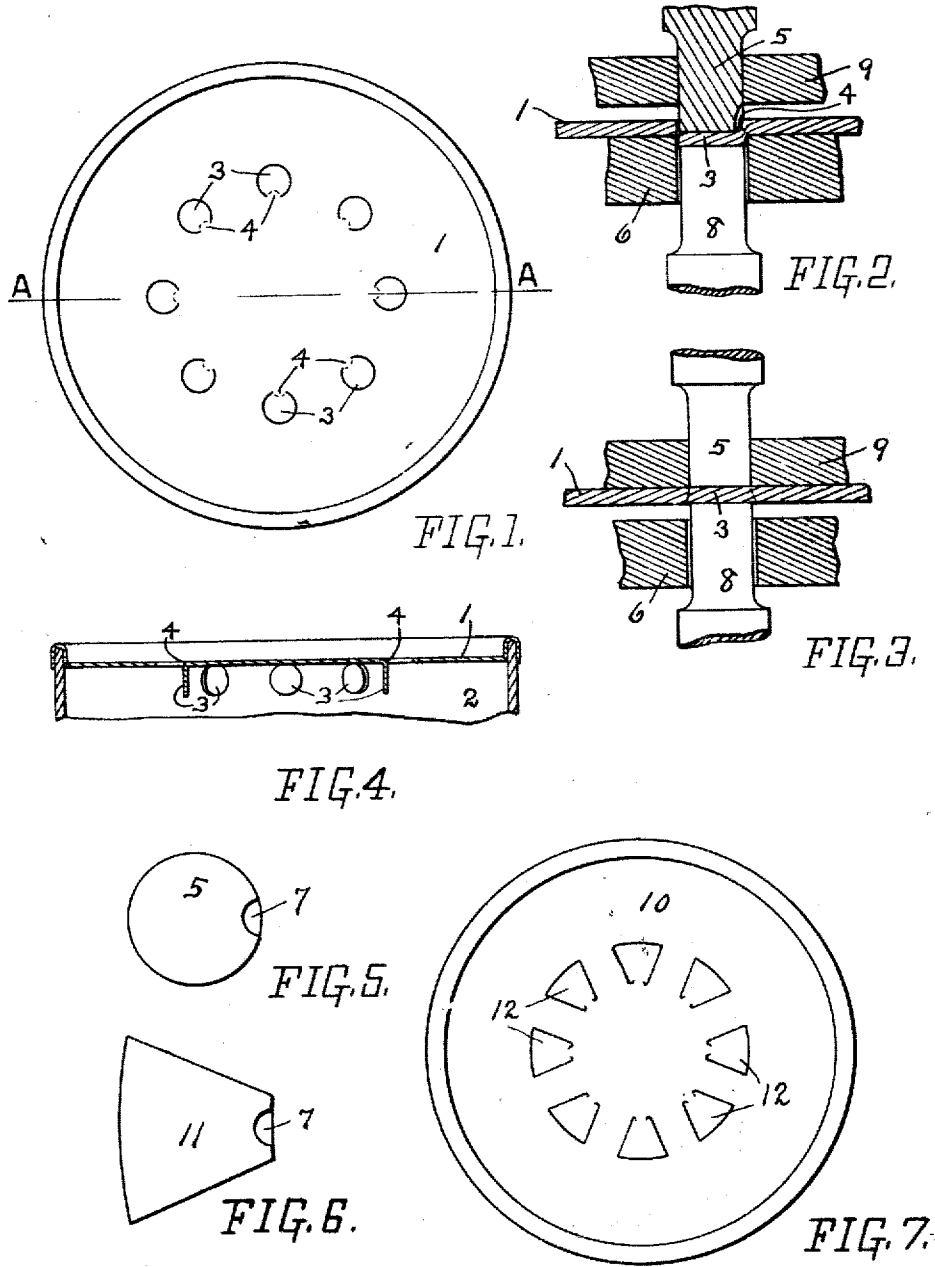


No. 853,547.

PATENTED MAY 14, 1907.

J. R. HARBECK.
CONTAINER TOP.
APPLICATION FILED DEC. 3, 1906.



Witnesses:
L. M. Brown.
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UNITED STATES PATENT OFFICE.

JERVIS R. HARBECK, OF DETROIT, MICHIGAN, ASSIGNOR TO KEMIWELD CAN COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

CONTAINER-TOP.

No. 853,547.

Specification of Letters Patent.

Patented May 14, 1907.

Application filed December 3, 1906. Serial No. 345,988.

To all whom it may concern:

Be it known that I, JERVIS R. HARBECK, a citizen of the United States, and a resident of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Container-Top, of which the following is a specification.

My invention consists in a container top formed from a flat sheet of metal or fibrous material, and having a series of small plugs, nearly the whole circumferences of which are severed from the body of the material.

It further consists in forming these plugs tapering, with their large end on the inside of the head so that they may be pushed down into the container but cannot be pushed out except under great pressure.

It also consists in the novel method of forming the head with tapering holes which are closed by tapering plugs integrally connected to the body of the head.

The object of my invention is to provide a cheap and efficient dredge or sifter top for containers and is attained by the construction illustrated in the accompanying drawings, in which

Figure 1 is a plan of the head or closure of a container. Figs. 2 and 3 illustrate the method of punching the holes, on an enlarged scale. Fig. 4 is a central cross section of the head on the line A—A of Fig. 1. Figs. 5 and 6 are end views of punches on greatly enlarged scales. Fig. 7 is a plan view of another top.

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

To produce dredge or sifter tops for containers at the lowest possible cost, it is necessary to cut down the labor and material to a minimum, and this is attained when the entire head or closure is formed at one stroke of the die when but one sheet of material is employed.

In the drawings, the top 1 is formed with a groove to receive the edge of the cylindrical body 2 of the container, to which it is soldered, or crimped or cemented according to the material employed. The small disks 3 are cut free from the body of the top except at one point where it remains attached by means of tongues 4 whose widths should not be far from one twelfth of the circumference

of the disks. When the container is to be emptied, these disks are pressed in by means of a lead pencil point, hair pin or other convenient article, when the contents may be discharged. The disks must be so formed that they can easily be pressed inwardly, and also that the contents of the container cannot force them outward. These conditions are met by disks tapering outwardly, and tightly fitting the holes from which they are punched.

To construct this container top I form the punch 5 considerably smaller than the hole in the die 6. When the hole is punched, the side toward the punch will be the diameter of the punch, while the side toward the die will have its diameter, the resulting disk 3 being tapering as shown in Fig. 2. In practice, a gang of punches are employed so that all the disks 3 are formed with one stroke, and the punches have grooves 7 so as to avoid shearing the complete circumference, the tongues 4 being left.

Lower punches 8 are mounted below the cutting punches 5 and hold the disks 3 up to position at the end of the cutting stroke of the punches 5, and afterward press the several disks 3 into their openings as shown in Fig. 3. Figs. 2 and 3 show the punches at lower and upper limits of their strokes. The plate 9 serves to hold the head while this last step is accomplished whereupon the followers 8 immediately drop down below the face of the die, so as to permit the container top to be removed and another substituted.

The small closures may be of any form desired, depending upon the punch and die employed, the head 10 shown in Fig. 7 necessitates punches such as 11, Fig. 8 to form the plugs 12. If the punches were made to closely fit the dies, the disks 3 or plugs 12 would be straight instead of tapering, and if the material of the top were thick, the result would be that the end toward the cutting punch would be a trifle the larger.

Having now explained my improvements, what I claim as my invention and desire to secure by Letters Patent is,—

1. A container closure comprising a sheet to which tapering plugs are attached by means of narrow tongues, the taper of the plugs serving to permit them to be easily

swung inward but preventing them from being swung outward.

2. A container closure comprising a body portion, integral tapering plugs connected thereto and adapted to be easily swung out from one side but prevented by the taper from swinging out at the other side.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JERVIS R. HARBECK.

Witnesses:

E. N. PAGELSEN,
BURTON W. SCOTT.