Feb. 27, 1934. R. T. GARFEIN 1,949,303

CONTAINER

Filed Feb. 1, 1933

Fig. 1.

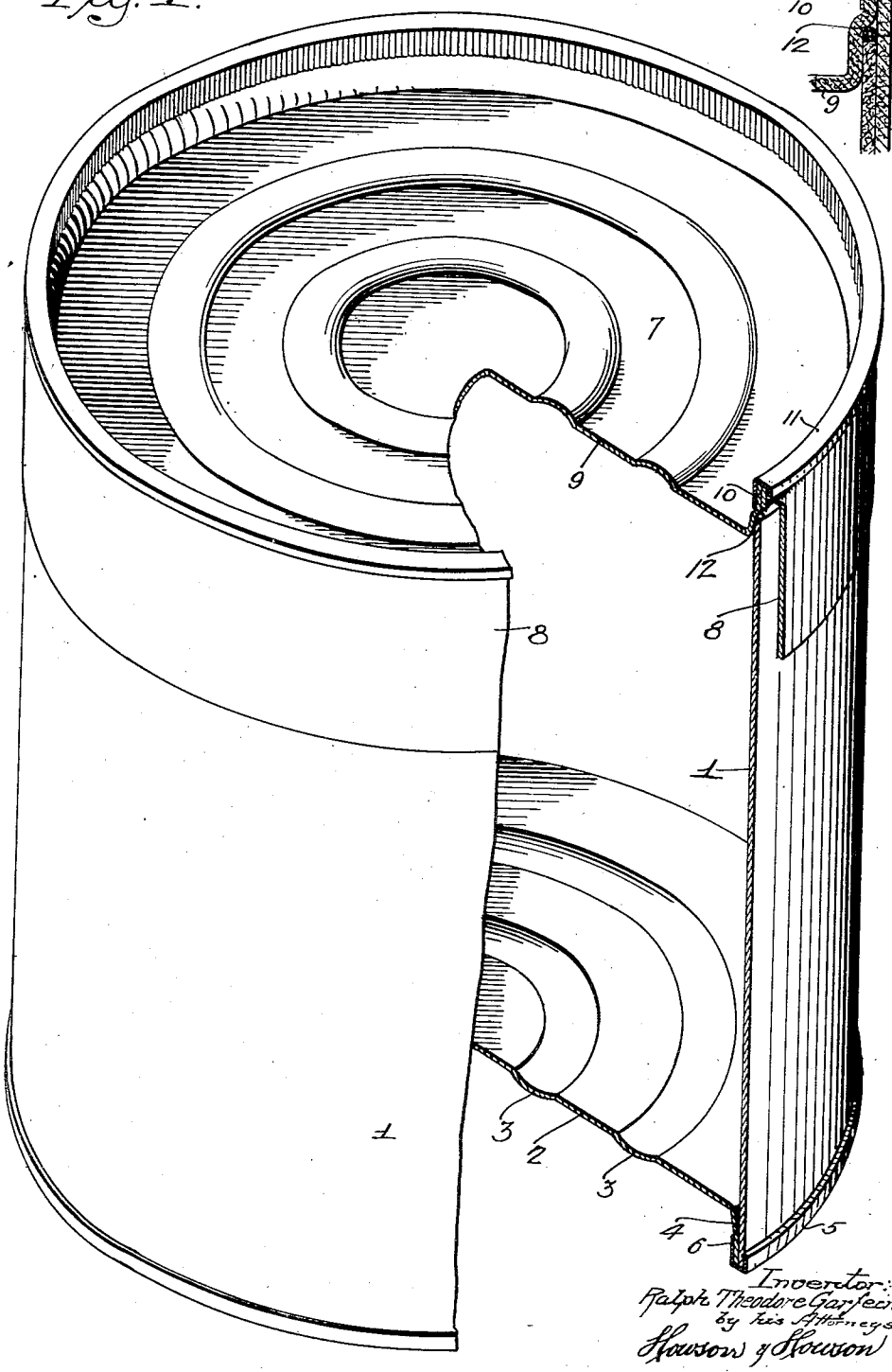


Fig. 2

Inventor:
Ralph Theodore Garfein
by his Attorneys
Howson & Howson

Patented Feb. 27, 1934 1,949,303

UNITED STATES PATENT OFFICE

1,949,303

CONTAINER

Ralph Theodore Garfein, Easton, Pa., assignor to The Canister Company, Phillipsburg, N. J., a corporation of New Jersey

Application February 1, 1933. Serial No. 654,713

6 Claims. (Cl. 229—5.5)

This invention relates to new and useful improvements in containers and more particularly to containers for dry materials such as chemicals or like substances wherein it is essential that the substances be sealed from contact with the atmosphere and maintained dry.

The principal object of the present invention is to provide a container or drum of the character set forth having novel features of construction whereby the interior of said container is perfectly sealed from the atmosphere, yet may be readily opened to permit removal of goods from the container.

Another object of the invention is to provide a container of the stated character having novel closure means constructed to preclude sifting of the contained substance outwardly of said container at the jointure of said closure and the body of the container.

A further object of the invention is to provide a container of the character noted which is of durable, rugged construction and relatively inexpensive to manufacture.

A more specific object of the invention is to provide a container having a closure member provided with a novel shoulder or overlapping means which, in conjunction with the general construction of said closure affords a quadruple sealing of the container.

A further detail object of the present invention is to provide an integral container as described which is permanently sealed from the atmosphere at inception, one end of said container being scored to facilitate cutting thereof to form an opening for removal of goods contained therein.

These and other objects and details of the construction are set forth hereinafter and disclosed in the accompanying drawing; in which

Figure 1 is a view in perspective of one form of container constituting the invention having a portion thereof removed to illustrate certain structural details;

Fig. 2 is an enlarged fragmentary view in section showing the detail closure structure.

Heretofore, in containers of a similar character for mechandising and storing chemicals or other dry substances, in granular or powdered form, great difficulty has been encountered in maintaining said substances absolutely dry and sealed from contact with the surrounding atmosphere. Further, containers of this type are very often tossed and juggled around by persons handling the same and a certain portion of substances contained therein, and particularly those of fine body invariably sift out of the container at the jointure of the closure and body thereof.

By the present invention a container is provided wherein substances, and particularly substances of fine body, may be perfectly sealed from contact with the atmosphere and maintained absolutely in a dry state, yet be easily and readily accessible for removal from said container. Furthermore, the structure of the container effecting the perfect seal of the goods from the atmosphere, functions also to prevent possible sifting of said goods through the jointure of the closure and body of said container.

Referring now more particularly to the drawing the container or drum constituting the present invention comprises an open-ended hollow cylindrical body or wall member 1. A cup-shaped bottom member 2 having embossed, or otherwise formed annular reinforcing welts or ridges 3 therein is inserted in an inverted manner within the body 1 adjacent the bottom edge thereof and the downwardly projecting flanges 4 of the bottom contact throughout their outer peripheral surface with the inner wall surface of said body 1. The bottom is positioned inwardly of the body a sufficient distance so that the bottom edge of the flange 4 is substantially coplanar with the bottom edge of the body 1 as shown in the drawing. Adhesive material or other securing means, such as glue, wire stitching, clasps or the like, is disposed intermediate the contacting surfaces of the flange 4 and the inner surface of the body 1 to secure the relative positions of the bottom member with respect to the bottom end of the body member, and seal the joint against passage of air and/or moisture therethrough.

A thin strip of metal 5 is rolled about the edges of the flange 4 and body 1 and crimped to insure against said strip 5 becoming loose and detaching from the container. A portion of the strip 5 extends vertically upward against the inner wall of the flange 4 as at 6 in Fig. 1 to support the latter and insure the permanency of the jointure of said flange and the body wall. In the event the bottom and body member are wire stitched as above stated, said stitches and clasps are concealed by means of the metallic strip 5 embracing the edges of the bottom and body members.

A particular feature of the invention resides in the construction of a closure member designated generally as at 7 and in the present instance the closure member comprises a relatively wide outer skirt member 8 arranged to overlie and snugly embrace the top portion of the outer surface of the body 1, extending a small distance above the

upper edge thereof when in a position closing the container. A top member proper 9 of substantially cup-shaped form and having upstanding flanges 10 at its periphery is inserted within the annular skirt 8 to a depth positioning the upper edges of the flange 10 in coplanar relation with the upper edge of the skirt 8 as shown, the outer surface of said flange being glued or otherwise secured to the inner surface of the skirt 8 as has been described with regard to the bottom structure of the container. A metal strip 11 is rolled and crimped over the edges of the flange 10 and skirt 8 in a manner similar to that prescribed in regard to the metallic strip 5 at the bottom.

In the present instance the circumferential edge of the top 9 is spaced a suitable distance from the inner surface of the skirt 8 as shown in Fig. 1 and the flange 10 is formed to constitute a shoulder 12 adjacent the junction of said flange and the flat portion of the top 9 for the reception of the upper edge of the body 1 which projects into the space intermediate the edge of the flat member 9 and the skirt 8 as shown in Fig. 1 of the drawing. A gasket 14 of rubber or other resilient material is positioned under the shoulder 12 intermediate the latter and the adjacent skirt 8 to provide a tighter sift-proof seal between the top closure member and the upper edge of the container body 1 which is in contact with said gasket.

It may be pointed out at this time that the large area of contact of the snug fitting closure skirt 8 embracing the upper portion of the body 1, cooperates frictionally with the surface of said body to afford a tight jointure effectively sealed against passage of air and moisture and, in addition, prevents sifting of goods outwardly of said container. The seal thus effected by the snug fitting skirt 8, together with the shoulder 12, the glued or otherwise secured jointure of the flange 10 and the body 1, and the rolled metal strip 11, crimped about the upper edges of said flange and body, afford a quadruple sealing of the container and insure goods contained therein from contact with the atmosphere to maintain the same in an absolutely dry condition.

It should be noted, however, that the top member 7 may be devoid of the annular reinforcing welts provided in Fig. 1, and the outer surface thereof scored so that the top may be cut and bent open in hinge-like manner.

The container in the present instance is preferably fabricated of material of fibrous texture, but may be composed of any material better meeting the exigencies of a particular purpose or use, and further, the dimensions of said container are not intended to form a part of the present invention, but may be increased or decreased variably to constitute a container of a particularly desired size and configuration.

While the particular embodiment of the invention has been set forth for the purpose of description, it is not intended that the invention be limited precisely thereto except such changes or modifications as are without the scope of the annexed claims.

What is claimed is:

1. A container comprising a wall member, a skirt snugly embracing an end portion of the surface thereof, an end closure inserted within said skirt, a flange integral with said closure member and having the outer edge thereof coplanar with the edge of the skirt, a binder overlying the edges of the flange and skirt and secured to the latter, and a shoulder formed in the inner portion of said flange arranged to engage and overlap the edge of the wall member.

2. A container including a wall member, a skirt snugly embracing an end portion of the surface of the wall member, an end closure inserted within said skirt, a flange integral with said member and having the outer edge thereof coplanar with the edge of the skirt, a binder overlying the edges of the flange and skirt and secured to the latter, a shoulder formed in the inner portion of said flange arranged to engage and overlap the edge of the wall member, and a resilient member positioned in the shoulder for engagement by the edge of the body.

3. A container including a wall member, a skirt snugly embracing an end portion of the surface of the wall member, an end closure inserted within said skirt, a flange integral with said closure and having its peripheral surface secured to the inner surface of said skirt, a binder overlying the edges of said flange and skirt and secured thereto, and a shoulder formed in the flange arranged to engage and overlap the edge of said wall member.

4. A container including a wall member, a skirt snugly embracing an end portion of the surface thereof, an end closure inserted within said skirt, a flange integral with said closure and having its peripheral surface secured to the inner surface of said skirt, a binder overlying the edges of said flange and skirt and secured thereto, a shoulder formed in the flange arranged to engage and overlap the edge of said wall member, and a resilient member positioned in the shoulder for engagement by the edge of the body.

5. A container including a wall member and a removable closure comprising a skirt embracing the end portion of the surface of said wall member, an end member within said skirt, a flange on said end member secured to said skirt, and a shoulder formed in the flange arranged to engage and overlap the edge of the wall member.

6. A container including a wall member and a removable closure comprising a skirt embracing the end portion of the surface of said wall member, an end member within said skirt, a flange on said end member secured to said skirt, a shoulder formed in the flange arranged to overlap the edge of the wall member, and resilient means positioned in the shoulder for engagement by the edge of the wall member.

RALPH THEODORE GARFEIN.