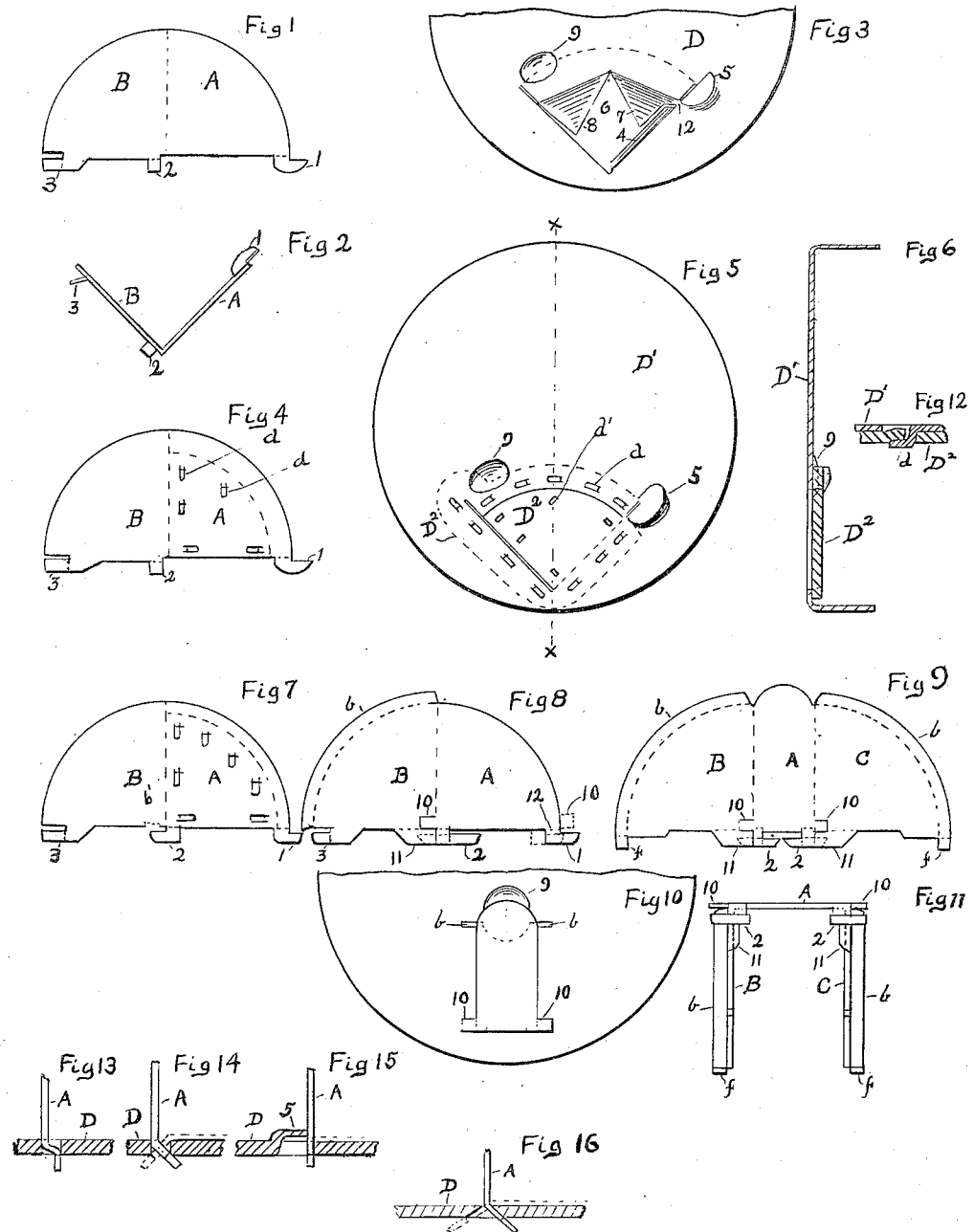


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CONTAINER SPOUT.
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WITNESSES:

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CONTAINER-SPOUT.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANCIS C. OSBORN, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Container-Spout, of which the following is a specification.

This invention relates to pouring spouts for containers and more especially to spouts of containers of powdered or granular substances such as baking powder, salt, coffee, etc., and which it is desirable to collapse in order to close the containers to keep the substances from exposure, and which, when closed, are practically flush with the surface of the container in order that the packages may be closely packed together for shipment or storage. Its objects are, to furnish an improved form of spout which is held in place by an improved form of hinge, to provide means whereby the opening for the spout is more completely sealed, and such other improvements as are set forth in the claims.

The nature of the invention will be more fully understood from the following description and accompanying drawings, in the latter of which: Figure 1 is a plan view of a blank before being formed. Fig. 2 is an end view looking at the lower edge of the same blank after forming. Fig. 3 shows a container cover ready for the insertion of the spout. Fig. 4 shows a blank the same as in Fig. 1 with points struck up for fastening a fiber sealing piece thereto. Fig. 5 shows a metal container cover ready for the insertion of spout shown in Fig. 4, with fiber lining around the openings for sealing same. Fig. 6 is a section of Fig. 5 on line X—X. Figs. 7, 8 and 9 are modifications of the spout. Fig. 10 shows the form of spout shown in Fig. 9 in place in a cover. Fig. 11 is an end view of Fig. 9, looking at the lower edge thereof after the blank is formed and in place. Fig. 12 is an enlarged section of one of the points *d* bent up to hold the fiber lining. Figs. 13, 14, 15, 16 show various forms of bending the hinge portion 1.

Similar reference characters refer to like parts throughout the several views.

In the embodiment of my invention shown in Figs. 1 to 3 inclusive, I form a spout from a single piece of sheet metal, preferably, although other material may be used, approximately semi-circular in contour, of

which the portion A forms the top or closure when in place in closed position and one of the sides of the spout when open, and the part B constitutes a wing or guide for holding the spout in position when closed and the other side of the spout when open. The projections 1, 2 and 3 are integral with A and B and are formed from extensions of the rear or hinge, and 1 and 2, when bent into the positions shown in Fig. 2, form hinge parts which in coöperation with the projecting part 4 of the container constitute a complete hinge for the spout. The projection 3 is bent outwardly as shown in Fig. 2 after the spout is in place and forms a stop against further opening of the spout. The projection 1 may be bent as shown in Figs. 13, 14 and 16, or may be used unbent as shown in Fig. 15. In the latter case the wall of the container is formed as shown in Figs. 3 and 15 at 5. Fig. 3 shows a container cover, preferably of paper fiber, top side up ready for the insertion of the spout shown in Fig. 2. The lugs or projections 2 and 3 are bent to the angle shown in Fig. 2 after the spout is inserted in the cover. The projecting portion of the cover 4, furnishes a supporting shoulder which coöperates with lugs 1 and 2 to form the hinge. This shoulder may be bent downward slightly. The edge of the part A between lugs 1 and 2 is in the axis upon which the spout revolves. The opening 6 in the cover is constricted by the bent-down portions 7 and 8. These serve to prevent too much material from coming out at one time but by being bent downward and being resilient they permit any excess of material not falling back into the container through the clear opening when the spout is being closed to be pressed below the surface thus not interfering with the complete closing of the spout or being spread over the cover. This is very likely to happen when the container is quite full as the material is shifted and piled up on the spout side of the container as it is held in pouring position and does not fall back into place unless sharply shaken to make it do so.

The depression 9 is for facilitating the opening of the spout by enabling a finger nail to be inserted under the edge of the spout.

It is exceedingly difficult, if not impossible, to insert a metal spout in a metal con-

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tainer, by the ordinary method, so as to prevent air circulation and hence deterioration of the contents of the container. In order to overcome this difficulty I provide a fibrous lining or packing to the metal container around the opening for the spout, and in Figs. 4, 5, 6, 7 and 12 is shown one method of arranging and applying this packing to the container and the spout. The points or tongues *d* are struck down in the metal as shown, and the fibrous packing, outlined by the dotted lines in Figs. 4 and 5, is secured to the container as shown in Fig. 5 in the manner shown in Fig. 12 by bending the tongue forward under the opening from which it is struck to prevent any opening around the tongue. The blank shown in Fig. 4 is now put in place after being bent at right angles on the vertical dotted lines and the tongues *d* pressed into the openings *d'* and clenched as shown in Fig. 12. The portion of the packing fastened to the spout is preferably integral with the rest of it and may be used as a hinge for the spout and the lugs 1 and 2 and the part 4 may be dispensed with, but I prefer to use in addition the hinge lugs 1 and 2 as shown. The fibrous packing lining thus serves to furnish a close fitting joint at all parts of the opening in the metal cover when the spout is closed. It will be noted that the fibrous packing is shown in one piece, and by proper change in form may be adapted for use with many forms of spouts differing from the one here shown.

Fig. 7 illustrates a spout similar to Fig. 4 but with the hinge lug 2 attached to the top part A of the spout instead of to the wing B. This lug, when bent at right angles downward on the dotted line so as to be flush with the lower edge of the part A serves the same purpose as the corresponding part in Figs. 1 and 2. The side extension of this lug may be let into the edge of wing B as shown at *b'*.

Fig. 8 shows a blank of a single angle spout of triangular form similar to those already described, but adapted to be used in a container opening like that of Fig. 3, but without the supporting shoulder 4. This shoulder 4 is objectionable in that it obstructs the opening when pouring and furnishes a place for lodgment of the material thus obstructing the closing of the spout, and is liable to be bent downward too much or broken off. The construction shown (Fig. 8) provides a lug 10 struck out of the wing B which rests upon the surface of the container as shown in Fig. 10. The other side of the hinge edge portion may be supported by the uncut portion of the container shown at 12, Fig. 3, or may be provided with a similar lug 10 as shown in dotted lines Fig. 8. The lug 10 taken from wing B leaves an opening in that part which it is

necessary to close and the extension 11 of wing B is used for this purpose by folding it downwardly and up against wing B. Since the part 11 uses up the material employed in Fig. 7 for a portion of lug 2, this lug is formed from an extension of part A and the lateral tongue is folded on itself at the dotted line and thus forms an extension similar to the lateral extension of this lug in Fig. 7. Another feature of this construction is the flange *b* which is bent upward at right angles to the part B and forms an extended surface for maintaining the spout in its endwise position. The container is cut away as shown at *b*, Fig. 10, to accommodate this flange.

Figs. 9, 10 and 11 show the construction just described applied to a double angle spout having the wings B and C and a rectangular top A. The similarity is obvious and the drawing will be readily understood by reference to the description given of Fig. 8 without further description. The parts 2 and 10 and the flange 10 in this construction are made in pairs instead of single parts. In this construction the stop 3 is omitted and the turned up ends of the flanges *b* constitute the outward stop as shown at *f*. The opening in the container is indicated by the dotted lines in Fig. 10. It is obvious that the packing-lining shown in connection with the single angle spout is applicable to this double angle spout.

It is obvious that further variations of construction may be employed without departing from the spirit of my invention, and I do not wish to be limited to the constructions shown.

What I claim is:

1. In combination with the top plate of a pivoted container spout, a rearwardly extending tongue integral with the rear edge of the plate and having a laterally extending portion extending laterally beyond said edge and the body of the spout and adapted to coöperate with the inner surface of the container laterally beyond the body of the spout as a hinge pivot.

2. In a pivoted pouring spout for containers consisting of two sides substantially at right angles to each other, a hinge portion formed at the rear end of one of the sides comprising a straight edge portion, a tongue formed from an extension of said edge portion having a lateral extension adapted to engage the inner surface of the container on an extension of the pivotal line beyond the body of the spout, and another hinge portion extending from the rear edge of the other side of the spout bent at right angles thereto and extending in the opposite direction from that of the other hinge portion and under the inner surface of the container on an extension of the pivotal line.

3. In a pivoted pouring spout for contain-

ers a hinge portion formed integral with the rear end of the outer or top portion of the spout said hinge portion having a lateral extension extending beyond the body of the
5 spout at one side and adapted to engage with the inner surface of the container on a line which is an extension of the pivotal line of the spout, and a second hinge portion extending from the rear edge of a side portion
10 of the spout and bent at right angles thereto laterally away from the body of the spout and adapted to engage the inner surface of the container on a line which is the extension of the pivotal line of the spout.
15 4. In a container, in combination with the wall of the container having an opening therein with a portion of said wall extending into said opening, a pivoted pouring spout having rearwardly extending tongues
20 integral with the rear end of the spout, one of said tongues extending from the rear edge of the outer or top plate of said spout and having a portion thereof extending laterally beyond the body of said spout and adapted
25 to engage the inner surface of the container on the pivotal line of the spout laterally beyond the body of the spout, the other of said tongues extending from the rear edge of a side of said spout and bent at right an-
30 gles thereto and adapted to engage the inner

edge of the container on the pivotal line laterally away from the body of said spout, and said rear edge of said top plate adapted to rest upon the outer surface of said wall extending into said opening. 35

5. In a container, in combination with the wall of the container having an opening therein with a portion of said wall extending into said opening, a V-shaped spout having sides substantially at right angles to
40 each other and rearwardly extending tongues integral with the rear end of the spout, one of said tongues extending from the rear edge of the outer or top plate of said spout and having a portion thereof ex-
45 tending laterally beyond the body of said spout and adapted to engage the inner surface of the container on the pivotal line of the spout laterally beyond the body of the spout, the other of said tongues extending
50 from the rear edge of a side of said spout and bent at right angles thereto and adapted to engage the inner edge of the container on the pivotal line laterally away from the body of said spout, and said rear edge of
55 said top plate adapted to rest upon the outer surface of said wall extending into said opening.

FRANCIS C. OSBORN.