

Aug. 18, 1964

C. K. SHAW

3,145,026

AUDITORY PUBLICATIONS

Filed May 16, 1961

6 Sheets-Sheet 1

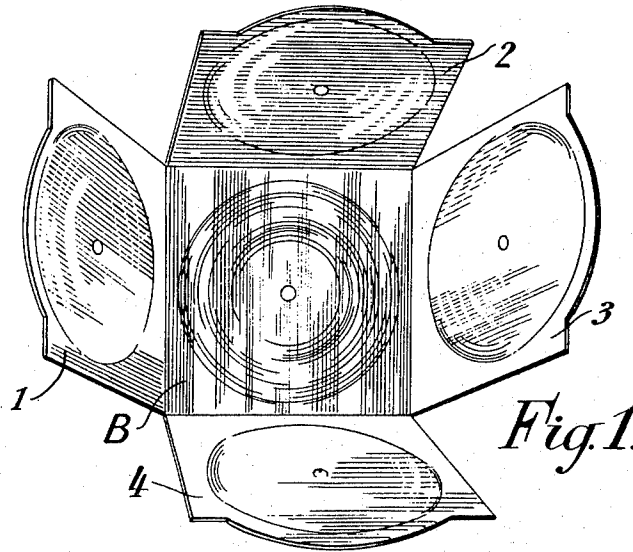


Fig. 1.

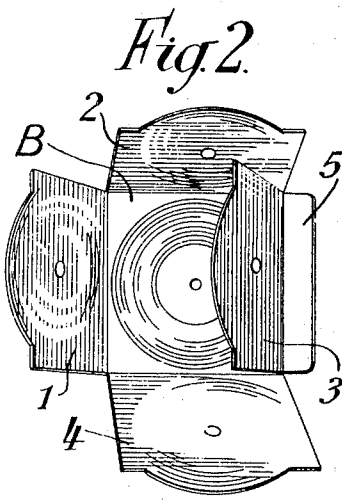


Fig. 2.

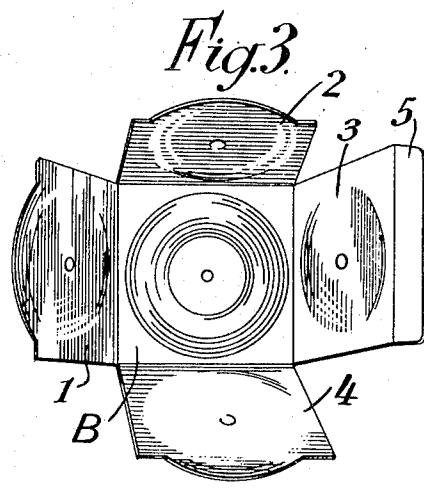


Fig. 3.

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6 Sheets-Sheet 2

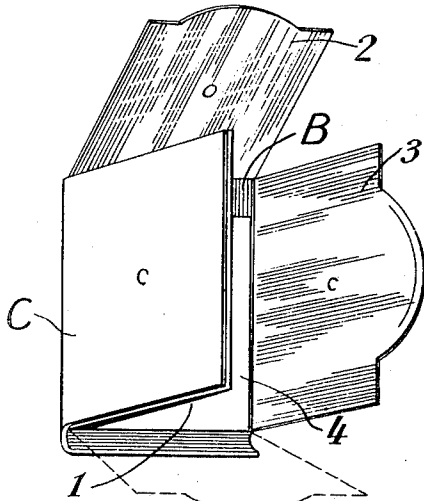


Fig. 4.

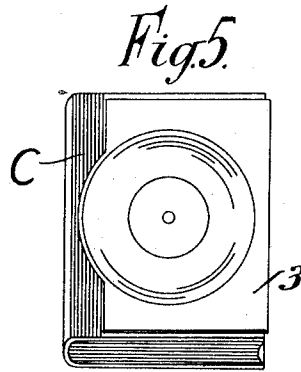


Fig. 5.

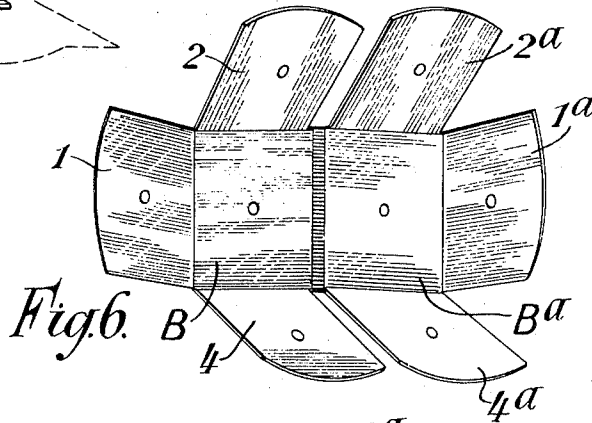


Fig. 6.

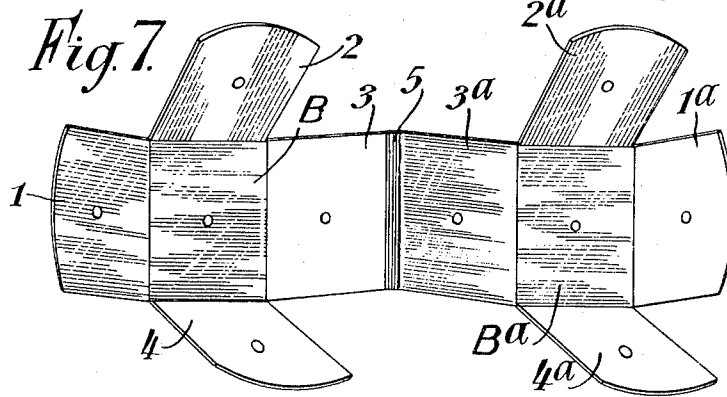


Fig. 7.

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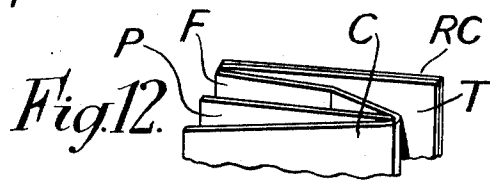
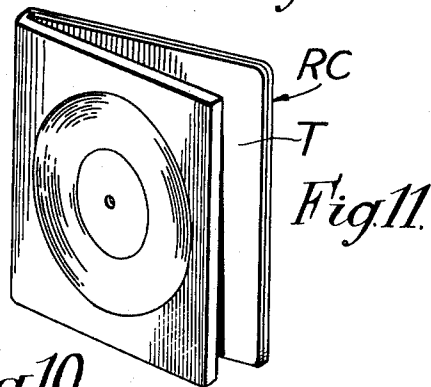
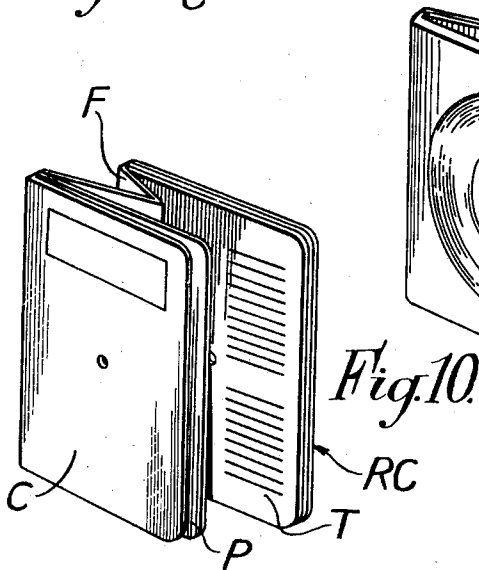
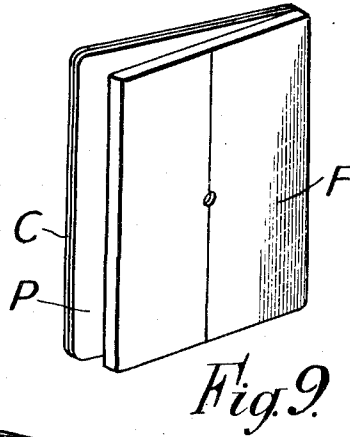
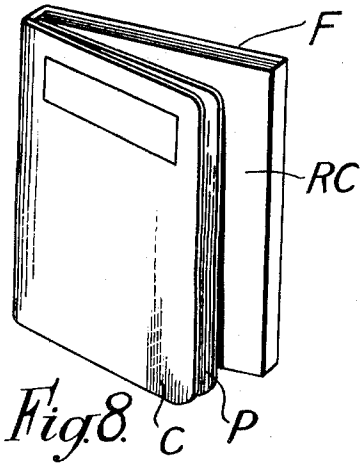
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AUDITORY PUBLICATIONS

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6 Sheets-Sheet 3



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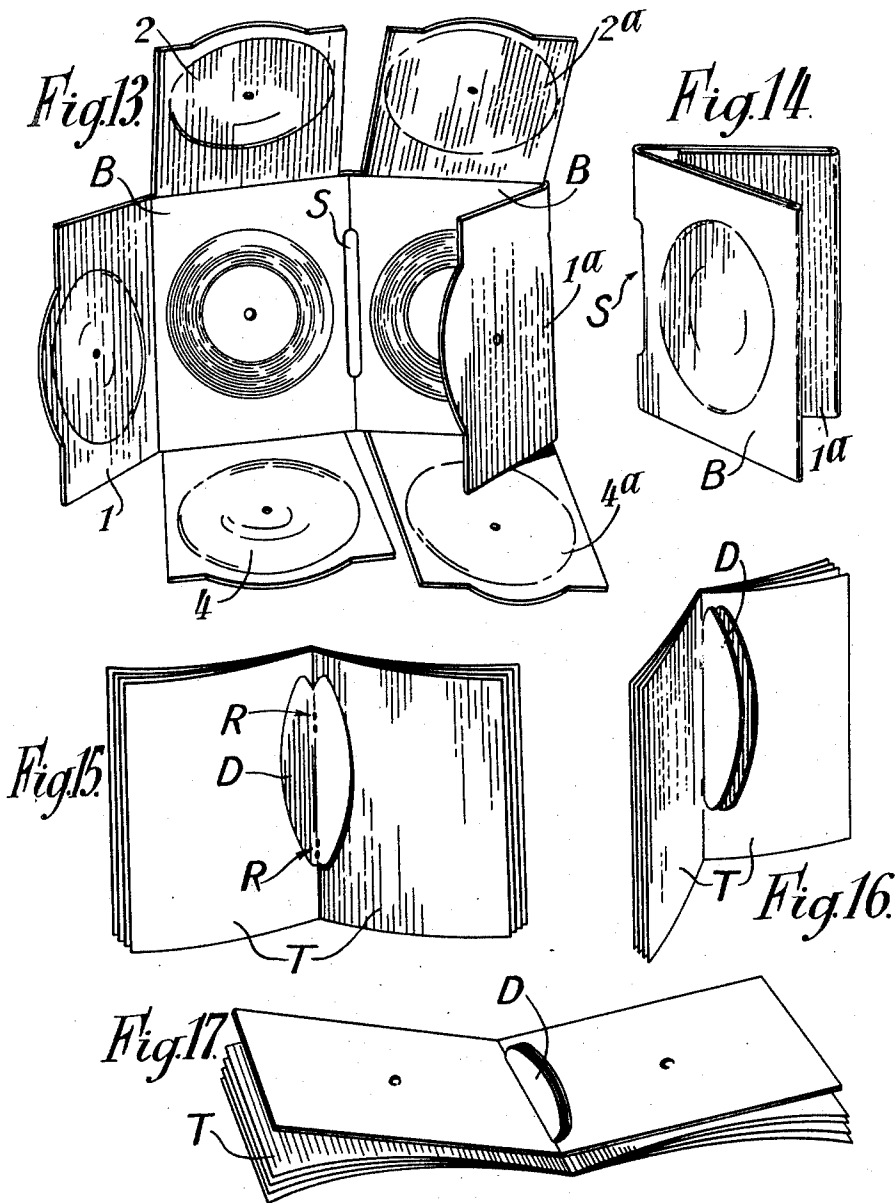
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6 Sheets-Sheet 4



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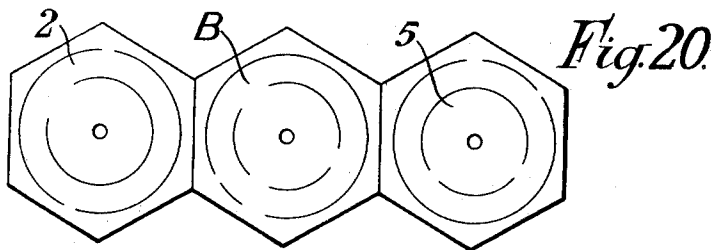
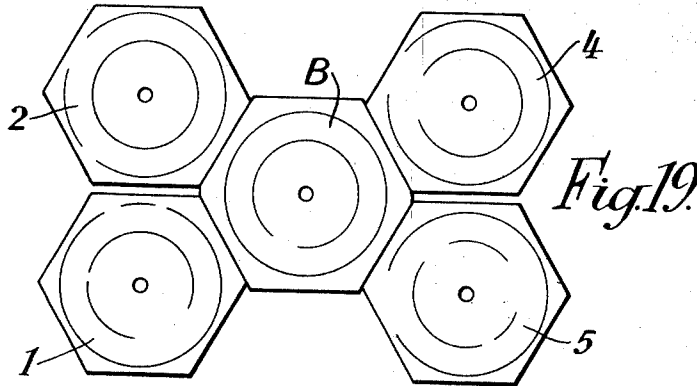
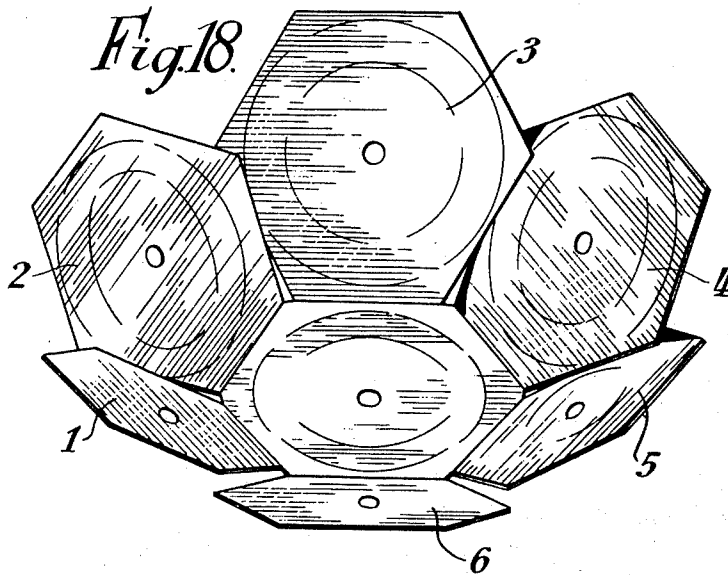
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AUDITORY PUBLICATIONS

Filed May 16, 1961

6 Sheets-Sheet 5



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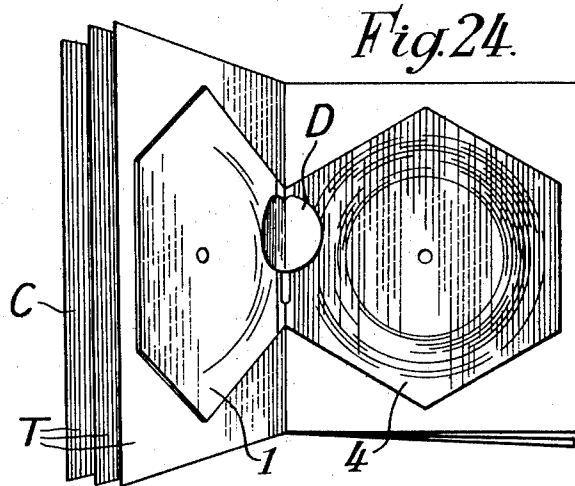
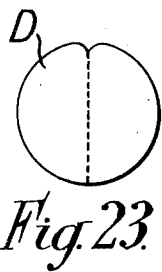
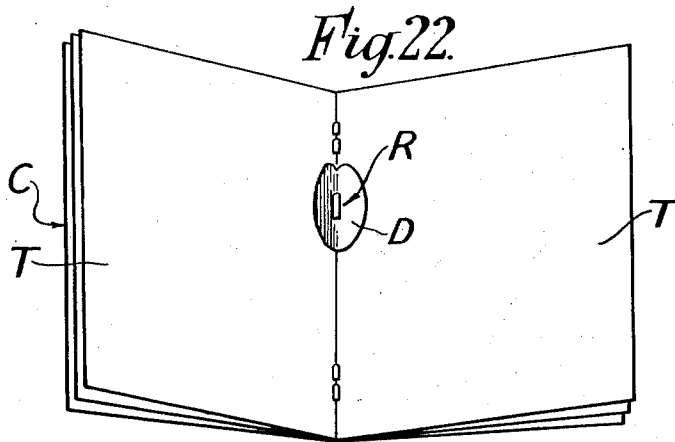
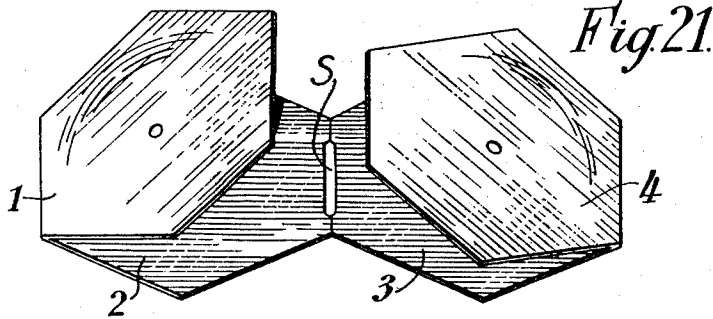
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AUDITORY PUBLICATIONS

Filed May 16, 1961

6 Sheets-Sheet 6



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3,145,026

AUDITORY PUBLICATIONS

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Filed May 16, 1961, Ser. No. 110,556

9 Claims. (Cl. 274-42)

This invention comprises improvements in auditory publications of the type wherein are provided sound recordings in addition to printed matter.

With the considerable developments that have taken place in the manufacture of plastic materials in recent years, it is now possible to produce very durable plastics in laminated form, varying in thickness from a few thousandths of an inch upwards, upon which microgroove recordings can be impressed, and which will give high-fidelity effects equal in every way—if not actually better than—the well-known shellac record of much greater thickness.

Apart from the great advantage of extreme thinness, a "laminated" record can be made of transparent material and afterwards mounted by adhesive or in other ways over a printed background. This background can be pictorial, colored, or with the printed word so as to combine the faculty of vision as well as being auditory.

On the other hand, the laminated material itself may be colored, and not transparent. In that case it is applied usually in disc form and made to adhere to the paper or board background with rubber, plastic or other solution or adhesive.

This invention has for its object the provision of a simple and convenient method whereby a number of flexible plastic recordings can be assembled or combined within a single integral group or unit without impairing the ease with which any one of the records can be selected and "played over" at will. Although of particular value in the case of normal publications in book form; the invention is not to be considered as confined to books.

According to my invention I arrange in a single integral record-pack for the provision of a number of separate recordings disposed around the edges of a centrally-perforated base in such a manner that they can be folded serially on to such base in any required order for the chosen recording to be uppermost.

Such a record-pack can if desired be then embodied within the compass of a book, magazine or other publication in a number of different ways, either being incorporated within the binding as a fixture or so adapted as to be detached from it or returned to it at will.

In one embodiment of the invention, such a record-pack unit can be housed inside the front or back cover of a book; and in this case the printed text pages will necessarily be perforated as well.

In another embodiment the record-pack unit will actually form part of the cover itself, one of the four folded sections being if necessary specially strengthened for this purpose or otherwise stiffened to avoid undue wear and tear when the book is in contact with others on a table or shelf.

In a further embodiment of the invention there may be two such record-pack units integrally joined together so that one half of the whole lies within one section of a book and the other half within another section—thereby providing the mount or basis of up to twenty recordings in a single assembly.

One great advantage in this method of assembling a number of records upon a single sheet of material lies in economy in production costs, because it saves the necessity of elaborate binding in the form of loose-leaf technique which is costly in both materials and labour, and moreover does not automatically ensure register of the spindle-holes of all the records and book-pages that are involved in only a small assembly of sheets and

records. Moreover the use of transparent film material for the records themselves enables any printed matter underneath to be clearly seen if not actually enhanced—particularly if in colour—when the background sheet or board is laminated and the recording impressed upon it.

Many examples could be given of auditory publications in which it would be of great advantage for the user to be able to see and read the symbols and the printed matter at the same time as the recorded sound is being heard. This applies for instance to the type of publication devoted to subjects such as these:

- Learning foreign languages.
- Learning to play musical instruments.
- Study of music and the opera.
- Political speeches and reportage.
- Bird, animal and nature study.
- Physical culture courses, and many others.

In another embodiment of the present invention therefore I so construct the record-pack that it can be detached at will from the surrounding text-matter so that it can be applied independently to the gramophone turntable, and afterwards returned at will to its location in the binding of the book, magazine or other publication. This latter feature is of importance, because if it is not possible to return the record or record-pack to its status quo ante it can easily become damaged, displaced or lost—which would mean that the book and the text-matter itself would become virtually valueless.

In this embodiment of the invention I provide a slot at one of the folds of the record-pack, by means of which the pack can be hooked over or otherwise engaged with a detention-segment stapled or otherwise incorporated in the binding. This segment conveniently takes the form of a central fly-sheet of stronger material than the text pages of the book or magazine, and of such shape and dimensions that the pack can be hooked over it and thereby held in place. The slot provided in the pack will of necessity correspond in position with the natural fold of the book so that when the book is closed the folded pack constitutes a single or double "page" of the book in which it is contained.

Various embodiments of the invention will be described and illustrated in the accompanying drawings which serve to show some examples of the way in which it can be applied.

In these drawings:

FIG. 1 is a simple form of record-pack arranged around a rectangular base. It is shown as opened-up in such a way as to illustrate the main features of its construction with its four hinged sections surrounding the central rectangular base.

FIG. 2 shows a construction similar to that in FIG. 1, but modified by the addition of a binding segment by means of which the record-pack can be applied to the binding of a book.

FIG. 3 shows a variation of the construction shown in FIG. 2, including an integral binding-strip provided on one of the segments instead of upon the central rectangular base.

FIG. 4 shows such a record-pack as applied to a bound book.

FIG. 5 is the same construction as that in FIG. 4 but with one of the record-mounts folded back over the front cover which is the position it would occupy when selected and in readiness for playing over on the gramophone turntable.

FIG. 6 and FIG. 7 show in diagrammatic form two different examples of a rectangular-based twin-pack providing up to sixteen and twenty record-mounts respectively if both sides of all the sections are used.

FIGS. 8, 9, 10 and 11 show the application of the in-

vention to book-publishing wherein the number of records to be included necessitates both sides of the record-pack being utilised instead of only one. FIG. 9 is the back view of FIG. 8.

FIG. 10 shows how the text-matter of the book is turned through 180 degrees in order to reverse the display of records from one side of the pack to the other.

FIG. 11 shows one record of the reversed pack displayed, and ready for application to the turntable, while

FIG. 12 is a diagrammatic view (to a reduced scale) to show the relative positions of the different sections of the book as in FIG. 11.

In the embodiment of the invention shown in FIGS. 13-17 the record-pack is modified to enable it to be detached from a book or magazine instead of being a fixture therein. FIG. 13 shows the pack itself, opened up to show its construction, and FIG. 14 shows the same pack folded ready for insertion into the book or magazine.

FIGS. 15 and 16 show the mounting in the text of the book of the double detention-segment over which the record-pack is applied when it is being replaced after use, and

FIG. 17 shows the record-pack in position after replacement.

In the embodiment of the invention shown in FIGS. 18-24, the record-pack is constructed upon a hexagonal base instead of a rectangle, thereby enabling economy of material to be achieved by affording the maximum number of records to be arranged in a single unit. FIG. 18 shows the full pack opened up to indicate the general arrangement of the folded sections.

FIG. 19 shows in diagrammatic form the same hexagonal construction in which there are only four folded sections instead of six, while in FIG. 20 there are only two.

FIGS. 21-24 show the equivalent of FIGS. 13-17 when applied to the hexagonal instead of the rectangular construction.

Referring now to the record-pack shown in FIG. 1, it will be seen that there are four separate sections, 1, 2, 3 and 4 of laminated paper or board projecting from a square base B over which they can be folded in any order that may be desired. The last one to be folded will of course be uppermost when the pack is applied to the gramophone turntable. It should here be observed that the sections shown diagrammatically an impressed recording on either one or other—or both—of its sides, because it is adapted to be folded either backwards or forwards as may be required. Even though the embodiment of the invention characterized by FIG. 1 is capable of accommodating a total of ten different recordings—five each side—it may be found convenient to employ only one side of the pack for this purpose, the reverse side being used for printed matter only. In that event, the paper or board would be laminated with plastic material to receive the impressed recording, but on one side only instead of on both.

It may in certain cases be found convenient to have only two hinged or folded sections instead of four; and in this case sections 1 and 3 could be dispensed with, or 2 and 4. On the other hand, any one of the four sections could be dispensed with, leaving 4-8 available surfaces instead of the 5-10 for the complete record-pack. Whatever arrangement may be adopted, it does not vary the essential feature that characterises the invention, namely that the desired record is folded over the base member with which it registers.

As illustrated in FIGS. 1-5, the recording sections are given a characteristic contour at their outer edges. This is not essential, but may be of help in selection and in locating the stylus in position when the pack is applied to the turntable.

In FIG. 2 a binding segment 5 is shown which is attached to the base B by adhesive, stitching, stapling, rivetting or in any other suitable way. This binding strip enables the record-pack to be incorporated in the make-up of a book in such a way that—according to the way in

which it is folded—the desired record can be displayed by folding it over the front or back cover of the book. In that case of course the book itself would be centrally perforated to accept the turntable spindle to which the whole assembly is applied.

In FIG. 3 the binding strip is applied to the record section 3 instead of to the base B, thereby enabling the major portion of the record-pack to be withdrawn from the body of the book for ready manipulation of its different sections.

FIGS. 4 and 5 show the actual application of a record-pack to a book, as an integral part of it. In this case, section No. 1 can be dispensed with so far as a recording is concerned, and in that case can be utilised as the inside face of the front cover C. On the other hand, if the method of binding shown in FIGS. 2 or 3 is utilised, then the section 1 is made available for a recording and the cover C would be so bound to the book that it could be folded backwards to lie against the back cover. In FIG. 5 it is assumed that section 1 is integral with the front cover C, that sections 2 and 4 are folded inside the cover (in no matter what order) and that section 3 is the record that has been selected for folding back over the cover, for the application of the whole book to the turntable.

FIG. 6 shows a twin-pack in which sections 3 and 3a have been omitted, the two base portions B being joined by a binding strip 5. When incorporated in a book, these base portions B can be used as the covers of the book, the text-matter being stapled or stitched to the strip 5. In certain cases the larger arrangement shown in FIG. 7 may be found of advantage. The disadvantage would lie only in the extra quantity of "off-cuts" of plastic-laminated paper or board occasioned in the manufacture of the packs. This however does not represent actual wastage of material, because the offcuts themselves can be used for the manufacture of single recordings as and when they are required.

Referring now to FIGS. 8 to 12, these illustrate how a single pack accommodating up to 18 different records can be arranged in a book, where for any reason it is desired to have all the records together and not split up into different groups. In this embodiment, two packs such as that illustrated in FIG. 1 are joined together by joining the central rectangular base sections B back to back, with a binding strip 5 suitably arranged (but not shown in the drawings) to enable the twin-pack thus formed to be bound into the book.

In the figures, the record-pack itself—to avoid confusion—is designated P and is at all times contiguous to the front cover C. On the other hand, the text portion T is at all times contiguous to the rear cover R.C. These two portions of the book are joined together by a binding-folder F which when opened is page-size as shown in FIG. 9 but which has a fold down its middle line so that when folded—as in FIG. 10—the text faces the record-pack.

When however it is not folded, but flat, it lies between the two halves of the book because the front half (i.e. the front cover C and the record-pack P) has been turned through 180 degrees in order to allow the reverse sides of the recording sections to be displayed.

It will be realised that by the use of one or more record-packs of the type described herein, many other variations and combinations of folded sections can be utilised without departing from the scope of the present invention, the main function of which is to achieve simplicity of construction by avoiding elaborate bindings of individual recordings.

Referring now to FIGS. 13-17 it will be seen that there are two rectangular base members B that joined and folded together, and having three record-segments 1, 2, 4 and 1a, 2a, 4a respectively attached to them at their edges. These segments can be folded around the bases B in any order that may be required to bring the selected recording into playing position, but whichever is chosen, the final result will be as in FIG. 14. A slot S is provided in the fold of the pack and this may be reinforced

at its edges in addition to the laminated plastic covering already provided for the recordings on one or both sides of the paper or board constituting the pack. In like manner it might in certain cases be advisable to strengthen the actual folds between the two sections B to allow of these being folded sometimes one way and sometimes in the opposite way, without risk of cracking or splitting. A fabric reinforcement could be provided, or alternatively the fold itself could be constituted by a strip or strips of fabric of appropriate width and length which would replace altogether the plastic-laminated paper or board of which the record-pack is composed.

Referring now to the book, magazine or literature in which the record-pack is to be housed, it will be observed from FIGS. 15 and 16 that a double detention-segment D is provided at a suitable point in the text T, and held securely in position by retaining staples R. The member D is of stronger material than the text-pages and is of such length, shape and contour as to allow its two halves when folded together to be inserted in the slot S in the record-pack. After the top end has been inserted, the pack is then pulled gently downwards until the top of the slot S comes against the staple R. At that point the whole of the member D will be lying within the compass of the slot S. The pack is then locked in place by gently pushing it upwards a fraction of an inch until the bottom of the slot S comes against the lower staple or retaining rivet R, the length of the slot D, and the overall length of the detention segment D will all be so related to one another as to be appropriate to the nature and dimensions of the book of which the record-pack is to form a part.

In the case of certain books it may be found to be an advantage not to have all the records contained in a single detachable pack, but instead to provide a plurality of detention-segments at different positions in the body of the book. In that event the folded record sections surrounding the bases B could be eliminated wholly or in part. Indeed, one might go even further and instead of reducing the record-pack to a fly-sheet composed of two sections B, the bulk of one of these could be removed so as to leave only a strip of material sufficient to contain the slot S. Thus the remaining member B could contain a single or a double-sided record, and that alone, without departing from the scope of the invention.

At the other extreme, I might utilise a double record-pack to accommodate up to twenty different recordings, on the lines shown in FIG. 7; and in that event, the binding strip itself would be appropriately slotted and reinforced for removable engagement with the detention segment provided in the binding of the book.

It will be realised that in this and other embodiments of the detachable-pack type it is not necessary to perforate all the text pages and the covers of the book in order that the entire book can be mounted on a turntable. This eliminates the necessity of giving special attention to the print layout, illustrations, blocks etc. to avoid their defacement by the perforation for the gramophone spindle.

Moreover, if the record-pack can be readily detached and replaced in the way described herein, there is no need to limit the thickness of the book to which it is applied. If on the other hand the entire book had to be put on the turntable, its total thickness might have to be limited by the design of the pick-up arm, the recording head carrying the stylus, or other constructional features that might be involved in the play-back device itself.

On the other hand it might in certain cases be advantageous to have the text of the book and its covers perforated as well as the record-pack, so that either method of operation could be employed. This could apply to books, periodicals or magazines of the thinner

type, such as catalogues, brochures and the like. In that case, the pack could be mounted on a detention segment inside the front or back cover, for the selected record to be folded over that cover without removal. Such an arrangement would be of use in cases where a series of record-packs were to be kept for filing in a special folder, while the text-matter accompanying it would be otherwise disposed of.

Referring now to the application of records to a hexagonal base the embodiments of the invention shown in FIGS. 18-20 are suitable purely as record-packs which may be used independently of literature or printed matter (other than that beneath the laminations) or they may be incorporated in the binding of a book by the addition of binding strips as shown in FIGS. 2 and 3 in connection with the rectangular-based type of pack. It will be observed in both FIGS. 18 and 19 however that clearance-spaces are arranged between the various sections to eliminate any buckling or fouling of the edges when they are folded after selection.

The hexagonal record-pack can be modified similarly to the rectangular one if it is desired to mount it detachably in a publication, by the inclusion of the slot S seen in FIG. 21 provided in one or more or all of the folds. In this case however, the fold being shorter than in the rectangular type, the detention segment D will with advantage be smaller than that shown in FIGS. 15 and 16 and held in place by only one retention staple R instead of two. In the embodiment illustrated the detention segment D is circular, folded in the middle, and of a diameter just a little less than the length of the slot S. The two halves of D are merely pinched together for the pack to be hooked on and pulled down against the staple R.

What I claim is:

1. An auditory publication comprising in combination, a booklike binder, a base sheet, at least two subsidiary sheets formed integral with the base sheet at the sides thereof, said subsidiary sheets being folded to overlie the base sheet in registry therewith, a flexible plastic recording mounted on each of said sheets, said base and subsidiary sheets being adapted to be unfolded and refolded at will to bring a selected recording uppermost directly adjacent said base sheet and without an intervening sheet between the base sheet and the subsidiary sheet on which the selected record is mounted, and means on said binder and one of said sheets for attaching the folded sheets within said binder.

2. An auditory publication according to claim 1 wherein said sheets and plastic recordings are centrally perforated, and said base sheet is of rectangular shape.

3. An auditory publication according to claim 1 wherein said sheets and flexible plastic recordings are centrally perforated, and said base sheet is of hexagonal shape.

4. An auditory publication according to claim 1 wherein said means for attaching the folded sheets comprises a foldable strip at one edge of one of said base and subsidiary sheets, said strip being fastenable to said binder to unite the binder with said folded sheets.

5. An auditory publication according to claim 1 wherein said means for attaching the folded sheets comprises a slot in one of said binder and folded sheets and a tab in the other, said tab being removably receivable in said slot to detachably fasten the folded sheets within the binder.

6. An auditory publication according to claim 5 wherein said slot is placed in at least one of the folds between said base and subsidiary sheets.

7. An auditory publication according to claim 5 wherein said binder includes test sheets, said binder and text sheets as well as said recordings being centrally perforated, said slot and tab normally permitting the folded sheets to be positioned in the text matter from which they can be removed at will for playing over of the records and then be returned at will, the whole publica-

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tion being so arranged that the records can also be played over by placing the entire assembly of binder, text and folded sheets on a turntable.

8. An auditory publication according to claim 1 wherein said binder includes two covers and a text portion contiguous to one of the covers, and said folded sheets mounting records being attached to the other cover to form two book sections, said covers being joined by a bind sheet having a central fold so that one of said two sections of the book can be turned through 180 degrees with relation to the other for the purpose of displaying either the obverse or the reverse face at will of the folded sheets mounting the flexible records.

8

9. An auditory publication according to claim 1 wherein said means for attaching the folded sheets within said binder is constructed and arranged to permit removal of the sheets from the binder.

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