Aug. 13, 1957 A. PODESTA 2,802,322

METHOD FOR THE SEALING OF CONTAINERS BY MEANS OF PRE-CURLED METAL CAPS

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Fig. 1

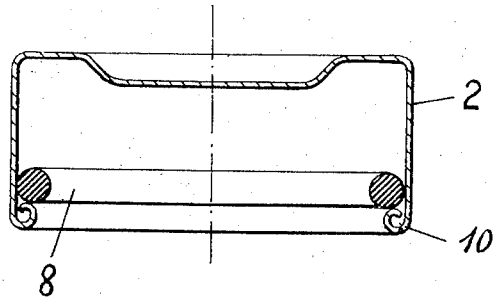
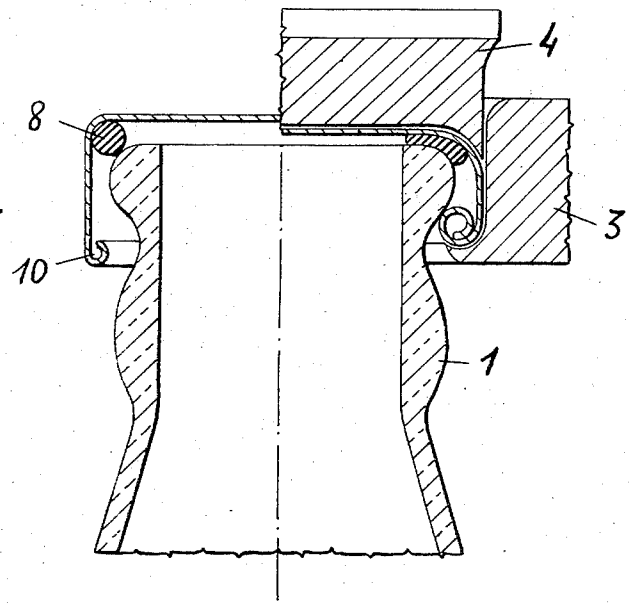


Fig. 2



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METHOD FOR THE SEALING OF CONTAINERS BY MEANS OF PRE-CURLED METAL CAPS

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Claims priority, application Switzerland September 8, 1950

2 Claims. (Cl. 53—16)

This invention relates to the sealing of containers by metal caps.

The object of the invention is to provide a method for sealing containers by curling under the container mouth the edge of the brim of metal caps.

According to the invention the method of sealing consists in fitting on to a container mouth a cap made of consistent sheet metal permitting an inside spiral curling of its pre-curled edge without undue deformation and by curling the cap edge by a static curling tool while keeping the cap bottom pressed against the container mouth. In this manner, as the curling progresses, the inner diameter of the curling becomes always smaller until the cap comes to be fastened to the container mouth.

The invention will be better understood from the following specification, reference being had to the attached drawing in which:

Figure 1 shows an axial section of a pre-curled cap.

Figure 2 shows in section at the left-hand half the pre-curled cap according to Figure 1 before its complete curling and in the right-hand half after the curling.

According to the invention, the fastening of sealing cap to container 1 to be sealed is attained by fitting on a mouth of a container 1, Fig. 2, a cap 2 made of consistent sheet metal and provided with a brim whose edge is pre-curled as shown in Fig. 1 and by curling afterwards the edge of this brim by means of a grooved curling ring 3, while the top of the cap 2 is kept pressed on the container mouth as by a pressing implement 4. In this way an inside curling (Fig. 2) is obtained of substantially spiral section, whereby the inner diameter of said curling will be reduced by the curling operation to such an extent as to become anchored with a substantial pressure to the container mouth, even when this latter is smooth, while the brim height is reduced.

In any case the inside diameter of the pre-curled part of the cap must be somewhat larger than the maximum outside diameter of the container mouth. In this pre-curled cap 2 a circular packing 8 is inserted whose out-

side diameter is greater than the inside diameter of the pre-curling 10. Thus by the pre-curling 10 the packing 8 is prevented from dropping off before the fitting of the cap on the container mouth as clearly shown in Fig. 1. This pre-curling is also useful in helping the centering of the cap on the container mouth, and with regards to the curling implement 3.

I claim:

1. A method for the sealing of a container by means of a pre-curled cap made of sheet metal of such thickness and rigidity as to permit of the inside curling of its edge, and comprising: fitting on the container mouth a cap provided with an inward pre-curling of its edge portion whose inner diameter is of the order of the maximum outside diameter of the container under its mouth, holding the top part of said cap pressed from the outside against the container mouth, and completing the curling of the edge of said pre-curled cap by means of a grooved curling ring until a section of the said cap, by becoming restricted through the curling, firmly engages a section of the container under its mouth.

2. A method for the sealing of a container by means of a cap made of sheet metal of such thickness and rigidity as to permit the curling of its edge, and comprising: fitting on the container to be sealed a cap provided with an inner packing ring and whose edge of its brim has been pre-curled to such an extent as to retain within the cap the said packing ring, sliding the cap on the container neck or on a part under the mouth thereof until the packing ring is held between the top part of the cap and the container mouth, holding the top part of said cap pressed against the container mouth with the packing therebetween, and completing the curling of the edge of said cap by means of a grooved curling annulus until a section of the said cap, by becoming restricted through the curling, firmly engages a section of the container under its mouth.

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