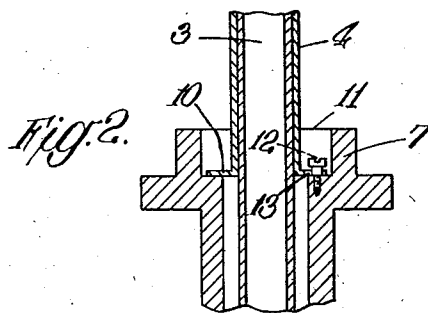
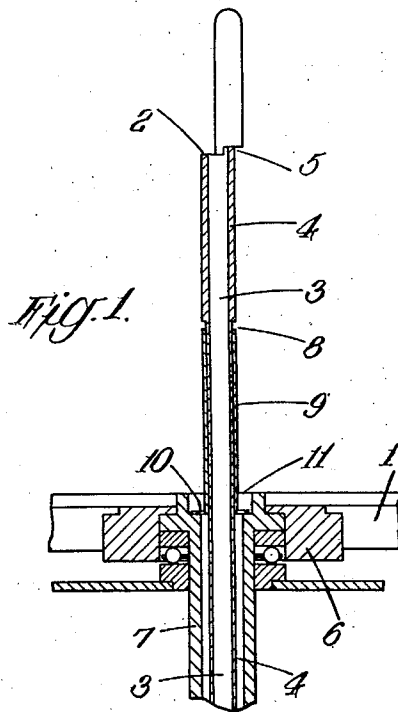


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RECORD-PLAYING MECHANISM

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RECORD-PLAYING MECHANISM

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2 Claims. (Cl. 274—10)

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This invention relates to record playing mechanism of the kind having a stationary record post and in which records to be played are adapted to be fed to the turntable in succession, the played records remaining on the turntable until the sequence of records has been played, hereinafter referred to as mechanism of the kind described. The present invention is of particular use in connection with automatic gramophones of the kind described in the specification of co-pending U. S. application Serial No. 640,470 in which records to be played are carried above the plane of the turntable on a shoulder provided on the stationary record post, the post being provided with a feeding sleeve which is adapted to be oscillated at appropriate times to cause a projection on said sleeve to feed a fresh record to the turntable.

In mechanism of the above kind it is found that there is a tendency for the second record fed to the turntable and subsequent records to slip during playing relatively to the first record fed to the turntable.

The object of the present invention is to provide an improved mechanism in which the above tendencies for records to slip are reduced.

According to the invention there is provided adjacent to the turntable, a sleeve surrounding the stationary record post, said sleeve during rotation of the turntable being arranged to be driven with said turntable.

In order that the said invention may be more clearly understood and readily carried into effect it will now be more fully described with reference to the accompanying drawing, in which:

Figure 1 is a view in sectional elevation of part of a record playing mechanism embodying the invention, and

Figure 2 is a detail view of part of the mechanism of Fig. 1.

Referring to the drawing, records to be played are carried above the plane of the turntable 1 on a shoulder 2 provided on a stationary record post 3 which is provided with a feeding sleeve 4 adapted to be oscillated at appropriate times to cause a projection 5 on said sleeve 4 to feed a fresh record to the turntable, as described in the aforesaid specification of U. S. application Serial No. 640,470.

The turntable 1 is secured to a wheel 6 adapted to be driven by the gramophone motor and carried by a sleeve 7, which surrounds the feeding sleeve 4 and which carries at its lower end a pinion, not shown, constituting the driving member of a gravity-operated dog clutch as described in British Patent No. 562,650. The feed-

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ing sleeve 4 is provided with a circumferential recess 8 in which is arranged a sleeve 9 having at its lower end a radial flange 10 which rests in a recess 11 in the upper end of the sleeve 7. The external diameter of the sleeve 9 is substantially equal to that of the unrecessed part of the feeding sleeve 4, this diameter being for example 0.281", and the length of the sleeve 9 is such that a gap is provided between the upper end of the sleeve 9 and the lower end of the unrecessed part of the feeding sleeve 4, said gap allowing the feeding sleeve 4 to be depressed against the action of a spring by the pressure extended by a record or records to be played on the feeding projection 5, as explained in the above-mentioned specification of U. S. application Serial No. 640,470, the gap being closed during the feeding of a record by the weight of the remaining record or records of the stack.

The sleeve 9 is arranged to be driven with the turntable and for this purpose the sleeve 9 may be connected to the sleeve 7 by means of a pin 12 (Figure 2) projecting through a hole or a radial slot 13 in the flange 10, the pin and hole or slot being so formed that relative movement can occur so that said sleeve 9 is self-aligning on the record post. As shown in Figure 2, the lower end of the pin 12 is screw-threaded and is screwed into the sleeve 7. The upper end of the sleeve 9 is preferably chamfered and smoothed so as to facilitate the movement of records from the stack to the turntable and the sleeve 9 projects above the surface of the turntable to an extent sufficient to protrude through the centre holes of the maximum number of records for which the gramophone is designed to play in one sequence, for example, ten records.

Although the invention has been described above as applied to a record changing mechanism of the kind described in the specification of the aforesaid co-pending application, it will be understood that the invention is not limited thereto since it can be applied to other forms of mechanism employing a stationary record post.

We claim:

1. Record playing mechanism comprising a central stationary record post, a turntable including a drive and supporting element coaxially mounted with respect to said record post and adapted to be rotated, said record post having a circumferential recess throughout a region extending from a point below said turntable to a point above said turntable determined by the record capacity of said mechanism, a sleeve surrounding and rotatable on the recessed portion

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of said record post, said sleeve having a radially extending flange on its lower end, and at least one pin extending through an aperture in said flange and rigidly held in said drive and supporting element, said aperture being larger than said pin whereby said sleeve is self-aligning with said record post.

2. Record playing mechanism comprising a central stationary record post, a turntable sleeve surrounding a lower portion of said record post and adapted to rotatably support a turntable in coaxial relation to said record post, said record post having a circumferential recess throughout a region extending from a point below the support level of said turntable to a point above the level of the surface of said turntable determined by the record capacity of said mechanism, a second sleeve surrounding and rotatable on the recessed portion of said record post, said second

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sleeve having a radially extending flange on its lower end which engages a complementary portion of said turntable sleeve, and at least one pin extending through an aperture in said flange and rigidly held in said second sleeve, said aperture being larger than said pin whereby said second sleeve is self-aligning with said record post.

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