

W. J. TOWLE.
AIR INLET MEANS FOR CONTAINERS.
APPLICATION FILED APR. 2, 1917.

1,296,341.

Patented Mar. 4, 1919.

Fig. 3

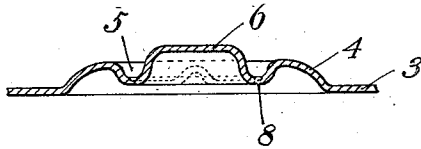


Fig. 4

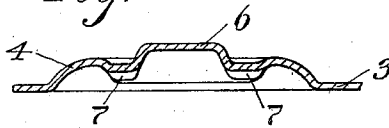


Fig. 5

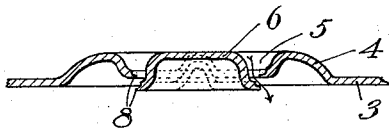


Fig. 1

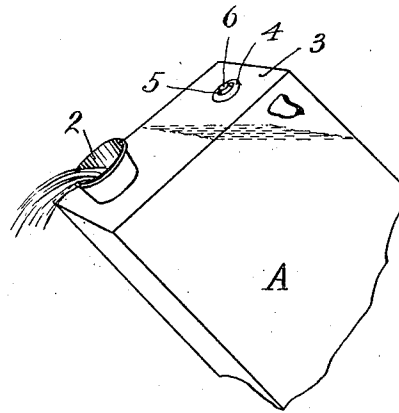
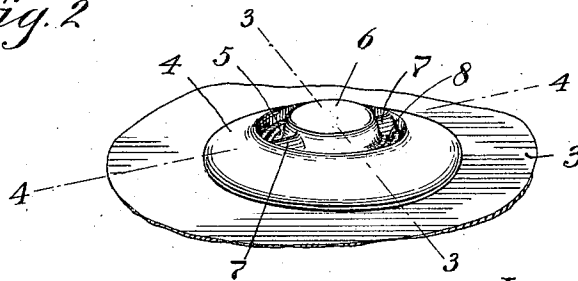


Fig. 2



Inventor,
William J. Towle

By

A. S. Johnson
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM J. TOWLE, OF ST. PAUL, MINNESOTA.

AIR-INLET MEANS FOR CONTAINERS.

1,296,341.

Specification of Letters Patent.

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Application filed April 2, 1917. Serial No. 159,141.

To all whom it may concern:

Be it known that I, WILLIAM J. TOWLE, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Air-Inlet Means for Containers, of which the following is a specification.

My invention relates to improvements in containers, its object being particularly to provide improvements in connection with containers for liquids which will admit air back of the liquid in the container to allow the liquid to flow freely from the discharge opening.

To this end the invention consists in the construction, combination and arrangement of parts hereinafter described and claimed.

In the accompanying drawings, forming a part of this specification,

Figure 1 represents a perspective view of the upper end of a container fitted with my improved features of invention.

Fig. 2 is a view of a portion of the container wall embodying my improved air admitting means.

Fig. 3 is a section on line 3—3 of Fig. 2.

Fig. 4 is a section on line 4—4 of Fig. 2 and,

Fig. 5 is a similar view to Fig. 3 showing the parts forced into position to admit air to the container.

Referring to the drawings,

A represents a metal container of the usual construction such as a syrup can, provided with the ordinary pouring nozzle 2. The nozzle 2 is adapted to be closed by any suitable closing means.

For the purpose of admitting air behind the liquid when the contents are being poured from the container I provide suitable air admitting means, the following described means being one embodiment of my idea. In the embodiment shown I form the top wall 3 of the container at the end opposite to the pouring nozzle 2 with a pressed out rim portion 4, the rim 4 on its inner side merging into an annular groove surrounding a central boss 6. The boss 6 is connected upon opposite sides with the rim portion by ribs 7, the bottom of the groove or channel 5 intermediate of the ribs 7 being relatively thinned along the line 8 extending from the rib upon one side of the boss to the rib upon the other side of the boss. This forms a relative weakening of the bottom of the

groove 5 between the boss and the supporting rim.

Ordinarily the boss will stand connected with the rim by the bottom wall of the groove 5 and by the ribs 7 as indicated in Figs. 2 and 3. When it is desired to admit air back of the liquid in the container to permit the same being more freely poured therefrom the boss is pressed inwardly. This will break the boss from the surrounding rim along the weakened line 8 leaving the boss supported by the rib 7, which rib will bend inwardly as indicated by dotted lines in Fig. 5 to accommodate the inwardly pressed position of the boss. When the boss is thus pressed inward, a vent, as indicated, will be formed between the boss and the surrounding rim portion through which the air may pass into the container behind the liquid to permit of the easy flowing of the liquid from the container. The construction as shown is simple and easy of operation and forms a very small vent opening affording the least possible inlet for dust and dirt and full protection against insects, etc., the surrounding rim further protecting the contents of the container from foreign matter being wiped, washed or floated into the container, particularly if vent is on the top of said container. If the vent is in the side of container, as it may be, the contents are absolutely protected against the entering of any foreign matter.

I do not restrict myself to this specific construction shown, nor to the use of my improvement with a metal container or any particular type of container, but may use my improvement in connection with any form of liquid container and may modify the same within the scope of the invention, as defined in the following claims:

I claim:

1. In combination, a container formed with a discharge opening, said container at a point removed from said opening having a portion of its wall joined with the surrounding wall portion by spaced relatively weak but normally unbroken connections interposed by stronger non-breakable connections for supporting said part when the weakened portions are broken, said part being adapted to be forced inward to form a break at said weakened portions and constitute a vent.

2. A container of the class described formed with a discharge opening, said con-

tainer at a point removed from said discharge opening being formed with a raised boss in one of its walls, said boss having integral connection with the surrounding wall, a portion only of such integral connection being weakened whereby said boss is depressible to break said connection for the purpose set forth.

3. A container having a discharge opening, and at a point removed therefrom a boss joined with the surrounding wall portion by spaced weakened connections breakable by depressing the boss and oppositely extending raised ribs of greater strength for supporting the boss alone when the weakened connections are broken.

4. A container of the class described formed with a discharge opening, the container being also formed at a point removed from said discharge opening with a raised boss, said boss being connected with the surrounding wall of the container by a relatively weakened groove and unweakened ribs intermediate of said grooves whereby said boss may be depressed to form a vent

by the breaking of the weakened groove between the ribs.

5. A container having a depressible part surrounded by an annular groove which is divided at diametrically opposite points by raised ribs, the bottom portions of the resulting arcuate grooves being weakened for breaking upon depressing said part, the latter extending above the permanent supporting ribs.

6. A container having an outwardly pressed rim and a depressible boss joined thereto by an annular groove which is divided at diametrically opposite points by raised ribs, the bottom portions of the resulting arcuate grooves being weakened for breaking upon depressing said part, the latter extending above the permanent supporting ribs.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM J. TOWLE.

Witnesses:

BEATRICE BROWN,
H. S. JOHNSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."