June 13, 1939. W. ELSER 2,162,452

EXTENSIBLE POURING SPOUT

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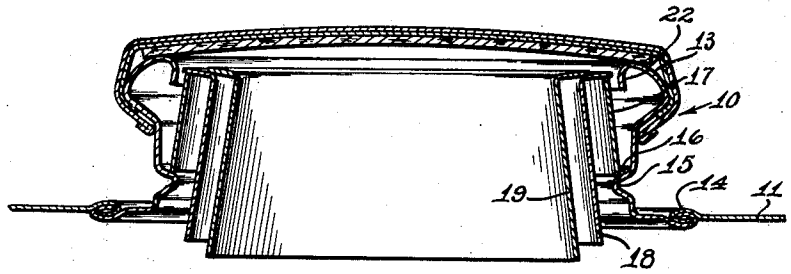


Fig. 1.

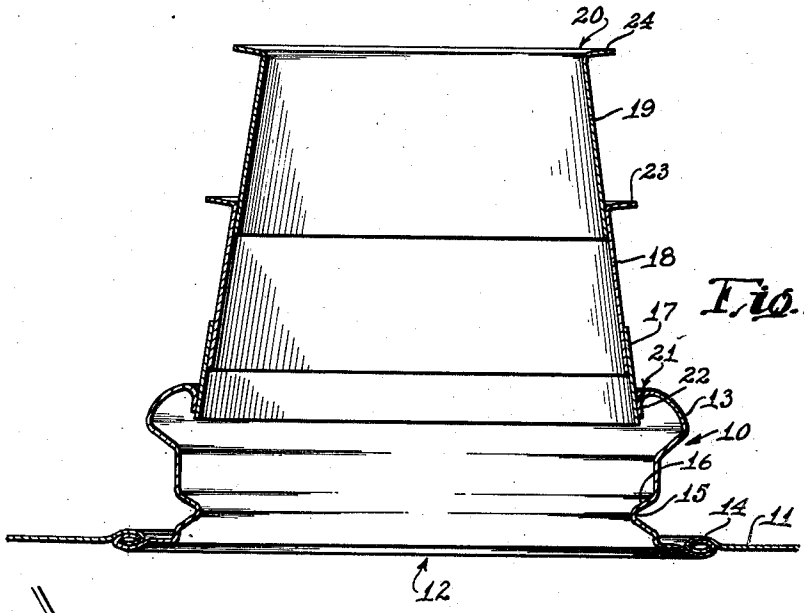


Fig. 2.

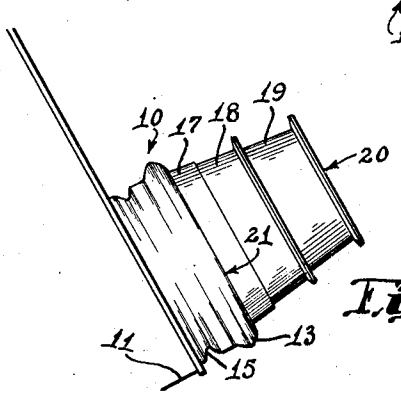


Fig. 3.

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EXTENSIBLE POURING SPOUT

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5 Claims. (Cl. 221—27)

The present invention relates to improvements in metal containers such as pails, cans, drums, etc., adapted to contain liquids such as oil, paint, varnish and the like and having at the top thereof or at the side a spout for facilitating pouring of the liquid from the container without spilling.

More specifically, the invention relates to an extensible pouring spout for such containers which may be projected a considerable distance from the container proper when liquid is to be poured therefrom and which may be retracted when not in use.

It is an object of the invention to provide an extensible pouring spout which, when retracted, will not project into the body of liquid in the container.

A still further object of the invention is to provide an extensible-collapsible sectional pouring spout having novel means for supporting the sections thereof in nested relationship.

Yet another object of the invention is to provide such a pouring spout together with novel means for supporting the extended sections thereof on the container body in such a manner that a full unrestricted neck opening is afforded.

Other objects of the invention, not at this time enumerated, will become apparent as the following description ensues.

In the accompanying drawing:

Fig. 1 is a longitudinal sectional view of the pouring spout as applied to a container wall and showing the spout collapsed with the dust cover applied thereto;

Fig. 2 is a sectional view similar to Fig. 1 but showing the dust cover removed and the spout extended for use; and

Fig. 3 is a fragmentary side elevational view of the extended pouring spout applied to a container and showing the manner in which the liquid is decanted from the container through the spout.

The spout unit 10 is applied to a container 11 and surrounds the discharge opening 12 thereof. The unit 10 includes a ring member 13 which is secured to the container 11 by means of an interlocking seam 14 surrounding the opening 12.

The ring member 13 is formed with a restriction 15 providing an internal ledge or seat 16 the purpose of which will appear presently.

The spout proper is comprised of a plurality of tubular sections of which the ring member 13 may be considered one section. These sections, exclusive of the ring member 13, include an outer section 17, a medial section 18 and an inner section 19. The sections 17, 18 and 19 are tapered and are of progressively smaller diameters so that one may nest within the other in such a manner that they may be extended one from the other to an appreciable although limited extent. When so extended as shown in Fig. 2, the joints between the sections will be liquid tight while the inner section 19 will have its outer pouring rim 20 well advanced beyond the rim 21 of the ring member 13. In keeping with this latter arrangement, the upper portion of the ring member 13 is turned inwardly and downwardly as at 22 and the inturned portion is of a mean diameter slightly less than the maximum diameter of the outer section 17 of the spout. Thus, when the spout sections 17, 18 and 19 are extended, the inturned portion 22 engages the outer section 17 and forms a liquid seal therewith while at the same time limiting the outward movement thereof.

The medial section 18 of the spout is provided with a lateral flange 23 at the upper edge thereof which is large enough to overlie the upper edge of the outer section 17 and rest upon the same when the sections are collapsed as shown in Fig. 1. A full lip 24 is provided around the outer edge of the inner section 19 to facilitate pouring of liquid from the spout without spilling or running backward along the sides of the latter when the container is erected after decanting. This latter lip is large enough to overlie a portion of the flange 23 and rest thereupon when the sections are collapsed. In the extended position of the spout the flange 23 underlies and is concentric with the lip 24 and any drops of liquid falling from the former are caught on the latter and, when the sections are collapsed, such spillage will automatically be returned to the container.

The lower edge of the outer section 17 is adapted to seat upon the ledge or seat 16 when the sections are collapsed and thus all of the sections are supported indirectly upon this ledge when not in use. The height of the ring 13 above the ledge 16 is slightly greater than the height of the outer section 17 and thus, when the sections are collapsed the upper edges thereof will be contained wholly within the ring 13.

The ring 13 is provided with an annular enlargement 25 near the rim thereof over which a dust cover or cap 26, which is preferably of the snap-on type, may be placed and snapped into sealing engagement therewith to close the opening 12 and conceal the sections 17, 18 and 19 of the pouring spout.

Various changes in the details of construction

may be resorted to without departing from the spirit of the invention. For example, while there have been disclosed three spout sections, exclusive of the ring 13 which may be considered a section, it is obvious that a greater or lesser number of such sections may be employed. Only insofar as the invention has particularly been pointed out in the appended claims is the same to be limited.

I claim:

1. A pouring unit for a container having a discharge opening therein, comprising an extensible multi-sectioned spout having a fixed section extending from and secured to the container and surrounding the opening, said fixed section being provided with an annular restriction medially of its ends providing an internal annular seat, one or more movable sections telescopically nested within the fixed section and extensible therefrom, and means providing sealing engagement between the upper portion of the fixed section and the lower portion of the movable section next adjacent the former when the latter is extended therefrom, the lower edge of the specified movable section being adapted to seat upon said internal seat when the spout is collapsed.

2. A pouring unit for a container having a discharge opening therein, comprising an extensible multi-sectioned spout having a fixed section extending from and secured to the container and surrounding the opening, said fixed section being provided with an annular restriction medially of its ends providing an internal annular seat, a plurality of telescopically disposed movable sections nested within the fixed section and extensible therefrom and from each other, the cross-sectional area of the movable sections when extended being of gradually increasing proportions whereby the wall of each section exclusive of the innermost nested one will provide a guide for smoothly directing the contents of the container to the next adjacent section, and means providing sealing engagement between the upper portion of the fixed section and the outermost movable section, the lower edge of said outermost movable section being adapted to seat upon the internal annular seat when the spout is collapsed.

3. A pouring unit for a container having a discharge opening therein, comprising an extensible multi-sectioned spout having a fixed section extending from and secured to the container and surrounding the opening, said fixed section being provided with an annular restriction medially of its ends providing an internal annular seat, a plurality of telescopically disposed movable sections nested within the fixed sections and extensible therefrom and from each other, the cross-sectional area of the movable sections when extended being of gradually increasing proportions whereby the wall of each section exclusive of the innermost nested one will provide a guide for smoothly directing the contents of the container to the next adjacent section, means providing sealing engagement between the upper portion of the fixed section and the outermost movable section, the lower edge of the outermost movable section being adapted to seat upon the internal annular seat when the spout is collapsed, and means formed on the upper rim of each inner movable section adapted to rest upon the rim of the next adjacent outer section when the spout is collapsed.

4. A pouring unit for a container having a discharge opening therein, comprising an extensible multi-sectioned spout having a fixed section extending from and secured to the container and surrounding the opening, said fixed section being provided with an annular restriction medially of its ends providing an internal annular seat, a plurality of telescopically disposed movable sections nested within the fixed sections and extensible therefrom and from each other, the cross-sectional area of the movable sections when extended being of gradually increasing proportions whereby the wall of each section exclusive of the innermost nested one will provide a guide for smoothly directing the contents of the container to the next adjacent section, means providing sealing engagement between the upper portion of the fixed section and the outermost movable section, the lower edge of the outermost movable section being adapted to seat upon the internal annular seat when the spout is collapsed, and an outwardly extending annular flange formed on the upper rim of each inner movable section adapted to rest upon the upper rim of the next adjacent section when the spout is collapsed.

5. A pouring unit for a container having a discharge opening therein, comprising an extensible multi-sectioned spout having a fixed section extending from and secured to the container and surrounding the opening, said fixed section being provided with an annular restriction medially of its ends providing an internal annular seat, a plurality of telescopically disposed movable sections nested within the fixed sections and extensible therefrom and from each other, the cross-sectional area of the movable sections when extended being of gradually increasing proportions whereby the wall of each section exclusive of the innermost nested one will provide a guide for smoothly directing the contents of the container to the next adjacent section, means providing sealing engagement between the upper portion of the fixed section and the outermost movable section, the lower edge of the outermost movable section being adapted to seat upon the internal annular seat when the spout is collapsed, and an outwardly extending annular flange formed on the upper rim of each inner movable section and partially overlying and resting upon the flange of the next adjacent outer section when the spout is collapsed, all of said movable sections being wholly contained within the confines of the fixed section when the spout is collapsed.

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