Feb. 13, 1934. C. M. TICHENOR 1,946,599

DEVICE FOR CENTERING A TABLET ON A TURNTABLE

Filed April 3, 1931

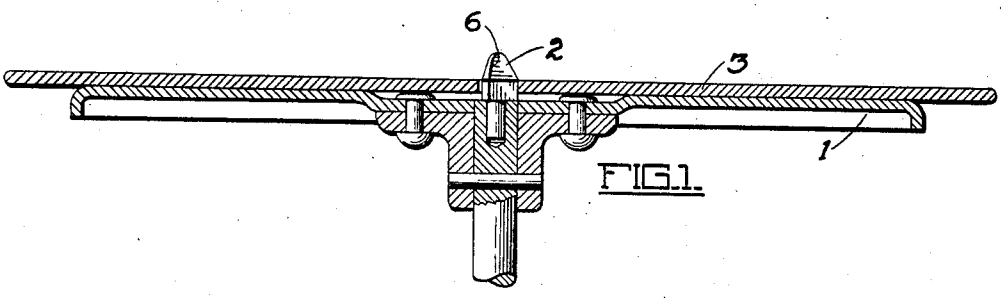
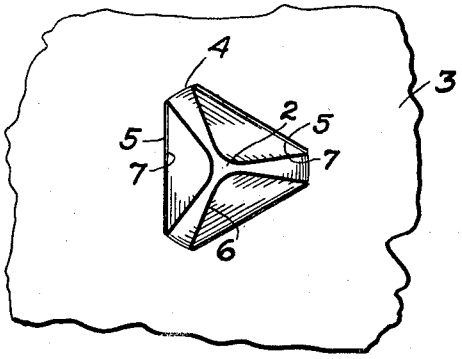


FIG. 1.

FIG. 2.



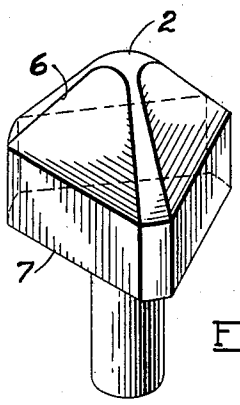


FIG. 3.

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DEVICE FOR CENTERING A TABLET ON A TURNTABLE

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4 Claims. (Cl. 274—39)

My invention relates to a phonograph and to a phonograph record and has a special relation to devices for centering a record on a turntable.

One object of my invention is to provide a flat record tablet with a non-circular opening for cooperating with a non-circular center pin and preventing slippage of the tablet on the turntable.

Another object is to provide a tablet with an opening for accomplishing the purpose mentioned which shall also be symmetrical to permit either side of the record to be played.

A further object is to provide a cooperating center pin and record center of such shape as to accurately center the record and prevent slippage and undesirable wear thereof at the pin engaging portions.

Other objects and advantages will appear as the description proceeds.

Referring to the accompanying drawing, Figure 1 is a central sectional view through a turntable and record tablet embodying my invention.

Fig. 2 is an enlarged plan view of the central portions of the device shown in Fig. 1, peripheral portions of the turntable and tablet being broken away.

Fig. 3 is an enlarged perspective view of the pin.

Referring more particularly to the drawing, the turntable 1 has a center pin 2 which extends through the center opening in a flat record tablet 3.

The opening has three curved sides 4 of equal length which lie in the circumference of a common circle and are connected by straight sides 5 which lie in the sides of an equilateral triangle.

The center pin has also three curved sides 6 of equal length, lying in a common cylinder which also are connected by flat sides 7 lying in the sides of an equilateral triangle.

The curved sides 6 extend upwardly beyond the record and inwardly towards the point of the pin and their upper areas are ogival in form. The flat sides 7 become curved as they approach this point and are of such shape that horizontal planes cut them in straight lines.

The opposing curved sides 4 and 6 center the tablet accurately on the turntable and the sides 7 prevent it from slipping during the playing operation. Slightly more clearance is provided between the sides 5 and 7 than between the curved sides 4 and 6 and the areas of the former are so large as to prevent excessive wear on the record.

The elimination of slipping is of particular advantage in the use of extremely thin records which have not sufficient weight to effectually grip the turntable frictionally and is also quite useful in automatic phonographs in which records are stacked one above the other on the turntable as the friction between contiguous records is slight.

The symmetrical shape of the opening renders it of equal utility irrespective of which side of the record is being played.

It will be apparent that the shape of the point of the center pin especially facilitates the placing of the record tablet thereon.

The described record tablet may also be played on a turntable equipped with a center pin such as is standard at the present time with a diameter of approximately 0.280'' and for this reason the center opening is of such dimensions as to snugly receive such a pin which is substantially smaller than my above described center pin.

My invention is not limited to the details of the described construction which may be extensively modified without departing from the spirit of the invention. A substantial range of equivalents is contemplated within the scope of the appended claims.

I claim as my invention:

1. A phonograph turntable pin for self-centering a record on the turntable, said pin comprising a plurality of substantially vertical portions circularly discontinuous, and self-centering tapered portions arising from said vertical portions and adapted to engage a similarly shaped hole in the center of the phonograph record, whereby a phonograph record is guided into center position on the turntable by said tapered portions, the record when resting on said turntable engaging said vertical portions.

2. A phonograph turntable pin for self-centering a record on the turntable, said pin comprising a plurality of substantially vertical portions, non-contiguous portions circularly discontinuous and symmetrically arranged about the center of the pin, and symmetrical self-centering tapered portions arising from said vertical portions and merging into a rounded point at the top of the pin, said tapered portions being adapted to guide the record to fit the pin.

3. A phonograph turntable pin comprising a record engaging portion for engaging and turning the record when on the turntable, and a guiding portion, said record engaging portion comprising a plurality of symmetrically spaced non-contiguous portions vertically arising substantially to the top of the record when resting on the turntable, said vertically arising portions merg-

ing to form the apex of said pin and constituting said guiding portion.

4. A phonograph turntable pin comprising a record engaging portion for engaging and turning the phonograph record when resting on the turntable, and a guiding portion for guiding the record to fit the pin at said record engaging portion, said guiding and engaging portions being in the general shape of a pyramid having a base with vertical sides extending to the top of the record when resting on the turntable, the corners of said pyramid, including said base, being rounded.

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