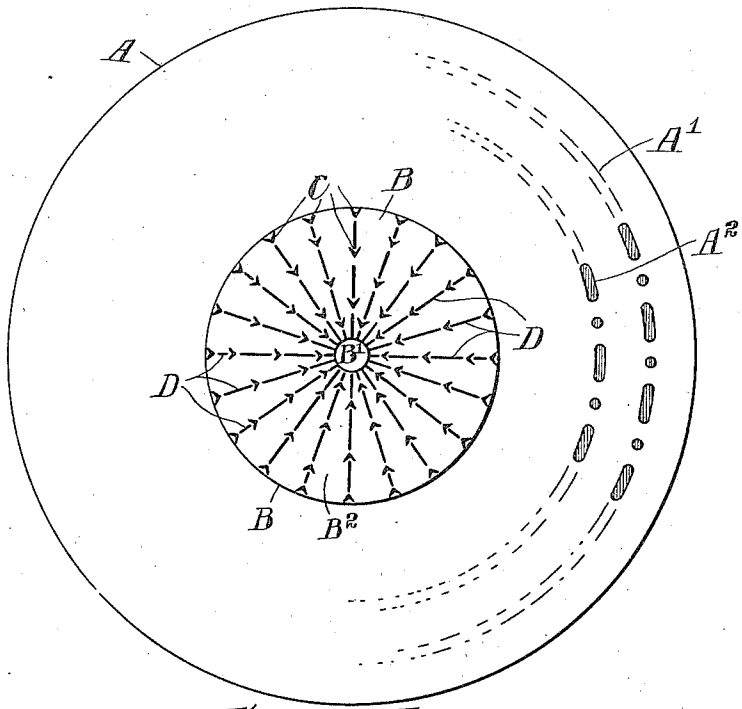
J. M. W. KITCHEN.

CENTERING DIRECTOR FOR RECORD DISKS.

APPLICATION FILED MAR. 6, 1916.

1,226,674. Patented May 22, 1917.

Fig. 1.



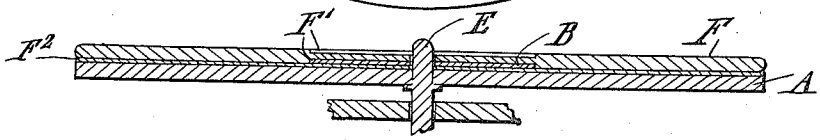


Fig. 2.

Attest:

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JOSEPH MOSES WARD KITCHEN, OF EAST ORANGE, NEW JERSEY.

CENTERING-DIRECTOR FOR RECORD-DISKS.

1,226,674. Specification of Letters Patent. Patented May 22, 1917.

Application filed March 6, 1916. Serial No. 82,335.

To all whom it may concern:

Be it known that I, JOSEPH MOSES WARD KITCHEN, a citizen of the United States, residing in the city of East Orange, county of Essex, State of New Jersey, have invented an Improvement in Centering-Directors for Record-Disks, of which the following is a specification.

The object of this invention is to facilitate the placing of record-disks on the retaining and centering shaft projection of the revolving horizontal turn-table of so-called "talking" machines. As is known, it is frequently difficult in placing an opaque record-disk on its turn-table, to at once bring the perforation in the center of the record-disk, over the centering and retaining shaft projection, inasmuch as there is no reliable and satisfactory visual means of directing the movement of the disk to the exact centering point of the turn-table, which is the center of the retaining shaft projection.

This invention overcomes that difficulty by at once informing the eye as to the centering direction in which to move the disk to bring the perforation of the disk directly over the centering shaft projection. In accomplishing this aim, I prefer to have lines and pointers drawn on the frictional pad of, or upper surface of the machine's turn-table, or on a removable thin plaque of uniform thickness resting on the turn-table, but having the lines and pointers on the plaque, and radiating from the central point of the turn-table shaft extending outwardly from the periphery of the shaft in all directions for a sufficient distance. Along the radiating lines I indicate by arrow heads or other forms of pointers, the central direction in which the record disk should be immediately moved to arrive at the position for imposition of the perforation of the record disk onto the centering shaft projection. I also sometimes indicate by circularly placed marks or lines on the frictional pad's surface of the turn-table, placed at the same distance from the center of the turn-table, as would be the peripheries of the record-disks, showing how the record-disks should be placed. Some of the turn-tables which are used for revolving record-disks are of the same diameter as the diameter of some record-disks, but some record-disks are larger than the turn-table used, while others are smaller. Hence, I preferably provide both methods for indicating the position of the centering shaft projections, both those immediately adjacent to the centering retaining shaft, and those which circumferentially indicate the position of the disks when in use. It is obvious that if the periphery of the record disk is the same as the circumferential indicating marks, the juxtaposition of the two would indicate the position of the center point of the turn-table's axial shaft. These markings may be placed on the felt or other surface pad of the turn-table, or partly on that surface pad and partly upon a removable thin disk or plaque placed upon and centered by the platform pivot. Or, they may be on only one removable centering disk-director plaque.

Centering directing marks, such as I may use, I indicate in the accompanying drawing; in which, Figure 1 is a plan view of the upper surface of a talking machine turn-table with a central directional plaque in position; and Fig. 2 is a vertical cross sectional view of Fig. 1 taken through its center, and having an ordinary record-disk in position; and A is the periphery of a talking machine turn-table; and A^1 and A^2 are circumferential indicating marks representing the emplacement position of disks of different diameters. B represents a removable centering plaque or disk, and also, an imprintment immovably attached to the turn-table pad; B^1 is the perforation of the disk or plaque indicator. B^2 is the dark colored background on which the centering indicating marks, lines, and directing pointers are affixed; C are the pointers indicating the direction of the turn-table's projecting shaft; and D are radiating lines to be followed in arriving at the centering point for placing the record-disk. In Fig. 2, E is the centering projecting axial shaft of the turn-table. F is a record-disk in position; F^1 is the usual, centrally placed, depression found in a record-disk, and F^2 is the frictional turn-table pad. It is obvious that with the use of my device in almost whatever position the perforation of the record-disk may be first placed in relation to the center point, a pointing indicator and leading line will be at once seen through the disk perforation, which if followed along any of the lines in the direction indicated by the pointers, the centering point will be quickly found.

Inasmuch as in placing a record disk in position, very little light gains access between the record-disk and the machine plat-

form, and as the central perforation in the record-disk is usually quite small for the entrance of light, an important part of the invention is in providing strongly contrasting unharmonious colors in the body surface of the indicating disk B, and in the directing pointers C and lines D; so that these pointers and lines may easily be visually perceived when they, as is usual, are poorly lighted. I prefer to provide a black back ground, and a brilliant yellow gilt for the indicating lines and direction pointers; but green and white, yellow and blue, or other markedly contrasting colors may be used.

As has before been stated, these centering directing pointers and lines may be imprinted upon the surface of the turn-table pad, although that usually has a poor printing surface; but in case the centripetal means of direction is removable, I prefer that it should be of thin sheet metal, coated with baked enamel in proper colors; though paper, cloth, leather or other material can be used for this purpose. The upper surface of the indicating disk plaque preferably should not have any coloring or imprinting on it to interfere with the directorial functional purpose of the disk plaque; but the under surface can be imprinted and decorated in any desirable manner, giving directions how to use the disk, its trade name, manufacturer, etc.

In case a removable centrally placed disk is used, it will have a diameter suitable to fit in the depressed center which is usually formed in record-disks, and on which are imprinted the title of the record, etc. It is obvious that this central part of the record-disk may have perforations, which will further facilitate the seeing of the indicating marks through the admission of more light through the record disk; though it is usually preferable to have the entire record-disk integrally of one material in order to increase the strength of the record-disk.

The marks and lines on the means I use in directing record-disks to their seat, are preferably so intermitted as to continuity as to allow of their imposition on the means through the use of a stencil. If there is stenciling on the surfacing frictional material composing the pad, I may use a stenciling fluid that will chemically change the color of the surfacing felt or other material on the platform. The invention comprises any method of applying permanently directorial marks on the turn-table, including lines adhering to or integral with the turn-table below or not much above the level of the frictional covering, and which might be seen through a perforation or perforations of the frictional covering of a suitable size. Or, the directorial means may be set into a perforation in the frictional material, or it may be placed over or upon the frictional material. In any case, it is preferable that the directorial indicator shall not have its surface touch any part of the surface of the record-disk, in which case the revolution of the record-disk would be still effected by contact with all of the outer areas of the frictional material covering the turn-table as is at present commonly the case.

Having now disclosed the nature of the invention, what I claim as new is:

1. The combination with a talking machine turn-table having a projecting axial shaft for centering a centrally perforated record-disk, of means for visually directing the centering and placing of record-disks on the projecting shaft, which means is located on the exposed upper surface of said turn-table in close juxtaposition to said shaft and leading thereto and pointing to the center of said shaft.

2. The combination with a talking machine turn-table having a projecting axial centering shaft, of a removable centering indicator having lines and pointers leading to and pointing to the center of said indicator and said shaft, said lines and pointers on said indicator, when said indicator is in position, starting from the external periphery of said indicator and extending to the external periphery of said shaft.

3. In a centering indicator for facilitating the emplacing of a record-disk on the centering and retaining means of a talking machine turn-table, a flat disk-plaque having a centering perforation and interrupted lines and indicating pointers in the interruptions, and extending from the circumferential surface-areas of the disk-plaque to approximately said centering perforation.

4. In a centering indicator for a talking machine turn-table having a centering means, directing means pointing to the center of said centering means of the turn-table from a plurality of directions with respect to said centering means and extending to a position closely in apposition with said centering means.

JOSEPH MOSES WARD KITCHEN.

Witnesses:
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BEATRICE MIRVIS.