CONTAINER FOR ADHESIVE TAPE

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The invention relates generally to metallic receptacles or containers and has for an object to provide a novel form of container which can be inexpensively manufactured and which is peculiarly adapted to the packaging of adhesive tape.

As is well known, adhesive tapes are packaged in roll form, and being adapted for use by the medical profession in the binding of wounds and the placement of surgical dressings, they usually are antiseptic in character. Because of the use to which such tapes are put, it is highly desirable that they be packaged in a sterile atmosphere, and that the aseptic condition of the tapes be maintained. Thus many of the spool packages now marketed are objectionable because the contained products are exposed to free ingress and contact of contaminated air.

In its more detailed nature, therefore, the invention seeks to provide a novel, substantially air tight container for adhesive tape, comprising a cylindrical container body closed at its bottom and having a friction collar defining its open upper end, a cover for completely closing the container against ingress of air and having a skirt for surrounding and frictionally gripping the collar, and a tape receiving spool secured to and depending from the cover.

Another object of the invention is to provide a novel form of cover for a container of the character stated, in which is provided an annular inverted U-shaped peripheral rib providing a resilient container body gripping skirt, and a tape receiving spool depending from the cover and clinch-grove secured thereto so that the metal of the cover remains unbroken from edge to edge.

With the above and other objects in view which will more fully appear, the nature of the invention will be more clearly understood by following the description, the appended claims, and the several views illustrated in the accompanying drawing.

Figure 1 is a central vertical cross section of the container;
Fig. 2 is a side elevation, the body and cover units of the container being shown separated;
Fig. 3 is a plan view;
Fig. 4 is a detail fragmentary vertical section illustrating the manner in which the tape receiving spool is secured to the cover;
Fig. 5 is a detail vertical cross section illustrating a modified form of the invention in which the spool bottom plate is secured in the same manner in which the cover and the spool are assembled;
Fig. 6 is a fragmentary detail vertical section illustrating a modified form of the invention.

The improved container comprises a cylindrical body 5 having a bottom closure 6 secured thereto in air tight relation, preferably by a double roll seam 7.

Adjacent the upper, open end of the container body a bead 8 is formed, defining a friction collar 9, the latter terminating in an intumet upper edge 10.

The open end of the container is completely closed against free ingress of air by a removable cover 11 shaped to include an inverted U-shaped peripheral rib 12 providing a resilient grip skirt 13 for fitting over and frictionally gripping the collar 9 of the container. The skirt 13 terminates in a rolled bead 14 for readily slipping over the intumet container collar edge 10 without binding, and in order to further secure the container against free ingress of air, the head seat 20 or annular groove formed in the rib 12 may be equipped with a suitable compressible sealing compound 15 for engaging the collar edge 10 and effecting an air tight seal.

A tape receiving spool 16 depends from the cover 11 in concentric spaced relation within the container body 5, as shown in Fig. 1. The spool is clinch-grove secured to the cover, as indicated at 17. This may be accomplished by so drawing the metal of the cover as to form an up standing rib 18 providing an annular groove into which the upper end of the spool 16 can be inserted as shown in Fig. 4, the rib thereafter being clinched and overturned as indicated in Fig. 1 to secure the spool in place. The spool is thus secured to the cover without solder or complicated securing lug equipments, and the whole diameter of the cover remains intact or unbroken from edge to edge. The cover 11 preferably includes a dished portion 19 providing freedom of metal, thus facilitating clinching and overturning of the spool securing rib 18.

The spool end or bottom plate 20 preferably comprises an annulus which is seam-secured as at 21 to the lower extremity of the spool and includes a rolled edge bead 22. The plate is of such diameter as to rather snugly fit within the body 5, and the spool 16 is of such length that the plate extends approximately to the bottom of the container.

As will be observed by reference to the upper portion of Fig. 2, the cover, spool and plate elements 11, 16 and 20 compositely form a spool unit insertible into and removable from the container, the top portion forming a closure for completely
closing the container against free ingress of contaminated air.

If desired, the spool bottom plate may be an unbroken, whole diameter plate 23 as indicated in Fig. 5, instead of a mere annulus, and it may be clinch-groove secured to the lower end of the spool 16 as indicated at 24, in the same manner in which the upper end of the spool is secured to the cover.

It will be observed by reference to Fig. 1 that the flat portion of the cover opposes the end plate 20 and these parts together form the spool ends. The spool end formed by the cover, however, is so constructed that it provides a complete closure for the container as hereinafter described.

In Fig. 6 of the drawing, we have illustrated a modified form of the invention. For supplying demands for longer yardages of tape, small spool portions 25 may be provided. Each small spool portion 25 may be roll-seam secured as at 26 to an adapter ring 27 having an upstanding flange adapted to be clinch-groove secured as at 28 to the cover element 29. In Fig. 6, the clinch-groove assembly is illustrated in the non-clinched condition, it being understood that the rib is to be clinched over in the manner shown in Fig. 1, in order to secure the spool and adapter ring in place on the cover element. The cover element 29 includes an annular rib 30 for receiving the upstanding roll seam 26 and for providing metal surplus facilitating clinching over of the clinch rib 28.

What we claim is:

1. An adhesive tape container comprising a cylindrical container body closed at its lower end and open at its upper end, and a spool and cover unit including a cover portion for completely closing the open end of the container and having a skirt presented for air excluding frictional contact with the body and a tape receiving spool portion depending from said cover portion and insertable into said body, said spool portion being clinch-groove secured to said cover portion so that the cover portion presents a closure unbroken from edge to edge.

2. An adhesive tape container comprising a cylindrical container body closed at its lower end and open at its upper end, and a spool and cover unit including a cover portion for completely closing the open end of the container and having a skirt presented for air excluding frictional contact with the body and a tape receiving spool portion depending from said cover portion and insertable into said body, said spool portion being clinch-groove secured to said cover portion so that the cover portion presents a closure unbroken from edge to edge.

3. An adhesive tape container comprising a cylindrical container body closed at its lower end and open at its upper end, and a spool and cover unit including a cover portion for completely closing the open end of the container and having a skirt presented for air excluding frictional contact with the body and a tape receiving spool portion depending from said cover portion and insertable into said body, said spool portion including a flat annulus opposed to the end plate and an upstanding peripheral resilient rib formed in part by said skirt.

4. An adhesive tape container comprising a cylindrical container body closed at its lower end and open at its upper end, and a spool and cover unit including a cover portion for completely closing the open end of the container and a tape receiving spool portion depending from said cover portion and insertable into said body, a spool end plate carried at the lower end of the spool portion said cover portion including a flat body annulus disposed in cooperative relation to said end plate and terminating peripherally in an upstanding resilient rib defined by inner and outer walls the outer one of which forms a skirt for frictionally embracing the open end of the container body.

5. An adhesive tape container comprising a cylindrical container body closed at is lower end and open at its upper end, and a spool and cover unit including a cover portion for completely closing the open end of the container and a tape receiving spool portion depending from said cover portion and insertable into said body, a spool end plate carried at the lower end of the spool portion said cover portion including a flat body annulus disposed in cooperative relation to said end plate and terminating peripherally in an upstanding resilient rib defined by inner and outer walls the outer one of which forms a skirt for frictionally embracing the open end of the container body, and said spool being clinch-groove secured to said cover portion so that the cover portion presents a closure surface unbroken from edge to edge.

6. An adhesive tape container comprising a cylindrical container body closed at its lower end and open at its upper end, and a spool and cover unit including a cover portion for completely closing the open end of the container and having a skirt presented for air excluding frictional contact with the body and a tape receiving spool portion depending from said cover portion and insertable into said body, said spool portion including a small diameter tape receiving body and a flanged adapter ring roll-seam-secured thereto, said ring flange being clinch-groove secured to said cover portion so that the cover portion presents a closure surface unbroken from edge to edge, and said cover portion including an upstanding rib forming a groove for receiving said roll seam and resilient so as to facilitate the formation of the clinch-groove attachment of said ring flange.

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