

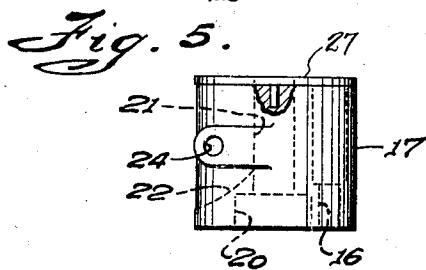
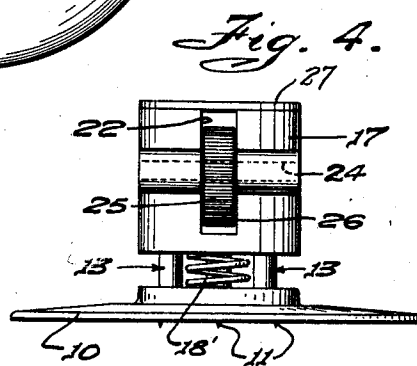
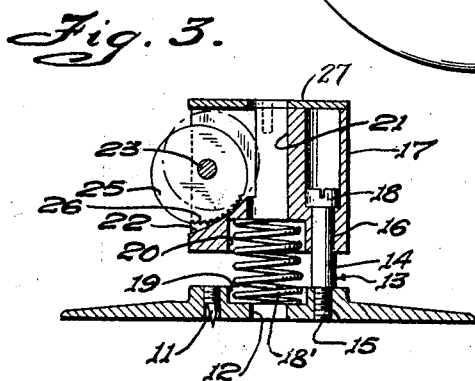
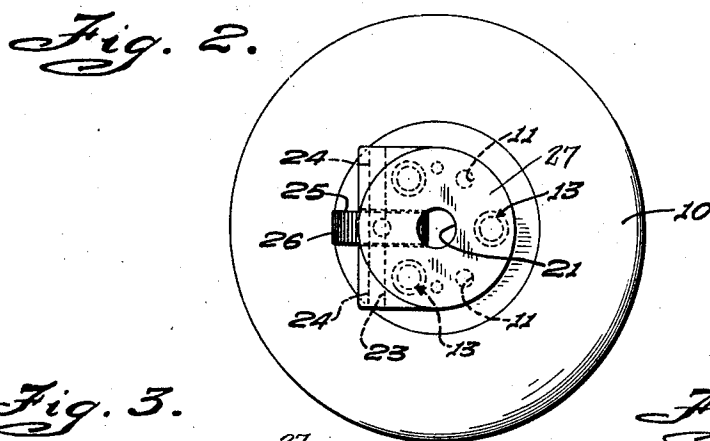
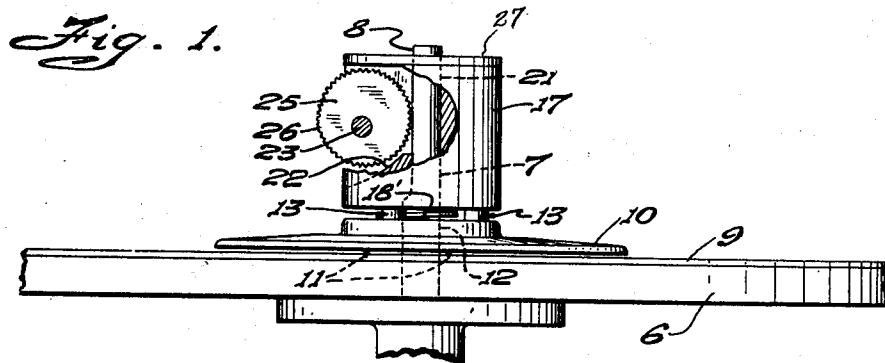
Jan. 20, 1931.

C. W. EBELING

1,789,810

LOCKING DEVICE FOR SOUND DISK RECORDS

Filed April 30, 1929



INVENTOR.
CHARLES W. EBELING
BY
Charles W. Ebeling
ATTORNEY.

UNITED STATES PATENT OFFICE

CHARLES W. EBELING, OF NEW YORK, N. Y., ASSIGNOR TO PHONODISC CORPORATION,
OF NEW YORK, N. Y., A CORPORATION OF NEW YORK

LOCKING DEVICE FOR SOUND DISK RECORDS

Application filed April 30, 1929. Serial No. 359,300.

This invention relates to improvements in locking devices for disk sound records, and pertains more particularly to a means for selectively locking a disk sound record upon its centering post and turntable so that the record will be rotated after being positioned properly in synchronism with a motion picture projected film, one object of the present invention being the provision of a simple and inexpensive clutch lock that cooperates with the centering post of the turntable and the turntable to selectively lock and hold the disk firmly down upon the turntable, and at the proper position to initially receive the stylus.

In the accompanying drawings:—

Figure 1 is a view showing the turntable, sound record disk and its centering post, with the present locking device in use thereon and therewith.

Figure 2 is a top plan view of the complete locking device.

Figure 3 is a vertical central sectional view through the locking device.

Figures 4 and 5 are detail views thereof.

Referring to the drawings, the numeral 6 designates the sound reproducing machine turntable, provided with the usual center-post 7, which in this instance is provided with the flattened portion 8, and 9 designates the sound record disk.

It is essential in synchronized pictures that the disk be properly positioned upon the turntable to receive the stylus at the starting point or a groove that may lead it thereto, and also that the disk be held in such initial position through the playing thereof, therefore the present locking device is a unitary device and consists of the record engaging disk or plate 10, which is provided with a plurality of tiny projections 11 that are embedded in the record, as the disk 10 has its opening 12 encircling the post 7, and flush upon the record disk 9. Upstanding from the disk 10 are a plurality of guides 13, each of which is composed of a pin 14, having the threaded end 15 engaging the disk 10, with the smooth intermediate portion mounted in its respective bore 16 of the movable knob 17, the head 18 thereof limiting the up-

ward movement of the knob, and also regulating the tension of the spring 18', which fits in the countersunk portions 19 and 20 of the respective disk 10 and knob 17. The knob is provided with a central bore 21, through which the center post 7 removably projects, and leading from this bore to one side is a groove 22, open through one side of the knob, and transversely of this groove is a pin 23 anchored in the knob by the aligned openings 24. Mounted eccentrically upon this pin and operably to be placed into engagement with the flattened portion 8 of the post 7, is a disk or cam 25, the periphery 26 of which is roughened or milled, so that the same can be easily manipulated and will properly hold the parts fixedly upon the post 7 when in record disk locking position. Where so desired a cover plate 27 may be employed and is carried by the knob.

From the foregoing description taken in connection with the drawings the operation of the present device will be clearly understood, but briefly stated it is as follows:— After the record disk has been positioned upon the turntable, and moved so that the stylus is placed in the starting point of the phonic groove, the locking device is placed upon the post 7 until the plate 10 rests upon the record disk. The cam 25 is now out of engagement with the flattened portion 8 of the post. The knob is now pressed down toward the disk or plate 10 and the spring is compressed to exert a resilient tension upon the plate 10 and force the projections into the surface of the record disk. The cam is now manipulated to bind and engage the center post and thus lock the knob with the spring under tension. To release, the exact reversal of these steps take place.

What I claim, is:—

1. A sound record disk locking device including a record disk contacting member, and a compressing member for the contacting member having manually operable means to frictionally engage the centering post of a sound record turntable to lock and hold the contacting member into firm engagement with the sound record disk.
2. A sound record disk locking device

according to claim 1, in which the resilient compressing member is provided with an eccentric locking member bodily carried thereby and capable of movement longitudinally of the centering post and into and out of frictional engagement with the centering post.

3. A sound record disk locking device according to claim 1, in which the contacting member is provided with disk biting projections.

4. A sound record disk locking device, including a circular centrally apertured plate, a knob slidably attached thereto and provided with an aperture co-axial with the aperture of the plate, said apertures being provided to receive the centering post of a sound record disk turntable, and an eccentrically mounted circular cam in the knob and disposed to be rotated into and out of engagement with the centering post of a disk record turn table.

5. A sound record disk locking device according to claim 4, in which there is a spring interposed between the plate and knob to normally hold them apart, and which is adapted to be compressed when the knob is locked by the cam upon the centering post to resiliently hold the plate in engagement with a sound disk record on a turntable.

6. A device of the character described comprising two apertured members for slidably and removably fitting upon the centering spindle of a sound record disk turntable, a spring for normally holding said members separated, means for connecting the members together and to permit limited separation, and spindle gripping device carried by one of the members, whereby as the spindle is gripped the spring is compressed and the other member is held resiliently toward the turntable.

7. A device according to claim 6, in which the spindle gripping device includes a circular cam mounted eccentrically and longitudinally of one member to rotate into and out of engagement with the spindle.

8. A device according to claim 6 in which the member toward the turntable is provided with means to bite the sound record disk to hold it for rotation with the spindle and turntable.

In testimony whereof I affix my signature.
CHARLES W. EBELING.

55

60

65