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POURING SPOUT CONTAINER

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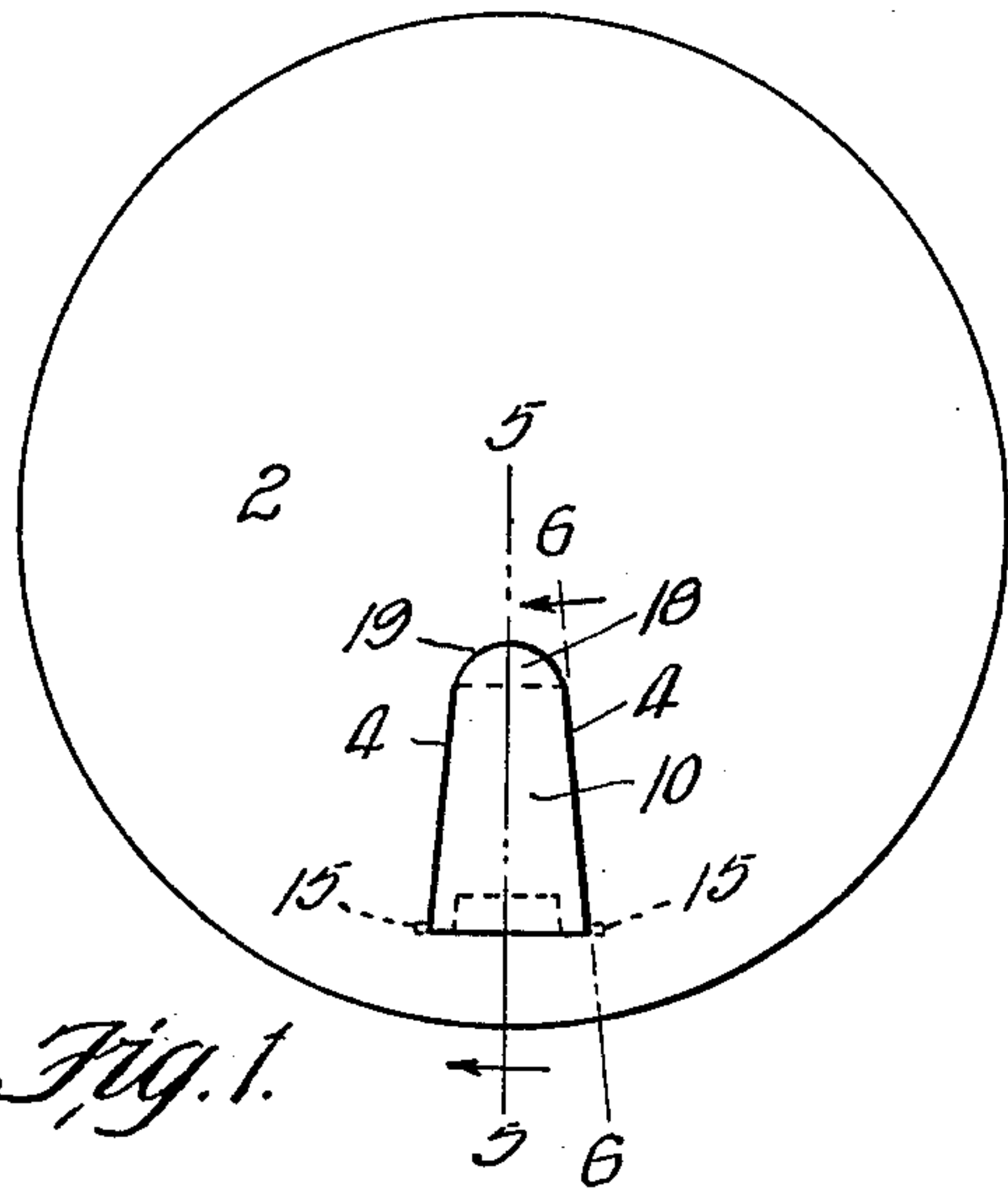


Fig. 1.

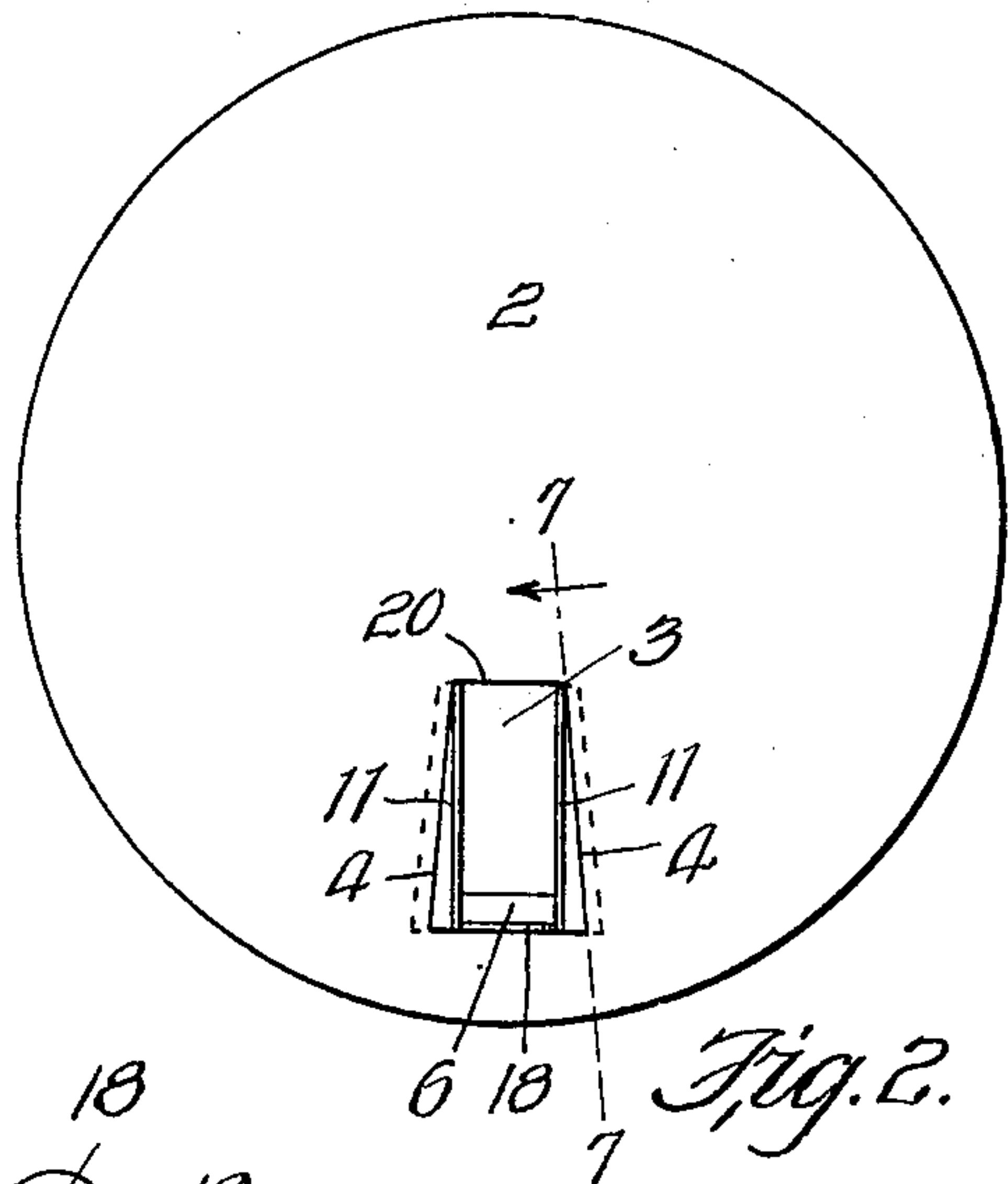


Fig. 2.

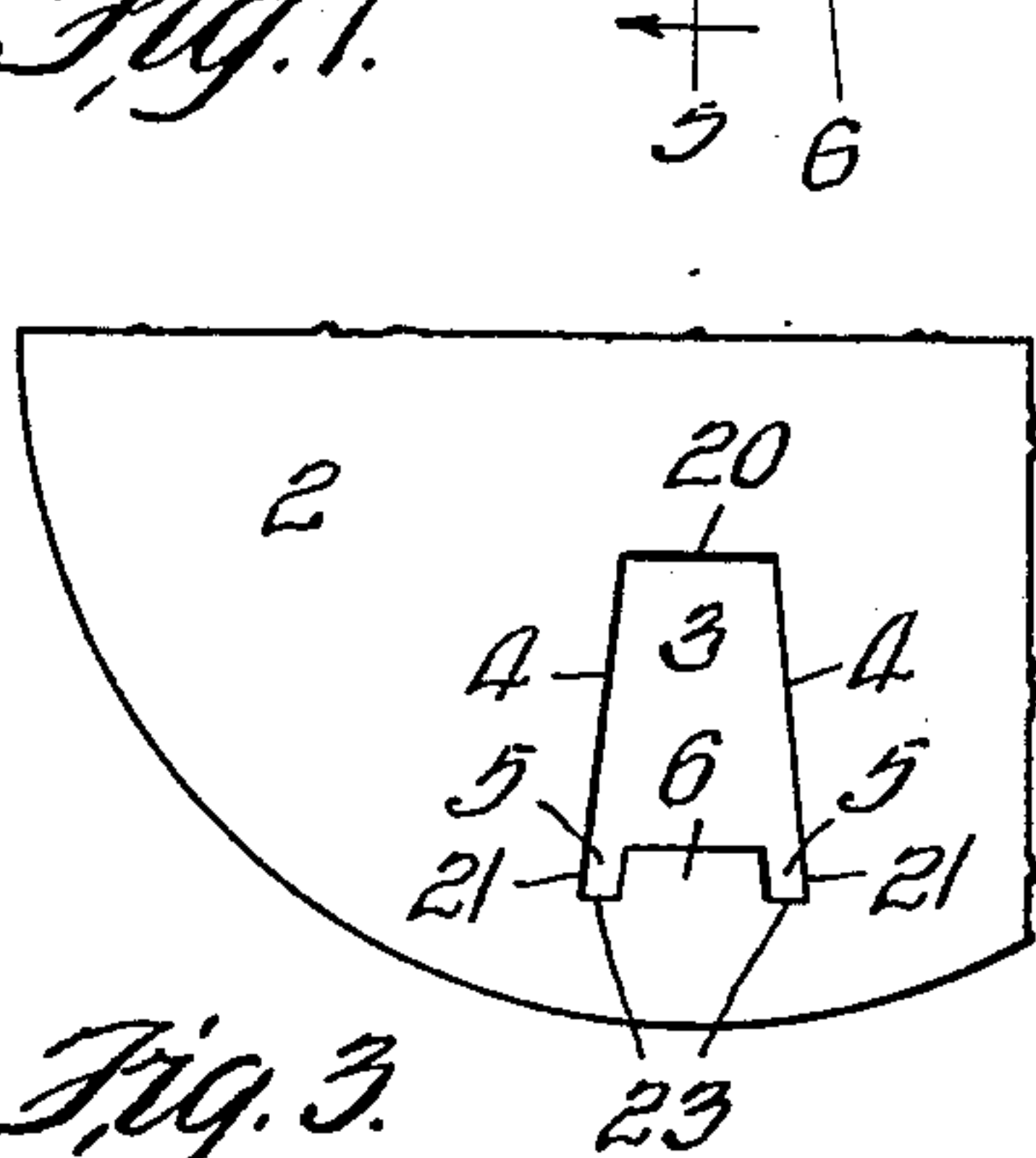


Fig. 3.

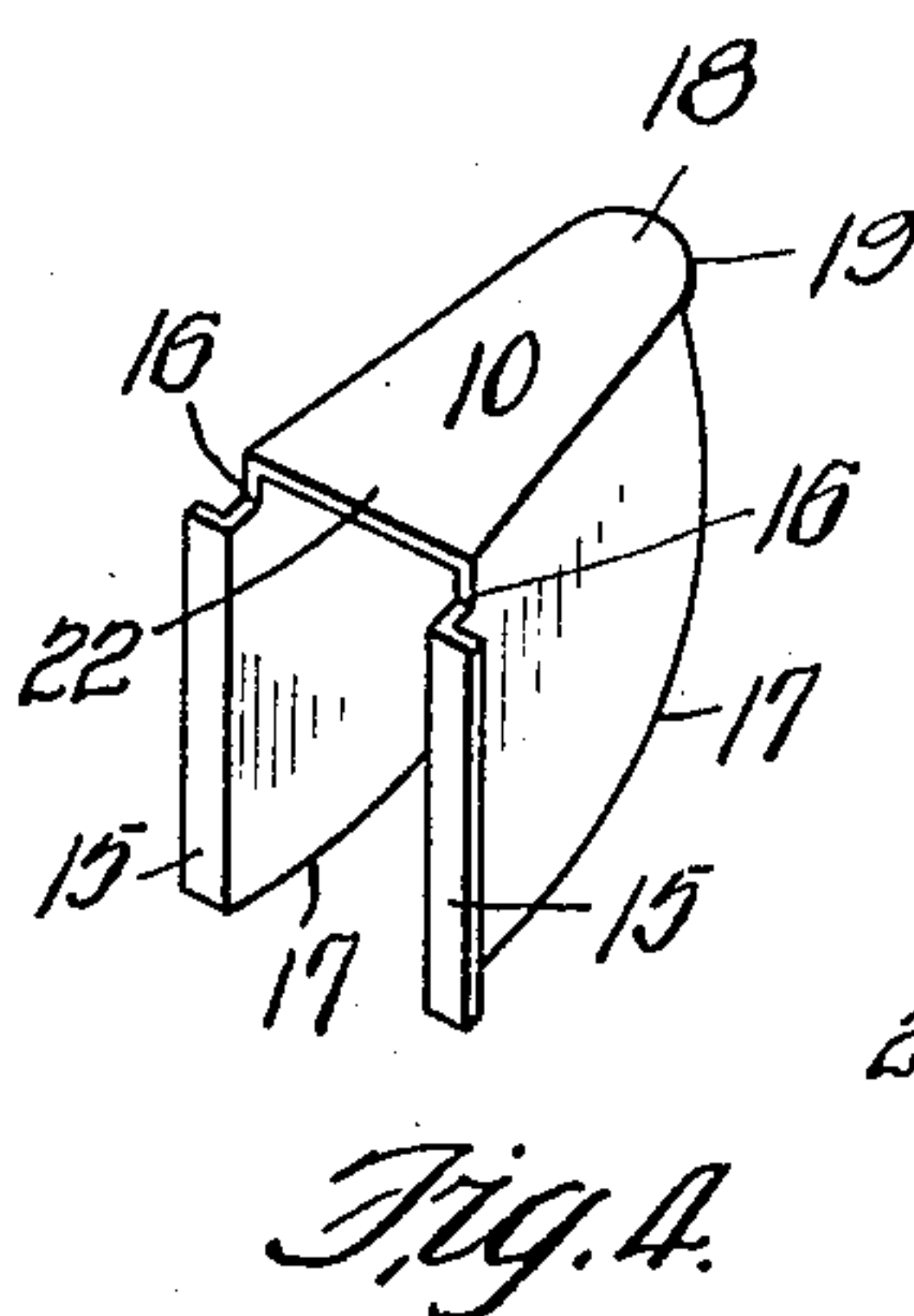


Fig. 4.

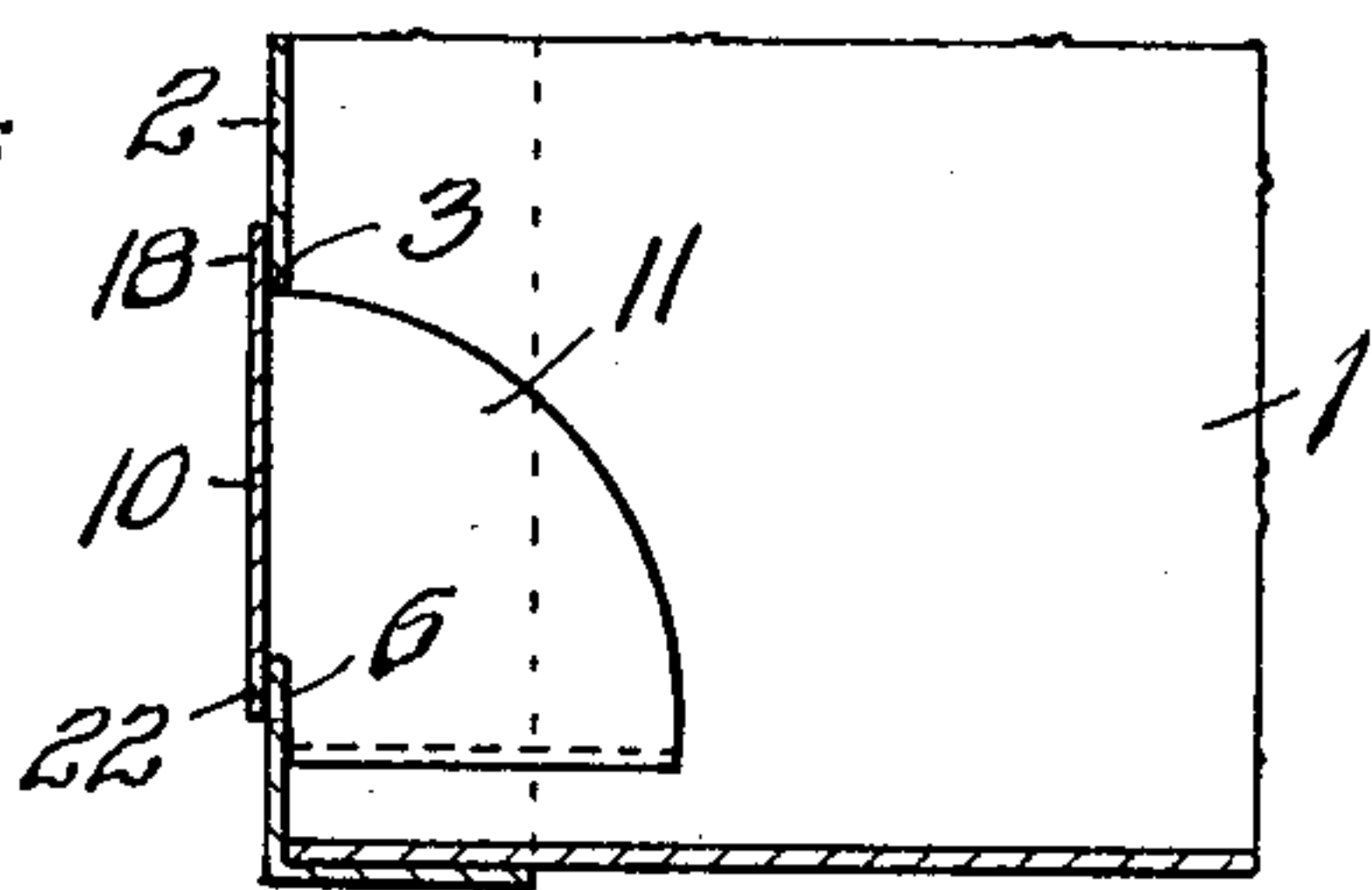


Fig. 5.

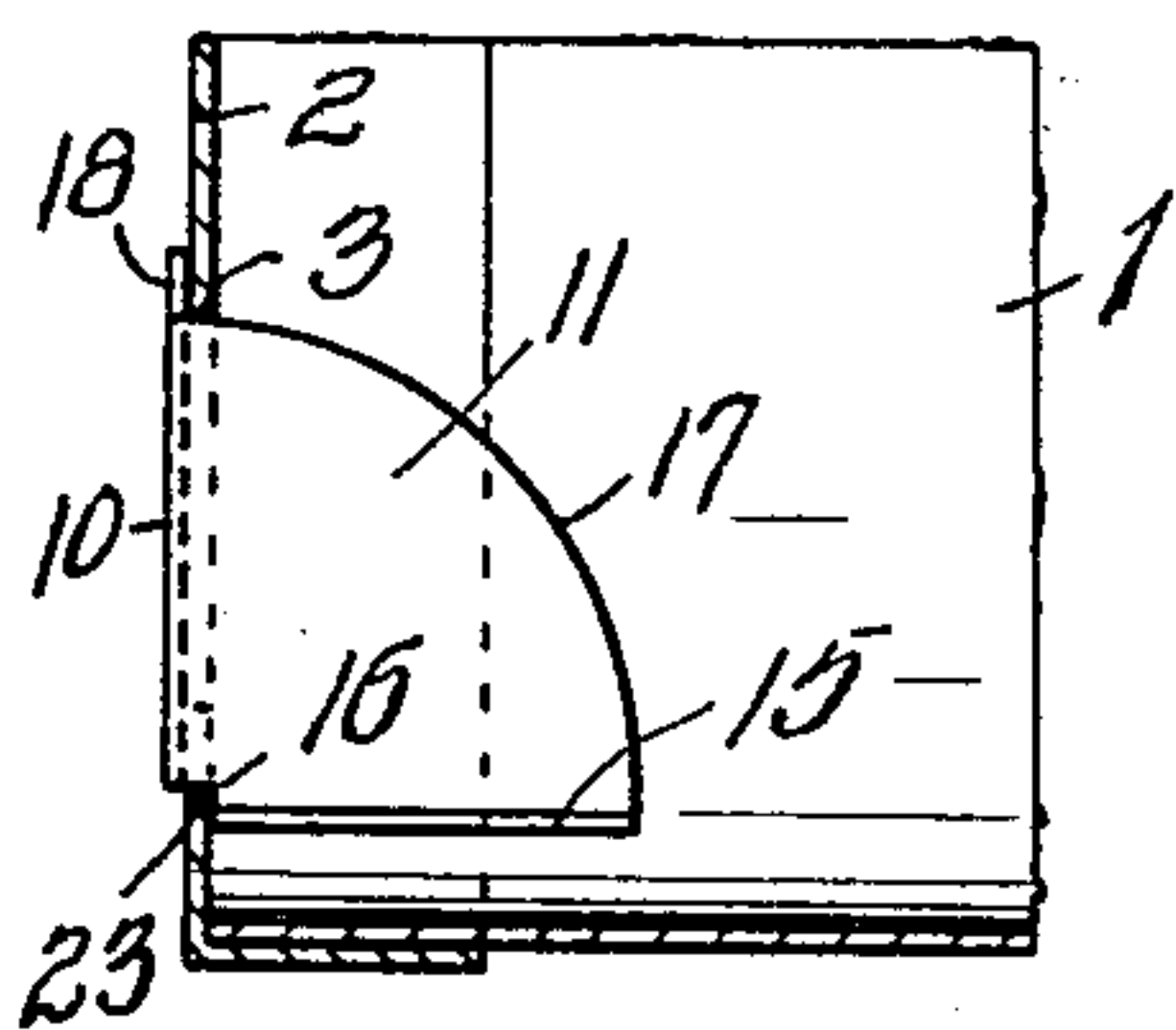


Fig. 6.

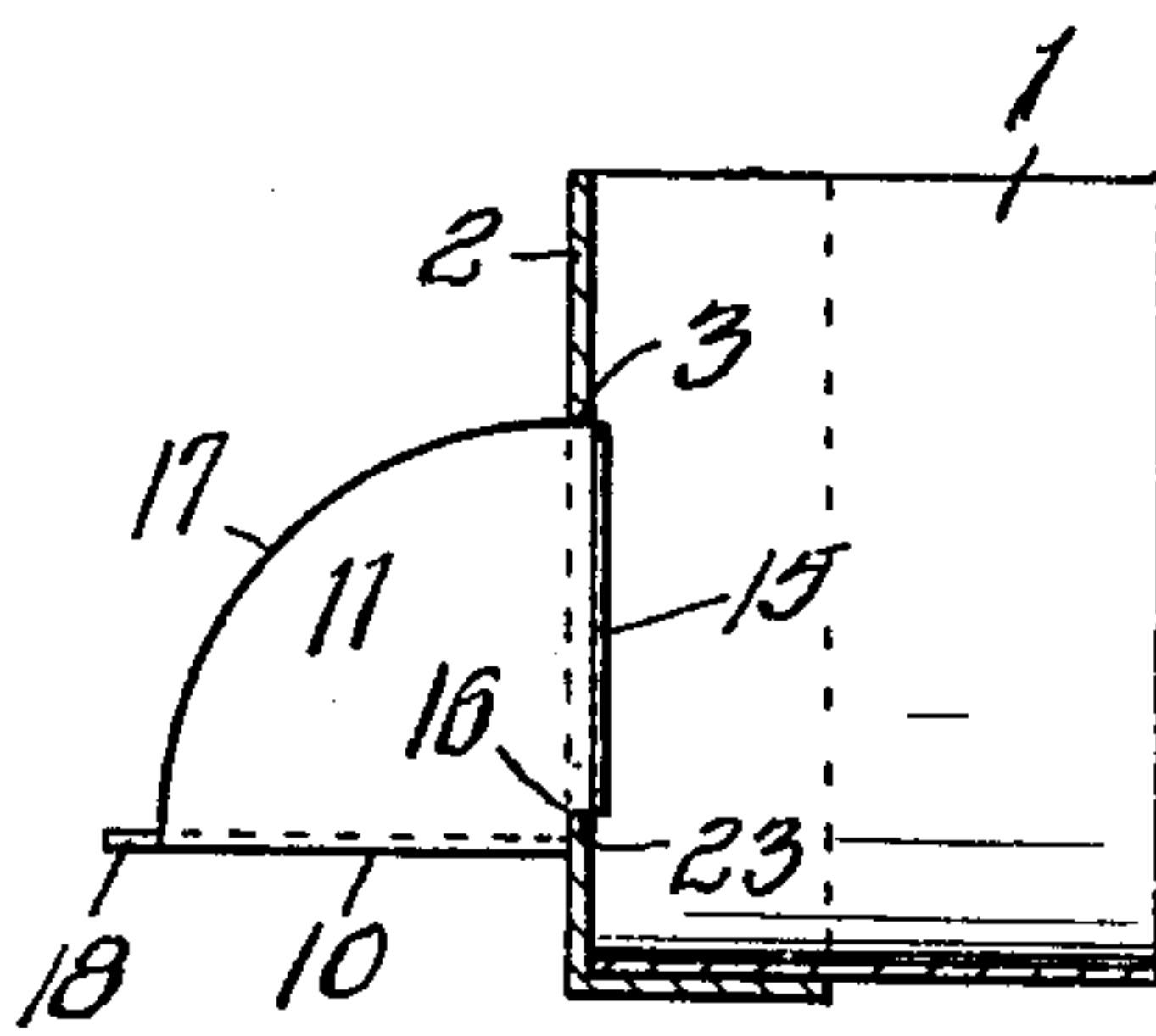


Fig. 7.

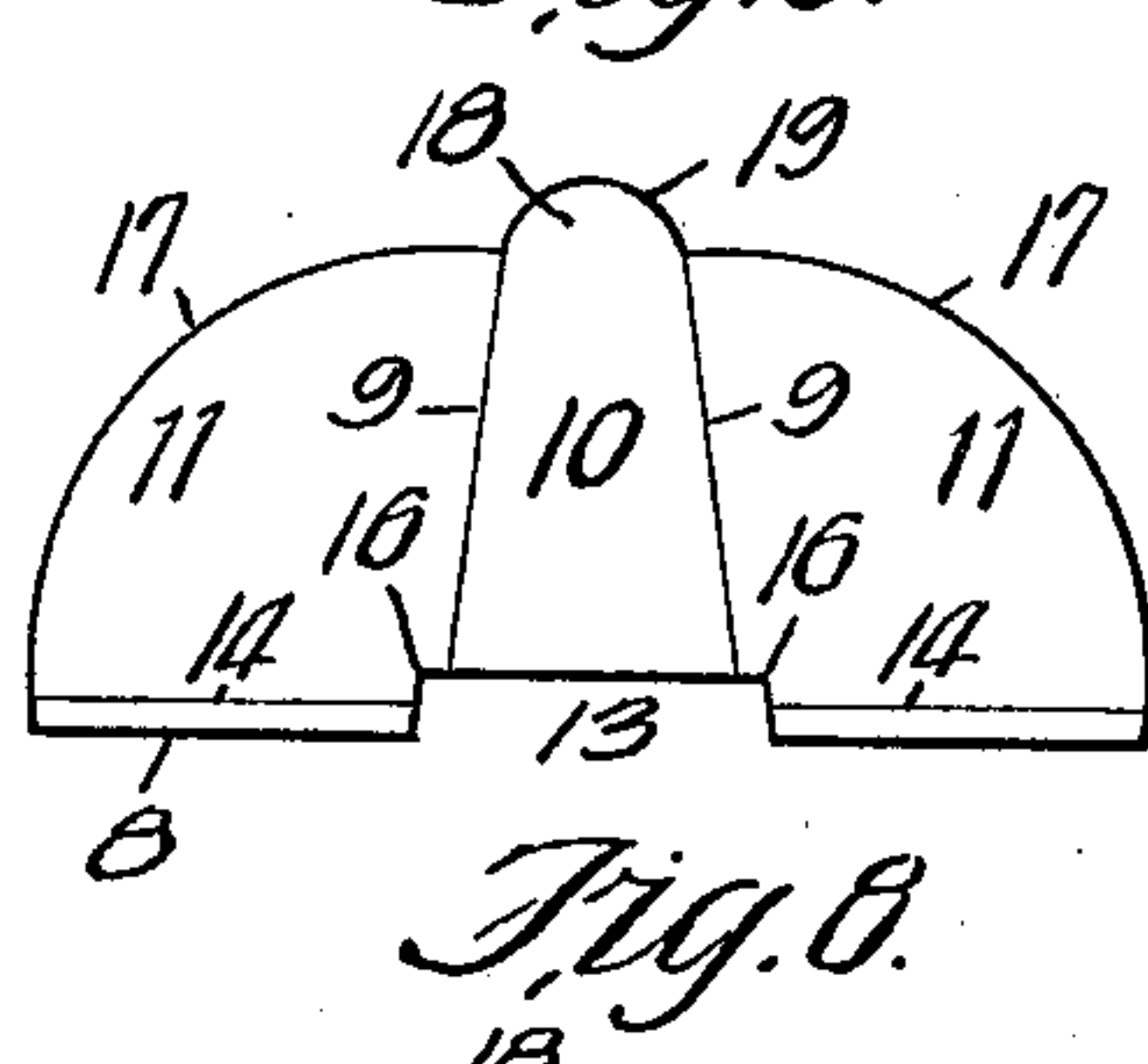


Fig. 8.

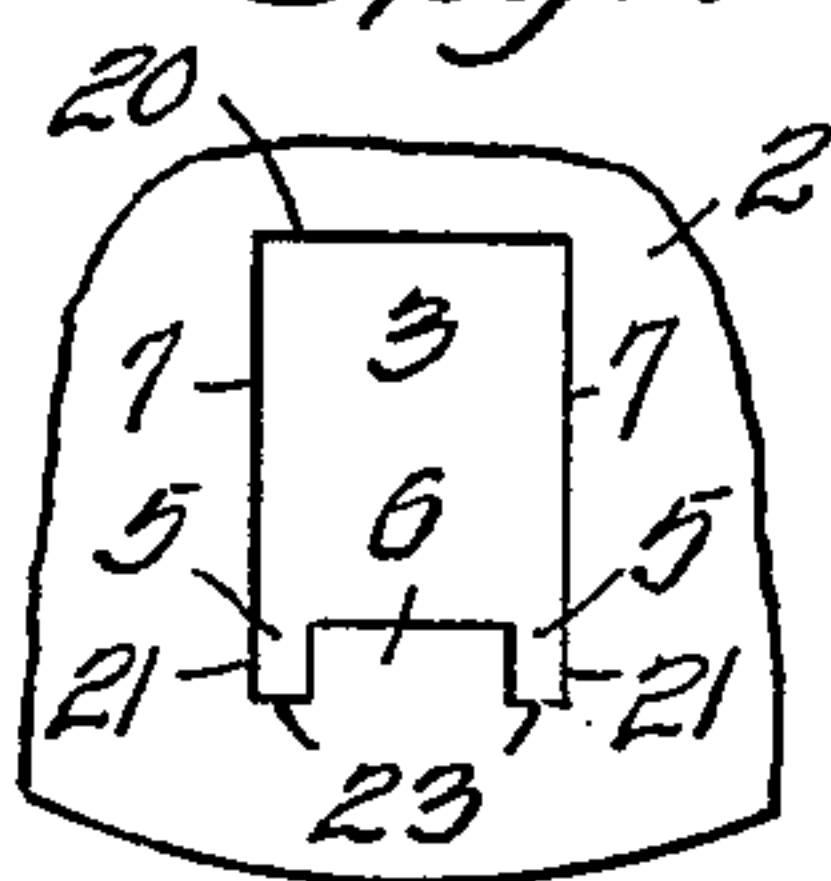


Fig. 9.

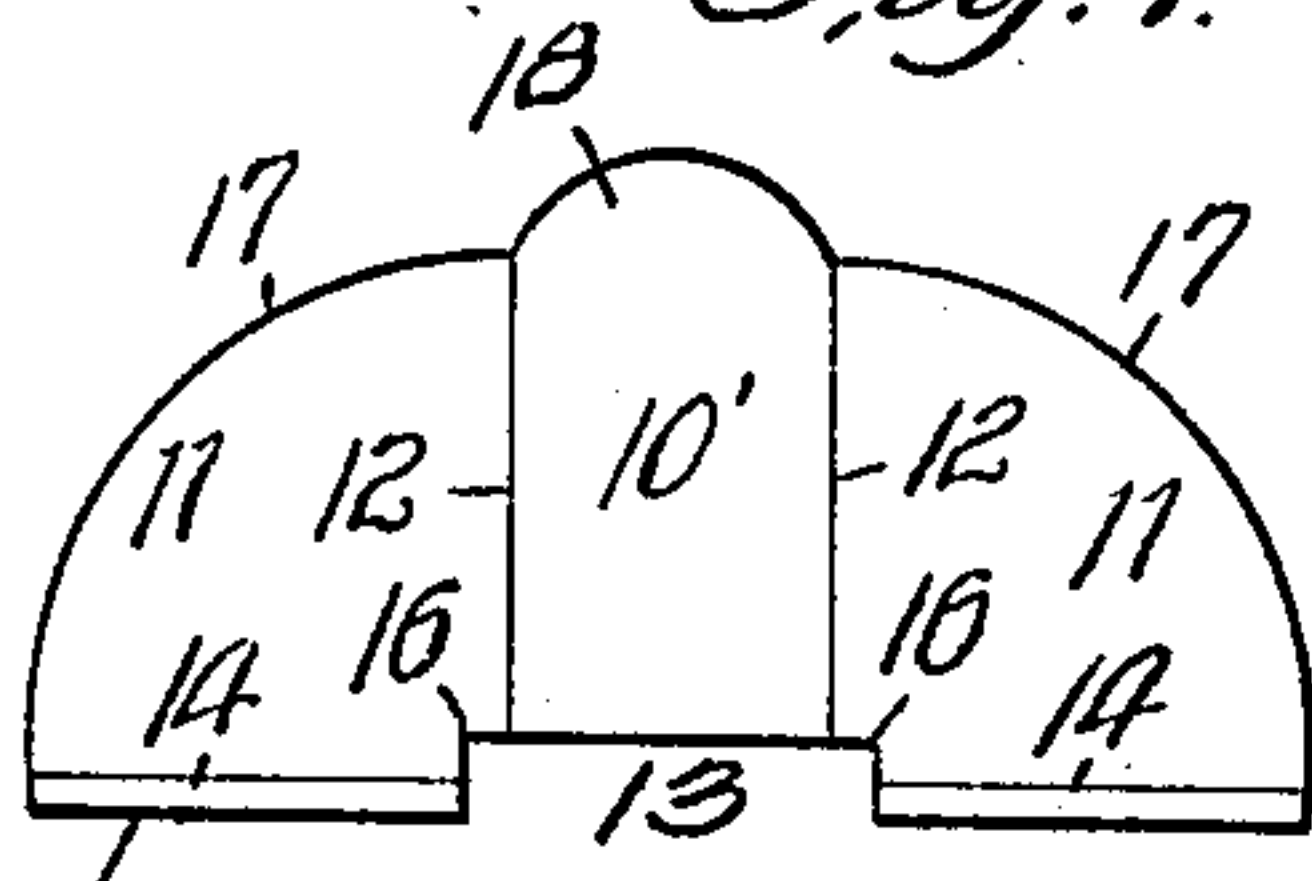


Fig. 10.

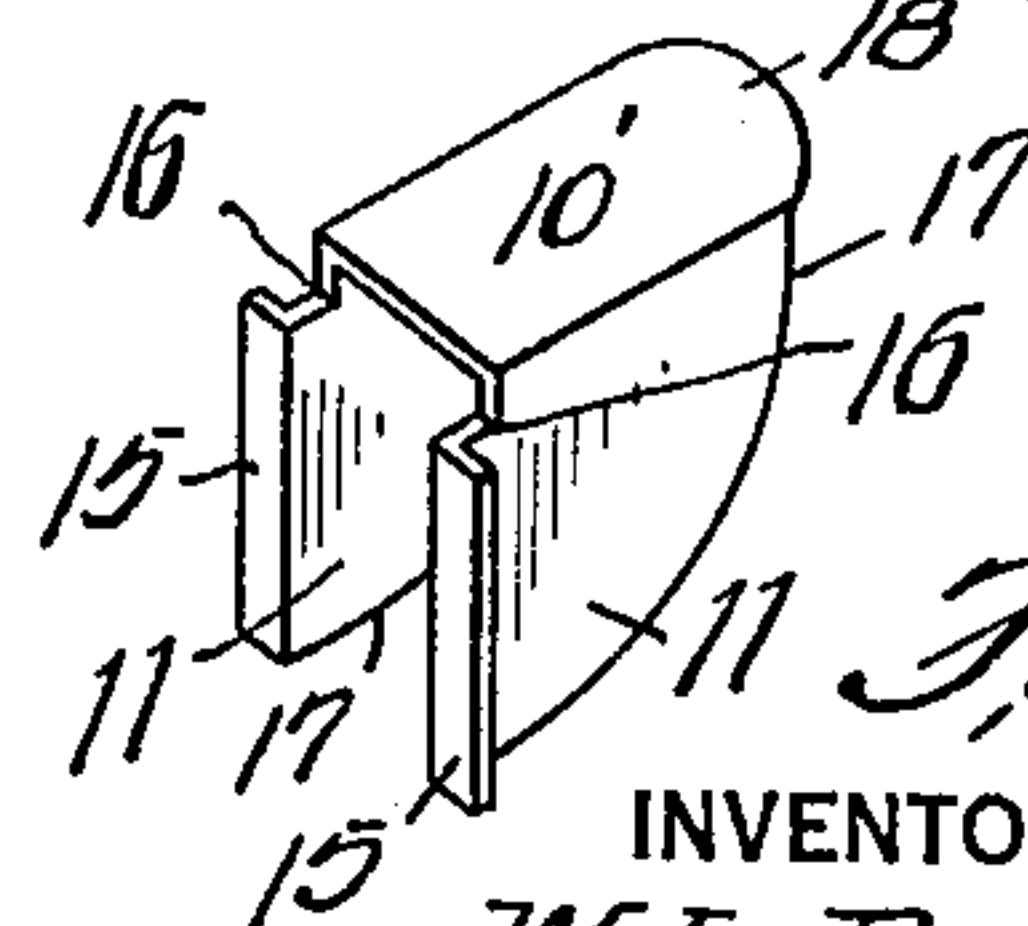


Fig. 11.

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## UNITED STATES PATENT OFFICE

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## POURING SPOUT CONTAINER

Application filed October 1, 1931. Serial No. 566,349.

My invention relates to pouring spout containers, and, more especially to metallic spouts adapted to be carried by the covers of containers containing merchandise, such for instance as salt, although not necessarily limited thereto, and, it is a distinct and practical improvement to overcome certain practical objections to, and defects in, the present types of pouring spouts for containers.

10 An essential object of the invention is the provision of a manually actuated pouring spout which can be readily applied to the cover of a container from the outside after the container has been filled with its contents  
15 by merely pushing it into position through an opening in the cover, thereby permitting the spouts to be shipped from the factory to the purchaser thereof unattached to the container.

20 A further object of the invention is to provide the upper rear corners of the spout with right angular shoulders adapted for engagement with the cover at one end of the filling and pouring opening therein to provide a  
25 hinge line for the spout to swing upon.

A still further object of the invention is the provision of a pouring spout container which possesses advantages in points of simplicity and efficiency, and, at the same time proves  
30 itself comparatively inexpensive in cost of manufacture.

With the above and other objects in view, the invention consists in the novel features of construction, arrangement and combination of parts hereinafter more fully described and finally pointed out in the claims hereto  
35 appended.

Referring to the accompanying drawing forming a part of this specification, wherein  
40 like characters of reference denote similar parts throughout the several views:

Fig. 1 is an outside plan view of the cover of a container showing my spout applied thereto and illustrated in closed position.

45 Fig. 2 is a view similar to Fig. 1, showing the spout in open position.

Fig. 3 is an elevation of part of a container cover showing the outline of the filling and pouring opening.

50 Fig. 4 is a view in perspective of the spout.

Fig. 5 is a partial longitudinal sectional view taken on line 5—5 of Fig. 1.

Fig. 6 is a partial longitudinal sectional view taken on line 6—6 of Fig. 1.

Fig. 7 is a partial longitudinal sectional  
55 view taken on line 7—7 of Fig. 2.

Fig. 8 is a plan view of the blank from which the spout is formed.

Fig. 9 is an elevation of part of a container cover showing the outline of the filling and  
60 pouring opening to receive the modified form of pouring spout.

Fig. 10 is a plan view of the blank from which a modified form of spout is formed.

Fig. 11 is a view in perspective of the modified form of spout.  
65

Referring to the drawing, the container consists of a tubular, preferably paper body 1 which is provided with a lid, or cover 2. The cover 2 is provided near its perimeter  
70 with a filling and discharge, or pouring opening 3. The opening 3 as shown in Fig. 2, is preferably of tapered formation to provide the converging side edges 4. The outer or widest edge of the opening is provided at its  
75 corners with the slits, or recesses 5 to provide a supporting ledge 6 for one end of the spout, hereinafter described, and to permit of the spout being applied to the cover for closing the opening 3 from the outside after the con-  
80 tainer 1 has been filled with the desired merchandise, such for instance as salt, or other dry contents which can be poured from the container, or the side edges of opening 3 may be parallel to each other, as designated by  
85 the reference numerals 7 in the modification shown in Fig. 9.

The pouring spout proper is formed from a metallic blank 8 preferably of a rust proof material, such for instance as sheet alumi-  
90 num, and it has the general outlines as shown in Fig. 8 and which is scored on the light converging lines 9, thus dividing the blank into central top or closure portion 10 and two side wing portions 11, the latter forming  
95 the side walls of the pouring spout. The tapered central or closure portion 10 formed from the blank shown in Fig. 8 corresponds in size and shape to the tapered filling and pouring opening 3, as clearly shown in Fig. 100



1, or if desired the side wings 11 may be bent on the parallel score lines 12, as shown in the modification shown in Fig. 10 so that the central portion 10' of the spout when formed  
 5 will correspond in size and shape to the opening 3 as shown in Fig. 9 which is provided with the parallel side edges 7.

The central portion 10 of the spout shown in Fig. 4, or the central portion 10' as shown in Fig. 11, act, in either case, as a closure for the filling and pouring opening in the cover when the spout is applied to the cover 2. The rear or wide edge of the spout blank is cut away as at 13, which cutaway portion extends beyond the score lines 9 of the blank shown in Fig. 8, as well as the score lines 12, as shown in Fig. 10, a distance substantially equal to the thickness of the material of the paper cover 2.

The depth of the cutaway portion, or recess 13 is substantially equal to the gauge of the spout material plus the thickness of the gauge of the material of the cover 2. The wing portions 11 of either blank are also scored on the light lines 14 and along these lines the entire rear edge portions of the wing portions 11 are adapted to be bent outwardly at right angles to the wing portions 11 to provide flanged stops 15. When the wing portions 11 have been bent downwardly on the score lines 9 of blank shown in Fig. 8, or on the score lines 12 of blank shown in Fig. 10, they assume positions substantially at right angles to the center or closure portion of the spout, as clearly shown in Figs. 4 and 11, thus the rear flanged edges 15 of the spout assume substantially parallel relation. When the blank has been bent or formed into position to form the spout ready to be applied to the cover 2 from the outside thereof, it will be observed that a right angular shoulder 16 is formed at the upper rear corners of each wing 11 due to the cutout portion 13, as will be apparent from Figs. 4 and 11.

The free edges of the wings are curved, as at 17 and the center portion 10 extends beyond the curved edges of the wings 11 to provide a finger grip 18 having a preferably curved edge 19, although not necessarily so. This curved edge 17 of the wings engages the front edge 20 of the opening 3 in the cover 2 to prevent longitudinal displacement of the spout when swinging the same to open and closed position after it has been positioned upon the cover 2.

To apply the spout proper to the cover 2, the operator grasps the spout with his fingers, in such a manner, that he can apply pressure to the wing portions 11 to press the rear flanged edges 15 thereof toward each other at their lower ends. This tapered relation of the rear flanged edges 15 is only sufficient to cause the flanged rear edges 15 to freely enter the slits 5 in the cover 2 without cutting the outer side walls 21 of the slits

5, thus permitting the spout to be initially inserted downwardly into the opening 3 of the cover 2. After the lower ends of the flanged rear edges 15 of the side wings 11 have been entered into the slits 5, finger pressure is released upon the side wings 11 and the operator then pushes downwardly upon the center or closure portion of the spout forcing the spout into final position within the opening 3 of the cover 2 so that the rear end portion 22 of the closure portion of the spout will rest upon the cover ledge 6 and the finger grip portion 18 thereof will rest upon the cover 2 adjacent the inner edge 20 of the opening 3.

In pushing down on the spout after initially inserting the flanged rear edges 15 thereof into the slits 5, the flanged rear edges 15 will cut into the outer side walls 21 of the slits 5 as the spout is moved downwardly into final, or home position. The material of the cover is compressed by the flanges 15, thereby allowing the spout to be pushed into home position. The material of the cover 2 adjacent the flanges 15 of the spout closes in tightly against the flanges 15, thereby offering sufficient resistance thereto to prevent the spout from being totally removed from the opening 3 except with extreme difficulty. The spout cannot, and will not, fall out of the cover openings 3 of its own accord, by vibrating, or jolting in shipment, or by the weight of contents of the container, bearing thereagainst from the inside of the container.

To open the spout for the purpose of pouring contents from the container, the operator merely grasps the finger grip 18 of the center or closure portion of the spout and pulls the same upwardly in an arcuate path from the cover 2. The closure portion of the spout will move from the cover opening in an arcuate path due to the rear corner notches 16 of the spout being held in engagement with the outer edges 23 of the slits 5 by the curved edges of the side wings 11 sliding on the front edge 20 of the opening 3. The outer edges 23 of the slits 5 act as fulcrums for the spout to swing upon due to the fact that the pulling pressure exerted upon the spout is transmitted to the right angular corner notches 16 thereof keeping them in contact, or engagement with the outer edges 23 of the slits 5. The side wings or walls 11 of the spout also offer frictional resistance to the side walls or edges of the openings 3 which aids in preventing any possible self opening displacement of the spout.

When the spout has been fully opened to permit pouring of contents from the container 1, the flanged rear edges 15 of the side wings 11 engage the inner face of the cover 2 at the side edges of the opening 3 thereby preventing the spout from being totally removed from the opening 3 of the cover 2.



To close the spout after a pouring operation, the spout is merely pushed back into closed position by pressing downwardly against the forward or inner end of the center closure portion thereof.

The many advantages of the herein described invention will readily suggest themselves to those skilled in the art to which it appertains.

From the foregoing description, it is evident that a simple device for this purpose has been disclosed, but it is to be understood that I do not desire to restrict, or limit myself to the very details of the construction shown and described, which is merely illustrative, it being obvious that changes, not involving the exercise of invention, may be made without conflicting or departing from the spirit of the invention within the scope of the appended claims.

What I claim is:

1. An article of manufacture of the character described comprising, in combination, a container having a cover provided with a filling and pouring opening, a pouring spout having an opening closure portion and side wall portions attachable to the cover from the outside; and cooperating hinge forming means on the spout and the cover so arranged that the spout may be permanently attached by pressing the spout into position upon the cover, said hinge forming means including vertically disposed right angular shoulders in the side wall portions of the spout engageable with the rear edge of the pouring opening which acts as a fulcrum for the right angular shoulders of the spout walls to rock upon when opening and closing the spout.

2. An article of manufacture of the character described comprising, in combination, a container having a cover provided with a filling and pouring opening and a tongue of less width than the opening extending into the opening from the rear edge thereof, a pouring spout having an opening closure portion and side wall portions and attachable to the cover from the outside thereof; and cooperating means formed by portions of the side walls of the spout and the cover so arranged that the spout may be permanently attached to the cover by pressing the spout into position thereon to form a hinge line at the rear edge of the spout and flange stops formed the full distance along two edges of the spout adapted to limit opening movement of the spout by contacting with the inner face of the cover at the side edges of the filling and pouring opening when the spout has reached its full open position.

3. In combination with a cover for containers provided with a filling and pouring opening near the perimeter thereof which opening has its rear edge provided with spaced corner recesses to provide a cover

tongue extending into the opening, a substantially U-shaped pouring spout having notches formed at the upper rear corners of the side-walls of the pouring spout to form vertically disposed right angular shoulders so arranged that the pouring spout may be attached to the cover by merely pressing the same into position through the cover opening from the outside of the cover after the container has been filled to bring the spout wall shoulders into engagement with the rear edges of the cover recesses which act as spaced fulcrums for the spout to swing upon as hinge lines.

4. In combination with a container having an opening in one of the end closures thereof with a tongue portion of the closure extending into the opening, of a spout having a top portion of a size to close said closure opening and supported at one end on said tongue portion of the closure, pendent side walls directed at substantially right angles from the side edges of said top, the corners of said side walls adjacent the rear edge of the top being cut away to form vertically disposed right angular shoulders hingedly engageable with the rear edge of the closure opening on opposite sides of the tongue portion thereof and the edge of pendent side wall adjacent the rear edge of the top being bent outwardly at right angles to said walls to provide stops limiting opening movement of the spout by contacting with the inner face of the closure the full length of the side edges of the opening of the closure.

5. A blank for forming pouring spouts for containers comprising a piece of metal shaped to form a top section and wing shaped side wall sections and the rear edge of said piece of metal being recessed with its inner edge extending beyond the top sections and into the wing sections thereof so that when the wing sections are bent at right angles to the top section vertically disposed right angular shoulders are formed at the corners of the wing sections adjacent the rear edge corners of the top section.

In testimony whereof, I have hereunto affixed my signature.

WALTER L. RUTKOWSKI.