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E. V. SCHNEIDER

2,286,015

TURNTABLE

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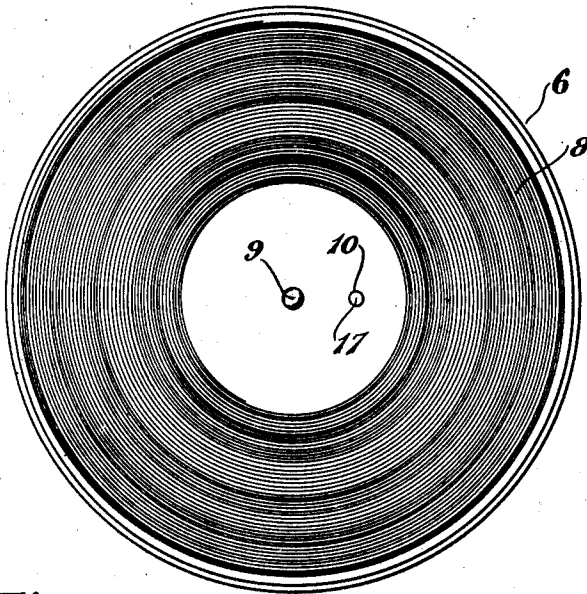


Fig. 1

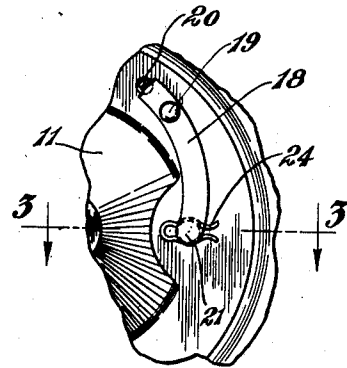


Fig. 2

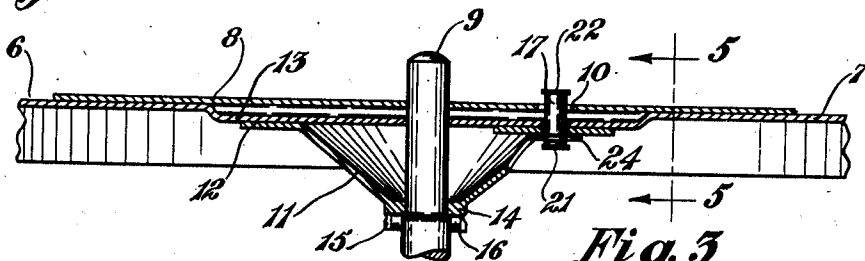


Fig. 3

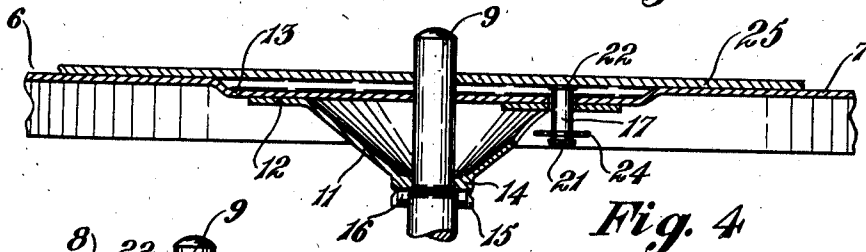


Fig. 4

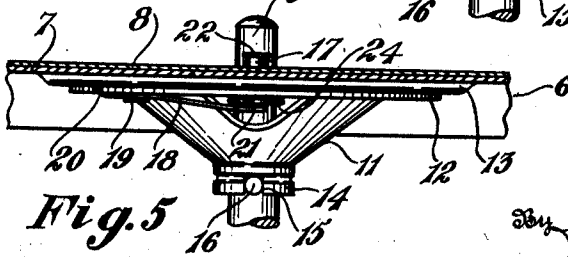


Fig. 5

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TURNTABLE

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2 Claims. (Cl. 274—39)

The invention relates generally to turntables for sound recording devices, and more particularly to an improved turntable adapted for both recording and reproducing purposes.

In making sound records, particularly for home use, the blank records usually used are inexpensive and consequently very thin and light in weight. As a result, as the record turns with the turntable the drag of the recording stylus overcomes the frictional resistance between the turntable and the record and causes slippage therebetween.

In order to overcome this difficulty these thin blank records are provided with an eccentrically located hole which fits over a pin secured to and projecting upwardly from the turntable, but while the slippage of the record is thus overcome the projecting pin prevents the playing of other standard records without the eccentric hole on the same turntable.

Accordingly, it is a general object of the present invention to provide an improved turntable adapted for making recordings on thin records and for playing standard records.

A more specific object is to provide a turntable having improved eccentric pin means adapted for entering a hole in the disk record for recording sound, and for yielding under the weight of standard relatively heavy records to permit them to rest on the turntable for playing the same.

A further object is to provide a turntable having an eccentrically located pin with improved spring means yieldingly holding said pin in a position projecting upwardly therefrom.

A still further object is to provide an improved turntable which accomplishes all of the foregoing objects, and which at the same time is extremely easy and inexpensive to manufacture.

These and other objects are accomplished by the parts and improvements and combinations comprising the present invention, which is shown in the accompanying drawing and hereinafter described and claimed, and which may be stated briefly as consisting of a turntable with an eccentrically located pin projecting upwardly therefrom for fitting in the usual hole in a disk record, and a leaf spring on the under side of said turntable normally maintaining said pin in upwardly projecting position but being adapted to yield to the weight of a standard reproducing record to allow the same to rest on the turntable.

Referring to the accompanying drawing in which a preferred embodiment of the invention is shown by way of example

Figure 1 is a plan view of the improved turntable with a thin disk record positioned thereon;

Fig. 2 is an enlarged fragmentary bottom plan view thereof;

Fig. 3 is a fragmentary sectional view as on line 3—3, Fig. 2 showing the pin entered in the eccentric hole of a thin disk record;

Fig. 4 is a similar view showing a standard heavy reproducing record without the eccentric hole positioned on the turntable; and

Fig. 5 is a fragmentary view as on line 5—5, Fig. 3.

Similar numerals refer to similar parts throughout the several views of the drawing.

In the drawing a turntable for a sound recording and reproducing device is indicated at 6 and includes the flat sheet metal platform 7 on which a record disk may be supported. In Figs. 1, 3 and 5 a thin record disk 8 of the type used for making recordings in the home is shown, said disk being provided with a central hole for fitting over the usual spindle 9 of the recording device and with an eccentrically located hole 10 for fitting over a rigid pin projecting upwardly from the turntable for preventing the record disk from slipping on the same during the making of a recording.

The turntable 6 is provided at its central portion with a depending conical hub member 11 which may have an annular flange 12 secured to the underside of the turntable. The flange 12 is preferably welded or otherwise secured to a central depressed portion 13 provided in the turntable. Preferably the base of the conical hub member 11 is provided with a slotted collar portion 14 fitting around the spindle 9, the slot 15 thereof being adapted to receive a pin 16 secured in the spindle 9.

A pin 17 is mounted in the platform 7 of the turntable, preferably in the depressed portion 13 thereof, for vertical movement therein, and the pin 17 is eccentrically located in the turntable so as to register with the eccentrically located hole 10 in the disk record 8, as best shown in Fig. 3.

Means for yieldingly abutting the lower end of the pin 17 for projecting it above the turntable preferably includes a leaf spring 18 pivoted at 19 near one end of the spring to the annular flange 12, the adjacent end of the spring being peened or forced into the annular flange as indicated at 20 for preventing lateral turning of the spring.

The free end 21 of the spring yieldingly abuts

the bottom end of the pin 17 and normally holds the same in the position shown in Figs. 3 and 5 wherein its upper end projects above the turntable. The upper end of the pin 17 is preferably provided with an annular flange 22 which is of a size which will pass freely through the hole 10 in the record disk 8 but will engage the upper side of the turntable to prevent the pin from dropping through the turntable. Near its bottom end the pin 17 may be provided with a groove around which a cotter pin 24 is engaged to prevent the pin 17 from passing upwardly through the turntable during assembly or shipment of the same.

As shown in Fig. 3 when it is desired to support a thin disk record on the turntable 6 for making a recording thereon, the record disk 8 may be supported on the turntable platform 7 with the pin 17 received in the eccentrically located hole 10 of the record disk 8, so that slippage of the record disk on the turntable due to the drag of the recording stylus will be prevented.

As shown in Fig. 4, when it is desired to support a standard relatively heavy record disk without an eccentrically located hole on the turntable 6 for playing the record, the weight of the record 25 will depress the pin 17 against the yielding resistance of the leaf spring 18 and allow the record 25 to be supported in a flat condition on the platform 7 of the turntable.

Thus the improved turntable is adapted both for making recordings on thin disk records and for playing standard relatively heavy records.

The improved turntable is extremely simple and inexpensive to construct and assemble, and the leaf spring 18 provides the proper amount of yielding resistance to depression of the pin without requiring any spring adjustment and

without requiring any parts which are difficult to assemble.

I claim:

1. A turntable for a sound recording and reproducing apparatus having an eccentrically located hole therein, a pin located entirely through the hole and freely vertically movable therein and having an integral flange at its upper end for engaging the upper side of the turntable around said hole, a removable shoulder on the lower portion of the pin for engaging the under side of the turntable around said hole and a leaf spring on the under side of said turntable having one end fixed to the turntable and its free end abutting and unattached to the lower end of the pin for normally yieldably projecting the pin above the turntable at all times except when downward pressure is exerted upon the upper end of the pin.

2. A turntable for a sound recording and reproducing apparatus having a central recessed portion therein and an eccentrically located hole through said recessed portion, a pin located entirely through the hole and freely vertically movable therein, and having an integral flange at its upper end for engaging the upper side of the recessed portion around said hole, a removable shoulder on the lower portion of the pin for engaging the under side of the turntable around said hole, and a leaf spring on the under side of the turntable having one end fixed to the turntable and its free end abutting and unattached to the lower end of the pin for normally yieldably projecting the pin above said recessed portion of the turntable at all times except when downward pressure is exerted upon the upper end of the pin.

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