March 7, 1967 N. J. GARROD 3,307,772

GRAMOPHONE RECORD SLEEVES

Filed July 27, 1965 3 Sheets-Sheet 1

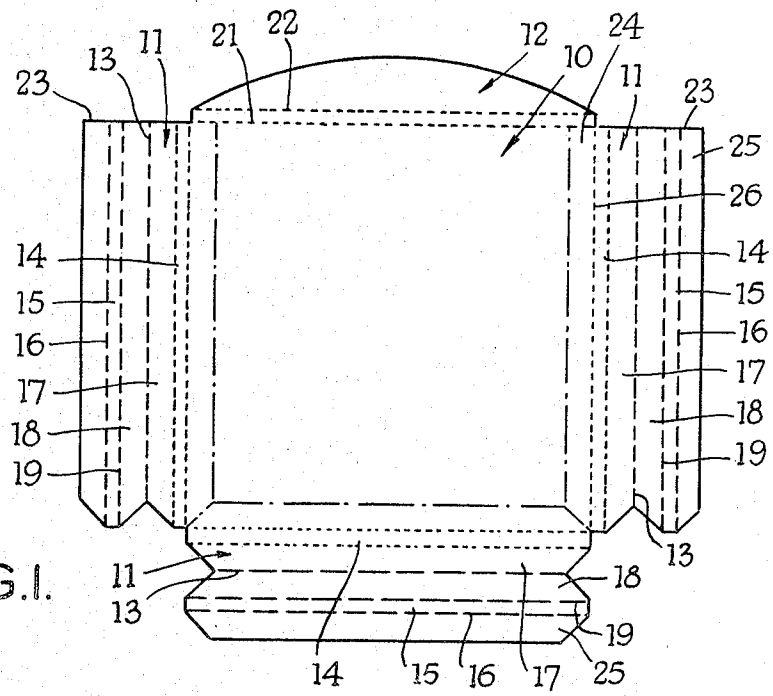


FIG.1.

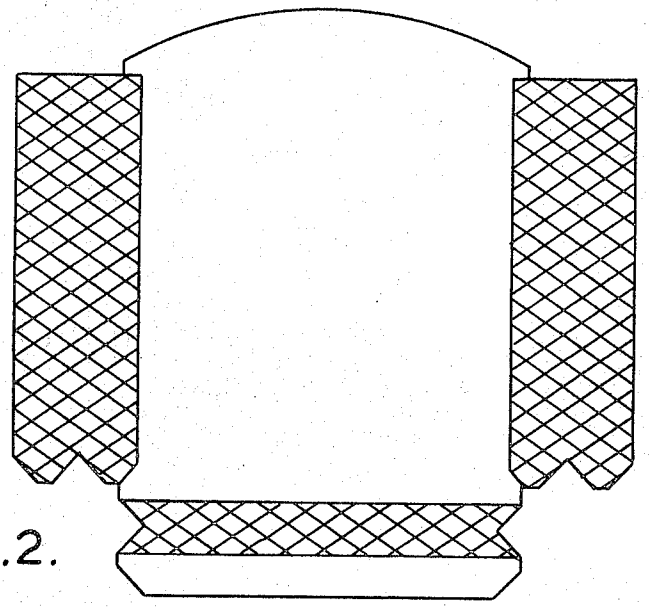


FIG.2.

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FIG. 3.

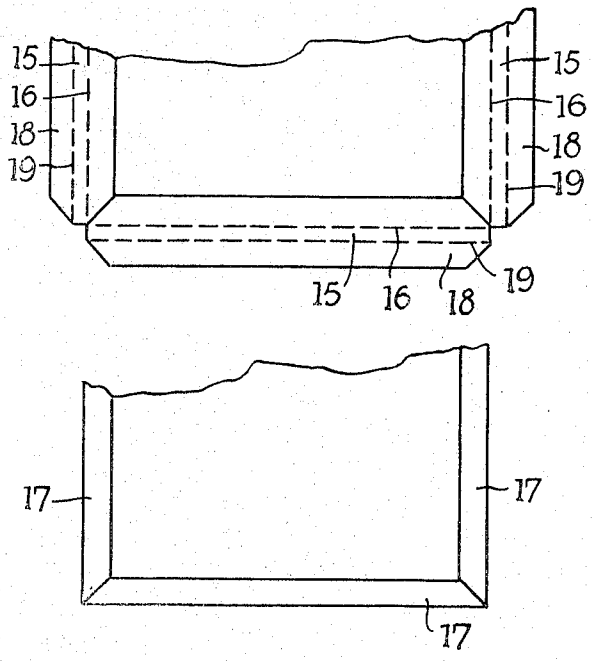


FIG. 4.

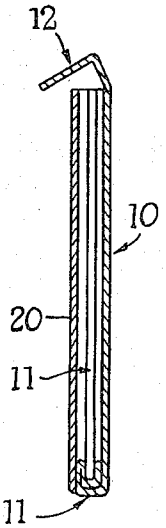


FIG. 5.

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GRAMOPHONE RECORD SLEEVES

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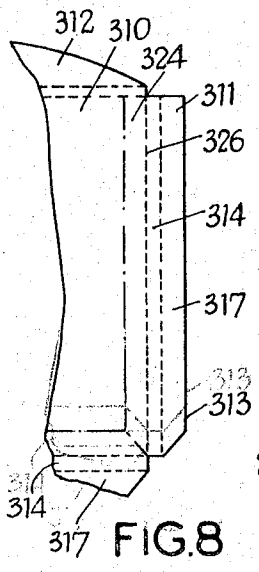


FIG.8

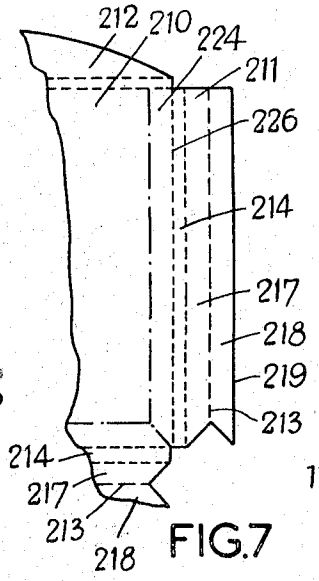


FIG.7

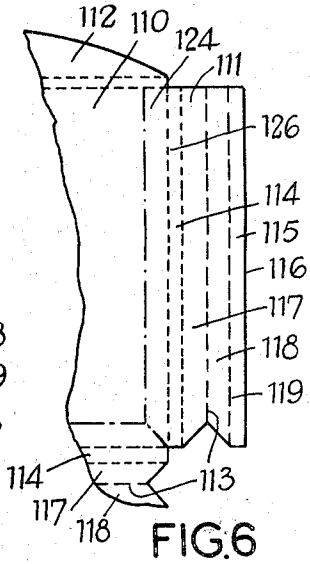


FIG.6

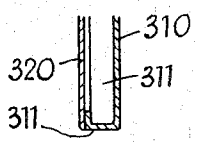


FIG.11

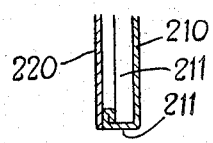


FIG.10

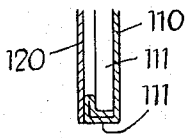


FIG.9

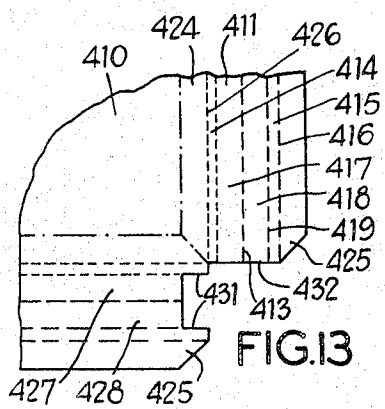


FIG.13

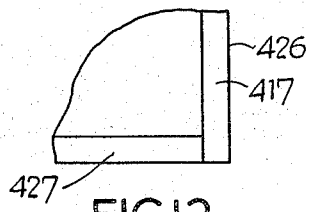


FIG.12

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Patented Mar. 7, 1967

3,307,772

GRAMOPHONE RECORD SLEEVES

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Claims priority, application Great Britain, July 29, 1964, 30,112/64
12 Claims. (Cl. 229—68)

The present invention relates to gramophone record sleeves and has for its object to provide an improved construction of gramophone record sleeve and a method of making the same.

It is known to provide a gramophone record sleeve with a spine located along the edge of the sleeve opposite to the opening edge thereof, such spine being either an insert or being formed integrally with one side of the sleeve. However, this prior constructoin has various practical disadvantages and the present invention provides an improved sleeve having a spine along the three non-opening edges, which spine is integral with one side member of the sleeve. Preferably, the spine, in a sleeve according to the invention, is reinforced and the reinforcement is integral with the spine. Also, the improved sleeve preferably has a spine and closing flap along the opening edge, which elements are integral with one of the sleeve side members, conveniently that with which the first-mentioned spine is integral.

A sleeve formed in accordance with the invention has a box-like structure of greater rigidity than that of prior sleeves and provides improved protection for a record enclosed therein. It has a further advantage in that its thickness is substantially constant, at least along its edges relative to prior sleeves having one spine only, and consequently when quantities of sleeves according to the invention are arranged closely side-by-side on shelves as is usual in record shops or stores, they stand more satisfactorily by virtue of their sides being parallel.

Further advantages, particularly with regard to simplicity of production, will become apparent from the following description of one embodiment of the invention described, by way of example, with reference to the accompanying drawings, in which:

FIGURE 1 shows the inner surface of a blank for forming one side of the sleeve as well as integral spines, reinforcements and closing flap,

FIGURE 2 shows the blank after application of adhesive,

FIGURE 3 shows the blank, in part, after a first folding operation,

FIGURE 4 similarly shows the blank after a second folding operation,

FIGURE 5 is a cross-section showing the completed sleeve,

FIGURES 6, 7 and 8 are partial views, comparable to FIGURE 1, of simplified forms of blank,

FIGURES 9, 10 and 11 are partial cross-sectional views through the eventual sleeve, comparable to the view shown in FIGURE 5, formed from blanks as shown in FIGS. 6, 7, 8 respectively,

FIGURE 12 shows a modification of the blank of FIGURE 1 whereby an eventual squared or butt joint is formed in place of a mitred joint, and

FIGURE 13 is a view comparable to FIGURE 12 showing such squared or butt joint.

In the construction of a record sleeve as illustrated in FIGURES 1 to 5, a blank of cardboard or other suitable material is cut, as shown in FIGURE 1, to have a square sleeve side portion **10** integrally connected with spine and reinforcement portions **11** on three sides and a spine and flap portion **12** on the fourth side, the side portion **10** forming the back of the eventual sleeve as shown more

clearly in FIGURE 5. The boundary lines between the portions **10** and **11** are indicated in chain line for clarity, but no such markings would have to be used in practice as will be seen hereinafter.

As to the profile of the blank, this is self-evident from FIGURE 1, but particular attention is drawn to the end profiles of portions **11** at the corners of the blank remote from portion **12**. These profiles are identically shaped as a successive pair of like frusto- 45°, 90° 45° triangles the bases of which are perpendicular to the respective sides of portion **10** and the pair of end edges at each corner are integral at their inner-most triangular side.

FIGURE 1 additionally shows crease and score lines by respective dotted and broken lines, the latter being lines along which the material is cut through part of its thickness. Since creases and scoring are necessary on one face of the blank only, the creasing and scoring may be performed in a single operation if desired.

A suitable adhesive is then applied to the other surface of the blank, in particular to those areas shown in double cross-hatching in FIGURE 2. The portions **11** are thereafter folded back on themselves along the score lines **13** to give the result shown in FIGURE 3, wherein the outermost flap **25** overlies the corresponding band **24** along the periphery of the main square shape bounded by crease line **26**.

Further folding is then performed, with areas **14** and **15** being folded inwardly along lines **16** to stand at right angles to the portion **10**, and with portions **17** and **18** being folded inwardly along lines **19** to stand parallel to the portion **10**. The result of this further folding is shown in FIGURE 4 and the section of FIGURE 5, and it will be seen that there is produced a reinforced generally U-shaped channel along three sides with the areas **17** providing a surface to which the other side portion **20** intended to form the front of the eventual sleeve can be affixed as shown in FIGURE 5.

At a convenient stage in the assembly, the remaining spine and flap portion can be folded inwardly along line **21** at right angles to the portion **10**, and the closing flap then folded inwardly along the line **22**, as shown in FIGURE 5.

The fixing of the second side portion **20** to the remainder can take place at any convenient stage, but it may be found preferable to perform it when the spines at the sides of the sleeve have been constructed as in FIGURE 4, but with the portions at the base of the sleeve as in FIGURE 3. One edge of the underside of portion **20** may then be affixed to area **17** at the base of the sleeve and can be moved into position for affixing to the remaining areas **17** when the base of the sleeve is folded to the position shown in FIGURE 4. To facilitate this procedure, part of the base portion **11** is left free of adhesive as shown in FIGURE 2 so as to permit the movement which takes place during folding of the base portion **11** to the FIGURE 4 position.

Again, it may be found convenient to affix the side portion **20** to one of the side areas **17** rather than the base area **17**, in which case the sequence of folding is adjusted accordingly.

The corners **23** may be cut, if desired, so as to provide a mitre as at the other corners, or they may be rounded if preferred. Also, the proportions of the closing flap may be other than those shown in the drawings consistent with ease of opening and closing the sleeve whilst preventing an undue amount of dust from entering at the upper corners of the sleeve. Suitable cut-outs may be provided to receive the flap if desired.

Turning now to the constructions shown in FIGURES 6 to 11, these result from the successive elimination of the outer portions of the blank along the three non-opening edges of the eventual sleeve and may be useful where

the degree of strength and rigidity achieved by the construction of FIGURES 1 to 5 is not required.

Thus in the blank of FIGURE 6, the outermost flap shown at **25** in FIGURE 1 has been eliminated, so that the score line **16** of the blank of FIGURE 1 becomes the blank edge **116**. The remaining score and crease lines, and areas, as depicted by numerals **110** to **119**, **124** and **126**, correspond of course to score and crease lines, and areas, depicted by numerals **10** to **19** in FIGURE 1.

In the blank of FIGURE 7 both the outermost flap **25** and adjacent area **15** shown in FIGURE 1 have been eliminated, so that the score line **19** of the blank of FIGURE 1 becomes the blank edge **219**. The remaining score and crease lines **213**, **226** correspond to lines **13** and **26** of FIGURE 1 and areas **210–11–12**, **214** and **217–18** to areas **19–11–12**, and **14** and **17–18** of FIGURE 1.

In the blank of FIGURE 8, the outermost flap **25**, adjacent area **15** and area **18** shown in FIGURE 1 have all been eliminated so that the score line **13** of the blank shown in FIGURE 1 becomes the blank edge **313**.

FIGURES 9, 10, 11 illustrate the cross-sections through the eventual sleeves resulting from use of blanks according to FIGURES 6, 7 and 8 respectively. As will be noted, whilst in each case there is produced an integral spine running around the three non-opening edges of the sleeve, the blanks shown in FIGURES 7 and 8 provide a spine of single thickness only as compared to the double thickness provided by the blanks of FIGURES 1 and 6. This distinction is apparent by comparing FIGURES 5 and 9, with FIGURES 10 and 11.

In the modification shown in FIGURE 12 the areas **17**, **18** of the blank shown in FIGURE 1 are of different profile at their corner junctions (the south-east and south-west corners on FIGURE 1). The N-S opposite pair of areas **17**, **18** instead of being shaped at their bottom (south) extremity so as to provide a V-notch in the form of a 45°–90°–45° triangle extend downwardly so as to form a straight end edge **432**. Correspondingly the E-W pair of ears **17**, **18** are stepped inwardly at both (east and west) extremities as shown at **431**. The length of steps **431** is equal to the separation between score lines **413** and **419**, that is, equal to the width of areas **417**, **418** and **427**, **428**.

The outermost flaps **425** are shaped the same as flaps **25** in FIGURE 1 as to form a mitred junction in the eventual sleeve. This is obscured in the view shown in FIGURE 13 since these outermost flaps lie underneath the squared or butt joint provided on folding by areas **417**, **418** and **427**, **428**. The remaining reference numerals **410–11**, **414–15–16**, and **419** represent of course the same lines and areas as the corresponding reference numerals **10–11**, **14–15–16** and **19** in FIGURE 1.

If desired, the outermost flaps **425** could of course be shaped to provide a squared or butt joint also, either as depicted in FIGURE 13 or with the E-W flap **425** running out at both sides to the N-S edges **426** and covering the N-S ends. Such arrangement can of course also be provided for the pairs of areas **417**, **418** and **427**, **428** forming the top arm of the U-shaped channel onto which the front of the sleeve is secured.

It will be seen from the above description that the invention provides, by a simple production method, a sleeve of considerable rigidity by virtue of its spines and reinforcements which are all integral with a side member of the sleeve. A further advantage lies in the fact that, with a sleeve according to the invention it is not necessary to crease the printed front side of the sleeve by bending its edges around the edges of the back as is the usual practice, with the possibility of cracking or otherwise damaging the film or other surfacing materials on such front side.

I claim:

1. A gramophone record sleeve comprising: a first substantially square side member; three spine members integrally connected to respectively different edges of said first side member, each doubled back and affixed to themselves to form a reinforcement, each folded inwardly along said edges, and each folded inwardly along lines parallel to and equally spaced from said edges to form a generally U-shaped channel with the U-base forming a spine for the sleeve; and a second substantially square side member having its periphery affixed along three edges thereof to the U-arm of said channel remote from said first side member.

2. A sleeve according to claim **1** comprising a fourth spine member integrally connected to the remaining edge of one of said side members, said fourth spine member being folded inwardly along said remaining edge to form a spine, and folded inwardly along a line parallel to said remaining edge and having said equal spacing therefrom to form a closing flap for the sleeve.

3. A gramophone record sleeve comprising: a first substantially square side member; three spine members integrally connected to respective ones of three edges of said first side member, each folded inwardly along said edges, each folded inwardly along lines parallel to and equally spaced from said three edges to form a generally U-shaped channel, and each having been doubled back and affixed to themselves and the periphery of said first side member adjacent said edges, before the aforementioned folding, to form a reinforcement for said channel; a fourth spine member integrally connected to the fourth edge of said first side member, folded inwardly along said fourth edge, and folded inwardly along a line parallel to said fourth edge and having said equal spacing therefrom to form a closing flap for the sleeve; and a second substantially square side member having its periphery affixed along three edges thereof to the U-arm of said channel remote from said first side edge.

4. A sleeve according to claim **3** wherein said second side member is affixed to the outer surface of said U-arm without substantial bending around the remainder of said channel.

5. A blank for use in making a gramophone record sleeve, comprising a substantially square side member portion, and spine portions of substantially uniform and equal width extending integrally with and along three edges of said side member portion, the end edges of said spine portions at the two corners formed intermediate successive pairs of said three edges each having a substantially identical profile as frusto-45°, 90°, 45° triangular shape with a common integral side between the adjacent pair of end edges at each corner and the triangle bases extending perpendicularly from their respective side member portion edges.

6. A blank according to claim **5** wherein the profiles of said end edges each continue into an additional frusto-triangle substantially identical to the afore-mentioned shape.

7. A blank according to claim **5** having a spine and flap portion extending integrally with and along the remaining edge of said side member portion.

8. A gramophone record sleeve comprising: a relatively stiff, substantially square first side member; three spine members integrally connected to respectively different edges of said first side member, each folded inwardly along said edges, and each folded inwardly along lines parallel to and equally spaced from said edges to form a generally U-shaped channel with the U-base forming a spine for the sleeve; and a relatively stiff second side member, having substantially equal square dimensions to said first side member and initially physically separate therefrom, and said second side member having its peripheral margins affixed along three edge regions thereof to the outer surfaces of said channels remote from said first side member.

9. A blank of relatively stiff material for use in making a gramophone record sleeve, comprising: a substantially square side member portion; spine portions of substantially uniform and equal width extending integrally with

and along three edges of said side member portion, said spine portions being adapted for folding along said edges; and spine flap portions, each having width less than the square dimension of said side member portion, extending integrally with and along the outer side edge of a respective one of said spine portions, and being adapted for folding along said outer side edges.

10. A blank according to claim **9** wherein, at each corner formed by a pair of said side member portion three edges, a first one of the associated spine flap portions extends fully towards the relevant corner along its respective spin portion, and the other spine flap portion extends towards said corner up to a point spaced therefrom along its spine flap portion by a distance equal to the width of the one spine flap portion at its adjacent end edge.

11. A blank according to claim **9** comprising reinforcement portions extending integrally with and along the outer side edge of said spine flap portion and adapted to be folded back along the last-mentioned outer side edges in superimposed relation over at least its associated spine flap portion.

12. A gramophone record sleeve having one open side comprising: relatively stiff first and second side members

of substantially equal square dimensions; three spine members each integrally connected to and folded inwardly along a side edge of one of said side members at a respectively different non-open side of the sleeve; and respective spine flap members integrally connected to and folded inwardly along the outer side edges of said spine members at least at the opposed pair of non-open sides of the sleeve, the outer surface of a spine flap member being integrally connected to one of said side members through a spine member being affixed to the inner surface of the other one of said side members to secure said side members in spaced apart superposed relation.

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