MZL FULLER.

SHIPPING CONTAINER FOR PHONOGRAPH RECORDS.

APPLICATION FILED JULY 3, 1913. RENEWED SEPT. 19, 1914.

1,137,126. Patented Apr. 27, 1915.

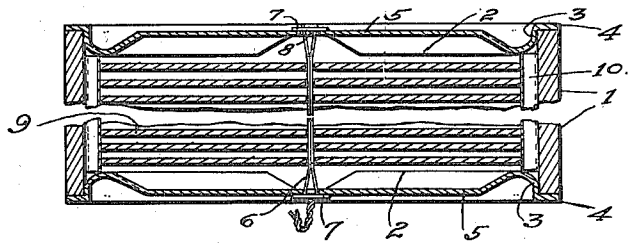


Fig. 1.

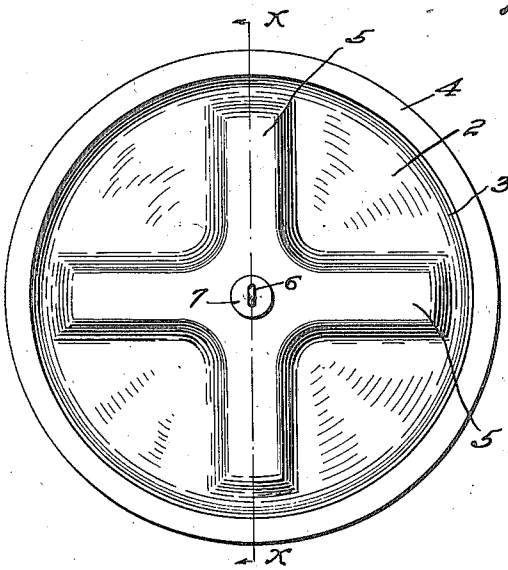


Fig. 2.

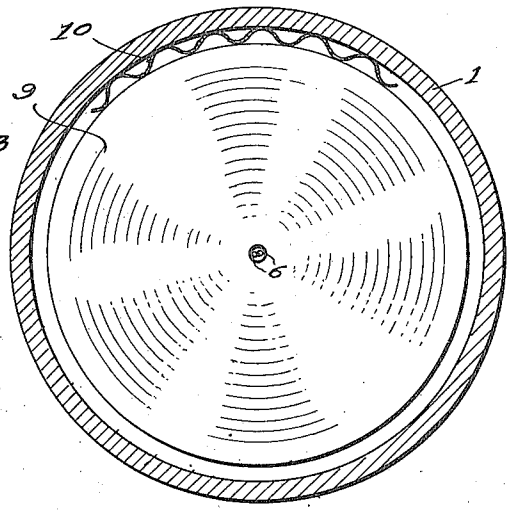


Fig. 3.

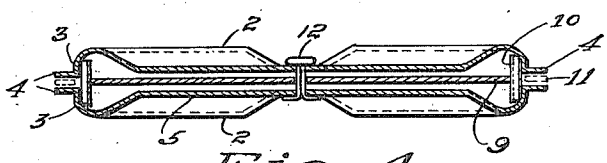


Fig. 4.

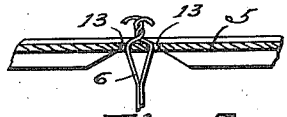


Fig. 5.

Witnesses

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SHIPPING-CONTAINER FOR PHONOGRAPH-RECORDS.

1,137,126. Specification of Letters Patent. Patented Apr. 27, 1915.

Application filed July 3, 1913, Serial No. 777,237. Renewed September 19, 1914. Serial No. 862,436.

To all whom it may concern:

Be it known that I, MZL FULLER, a citizen of the United States of America, residing at Birmingham, in the county of Jefferson and State of Alabama, have invented certain new and useful Improvements in Shipping-Containers for Phonograph-Records, of which the following is a specification.

My invention relates to improved means for the shipment of phonograph disk records or record blanks and is essentially designed so as to be adaptable for the shipment of records in any desirable quantity.

One object of my invention is to so design the parts that they may be assembled for shipment of a single record or the capacity of the container may be increased to take care of a considerable number of records at only a nominal increase in cost.

A further object is to design the end closures of the container so that they are similar and interchangeable, thereby standardizing the parts and making the cost of the container less and its use more simple.

A further object of the invention is to take advantage of the central opening in the records as a means for inserting through the records themselves and through the end closures of the container, a fastening means which may be of different character according to the duty required of it.

A further object is to design the interchangeable end closures of the container so that, when assembled in reverse positions, they will receive and hold a single record between them and when their positions are reversed they will receive between them a tubular body of varying lengths and will interlock with the same.

My invention further comprises the details of construction and arrangement of parts which, in their preferred embodiment, are hereinafter more particularly described and claimed, reference being had to the accompanying drawings, in which:—

Figure 1 is a vertical sectional view of a container holding a number of records, the fastening means being shown in position and the packing being omitted from between the records. The section is taken on the line x—x of Fig. 2. Fig. 2 is a plan view of Fig. 1. Fig. 3 is a horizontal cross-sectional view through the container as shown in Fig. 1, the marginal packing being partially indicated. Fig. 4 is a cross-sectional view showing the end closures of the container reversed to receive between them a single record. Fig. 5 is a detail cross-sectional view showing a modified manner of attaching the fastening means to the end closure.

Similar reference numerals refer to similar parts throughout the drawings.

The flat record disks in general use are large and heavy and are liable to be easily broken in shipment. In order to facilitate their safe and economical transmission by mail or freight, it is necessary to provide a carrier having the requisite strength to protect the disks and yet which is readily adjustable at small expense to accommodate one or any reasonable number thereof.

According to my invention, I propose when shipping the records in quantity to use a cylindrical body 1 which may be made of metal or of any strong composition material such as cardboard or papier mâché, and which will be light and yet sufficiently strong and rigid to protect its contents. This cylindrical body 1 can be furnished in varying lengths according to the number of records to be shipped in it, or it may be furnished in stock lengths and sawed or cut to the length desired for each shipment. I provide duplicate end closures for the cylindrical body 1, which closures as shown are circular metal plates 2, each provided near its periphery with an annular shoulder 3 which is slightly inclined outwardly and which merges into a horizontal marginal flange 4 raised slightly above the body portion of the plate. The plates are provided in their centers with cross shaped reinforcing ribs 5 which are raised on the same side of the plate as its shoulder 3 but to a slightly less height so that the ribs also stand below the level of the flange.

In order that the carrier may accommodate the different diameters of record disks and avoid expensive or troublesome packing to prevent shifting of the same and also in order to protect the peripheral edges of all record disks from being injured, I provide a central fastening means which at its ends is connected centrally to the end closures and which is passed through the central openings in the record disks. In the construction shown in Fig. 1, this fastening means comprises a wire 6 which is doubled preferably and its ends passed first through two openings in a plate or button 7, after which the two ends of the wire are passed downwardly through a central opening 8

in the top closure. After the several record disks 9 that are to be shipped have been strung on the double wire strand by having the latter passed through their center openings, the lower ends of the wire are passed through the opening 8 in the bottom end closure and finally through the openings in a plate or button 7, after which the ends of the wire are twisted together to hold the parts securely in assembled position.

In assembling the container the closures have their inclined shoulders 3 forced into the ends of the body 1 until the flanges 4 seat flush against the ends of such body. The inclined or beveled character of the shoulders 3 causes them to fit tightly into the ends of the body and their shape enables them to effectively strengthen or brace the body against radial crushing strains. Before the record disks 9 are strung on the fastening wire, which serves to center them in the body 1, packing is interposed if desired between adjacent disks. Also, after the disks are in place, before the top closure is forced on, a fluted packing strip 10 is inserted between the body 1 and the edges of the disks. Any other suitable packing may be used in place of that shown. After the packing has been inserted between and around the disks and the latter strung on the wire 6 as a centering means, the end closures are forced home and the free ends of the wire are twisted together to tightly interlock the several parts. Obviously the length of the cylindrical body 1 will be made to correspond substantially to the number of record disks to be shipped, and the end closures and fastening means are suited for use with any length of body.

The construction described is suited for shipment of more than one or two records. Where, however, only one or two records are to be shipped, it is obvious that this must be done at the least possible expense. To this end I dispense with the use of the cylindrical body 1 and simplify the fastening and centering means. By reference to Fig. 4, it will be seen that if the end closures 2 are reversed from the position shown in Fig. 1 and assembled with their flanges 4 in engagement, a circular compartment is provided between the shoulders 3 and the body portions of the plates which is sufficient to receive a record disk and ample packing therefor, or by slightly spacing the flanges 4 by a washer or ring spacer 11, shown in dotted lines, this compartment may be adapted to receive two or even three records without really using what would constitute a cylindrical body portion 1. In this construction the fastening means for the container is also adapted to serve as a disk centering means and is preferably formed by a strong split metal fastener 12, which is passed down through the openings 8 in the end closures 2 and through the central opening in the inclosed record disk, after which the ends of the fastener are spread apart.

It will be noted that the head and split ends of the fastener are adapted to be received in and protected by the ribs 5 and that in the position in which the plates are here used, the centers having the openings 8 are brought close together so as to shorten the length required for the fastener and cause them to hug the disk packing.

The fastening and centering means may be the same in the large and small carrier if desired for a heavy split metal fastener might be employed, or any equivalent means which will both fasten the ends together and hold the disks in central position may be utilized. Where the end closures are made of sufficient heavy metal plate the plates 7 may be dispensed with and instead of providing a single opening 8 in the center of plates 2, the latter may be provided with separate openings 13 through which the ends of the wire strand are passed and twisted.

Various other changes and modifications may be made in the construction and arrangement of the centering and fastening means.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A shipping carrier for phonographic record disks comprising a base, a top, a separate tubular body adapted to be inserted between said top and base, and, means to interlock base, top and body with a series of superimposed centrally apertured record disks within the carrier.

2. A shipping carrier for phonographic record disks comprising a base, a top, a detachable and interchangeable tubular body adapted to be interposed and held between the top and base, a member adapted to be inserted through the central openings of a number of superimposed record disks to center them in said body, and means to fasten the top and base to said member to interlock them with said body.

3. In a shipping carrier for phonographic record disks, a tubular body adapted to be varied in length to receive a variable number of superimposed record disks, end plates to close the ends of said tubular body, a central member upon which the record disks to be shipped are strung, means to interlock said member with said end plates, and means to hold the body portion in position between the end plates.

4. In a shipping carrier for phonographic record disks, a tubular body, duplicate flanged end closure plates which interlock with the ends of said body, and a central fastening means which holds the ends inter-

locked with said body and upon which the inclosed disks are adapted to be strung.

5. A shipping carrier for phonographic record disks comprising, in combination, a tubular body, reinforced end closures shaped to engage the ends of and fit against the inner peripheral wall of said tubular body, superimposed record disks which have central openings and are disposed within said body and spaced from contact with its inner wall, packing between said disks and body, and flexible means passed through the central openings of said disks and through said end plates to fasten all said parts together.

6. In a shipping carrier for phonographic record disks, a tubular body of greater diameter or width than the disks, detachable flanged end closure plates which are struck up taperingly to fit snugly into and to interlock with the ends of said body, and a central fastening means which engages and holds both ends fast in the ends of the body and upon which the inclosed disks are adapted to be strung, said fastening means being made fast to said end plates and held centrally of the body thereby.

7. A shipping carrier for phonographic record disks comprising a tubular body container, similar, reinforced, dished end closures therefor, means on which the disks to be inclosed in said container are strung and which comprises a wire which is doubled and passed through the disks and closures, and means which the ends and bight of said doubled wire engage to hold said parts interlocked.

8. A shipping carrier for phonographic record disks comprising a pair of duplicate dished plates having peripheral flanges adapted to engage the opposite ends and inner wall of a tubular container for disks, said plates when reversely disposed and assembled with their peripheral flanges in position to engage each other being adapted to form between them a disk receiving pocket, and central alining openings in said plates when assembled which receive fastening means adapted to pass through the center opening of a disk inclosed in said pocket, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

MZL FULLER.

Witnesses:

NOMIE WELSH,

R. D. JOHNSTON, Jr.