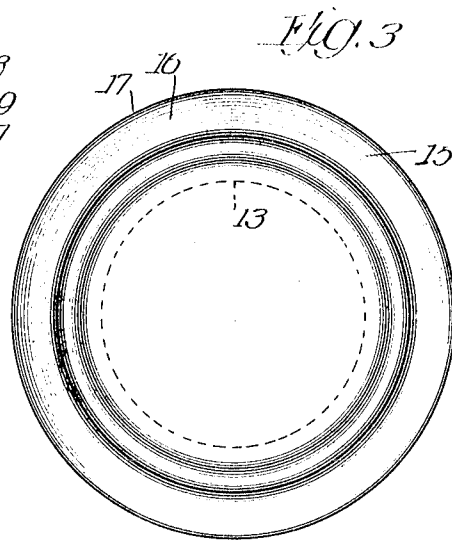
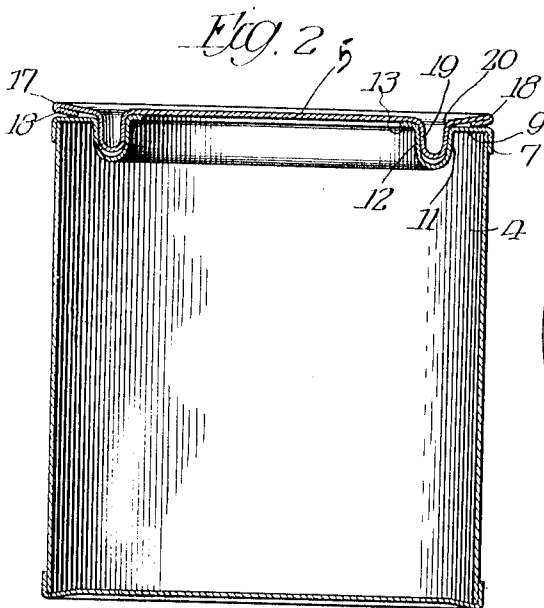
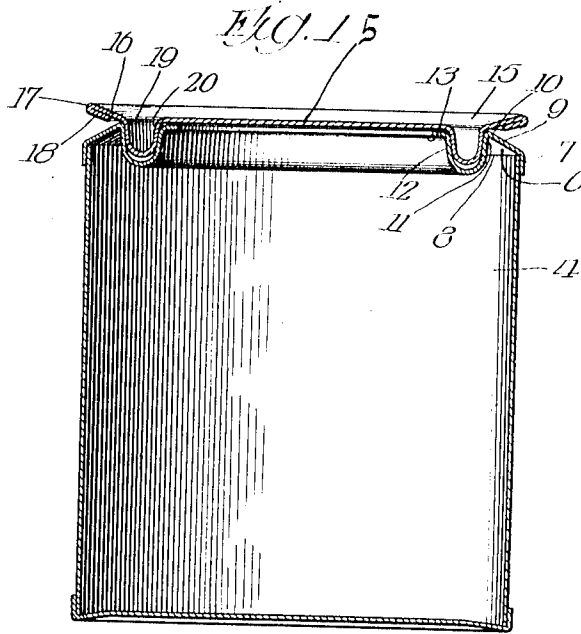


J. M. HOTHERSALL.
 FRICTION TOP CAN.
 APPLICATION FILED APR. 19, 1915.

1,309,628.

Patented July 15, 1919.



Witnesses:
G. Barrett
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UNITED STATES PATENT OFFICE.

JOHN M. HOTHERSALL, OF BROOKLYN, NEW YORK, ASSIGNOR TO AMERICAN CAN COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

FRICTION-TOP CAN.

1,309,628

Specification of Letters Patent.

Patented July 15, 1919.

Application filed April 19, 1915. Serial No. 22,254.

To all whom it may concern:

Be it known that I, JOHN M. HOTHERSALL, a citizen of the United States, residing in Brooklyn, in the county of Kings 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 in general to friction top cans or containers and has for its object broadly the provision of a friction top can wherein the cover or closure will form with the body a liquid and air-tight connection.

A further object of the invention is the provision of a can of this kind in which the friction joint will be sufficiently strong and perfect to permit processing of the can after liquids have been placed therein.

A still further object of the invention is the provision of a friction closure wherein such a top may be readily applied and the maximum tightness of closure be provided with the expenditure of a minimum force, the parts being so constructed and arranged that the pressure necessarily applied to the can for positioning the closure is increased by the can itself and retained in the finished joint.

Other objects and advantages of the invention will be apparent as it is better understood from the following description when considered in connection with the accompanying drawing illustrating a preferred embodiment thereof.

On the drawing,
Figure 1 is a sectional view through a container embodying my present invention showing the cover in its initial closing position;

Fig. 2 is a similar view showing it in its final closed position; and

Fig. 3 is a top plan view of the container with the parts arranged as shown in Fig. 2.

For the purpose of illustrating my invention I have shown it embodied in a can having a sheet metal body 4 and a closure 5 of similar material. The body 4 is provided with an inwardly extending sealing ring 6 of peculiar construction.

This sealing ring, in the present instance, is provided with a flange 7 soldered or otherwise secured about the upper edge 8 of the body. Inwardly of this ring, as it is formed and positioned on the body, a portion 9 extends inwardly and upwardly forming an acute angle with the horizontal when con-

sidered in section. In other words, it flares inwardly and upwardly from the flange 7 and edge 8 of the body. From its highest point 10 it is bent downwardly at 11 and back upon itself at 12 to form double and substantially parallel friction walls for engagement with the cover. The inner edge 13 of the ring extends inwardly of the wall 12 to provide a reinforcement in the present instance. The cover is reversely formed, having a downwardly and inwardly flaring flange 16 bent back upon itself at 17 to provide an edge reinforcement 18. As in the ring 6, two friction walls 19 and 20 are formed by bending the cover, these walls being arranged to tightly fit within the bent portion of the ring and in a firm metal to metal contact with the friction walls 11 and 12 thereof. The parts are preferably so constructed that when arranged as in Fig. 1 a close frictional engagement is present between the friction walls of the cover and the friction walls of the ring 6.

When thus arranged it is intended that pressure be applied to the cover to force the parts into the position shown in Fig. 2 with the portion 9 which in Fig. 1 is shown flaring inwardly and upwardly in substantially horizontal position and with the edge reinforcement 18 of the cover in contact or substantially in contact therewith. This movement of the parts carries the outer friction wall 11 of the ring inwardly toward the friction wall 12, compressing between these walls the friction walls 19 and 20 of the cover. From the arrangement shown in Fig. 1 it will be noted that the inwardly and downwardly flaring portion 10 of the cover and the inwardly and upwardly flaring portion 9 of the ring form a connection very like a toggle, which magnifies or rather increases the pressure exerted upon the cover to move the parts from the position shown in Fig. 1 to that shown in Fig. 2. This movement is accompanied by a compression of the friction walls 19 and 20, thereby utilizing to the fullest extent the elastic strength of the materials. The metal to metal contact between these walls is present in the finally closed container or can with peculiar firmness and strength.

It is thought that the invention and many of its attendant advantages will be understood from the foregoing description, and it will be apparent that various changes may

be made in the form, construction and arrangement of the parts without departing from the spirit and scope of the invention or sacrificing any of its material advantages, the form hereinbefore described being
5 merely a preferred embodiment thereof.

I claim:

1. A container comprising a body provided with a ring secured about its top, said
10 ring extending inwardly and upwardly before a cover is positioned, and a cover provided with a friction wall adapted to be engaged by said ring when in upper position, said ring being depressible to substantially
15 a horizontal position after the cover is in place to cause it to bind against the friction wall of said cover.

2. A container comprising a body provided with a ring secured to its top edge, said ring
20 extending upwardly and inwardly therefrom and provided with a double friction wall at its inner edge, and a cover having a depression forming a double friction wall adapted to be inserted between the friction walls of

said ring, said ring being depressible to substantially a horizontal position, forcing its friction walls toward each other to tightly clamp the friction walls of the cover.

3. A can end for friction closures, formed with a peripheral seam portion whereby it
30 may be united with a can body, an annular top portion extending upward and inward from said seam portion and above the plane at which the top edge of the body will be located and an inwardly presented friction
35 wall carried by the upper inner part of the said annular top portion; whereby the application of the corresponding friction cover may depress said top portion and cause the
40 friction wall of the can end to be forced inward to increase the tightness of the engagement between the end and cover.

Signed in the presence of two subscribing witnesses.

JOHN M. HOTHERSALL.

Witnesses:

W. D. FOSTER,
D. F. MENNIS.