July 9, 1940. H. J. PHILLIPS 2,207,176

FLUID CAN WITH RESILIENT SPOUT

Filed April 19, 1939

Fig. 1

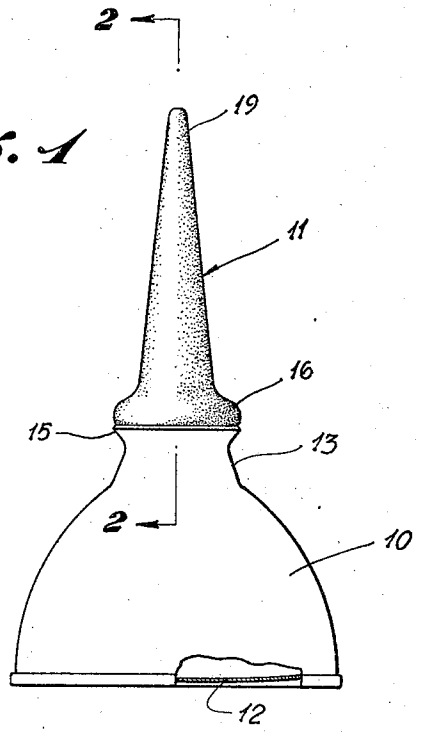


Fig. 2

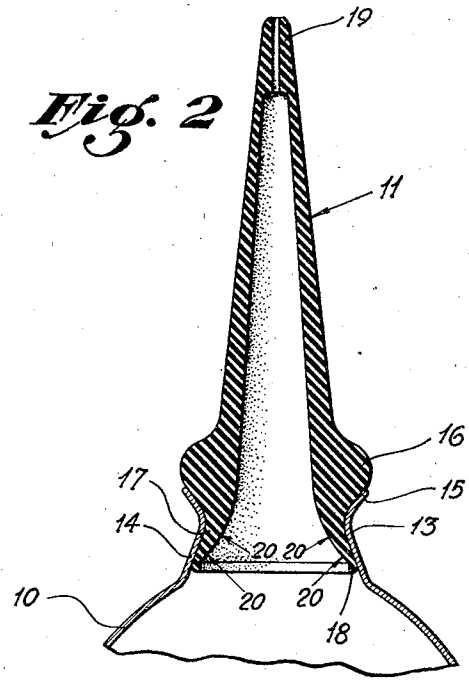
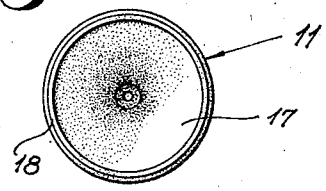


Fig. 3



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FLUID CAN WITH RESILIENT SPOUT

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5 Claims. (Cl. 221—32)

This invention relates to a fluid can with a resilient spout.

An object of my invention is to provide a fluid can with a resilient spout in which the resilient spout is sealed in the upper end of a container and in which pressure in the container serves to increase the seal between the resilient spout and the container.

Another object of my invention is to provide a fluid can with a resilient spout in which the spout is so supported in the container that it cannot be forced into the container as pressure is applied to the end of the spout.

Another object of my invention is to provide a fluid can with a resilient spout in which the resilient spout can be easily and quickly withdrawn from, or inserted in, the container.

Another object of my invention is to provide a fluid can which may be easily and quickly filled.

My invention has many other objects, advantages, and features, some of which, with the foregoing, will be set forth at length in the following description where I shall outline an example of my invention, which I have selected for illustration in the drawing accompanying and forming a part of the present specification, but it is to be understood that I do not limit myself to such example, since the invention, as expressed in the claims, may be embodied in a large plurality of forms.

Referring to the drawing:

Figure 1 is a side elevation of a fluid can partly broken away embodying the features of my invention.

Figure 2 is a longitudinal section taken along the line 2—2 of Figure 1.

Figure 3 is a bottom plan of the resilient spout.

The fluid can of my invention consists of a container 10 which may be made of metal or any other suitable material, and a resilient spout 11, which may be made of rubber, synthetic rubber, or other suitable material.

The bottom of the container is provided with a conventional diaphragm 12 and the upper end of the container is provided with a neck 13, the lower end of which flares outwardly as indicated at 14. The upper end of said neck terminates in a rim 15.

The lower end of the resilient spout 11 is provided with a reinforcing circular rib 16, which strengthens the entire resilient spout and serves to protect the upper rim 15 of the container.

Depending from said circular rib 16 is a tubular portion 17 which flares outwardly and is of such size and shape that it is adapted to form a snug and leak-proof fit with the outwardly flaring surface 14 of the container when said resilient spout is inserted in the upper end of said container. The lower rim 18 of the tubular portion 17 is preferably rounded in order to avoid any tearing or splitting of the resilient material and to provide a fluid can which is capable of considerable usage and wear.

The upper end 19 of the resilient spout is preferably provided with an orifice of uniform size and of considerable length so that it is also capable of considerable usage and wear.

The upper rim 15 of the container is preferably rounded in order to eliminate any sharp edges which might damage the resilient spout 11, and is preferably wider than the bottom rim 18 of the resilient spout 11 in order to facilitate the insertion of the spout in the container. The insertion of the spout in the container is best performed by imparting to the spout a rotary movement as the spout is being inserted in the container.

In practice I have found that the resilient spout 11 is mounted in the container 10 in such a manner that pressure on the diaphragm 12 serves to increase the seal between the spout and the container as indicated by the numerals 20 and so that the spout cannot be forced into said container as pressure is applied to the end of said spout.

From the accompanying description taken in connection with the foregoing drawing the advantages of my invention will be readily understood by those skilled in the art to which the invention appertains and while I have described the form of my invention which I now consider to be the best embodiment thereof, I desire to have it understood that the article shown is merely illustrative and that the invention is not to be limited to the details described herein but is to be afforded the full scope of the appended claims.

I claim:

1. A fluid can comprising a container provided with a neck at its upper end, the narrowest portion of said neck being at a point intermediate the ends thereof, and a resilient spout, the outer surface of the lower end of which corresponds to the inner surface of said neck, so that pressure exerted on the bottom of said container tends to increase the seal between said container and said spout, and so that the spout is prevented from being forced into said container as pressure is applied to the end of said spout.

2. A fluid can comprising a container provided with a neck at its upper end, said neck having a

convex inner surface, and a resilient spout provided at its lower end with a tubular portion, the outer surface of which conforms to the inner surface of said neck and is adapted to be inserted in the neck of said container to form a leak-proof seal therewith, and to be supported thereby in such a manner that the spout is prevented from being forced into said container as pressure is applied to the end of said spout.

3. A fluid can comprising a container provided with a neck at its upper end, the lower end of which neck flares outwardly, and a resilient spout provided at its lower end with a tubular portion, the lower end of which tubular portion flares outwardly and is adapted to be inserted in the neck of said container to form a leak-proof seal therewith, the lower rim of said resilient spout being smaller in diameter than the upper rim of said container.

4. A fluid can comprising a container provided with a neck at its upper end, the lower end of which neck flares outwardly, and a resilient spout provided at its lower end with a reinforcing circular rib having a depending tubular portion, the lower end of which tubular portion flares outwardly and is adapted to be inserted in the neck of said container to form a leak-proof seal therewith, said resilient spout being provided at its upper end with a nozzle of uniform size and substantial length.

5. A fluid can comprising a container provided at its upper end with a neck which flares outwardly at its lower end, the upper rim of said neck being rounded off, and a resilient spout provided at its lower end with a reinforcing circular rib, said circular rib having a depending outwardly flaring tubular portion, said tubular portion being adapted to be inserted in the neck of said container to form a leak-proof seal therewith, the lower rim of said tubular portion being rounded off and smaller in diameter than the upper rim of said neck of said container.

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