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SLIP COVER FOR CYLINDRICAL CONTAINERS

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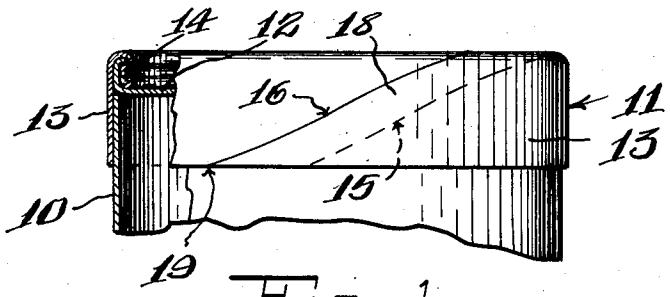


Fig-1-

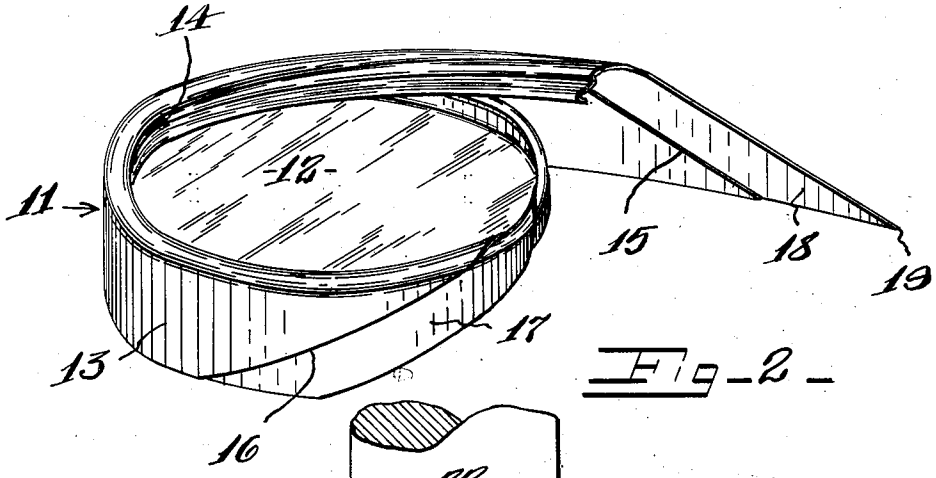


Fig-2-

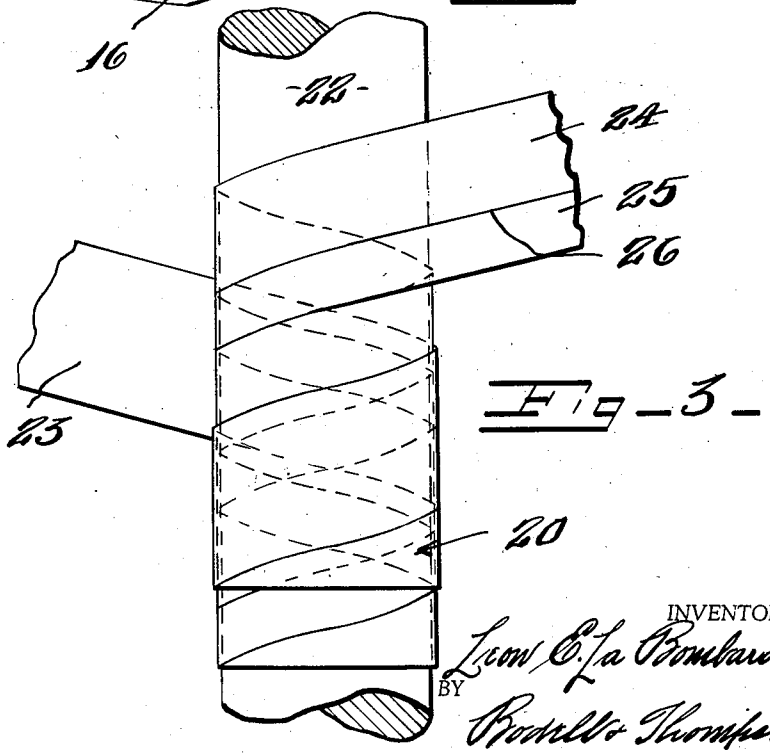


Fig-3-

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SLIP COVER FOR CYLINDRICAL CONTAINERS

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5 Claims. (Cl. 229—5.5)

This invention relates in general to slip covers for cylindrical fibrous containers, and more particularly to a construction, or formation, of such a slip cover whereby the cover can be quickly and conveniently removed from the container.

The containers, referred to herein, are usually formed of one or more layers of paper material. Such containers are used extensively to dispense merchandise at retail establishments, such as, for example, soda fountains in which liquids and semi-liquid products are put up for consumption off from the premises. The containers are used for both hot and cold liquids, and for semi-solid foods, such as ice-cream.

It is well known to those skilled in the art that to be effective, the slip cover must fit the wall of the container tightly. This tight fit results in considerable difficuly in getting the slip cover onto the container, and in getting it off from the container after it has been put on. This invention has to do with the second problem. That is, removing the slip cover from the container, and applies particularly in instances where it is necessary to have an extra tight, or permanent, fit between the flange of the slip cover and the wall of the container, and where the cover, after first removal, is discarded and not replaced upon the container.

The invention consists in the novel features and in the combinations and constructions, and the method, hereinafter set forth and claimed.

In describing this invention, reference is had to the accompanying drawing in which like characters designate corresponding parts in all the views.

Figure 1 is a side elevation of a slip cover involving my invention, and contiguous portion of the container, both being partly in section.

Figure 2 is a perspective view of the slip cover after it has been removed from the container.

Figure 3 is a diagrammatic view showing one method in forming the flange portion of the slip cover.

10 designates the cylindrical side wall of the container which is usually formed of one or more layers of paper material, and 11 indicates the slip cover generally, which is composed of a discoidal portion 12 acting as a closure for the mouth of the container, and being provided with, or having secured thereto, a depending annular flange portion 13. As here shown, the discoidal portion 12 and the flange portion 13 are separate elements, and are joined together as by crimping, as at 14.

In carrying out this invention, the flange 13 is so formed that it may be conveniently and readily severed, and the slip cover thereafter removed from the container. To accomplish this result, the flange 13 is provided, or formed, with two incisions extending parallel and in spaced-apart relationship. One of the incisions 15 extends outwardly from the inner surface of the flange 13, and the other incision 16 extends inwardly from the outer surface of the flange 13. These incisions extend approximately one-half the thickness of the flange 13. The incisions 15, 16, define overlapping portions 17, 18.

As shown in Figures 1 and 2, the incisions 15, 16, extend spirally relative to the axis of the slip cover, or flange 13. The outer overlapping portion 18 tapers to a narrow point where the incision 16 is intercepted by the lower edge of the flange 13 forming a point 19. The point 19 can be conveniently raised by the finger nail and thus form a tab-like portion to grasp the overlapping section 18, and by pulling outwardly the overlapping portion 18 is split, or severed, from the overlapping portion 17, as indicated in Figure 2. Obviously, the cover 11 may be quickly and conveniently removed from the container by grasping the container in the left hand, and tearing the overlapping portion 18 from the portion 17 with the right hand. The cover may be entirely removed from the container by simply grasping the overlapping portion 18. Or, in other words, the overlapping portions are severed, and the slip cover removed from the container in one continuous operation.

In manufacturing this slip cover, the method I prefer is to form the flange 13 of a plurality, in this instance two, layers of paper material. These flange portions are first formed in the shape of a cylindrical tube 20, which is later cut, or severed, in proper lengths, and these rings, or severed portions, form the flange 13 of the slip cover, and are secured to the disks 12 as by crimping. The tube 13 is wound upon a mandrel 22. A strip of paper, or other sheet material 23 is wound upon the mandrel 22, the strip 23 being fed on the mandrel at an angle relative to the axis thereof, and to the lower side thereof. The strip 23 constitutes the outer layer of the tube 20. Strips 24, 25, are wound upon the mandrel 20 in similar manner to the strip 23, and are fed to the mandrel on the upper side thereof. The strips 23, 24, 25 are wound around the mandrel 22, which is stationary, by traveling belts which are initially looped about the mandrel and which are adjusted on the same angle as the strip which they rotate about the mandrel. This method of

winding spiral tubes is well known to those skilled in the art, and the belts referred to have been omitted from the drawings so that the particular method here involved might be better illustrated.

The total width of the strips **24**, **25**, is equal to the width of the strip **23**. As here shown, the strips **24**, **25**, are of unequal width, the strip **24** being wider than the strip **25**. Usually however, the strips from which tubes are wound are of equal width and so initially placed on the mandrel than the adjoining edges of one strip are overlapped centrally by the other strip, with the result that a tube is produced having a number of layers equal to the number of strips employed, and the spiral joint in one layer is overlapped centrally by the adjacent layer. This is done to obtain a maximum amount of strength in the tube.

As here shown, Figure 3, because of the fact that the strip **24** is wider than the strip **25**, the edges, or joint **26** is not overlapped centrally by the strip **23**, but is overlapped by said strip adjacent the edge thereof. In other words, a continuous spiral incision apears on the outer surface of the tube **20** while on the inner surface of the tube, there appears a pair of spaced apart continuous spiral joints, the inner spiral joints being spaced apart somewhat less than 180°, the spacing depending upon the relative width of the strips **24**, **25**. Preferably, the strip **25** is comparatively more narrow than the strip **24**, as this strip obviously determines the width of the overlapping portions **17**, **18**. The width of these overlapping portions is preferably such as to give the desired strength to the flange **13**, and at the same time, narrow enough so that the overlapping portion **18** may be conveniently torn, or separated from the under overlapping portion **17**.

After the tube **20** is wound from the strips **23**, **24**, **25**, it is cut into cylindrical bands, as above referred to, and these bands are secured to the disk **12** by crimping, or in any other suitable manner.

This invention is particularly advantageous when the flanges **13** are formed from the spirally wound tube, as above explained, inasmuch as the overlapping portions **17**, **18**, are more easily severed, or separated, than if the flange **13** is formed in one thicker layer with the incisions **15**, **16**. In the latter instance, it is necessary for the paper to split according to the lines of cleavage in the paper. While it is practical to form the flange **13** of one thicker layer, I prefer to employ the method above described, as the adjacent edges of the strips, from which the tube is wound, automatically form the incisions, thus avoiding the necessity of cutting the flanges **13** after they have been formed.

It will be observed, from Figure 2, that the flange **13** may be conveniently and entirely removed from the disk **12**. This permits removal of the slip cover regardless of how tightly it was originally pressed on the open end of the barrel and whether the barrel has, because of moisture, swelled in tight contact with the cover.

What I claim is:

1. A slip cover for cylindrical containers, said slip cover comprising a disk portion and a depending flange portion, outwardly and inwardly extending incisions in said flange portion, said incisions extending in depth less than the thickness of the flange, and defining overlapping sections of the flange.

2. A slip cover for cylindrical containers comprising a discoidal portion, and a depending flange portion, said flange portion being provided with parallel extending incisions, one of said incisions being made in the inner wall of the flange, and one in the outer wall thereof, said incisions extending in depth less than the thickness of the flange and defining overlapping portions of the flange.

3. A slip cover for cylindrical containers comprising a discoidal portion and a depending flange, said flange being formed with separable overlapping portions.

4. A slip cover for cylindrical containers comprising a discoidal portion acting as a closure for the open end of the container, a depending flange portion surrounding the upper edge of the container and having one edge crimped into engagement with the discoidal portion of the cover, said flange portion being provided with a pair of spaced-apart incisions extending throughout the width of the flange portion including the crimped portion thereof and defining overlapping sections.

5. A slip cover for cylindrical containers comprising a discoidal portion acting as a closure for the open end of the container, and a depending flange portion surrounding the upper edge of the container, said flange having one edge crimped into engagement with the discoidal portion of the cover, and said flange portion being provided with a pair of spaced-apart incisions extending in angular relationship to the axis of the cover throughout the width of the flange portion, one of said incisions being formed on the inner side of the flange, and the other of said incisions being formed on the outer surface of the flange, and said incisions defining overlapping sections separable throughout the width of the flange portion.

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