Friction-Top Cans, of which the following is a specification.

My invention relates to improvements in friction top cans.

The object of my invention is to provide a friction top can, which will be of a simple and efficient construction, and have a wide opening mouth of substantially the full diameter of the can body formed in a seamless friction seal ring or ring member secured to the can body by a double seam, and in which the friction cap or cover will serve to close the can securely and liquid tight, and also be adapted for easy and convenient removal and replacement.

My invention consists in the means I employ to practically accomplish this object or result as herein shown and described, the same comprising essentially a friction seal ring or rim fitting snugly within the upper end of the can body, and having an upper and outer portion double seamed thereto, and provided at its inner and lower portion with an annular friction seat roll formed by reversely curving the lower portion of the friction seal ring, the extreme edge of the roll preferably abutting against a narrow, annular, horizontal shoulder formed by the inwardly projecting and upwardly or reversely curved portion of the sealing ring. The reverse curve at the inner and lower portion of the sealing ring produces a friction seat roll which is strongly supported and slightly bodily yieldable and facilitates the production of a liquid tight joint, while at the same time the friction seal ring and its integral friction seat roll are closely adjacent on the inside to the upright wall of the can body, and thus produce a can having a smooth, wide mouth of substantially the full diameter of the can body.

My invention also consists in the novel construction of parts and devices and in the novel combinations of parts and devices herein shown and described and more particularly specified in the claim.

In the accompanying drawing forming a part of this specification, Figure 1 is a central, vertical section of a sheet metal fric-

tion top can embodying my invention. Fig. 2 is a horizontal section on line 2—2 of Fig. 1 and Fig. 3 is an enlarged, detail, vertical section to more clearly show the construction of the friction top closure.

In the drawing, 1 represents the can body and 2 the bottom head having a countersunk wall 3, fitting tightly and snugly within the lower end of the can body and secured to the can body without solder by a double seam 4 produced by the interfolded seam flanges 5 of the can body and 6 of the bottom head of the can.

The can body is provided at its upper end with a seamless friction seal ring or rim 7, having an upright countersunk wall 8 fitting tightly and snugly within the upper end of the can body, and secured to the can body by a double seam 9 formed by interfolded seam flanges 10 on the can body and 11 on the friction seal ring or rim 7. The seamless ring or rim 7 is provided at its lower portion with a narrow, horizontally extending annular shoulder 12 and an annular friction seat roll 13, preferably of a generally elliptical shape in cross section, with its major axis upright and with its inner wall 14 preferably somewhat convexly curved for engagement with the corresponding friction seat wall of the cover. The extreme edge 15 of the friction seat roll 13 abuts against the horizontal annular shoulder 12 of the seamless friction seal ring 7 to strengthen and stiffen its friction seat roll 13 when the friction cap or cover is forced home. The reverse curve 16 formed by the upper and greater portion of the hollow friction seat roll 13 gives this friction seat roll a certain degree of yield or elasticity which serves to insure a liquid tight closure being produced when the friction cap or cover 17 is forced within the friction seat roll 13 of the seamless sealing rim or ring 7 of the can.

The friction cap or cover 17 is provided with a relatively deep, substantially upright, friction seat wall 18 and with a horizontal pry-off rim or flange 19 which is strengthened by an intumed marginal fold or flange 20. As the friction seat roll 13 of the seamless rim 7 has a relatively narrow bearing or engagement against the middle portion 21 of the depending friction seat wall 18 of the friction cover 17, and as this friction seat wall 18 of the cover is relatively deep

or wide, it is also adapted to slightly yield and thus form an elastic bearing or engagement with the slightly elastic or yielding supported friction seat roll 13 of the seamless rim. This adapts the friction cover 17 to be forced into the mouth of the can or within the friction seat roll 13 of the seamless rim 7 under great pressure without danger of rupture or cracking the stock, and to uniformly produce a perfectly liquid tight closure; while at the same time the cover is adapted to be conveniently pried off by a suitable blade-like implement inserted between the pry-off rim 19 of the cover and the annular pry-off rim 22 of the can which is formed by the upper portion of the double seam which unites the rim 7 to the can body.

The elastically supported or bodily yieldable annular friction seat roll 13 of the seamless rim 7 projects inwardly from the lower portion of the close fitting counter-sunk wall 8 of the rim 7, thus adapting the seamless rim 7 to be secured to the can body by a double seam, and to thus produce a liquid tight joint without the necessity of

solder. And at the same time, this annular friction seat roll 13 of the rim 7 projects only very slightly inward from the upright wall of the can body, so that the can is provided with a wide smooth mouth of substantially the diameter of the can body.

I claim:—

In a friction top can, the combination with a can body, of a friction seal ring fitting within the can body and secured thereto, said ring having a portion extending parallel to and in engagement with the side of the can body and a lower and inner portion reversely curved to form a narrow inwardly projecting shoulder and an annular, friction seat, slightly flattened roll, the latter having an extreme edge projecting below said shoulder, and said roll being adapted to yield slightly and thus to form a perfectly liquid tight closure with a friction cover.

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Witnesses:

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