

No. 795,128.

PATENTED JULY 18, 1905.

J. G. HODGSON.
FRICTION TOP CAN.

APPLICATION FILED DEC. 31, 1904.

Fig. 1

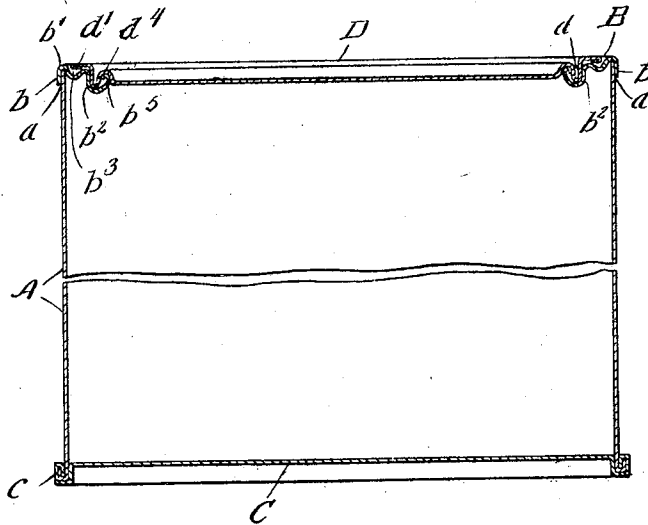


Fig. 2

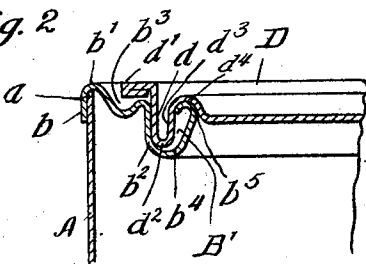
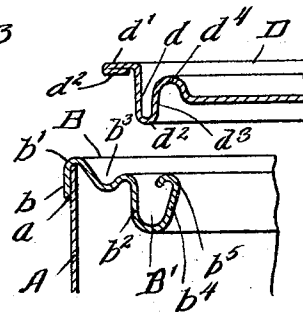


Fig. 3



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN G. HODGSON, OF MAYWOOD, ILLINOIS, ASSIGNOR TO AMERICAN CAN COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

FRICTION-TOP CAN.

SPECIFICATION forming part of Letters Patent No. 795,128, dated July 18, 1905.

Application filed December 31, 1904. Serial No. 239,280.

To all whom it may concern:

Be it known that I, JOHN G. HODGSON, a citizen of the United States, residing in Maywood, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Friction-Top Cans, of which the following is a specification.

My invention relates to improvements in cans of the kind or class commonly known as "friction-top" cans or cans which are designed to be opened and closed a number of times as the contents are being used and which have a top or head furnished with a friction seat wall or flange adapted to receive a friction or slightly-wedging cover that is forced into the seat of the friction-top to tightly close the can by the tight close metal-to-metal contact of the cover with the seat in the top or head of the can. Great difficulty has heretofore been experienced in cans of this kind or class in producing a liquid-tight closure or joint between the so-called "friction-top" of the can and its so-called "friction-cover," especially where the cans are filled with extremely permeable or fluid liquids like turpentine, benzene, &c.

The object of my invention is to provide a so-called "friction-top" can of a simple, efficient, durable, and economical construction, which may be readily and repeatedly closed and sealed by simply forcing the cover in place and readily opened by simply prying off the friction-cover, and which at the same time may be closed liquid-tight with certainty and reliability.

My invention consists in the means I employ to practically accomplish this object or result—that is to say, it consists in a can having a top or head furnished with the customary depending integral friction seat wall or flange for the cover, said seat wall or flange having an inwardly-projecting curved flange provided with an upwardly-projecting flange terminating in a rounded or curved outwardly-projecting flange, said upwardly-projecting flange and its outwardly-curved terminal or marginal flange constituting an elastic spring-acting member in combination with a friction-cover having an integral friction seat wall or

flange tightly engaging the friction seat wall or flange of the can-top and provided with an inner upright wall or flange terminating in a rounded flange or wall engaging the elastic or spring-acting member of the can-top, whereby the can is adapted to be closed liquid-tight with certainty and reliability.

My invention also consists in the novel construction of parts and devices and in the novel combinations of parts and devices herein shown or described.

In the accompanying drawings, forming a part of this specification, Figure 1 is a central vertical section of a friction-top can embodying my invention. Fig. 2 is an enlarged detail section to more clearly show the construction. Fig. 3 is a detail section showing the parts before the friction-cover is forced home on the top.

In said drawings, A represents the can-body, and C its bottom head, secured thereto by a soldered or other seam *c*.

B is the top, secured to the can-body by a soldered or other seam *a*. The top B has a marginal flange *b* for securing the same to the can-body and a raised bead or shoulder *b'* to serve as a fulcrum in prying off the friction-cover D. The top B has an integral depending friction seat wall or flange *b'*, tightly engaging a corresponding friction seat wall or flange *d* of the friction-cover D, these interengaging seat-walls *b'* *d* being preferably slightly wedging or tapering, and the seat-wall *d* of the cover being slightly larger than the seat-wall *b'* of the can-top to insure a firm and tight gripping or anchorage of the two together when the cover D is forcibly pressed or driven home in the can-top B. The can-top B has also an inwardly-projecting curved or gutter-shaped flange *b''* and an upwardly-projecting flange *b'''*, terminating in an outwardly curved or rounded flange *b''''*, constituting an elastic or spring-acting member.

The friction-cover D is provided with marginal folded flanges *d'* *d''* at its rim to strengthen the same and to form a shoulder for prying off the cover. The friction-cover D has in addition to the friction seat wall or flange *d* an inwardly-projecting curved flange

d^2 and an upwardly-projecting flange d^3 and a curved or rounded annular seat flange or wall d^4 , which engages and forms a seat for the elastic or spring-acting flange member b^5 of the top B. The flanges d , d^2 , and d^3 of the friction-cover D form a projecting annular rib on the under side of the friction-cover, which fits in the corresponding annular recess or groove B' of the top, and as this annular rib on the cover is substantially rigid and yielding, while the inner upright wall b^4 of the annular recess or channel B' of the can-top is elastic and free to spring slightly inward as the cover D is forced snugly home, it produces an elastic or spring action between the interengaging members b^5 and d^4 , and thus secures a liquid-tight closure with certainty and reliability. As the spring-pressure of the elastic flanges b^4b^5 against the coacting wall d^4 is comparatively slight in respect to the tight frictional grip between the friction seat-walls b^3d of the can top and cover, the same does not in practice tend to loosen the cover, so that the cover remains securely anchored on the can-top, while at the same time effecting a liquid-tight closure.

In driving or forcing the friction-cover home in the top B the pressure is applied to the inner or flange d' of the cover, thus forcing or driving the friction seat-walls d and b^2 into tight contact and causing the seat wall or member d^4 of the cover into engagement with the elastic or spring acting member b^5 of the can-top B, which yields downward slightly as the cover is driven snugly home, thus producing a liquid-tight and secure closure.

I claim—

1. In a friction-top can, the combination with a top having a friction seat-wall provided with an inwardly-projecting flange, and an upwardly-projecting flange terminating in a marginal outwardly-curved flange acting as a spring member, of a friction-cover hav-

ing an upright friction seat-wall, an inwardly-projecting flange and an upwardly-projecting flange having a rounded seat member, substantially as specified.

2. In a friction-top can, the combination with a top having a friction seat-wall provided with an inwardly-projecting flange, and an upwardly-projecting flange terminating in a marginal outwardly-curved flange acting as a spring member, of a friction-cover having an upright friction seat-wall, an inwardly-projecting flange and an upwardly-projecting flange having a rounded seat member, said can-top having a marginal raised rim to serve as a fulcrum in prying off the cover, substantially as specified.

3. In a friction-top can, the combination with a top having a friction seat-wall provided with an inwardly-curved and upwardly-projecting flange terminating in a marginal outwardly-curved flange acting as a spring member, of a friction-cover having a marginal folded rim, a depending friction seat-wall, and an inwardly and upwardly projecting flange having a rounded seat member, substantially as specified.

4. In a friction-top can, the combination with a top having a friction seat-wall provided with an inwardly-curved and upwardly-projecting flange terminating in a marginal outwardly-curved flange acting as a spring member, of a friction-cover having a marginal folded rim, a depending friction seat-wall and an inwardly and upwardly projecting flange having a rounded seat member, said can-top having a marginal raised rim to serve as a fulcrum in prying off the cover, and an annular channel or depression beneath the folded marginal rim of the cover, substantially as specified.

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Witnesses:

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