J. B. OGDEN.

CABINET FOR SOUND RECORDS.

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Fig. 1.

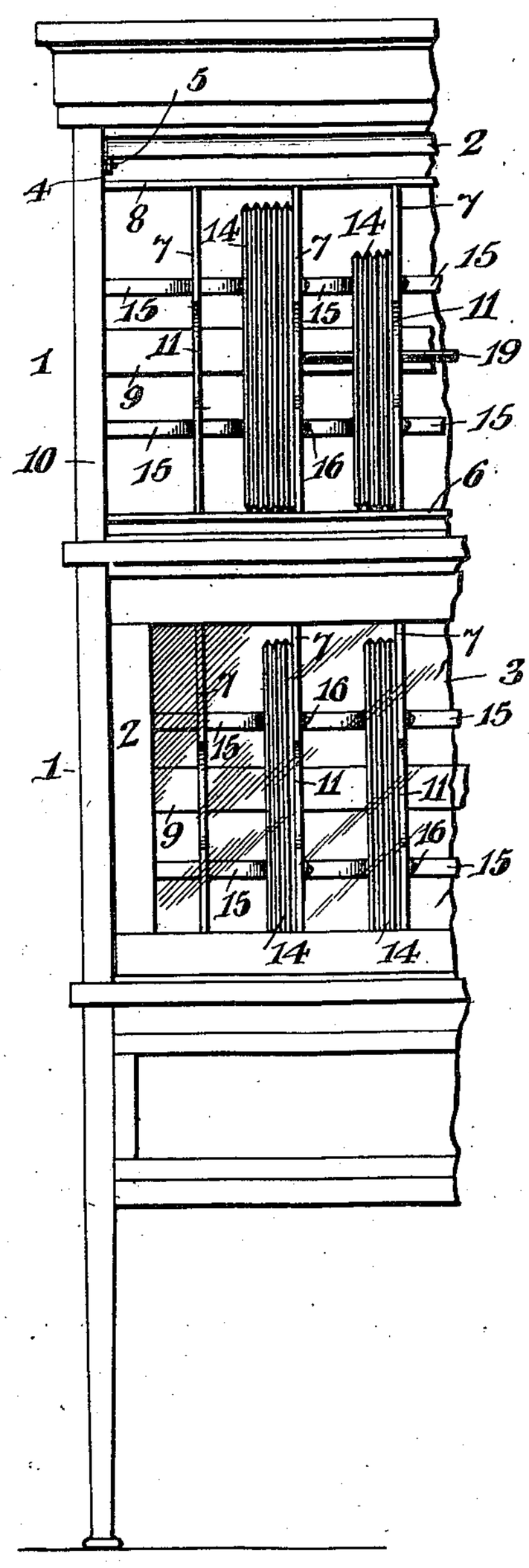


Fig. 2.

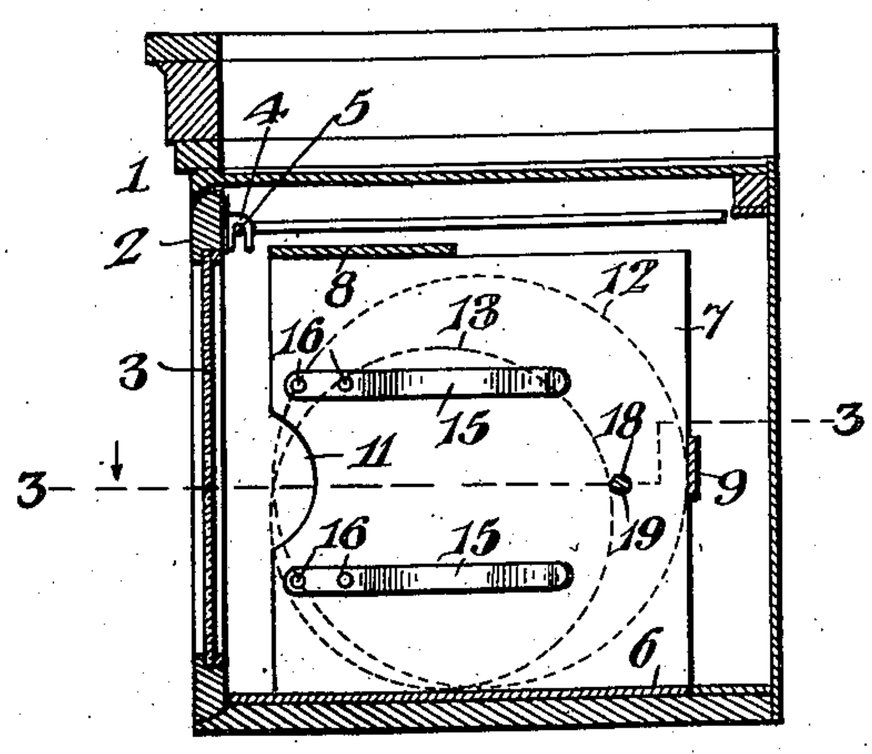
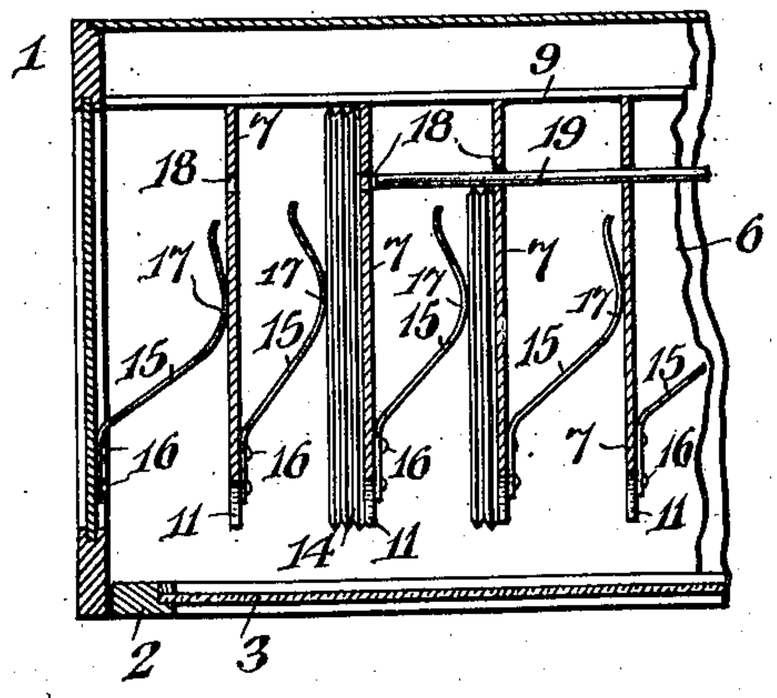


Fig. 3.



WITNESSES

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CABINET FOR SOUND-RECORDS.

1,167,206. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed October 12, 1914. Serial No. 866,347.

To all whom it may concern:

Be it known that I, JOHN B. OGDEN, a citizen of the United States, residing at Lynchburg, in the county of Campbell and State of Virginia, have invented a new and useful Cabinet for Sound-Records, of which the following is a specification.

This invention has reference to cabinets for sound records, and is designed particularly for the storage of disk sound records with the disks setting on edge in such manner that liability of warping of the disks is obviated.

It has heretofore been the custom to store disk sound records either on edge or lying flat one on the other, but both of these schemes while advantageous in some respects, have disadvantages in other respects. In the customary manner of storing disk sound records on edge a considerable number of records are stored in a single compartment, and unless the compartment is practically full and so maintained the record disks are liable to slant and then they warp more or less. This warping, of course, is detrimental, and in order to avoid so prevalent a deleterious condition it has been proposed to stack the disk records flat, but while the flat or horizontal position of the records prevents warping, it becomes difficult to remove any of the records except those at or near the top of the stack.

With the present invention the records are stored in the upright position and automatically maintain such position whether there be but one record in a compartment or the compartment be substantially full of records, while there is no interference with the ready removal of any desired record in a compartment. Since the record disks are maintained in the upright position under some lateral pressure at considerably spaced points, there is no tendency for the record disks to warp and any chosen one of a group of disks in a compartment may be removed without disturbing the others or interfering with the maintenance of the true upright position.

In a cabinet constructed in accordance with the present invention there are numerous compartments provided, and in each compartment broad leaf springs are mounted readily yieldable to the introduction of the record or record disk and its removal from the compartment, while these springs are so arranged as to have a normal tendency to extend wholly across the particular compartment, but may be moved to the same side of the compartment from which they extend. By this means the springs which are spaced apart in the direction of the height of the compartment readily hold a single record disk flat against the opposite wall of the compartment, or these springs will hold as many disks as the compartment will hold at the same time maintaining the disks in the true upright position.

The invention contemplates the employment of a stop member which may be introduced, if desired, so that the compartments may be initially made to hold the larger record disks, namely, those twelve inches in diameter, or they may be made to hold the smaller record disks which are ten inches in diameter, and in each instance those edges of the disks presented toward the front of the cabinet are all in substantially the same upright plane extending transversely of the cabinet. This not only produces a neat appearance, but brings all the disks into position for being readily grasped in case it is desired to remove any one or more of the disks.

The invention will be best understood from a consideration of the following detailed description, taken in connection with the accompanying drawings forming a part of this specification, with the further understanding that while the drawings show a practical form of the invention, the latter is not confined to any strict conformity with the showing of the drawings, but may be changed and modified so long as such changes and modifications mark no material departure from the salient features of the invention.

In the drawings:—Figure 1 is a front elevation of a portion of a cabinet made in accordance with the present invention. Fig. 2 is a front to rear vertical section of a portion of the cabinet. Fig. 3 is a section on the line 3—3 of Fig. 2, showing some record disks in place.

For convenience of manufacture, transportation, and storage the cabinet may be made of sections, after the manner of the familiar sectional bookcase, but it is to be

understood that the cabinet may be made as a single piece of furniture with the sectional idea omitted. Since each section of the cabinet may be like the others, the description to follow will be limited to a description of one section. The cabinet, therefore, is made up of sections 1 each provided with a door 2, which may have a glass pane 3 and is usually so constructed. The door may be hung in the manner customary in sectional bookcases, that is, the door is suspended by a hook 4 upon a pivot pin 5 at each end, so that when the door is in the closed position it is pendently supported by the pins 5. When, however, it is desired to open the door it is swung upwardly around the pivot pins 5 and then moved inwardly until housed in the casing of the cabinet section. It is customary to provide such doors with means for facilitating the movements thereof, but as these means may follow the usual practice in sectional bookcases, no attempt has been made to show them.

Adapted to the interior of each section of the cabinet is a compartment structure consisting of a bottom piece 6, spaced partitions 7 carried thereby, a connecting top piece 8, and a back connecting piece 9. The compartment structure may be arranged for ready insertion in one of the cabinet sections or removal therefrom, or it may be fixedly built into the section. Each partition 7 is suitably spaced from its neighbors, and the end partitions are suitably spaced from the end walls of the cabinet, one such end wall being indicated at 10. These partitions each have what constitutes the front edge cut out or notched, as indicated at 11, for permitting access to the record disks, such as indicated at 12 and 13, respectively, in Fig. 2, with or without the customary envelops indicated at 14 in Figs. 1 and 3, since the front or exposed edges of these disks are all in the same vertical plane transverse of the cabinet and close to the partitions.

Secured to each partition 7 near the front edge thereof and above and below the notch are flat or leaf springs 15, the fastening devices indicated at 16 traversing these springs near one end, and from this point the springs are bent away from the respective partition toward the next partition in order, and then returned for a portion of the distance by a gentle curve indicated at 17, so that there is always left a short space between the free extremity of a spring 15 and the partition toward which it tends. Similar springs are attached to one end 10 of the cabinet, and those of the last partition 7 in order to engage the other end of the cabinet, as will be readily understood, although this feature is not shown in the drawings.

Each partition 7 is provided with a passage 18 near its rear edge, and these passages are all in line, so as to be traversed by a rod 19.

Since under present conditions the largest sound record disks on the market are twelve inches in diameter, the cabinet, and especially the compartment portion thereof, is so proportioned that a twelve inch sound record disk indicated at 12 in Fig. 2 when placed in the cabinet either with or without the inclosing envelop 14 will engage the rear strip 9, at which time the front of the record disk or the envelop carrying it is about coincident with the front edge of the partitions 7 defining the compartment in which the record disk has been placed. The insertion of such a disk, (and hereinafter the term disk will be used to mean the disk without the envelop or the disk with the envelop, as the case may be,) causes a corresponding compression of the springs 15 of the compartment by engaging the curved portion 17 thereof. The normal tension of the springs 15 is such that the inserted disk is forced flat against the corresponding wall of the next partition 7 in order, and these springs engaging the disk on opposite sides of its center along an upright line which may correspond quite closely to the upright diameter of the disk, hold the latter at spaced points. When other disks are inserted in the same compartment, the springs are still further compressed and therefore hold the disks with added force, which however is advantageous since as the number of disks inserted increases the tendency of these disks to fall over correspondingly increases. The insertion of disks may continue until the compartment is full, or may stop at any point when the spaced springs bearing at correspondingly spaced points on the disks with which they engage force the disks evenly against the other wall of the compartment, but whatever be the number of disks in the compartment they are always held in face to face contact and against the opposite wall of the compartment from the springs, wherefore there is no opportunity or tendency to warp, since the disks are invariably upright upon the edges supporting them. If it be desired to store ten inch sound record disks in the cabinet, the rod 19 is inserted through the passages 18, and then serves as a stop limiting the extent of insertion of the disks in the compartments. This rod is so placed that the front edge of a ten inch disk occupies about the same position as is occupied by a twelve inch disk when abutting against the stop member 9. By using rods 19 of less length than the full width of the cabinet some of the compartments in the same horizontal row may be employed for the storage of twelve inch disks and other compartments for the storage of ten inch disks. The two sizes of sound record disks given are those almost universally in use, but if

it be desired to accommodate disks of other sizes, such as seven or eight inch disks, which have been made in the past, it is only necessary to provide other holes 18 properly located. In a cabinet designed particularly for ten and twelve inch disks the springs 15 are so located that they will engage disks of either size at spaced points above and below the center of the disk, thus holding the disks flat against that wall of a compartment opposite the wall carrying the springs 15.

As practically all sound record disks are now furnished with protecting envelops, the springs may be made to engage directly against the envelop of the disk next to the springs and the insertion into or withdrawal of disks from the compartment is not at all detrimental to the disks because they are protected by their inclosing envelops and the movement of the broad flat springs along such envelops is harmless, such movement occurring as the springs approach the opposite wall of the compartment or recede therefrom. Moreover, the springs are readily located so as to avoid the customary label displaying opening provided at the centers of the protecting envelops.

In Fig. 1 there is shown a cabinet formed of two superposed members with the upper member having the protecting door open and two of the compartments provided with twelve and ten inch record disks, respectively. The lower member is shown with two compartments containing twelve inch disks, each of the lower compartments having a less number of disks therein than the corresponding upper compartments. In Fig. 2 the disks are omitted, but their positions are indicated in dotted lines, one showing a twelve inch disk and the other a ten inch disk. In Fig. 3 two adjacent compartments are shown with twelve and ten inch disks, respectively, and as the number of disks in the two compartments of Fig. 3 differ, the springs 15 are differently compressed to a corresponding degree. In Figs. 1 and 3 the rod 19 is shown as traversing a portion only of the number of compartments there displayed, but it will be understood that the rod may extend throughout all the compartments, so that the particular cabinet member may be then limited to ten inch disks, or the rod may be omitted entirely, in which case the cabinet member would be adapted to contain twelve inch disks throughout all its compartments.

The record holding or filing cabinet of the present invention is particularly useful in salesrooms, whereby each compartment may be reserved for a group of records of one number or composition, or may contain two or more such groups each made up of an appropriate number of disks. The cabinet has the advantage of convenience in the storage of records with protection from dust and harm, as well as providing an attractive piece of furniture for the salesroom. The cabinet has also the further advantage of maintaining all records whether many or few in number in a practically true upright position, so that all tendency of the record to warp because of unequal support and the tilting of the record is avoided, while each record is readily accessible at all times, irrespective of the presence of other records, and the inconvenience incident to piling records one on top of the other is wholly obviated.

What is claimed is:—

1. A storage cabinet for sound record disks having a series of compartments therein formed by a plurality of upright partitions, the compartments being open at the front, and flat leaf springs secured to the partitions near the front thereof, said springs being bent outwardly and rearwardly toward the next adjacent partition and normally in contact therewith intermediate of their length, and thence curved away from the last mentioned partition, said springs being arranged in pairs in each compartment with one spring above and the other below the horizontal center of the compartment, whereby the records when inserted through the open front of the compartments are caused to strike the springs near their fastened ends, and when the records are in place the springs engage the records on the opposite sides of the horizontal diameter and substantially at the vertical diameter, so as to maintain the records on edge in an upright position and prevent warping.

2. A storage cabinet for sound record disks having a series of upright partitions, a bottom member carrying the partitions and a rear member connecting the partitions and serving as a stop, said partitions each carrying springs, each spring being connected at one end to the corresponding wall of a partition near the front edge, and having a normal tendency to engage the corresponding wall of the next partition in order, said partitions with their connecting parts and springs being bodily removable as a unit from and insertible into the cabinet.

3. A storage cabinet for sound record disks having a series of compartments therein provided with upright partitions and each compartment having flat leaf springs secured to one side wall of the compartment near the front end thereof and thence directed toward the other wall of the compartment and having the extremity curved away from said last-named wall, the springs in each compartment being arranged above and below the mid point of the height of the compartment, each compartment having its front to rear depth sufficient to accommodate a record disk of largest diameter and said compartments being also provided with readily removable stop means situated at a

distance from the front of the compartment corresponding to the diameter of a smaller disk than the first-named disk.

4. A storage cabinet for sound record disks having a series of upright partitions defining compartments with each compartment provided with leaf springs one above and the other below the middle of a record disk when lodged in the compartment, each spring being secured at one end to a respective wall of the compartment and having a normal tendency to engage the other wall thereof, the partition walls of the compartments being provided with stop means for record disks of a predetermined diameter and other stop means in the form of a removable rod, the partitions being provided with alined passages for the reception of the rod.

5. A storage cabinet for sound record disks having a series of upright partitions, a bottom member carrying the partitions, and a top member joining and spacing the partitions, together with a rear member connecting the partitions and serving as a stop member, the said partitions each carrying on one wall a set of leaf springs each connected at one end to the corresponding wall of a partition near the front edge of the partition and having a normal tendency to engage the corresponding wall of the next partition in order with the free rear end of the spring bent backward toward the partition carrying it, said partitions with their connecting parts and springs being bodily removable from and insertible into the cabinet.

6. A storage cabinet for sound record disks having a series of upright partitions, a bottom member carrying the partitions, and a top member joining and spacing the partitions, together with a rear member connecting the partitions and serving as a stop member, the said partitions each carrying on one wall a set of leaf springs each connected at one end to the corresponding wall of a partition near the front edge of the partition and having a normal tendency to engage the corresponding wall of the next partition in order with the free rear end of the spring bent back toward the partition carrying it, said partitions with their connecting parts and springs being bodily removable from and insertible into the cabinet, and said partitions having alined passages near their rear ends and a rod adapted to the passages and serving as a stop member for records of smaller diameter than those accommodated by the first-named stop member.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN BROWNING OGDEN.

Witnesses:
E. Singleton,
B. Y. Calvert.