Aug. 26, 1969 H. GORMAN ET AL 3,463,303

CONTAINER WITH SOUND RECORDING

Filed Aug. 7, 1967

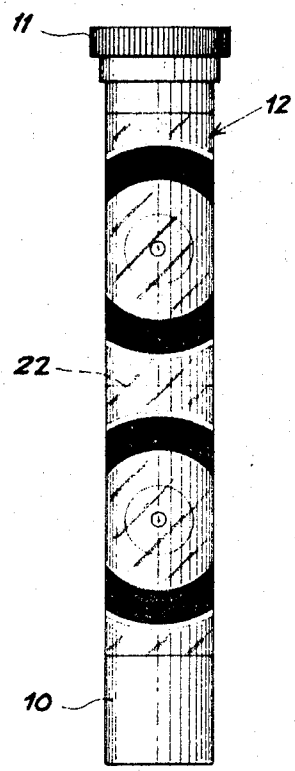
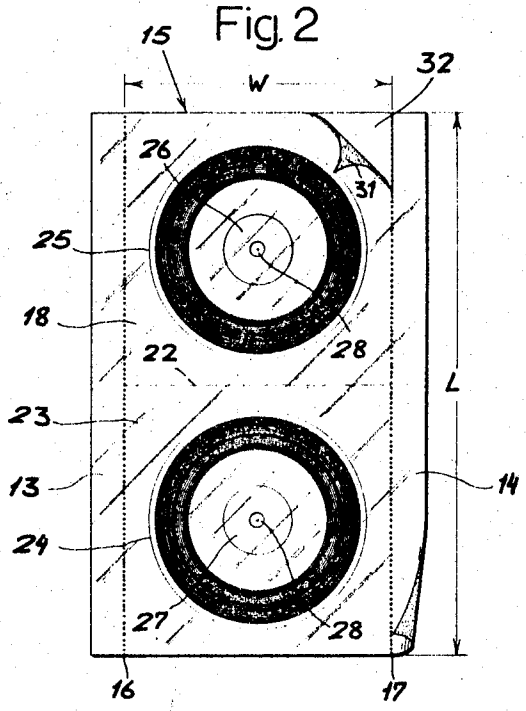


Fig. 1

Fig. 2



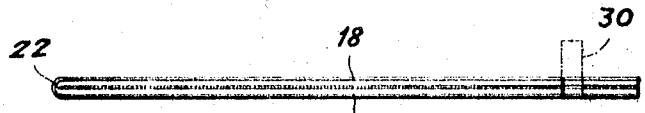


Fig. 5

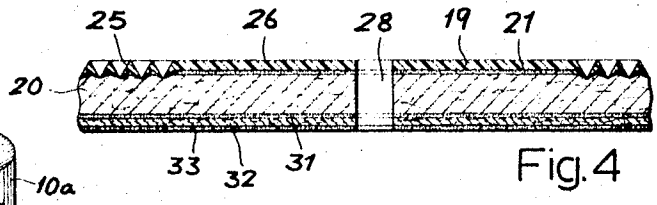


Fig. 4

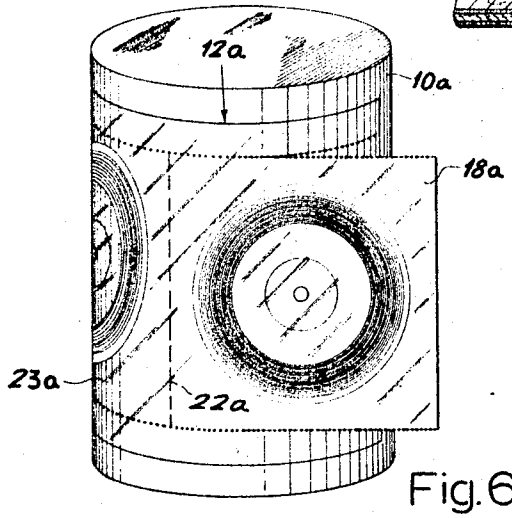


Fig. 6

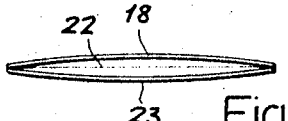


Fig. 3

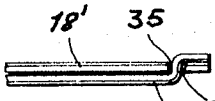


Fig. 7

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CONTAINER WITH SOUND RECORDING

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U.S. Cl. 206—47 8 Claims

ABSTRACT OF THE DISCLOSURE

A phonograph sound-recording structure in which an advertising or other phonograph-type sound-recording surface is embossed in a thermoplastic-coated substrate of paper wrapped about a cylindrical container, the substrate having a width at least twice that of the recording surface and being provided with means for separating the wrapping intact from the container and for securing a folded underportion of the substrate to the underside of the embossed portion whereby the folded wrapper has counteracting bowed portions. The fold line can run along the generatrix of the container or circumferentially therearound.

Our present invention relates to acoustical-recording arrangements in which a phonograph-type sound recording is embossed in a laminated substrate applied to a rigid container and carrying an advertising or other message.

In the copending application Ser. No. 543,630 filed Apr. 19, 1966, and now U.S. Patent No. 3,367,665, by one of the present joint inventors, there is disclosed and claimed an improved container assembly having a phonograph-type recording embossed in a synthetic-resin cover adapted to be marketed with the container and carrying an advertising or other message, a musical selection or the like. Prior thereto, it has been proposed to provide flexible thermoplastic foils, adapted to be used as packaging materials, with an embossed sound-recording groove which, upon separation of the sound-recording surface from the remainder of the wrapper along perforations or other weakened zones, could be placed upon a phonograph turntable for use as a conventional phonograph record. In the improved package, a synthetic-resin cover, marketed with a sealed-top container and adapted to hermetically seal the latter upon removal of the disc of the container by a can opener or the like, was provided with sound-recording grooves in a relatively flat disk-shaped portion of the cover. To ensure a flat lie of the recording surface upon the turntable, the underside of the disk had at least one formation whose height approximated that of the annular sealing flange or means was provided which enable severing of the disk portion from the flange by a conventional can opener. In still earlier applications copending with that mentioned above and subsequently issued as U.S. Patents Nos. 3,245,691 and 3,265,396, one of the present joint applicants demonstrated that relatively thin paper could be effectively employed for sound-recording purposes when laminated on one or both surfaces with a thermoplastic film which extended beyond a fold line and when the paper was so folded as to have the thermoplastic film bent in generally U-shape at the fold line. In this system, the laminate-foil

forms a channel-like structure reinforcing the sheet material against bending out of its plane and thereby improves and record-playing characteristics. It has also been found, according to these earlier applications and subsequently issued patents, that foil-layer material bridges a scored or separated portion of the substrate which may extend across the record face and, as a consequence of the resilience of the foil layer, provide a relatively smooth fold line which does not detrimentally affect sound-reproduction qualities. It has not, however, been possible heretofore to provide sound-recording labels or the like for rigid containers which are both economical and capable of yielding a sound reproduction of high quality.

It is, therefore, the principal object of the present invention to provide an improved container and sound-recording arrangement whereby this disadvantage is obviated and which can yield a sound message of high quality in spite of the fact that the recording is mounted upon a rigid container of such nature that a curvature or bowing is applied to the label.

We have now found that this object and others which will become apparent hereinafter, can be attained, in accordance with the present invention, by providing a label for the generally cylindrical container, which label may be bowed upon removal from the container, whose recording surface occupies only a limited surface region of the label while at least a comparable region thereof is designed to be folded under the sound recording, and to be retained in surface contact with the underside thereof so that the mutually outward bowing of each face nullifies that of the other and the sound recording consequently lies flat on the phonograph turntable. More specifically, the label or wrapping of the present invention comprises a foldable sheet consisting of a paper substrate upon which is laminated the sound reproducing foil, via an adhesive layer as described in the aforementioned patents. This sheet is embossed over the laminated surface region with a sound-reproducing groove centered on a weakened or perforated central zone adapted to receive the spindle of a phonograph turntable, a further portion of the sheet whose surface is at least coextensive with the record-carrying portion being unilaterally formed with the latter portion and adapted to be folded under and affixed to the recording-carrying portion along a fold line. This folding operation not only provides a channel-like stiffening of the resulting record but also tends to straighten the outwardly bowed record-carrying face. The two portions of the sheet may be affixed in surface-contacting relationship by any securing means although a contact-type adhesive is preferred. It will be understood that the underlying surface of the sheet will also be provided with a weakened or perforated spindle-receiving zone adapted to register with the central portion of the recording face so that the spindle alone may retain the faces in contacting relationship. In this case, the spindle prevents relative shifting of the surface in contacting portions while the straight-line fold maintains the record level. The securing means may, moreover, be mechanical in nature (e.g. a paper fastener or merely a fold zone at a corner or edge, or the like).

According to a further feature of this invention, the fold line, which is marked or indented in the sheet, extends along a generatrix of the labeling carying container or circumferentially thereof. The former technique is preferred when the circumference of the container is at least

twice the diameter of the recording surface, while the latter arrangement is used when the circumference is less than twice that of the recording zone but the length of the container is at least twice the diameter of the record face. The label, carrying the embossed sound-reproduction groove, is preferably affixed to the outer surface of the container so as to be removed therefrom with the reproduction portion and the underlying portion intact. Accordingly, means is provided for affixing the label to the container only externally of these portions or with the aid of a parting substance enabling the ready removal of the label from the container. For example, the underside of the record-carrying label may be provided with a pressure-sensitive or contact-type adhesive adapted to adhere only to a similary coated surface so that there is no adhesion to the container and only upon molding of the label in the manner prescribed, do the oppositely bowed surfaces adhere to one another to form a flat record. Alternately, the pressure-sensitive adhesive (e.g., the cellophane-tape type), may be covered with a layer of masking material having a release surface. The masking layer, in turn, may be rigidly secured to the container so that removal of the record-carrying sheet leaves the masking layer affixed to the container and uncovers the pressure-type adhesive. Alternatively, the masking layer may be removed with the label and subsequently stripped therefrom.

The underlying portion may also be laminated with embossible foils and sound reproducing grooves embossed therein. Further, prior to laminating the paper substrate, it may have various appropriate messages printed thereon as may be required by labeling laws or commercial necessity.

The above and other objects, features and advantages of the present invention will become more readily apparent from the following description, reference being made to the accompanying drawing in which:

FIG. 1 is an elevational view of a container provided with a label, according to this invention;

FIG. 2 is a plan view showing the label upon its removal from the container;

FIG. 3 is an end view of the label after folding and prior to flattening;

FIG. 4 is a cross-sectional detail view of the label taken along its central zone;

FIG. 5 is a cross-sectional view of the folded record;

FIG. 6 is a perspective view of another container having a label according to this invention; and

FIG. 7 is a detail view showing an alternative construction.

In FIG. 1, we show a tube-type container for round goods which is generally designated **10** and has a press-fitted or screw-type cap **11**. The container **10** is generally cylindrical and is covered by a label **12** which is affixed to the container **10** at a pair of flaps shown at **13** and **14**. The flaps may be connected to the sheet portion **15** of the label by scored tear lines **16** and **17** whereby the central portion **15** may be removed from the container **10** without damage to the recording surface while the flaps **13** and **14** remain adherent thereto. As illustrated in FIGS. 1 and 2, the central portion **15** of the label **12** is provided with a recording surface **18** formed by laminating a thermoplastic foil layer **19** to the paper substrate **20** by an intervening adhesive layer **21** as set forth in the aforementioned patents. A fold line **22** is formed by scoring the underside of the central portion **15** between the surface **18** and a coextensive surface **23** here shown as bearing a similar sound recording **24**. The sound-recording grooves **24** and **25** of portions **23** and **18**, respectively, are embossed in the laminated sheet as illustrated generally in FIG. 4 about respective central zones **26** and **27** having weakened portions **28** or perforations adapted to be punched out of the sheet when the latter is folded and inserted over a phonograph spindle. As illustrated in FIG. 3, the portions **18** and **23** are, by virtue of prolonged mounting of the label on the cylindrical container **10**, outwardly bowed and could not ordinarily be used in this convex state for sound-reproduction purposes. The fold line **22**, however, tends to flatten the surfaces **18** and **23** when the spindle is inserted as represented at **30** in dot-dash lines in FIG. 5. To ensure effective surface-to-surface contact between the portions **18** and **23**, however, we prefer to provide additional means for securing the folded underportion **23** to the overlying portion **18** and, to this end, a layer **31** of a contact-type adhesive is provided along the underside of the substrate **20**. To expose the adhesive layer **31**, which secures the portions **18** and **23** in flat relationship (FIG. 5) when the adhesive surfaces are brought together, a masking sheet **32** is removed. As noted earlier, a layer of glue **33** can secure the masking sheet **32** to the container **10** so that the adhesive is exposed immediately upon withdrawal of the central portion **15** from the container as illustrated at the upper right-hand corner of FIG. 2.

It will be understood that other means may be employed to secure the portions **18** and **23** in surface-to-surface contact as illustrated, for example, in FIG. 7. Here, the upper layer **18'** is shown to be provided with a slot **34** into which a tab **35** of the underlying **23'** is inserted and bent over.

It will be clear from FIG. 1 that the scored fold line **22** extends circumferentially of the container **10** since the circumference of this container is at least equal to the width W of the sound-recording surface **18** but is less than twice this width (L).

In FIG. 6 we show another container **10*a*** whose label **12*a*** can be stripped from the container as illustrated, and folded along a line **22*a*** parallel to a generatrix of the container to place section **23*a*** in surface-to-surface contact with the under side of the sound-record portion **18*a***. The label may be provided with a securing means described above and is correspondingly affixed to the container **10*a***. In this case, the container has a circumference equal at least to the dimension L mentioned above, i.e. to a minimum of twice the width W of the sound recording surface.

We claim:

1. A package comprising a container having a generally cylindrical wall, a flexible sheet removably affixed to said wall and lying therealong, said sheet being formed with a first portion having a phonograph-type sound reproducing surface adapted to be played upon a phonograph turntable, and a second portion at least coextensive with said first portion and foldable to underlie and flatten said first portion prior to mounting same upon said turntable, said portions being provided with perforatable central zones adapted to receive a phonograph spindle and to align said portions; and further including fastening means for securing said portions together in surface-contacting relationship.

2. A package as defined in claim **1**, wherein said fastening means includes complementarily interengageable mechanical means formed in said sheet and co-operating upon folding of said sheet to maintain said portions in flat relationship.

3. A package as defined in claim **1**, wherein said sheet is formed with a fold line between said portions extending along a generatrix of said cylindrical surface.

4. A package as defined in claim **1**, wherein said sheet is formed with a fold line between said portions extending circumferentially about said cylindrical surface.

5. A package as defined in claim **1**, wherein said second portion is also provided with a phonograph-type sound-reproducing groove.

6. A package as defined in claim **1**, wherein said fastening means includes a layer of adhesive on at least one of said portions boundable with the other portion.

7. A package as defined in claim **6**, further comprising

means for preventing bonding of said adhesive layer to said wall of said container.

8. A package as defined in claim 7, wherein the last-mentioned means is a masking layer overlying said adhesive layer and strippable therefrom upon removal of said portions from said container.

References Cited

UNITED STATES PATENTS

1,146,387	7/1915	Aylsworth.	
2,091,346	8/1937	Wright	40—2
2,093,985	9/1937	Stansbury	40—306
3,195,265	7/1965	Marquez et al.	206—47 X
2,063,870	12/1936	Finch	274—42

FOREIGN PATENTS

1,199,718	6/1959	France.

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U.S. Cl. X.R.

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