P. CATUCCI.

TABLET SUPPORT FOR TALKING MACHINES.

APPLICATION FILED SEPT. 24, 1914.

1,128,756. Patented Feb. 16, 1915.

Fig. 1.

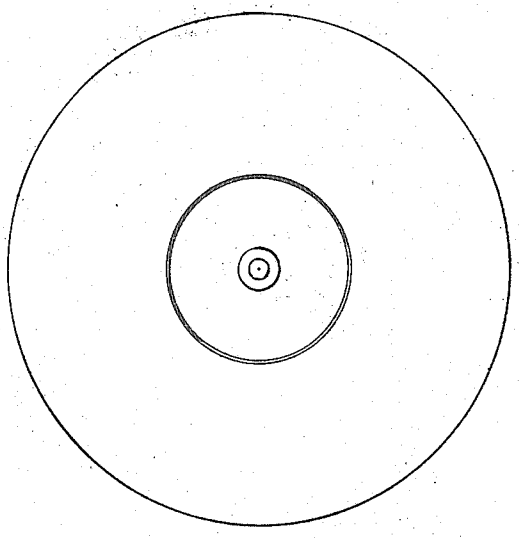


Fig. 2.

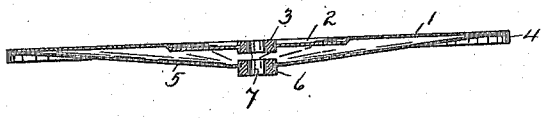


Fig. 3.

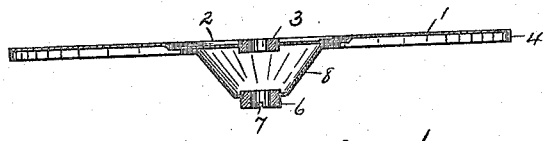


Fig. 4.

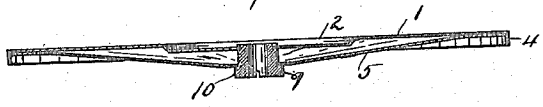


Fig. 5

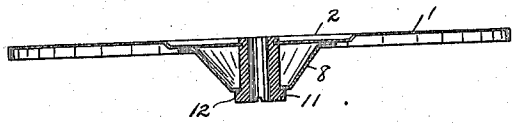
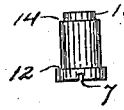


Fig. 6.



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UNITED STATES PATENT OFFICE.

PLINY CATUCCI, OF NEWARK, NEW JERSEY, ASSIGNOR TO A. F. MEISSELBACH & BROTHER, A CORPORATION OF NEW JERSEY.

TABLET-SUPPORT FOR TALKING-MACHINES.

1,128,756. Specification of Letters Patent. Patented Feb. 16, 1915.

Application filed September 24, 1914. Serial No. 863,278.

To all whom it may concern:

Be it known that I, PLINY CATUCCI, a citizen of the United States, residing in the city of Newark, county of Essex, and State of New Jersey, have invented certain new and useful Improvements in Tablet-Supports for Talking-Machines, set forth in the following specification.

My invention relates to tablet supports or turn tables for disk talking machines, and has for its principal object, the material lessening in the weight of the structure while at the same time I am able to preserve the requisite strength and stability of the support.

It has been the custom of manufacturers to construct the tablet support of comparatively heavy sheet metal for retaining the support in its original shape. The making of the support of such heavy sheet metal not only necessitates a higher cost for the material because of excessive thickness, but also a higher cost for presses and dies, for the reason that they must be of heavier and stronger material in order to stamp out and press into the desired shape the material of which the support is made. The upkeep of presses and dies amounts to a considerable sum when large quantities of the supports are required to be turned out, and the punches and dies must frequently be repaired and replaced with new ones because of excessive wear upon them.

It has been proposed by some manufacturers to use a lighter material for the tablet support, and during the process of stamping the same into desired shape, to provide the tablet support with a series of radial corrugations. This method has been found objectionable, and particularly because of the wear upon, and necessity for frequent renewal of the tools and dies used in their manufacture. I have found not only from practical experiment, but from experience, that a very much lighter material may be utilized in the making of tablet supports and thereby I am not only able to use lighter and less expensive presses, but lighter and less expensive punches and dies, and at the same time the wear upon the punches and dies is very materially lessened, thereby giving them longer life and permitting longer use without repair or renewal, while at the same time the resulting product has all of the elements of strength and rigidity and when packed for shipment in quantities is much lighter and costs less for freight or expressage. There is also a tendency among the manufacturers of phonographs and talking machines, toward cheapness in material and the reduction in weight, and a consequent reduction in the cost of product. These conditions make it necessary and even imperative for manufacturers to seek ways and means to reduce the cost of construction and weight of material.

It is therefore the purpose of my invention to accomplish these various results and at the same time produce an article of strength, rigidity and cheapness.

In carrying out my invention, I make use of the structure described in the accompanying detailed description and illustrated in the accompanying drawings, wherein—

Figure 1, is a plan view of a turn table. Fig. 2, is a diametrical section of one form of turn table made in accordance with my improvement. Fig. 3, is a similar section of another form. Fig. 4, is a section similar to Fig. 2, showing the central bearing thimble as an integral piece of metal. Fig. 5, is a section similar to Fig. 3, with the central bearing thimble shown as an integral piece of metal. Fig. 6, is a detached view of the bearing thimble before assembly with the other parts.

Similar reference numerals refer to like parts throughout the specification and drawings.

The turn table as shown in the drawings, must conform to the standards already established, and in my various forms illustrated, it consists primarily of the flat metal disk 1, having a central circular depression 2, with a central bearing thimble 3, rigidly secured to the depressed part 2. At the circumference of the disk 1, is provided a downwardly turned annular flange 4, as shown. This disk may be of any desired or preferred material, as cold, rolled sheet steel, formed by stamping the same from the raw material. In order to strengthen the tablet support when made of such light material, I provide a supplemental disk 5, slightly dished as shown, into a very shallow cone and having a diameter to permit of its forcible insertion within the flange 4, of the disk 1, so that its circumference will bear in the angle formed by said flange with the under face of the disk. In the center of the dished

disk 5, I provide a center bearing thimble 6, with the diametrical slot 7, and having a central aperture in alinement with the central aperture of the bearing thimble 3. The slot 7 is for the purpose of taking over a cross pin in the driving spindle of a talking machine, it being understood that the bearing thimbles 3 and 6 are designed to fit over said spindle.

In Fig. 3, the upper plate or disk 1, with its depression 2, bearing thimble 3, and flange 4, is identical with that shown in Fig. 2. Instead, however, of making use of the shallow cone disk 5, I substitute for it a deeper and smaller cone as 8, and rigidly secure said cone to the central depressed portion of the disk 1, either by riveting, soldering, brazing, or in any desired or preferred way. In this case, the central bearing thimble 6, is secured to the central portion of the cone 8, in alinement with the bearing thimble 3.

In Fig. 4, the general form of the disk is the same as that shown in Fig. 2. In this case, however, I substitute for the two individual bearing thimbles 3 and 6, the central bearing thimble 9, providing such thimble with a shoulder 10, at its lower end for engagement with the central aperture in the disk 5. In this case, as in each of the other cases, the bearing thimble is provided with a cylindrical shoulder at its upper end for engagement with the central aperture in the disk 1. When in place, the metal of the thimble which projects above the face of the disk, is spun down upon, or riveted over the edge of the metal surrounding the aperture so as to rigidly connect the thimble and disk together.

In Fig. 5, I show a structure similar to that shown in Fig. 3, but using a single integral bearing thimble 11. In this case the central part of the cone 8 bears upon the shoulder 12, formed upon the lower end of the thimble, while the upper end 13, of the thimble projects through a slightly smaller aperture in the depressed part 2, after which the projecting end 13, of the thimble is spun down or riveted over the edge of the metal surrounding the aperture as hitherto described.

In Fig. 6, I have shown a detached thimble with the upper portion 13 extended and prepared to receive the apertured disk 1.

It will thus be seen that by forming the tablet support of very light material and strengthening the same by using what may be termed a truss structure, I am able to so strengthen the tablet support as to overcome any objection which might be raised to a support made because of such light and thin material.

In practice, when the forms illustrated in Figs. 4 and 5 are used, the cylindrical part of the thimble between the shoulder 10 or 12 and the upper shoulder 14, is made slightly less than the depth of the cone 5, or the cone 8, so that when the parts are assembled and the cylindrical extension 13 is riveted or spun down over the disk depression 2, the supporting disk 1, and the cone disk 5 or 8 will be forcibly drawn together thereby preventing the parts from separating.

In each of the forms as shown, I may secure, as above indicated, the margin of the shallow cone 5, or the margin of the deeper cone 8, and the under face of the disk 1, by any convenient or desired means, as by soldering, riveting or brazing. In some cases where using either structures illustrated in Figs. 2 or 4, the downwardly extending flange 4, may be spun down over the margin of the disk 5, thereby rigidly connecting the margins of the said disks.

From the above description, it will be seen that I am able to produce a tablet support or turn table for talking machines, much lighter than and yet an article which possesses all the strength and rigidity of heavier tablet supports now in general use, and I at once accomplish all of the results sought in such an article at a minimum of cost and a minimum of expense in maintenance of tools for the construction of the same.

I claim:

1. In a tablet support for talking machines, the combination of a flat, circular disk having a central aperture therein and a dished or cone shaped disk, and means for firmly securing the margin of the latter disk to the under face of the former disk.

2. In a tablet support for talking machines, the combination of a flat, circular disk having a down turned circumferential flange thereon, and a dished or cone shaped disk having its margin firmly secured to said flat disk upon the under face thereof.

3. In a tablet support for talking machines, the combination of a flat, circular disk having a central aperture therein, a bearing thimble secured in said aperture and a dished or cone shaped strengthening disk secured at its margin to the under face of said flat disk.

4. In a tablet support for talking machines, the combination of a flat, circular disk having a marginal down turned flange and a central aperture, a cone shaped disk having its margin forced into engagement with said down turned flange, and a bearing thimble firmly secured in the aperture of said flat disk.

5. In a tablet support for talking machines, the combination of a flat, circular disk of very thin sheet metal, a thin metal cone shaped circular disk, and means for rigidly and concentrically connecting the latter disk to said flat disk.

6. In a tablet support for talking ma-

chines, the combination of a thin, flat, circular sheet metal disk having a marginal down-turned flange thereon, and a central aperture therein, a thin cone shaped sheet metal disk having a central aperture therein, and a tubular thimble secured to and rigidly connecting said disks together.

7. In a tablet support for talking machines, the combination of a very thin, flat, circular sheet metal disk, having a down-turned marginal flange thereon and a central aperture therein, a bearing thimble rigidly secured in said aperture, and a cone shaped strengthening disk firmly secured to the under face of said flat disk within the marginal flange thereon.

8. In a tablet support for talking machines, the combination of a flat, circular disk having a central aperture therein, a cone shaped disk having a central aperture therein, and a tubular bearing thimble secured in said apertures and firmly uniting said disks together with the margin of said cone shaped disk bearing upon the under face of said flat disk.

In testimony whereof, I have hereunto set my hand this 19th day of Sept., 1914.

PLINY CATUCCI.

In presence of—
LOUIS M. SANDERS,
NORMAN E. ZUSI.