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E. RENTSCHLER

2,295,865

CONTAINER SPOUT

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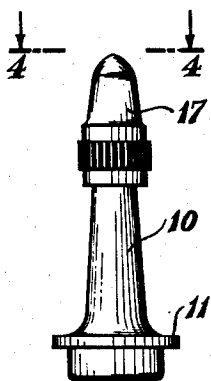


FIG. 1

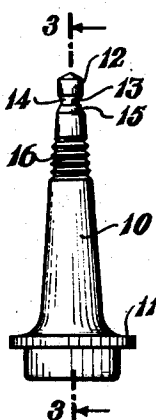


FIG. 2

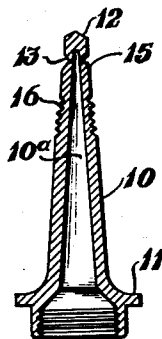


FIG. 3

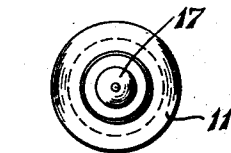


FIG. 4

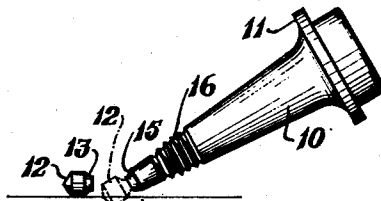


FIG. 5

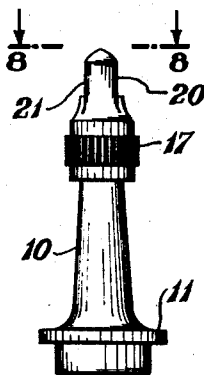


FIG. 6

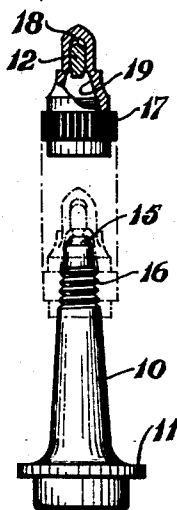


FIG. 7

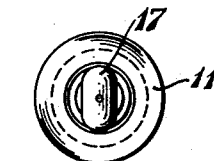


FIG. 8

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CONTAINER SPOUT

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3 Claims. (Cl. 220-27)

This invention relates to spouts and, more particularly, to a sealed container spout.

In the past leakage has occurred from the top of the spout on a container containing a liquid during shipment of said container, or before it was desired to use the contents of the container, through the cap on said spout becoming loose or through the failure to properly tighten the cap. Prior seals for spouts were not only difficult to break but broke in such a manner as to injure the spout so that a cap could not be replaced tightly thereon, which caused leakage of the contents of the container.

It is an object of the present invention to provide a sealed container spout which seal may easily be removed when it is desired to use the contents of the container.

Another object of this invention is to provide an elongated container neck or spout adapted to receive a removable closure cap, with a seal which may be removed cleanly from the spout without injury thereto, so that the closure may be replaced tightly thereon and there will be no leakage.

A further object of this invention is to provide a seal for a container spout adapted to receive a cap, which seal is broken and removed from the spout when the cap is removed.

Other objects will be obvious or will appear during the course of the following specification.

In accomplishing the objects of the present invention it has been found most satisfactory to provide a container spout having a head on the top thereof formed by an annular groove in the body of the spout said spout having a passage therein extending from the base thereof to a point adjacent said annular groove, the head acting as a seal for said passage. The spout is constructed to receive a screw cap on top thereof said cap having a recess therein adapted to receive the head of the spout, the cap and the head of the spout both being of compressible metal, so that by compressing the top of the cap from opposite sides thereof, after it is positioned on the spout, sufficiently to also compress the head, unscrewing of the cap will twist the head from the spout unsealing the passage therein the head being removed as the cap is unscrewed.

The invention will appear more clearly from the following detailed description when taken in connection with the accompanying drawing, showing by way of example an embodiment of the invention, together with a possible modification thereof.

In the drawing:

Figure 1 is an elevational view of the spout of the present invention with the cap positioned thereon;

Figure 2 is an elevational view of the spout with the cap removed therefrom;

Figure 3 is a sectional view taken on the line 3-3 of Figure 2;

Figure 4 is a plan view taken on the line 4-4 of Figure 1;

Figure 5 is an elevational view, showing the removal of the seal from the spout;

Figure 6 is an elevational view with the cap positioned on the spout, the opposite sides of the cap being compressed;

Figure 7 is a view similar to Figure 6, showing the cap removed from the spout; and

Figure 8 is a plan view taken on the line 8-8 of Figure 6.

Like numerals refer to like parts throughout the several views.

The container spout of this invention comprises a body portion 10, having a skirt 11 which may be of any well-known form, the body portion 10 being preferably tapered from the skirt 11 toward the top of the spout. The body portion 10 may be in the form of an elongated neck of a container, formed integrally with the top thereof, if so desired.

While the spout may be of any desired compressible material, it is preferably made of white metal. In the form of the invention shown in Figures 1 through 5, inclusive, the spout need not be of a compressible material, since, as will hereinafter appear, it is not necessary to compress the same.

At the top of the spout is a head 12 formed on said spout by an annular groove 13; the groove 13, in turn, forms a neck 14. The neck 14 is tapered upwardly toward the head 12, the deepest portion of the groove being adjacent the body 10. The body portion 10 adjacent the neck 14 is bevelled, as shown at 15. Screw threads 16 are formed in the body portion 10. The body portion 10 is adapted to receive on the screw threads 16 a cap 17. Extending through the body 10 and into the neck 14 is a passage 10a.

When it is desired to remove the head 13, which head acts as a seal on the passage 10a, it is merely necessary to apply a lateral pressure to the head 12, which will cause the same to become detached from the body portion 10, at the bottom of the neck 14 where the neck is of smallest diameter. (See Fig. 5.)

As shown in Figure 7 of the drawing, the cap

17 has a recess 18 in the top thereof to receive the head 12. The cap is also tapered at 19 so as to fit the bevel 15 on the body portion 10.

The cap, the body portion and the head of the spout, as illustrated in Figures 6, 7 and 8 are of a compressible material. After the cap is placed upon the body portion 10, as shown in Figure 1, the opposite sides thereof adjacent the top may be compressed as, for example, with a machine, pliers, or any other desired means, forming compressed portions 20 and 21 on opposite sides of the cap. The cap is compressed to such an extent that the head 12 within the recess 18 is also compressed on the opposite sides thereof, as shown in section in Figure 7.

When it is desired to use the contents of a container having a spout of this invention, the sides of the cap of which have been compressed after the cap has been placed upon the spout, it is merely necessary to unscrew the cap 17. Unscrewing of the cap will twist the head 12 and the neck 14 thereon from the body portion 10 and remove the same as the cap is removed from the spout, unsealing the passage 10a. The twist action when the cap is unscrewed will give a much cleaner break between the neck and the body portion 10 than would be obtained if the head and neck were merely pulled upwardly from said body portion. A clean break is very essential, since the user, after breaking the seal, will desire to place the cap back on the spout after use. A clean break will allow the cap to be firmly repositioned on the spout by screwing the same down tightly until the taper 19 in the cap 17 firmly engages the taper 15 on the bottom portion.

It is apparent that the specific illustrations shown have been given by way of illustration and not by way of limitation and that the structure above described is subject to a wide variation and modification without departing from the scope or intent of the invention, all of which variations and modifications are to be included within the scope of the present invention.

What is claimed is:

1. A container closure comprising an elongated neck having a body portion screw-threaded to receive a cap thereon, a cap of compressible material adapted to be screwed onto and off of said neck, a head of compressible material formed on said body portion and projecting into said cap, a reduced neck between said body portion and said head formed by an annular groove in said

body, said neck having a passage therein extending through the body portion to the reduced neck thereon, the head and reduced neck acting as a seal for said passage, and compressed portions formed in the opposite sides of said cap and the sides of said head adjacent thereto when said cap is in position on said spout, whereby unscrewing of said cap from said spout causes the head and the reduced neck to be twisted and removed from said body portion.

2. A container closure comprising a spout having a body portion screw-threaded to receive a cap thereon, a cap of compressible material adapted to be screwed onto and off of said spout, a head of compressible material formed on said body portion and projecting into said cap, a neck between said body portion and said head formed by an annular groove in said body said groove being of greatest depth adjacent the body and tapered toward said head, said spout having a passage therein extending through the body portion to the neck thereon the head and neck acting as a seal for said passage, and compressed portions formed in the opposite sides of said cap and the sides of said head adjacent thereto when said cap is in position on said spout, whereby unscrewing of said cap from said spout causes the head and the neck to be twisted and removed from said body portion.

3. A container closure comprising a spout having a body portion screw-threaded to receive a cap thereon, a head of compressible material formed on said body, a neck between said body portion and said head formed by an annular groove in said body said groove being of greatest depth adjacent the body and tapered toward said head, said spout having a passage therein extending through the body portion to the neck thereon the head and neck acting as a seal for said passage, a bevel on said body portion adjacent to and tapered toward said groove, a cap of compressible material adapted to be screwed onto and off of said spout said cap having a taper therein adapted to engage the bevel on said body portion, and a recess therein to receive said head, and compressed portions formed in the opposite sides of said cap and the sides of said head adjacent thereto when said cap is in position on said spout, whereby unscrewing of said cap from said spout causes the head and the neck to be twisted and removed from said body portion.

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