

935,379.

Patented Sept. 28, 1909.

Fig. 1.

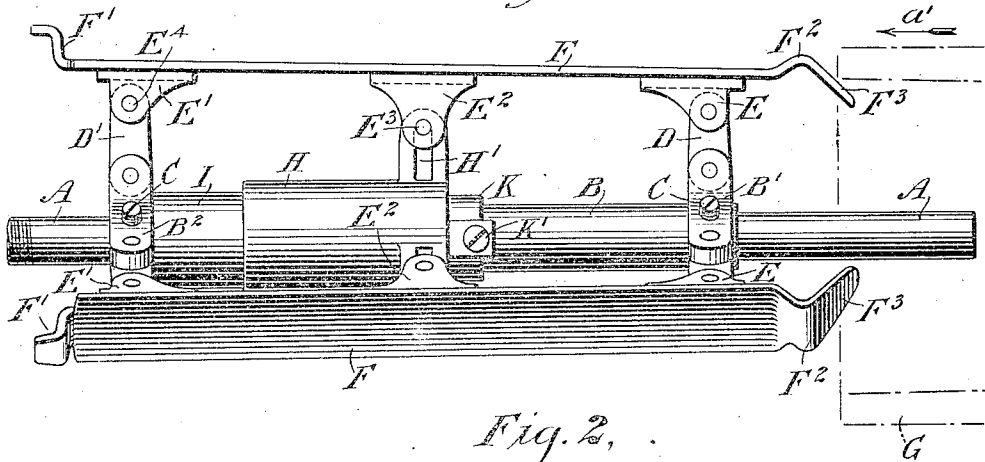


Fig. 2.

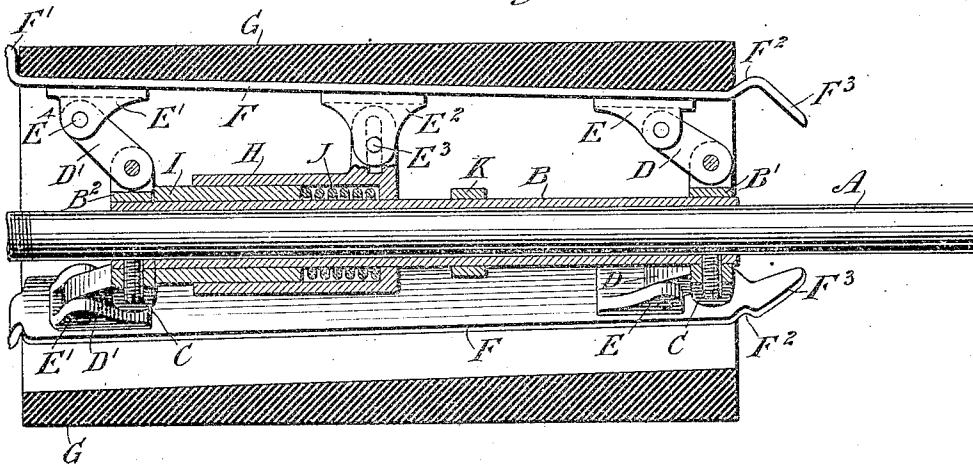
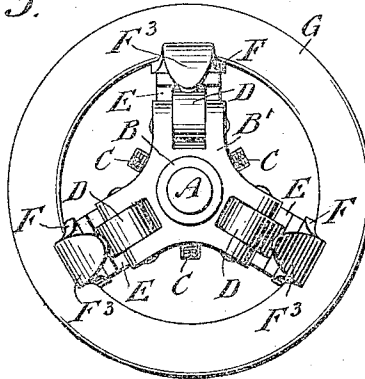


Fig. 3.



WITNESSES

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RECORD-HOLDER.

935,379

Specification of Letters Patent. Patented Sept. 28, 1909.

Application filed January 29, 1909. Serial No. 475,040.

To all whom it may concern:

Be it known that I, WILLIAM T. LONG, a citizen of the United States, and a resident of Sumner, in the county of Pierce and State of Washington, have invented a new and Improved Record-Holder, of which the following is a full, clear, and exact description.

The invention relates to phonographs, and its object is to provide a new and improved record holder arranged to accurately and securely hold the record in central position; to accommodate records of different sizes; to compensate for variations of the inside diameter of the records, to hold the record against accidental shifting in an axial direction and to allow placing the record conveniently in position on the holder or removing it therefrom. For the purpose mentioned, the holder is provided with a plurality of bars for engagement with the inner surface of the record and mounted to swing in unison toward and from the axis of the holder, the bars being pressed in an outward direction by a spring device.

A practical embodiment of the invention is represented in the accompanying drawings forming part of this specification and in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement; Fig. 2 is a longitudinal central section of the same and showing the record in place; and Fig. 3 is a front end elevation of the same.

The usual feed shaft A, of a phonograph extends through a tube B, secured centrally to the feed shaft A by set screws C, preferably screwing in heads B¹, B² secured or formed on the ends of the tube B. By the use of the set screws C the tube B can be accurately centered on the feed shaft A, and as the inside diameter of the tube B is somewhat in excess of the diameter of the feed shaft A, it is evident that the tube B can be readily fitted on feed shafts varying slightly in diameter.

The heads B¹, B², are pivotally connected by sets of links D, D', with lugs E, E', attached to or formed on the inner faces of longitudinally-extending bars F, adapted to engage with their outer faces the inner sur-

face of the cylindrical phonograph record G, to support the latter centrally relative to the axis of the feed shaft A. The rear ends of the bars F are provided with outwardly-extending integral stop lugs F', in engagement with the rear end of the phonograph record G to limit the rearward movement thereof, and the forward ends of the said bars F are provided with humps F², for engagement with the forward ends of the phonograph record G to hold the record against accidental outward movement, said bars having inwardly bent terminals F³. Thus when the phonograph record is in position on the bars F, it is held against movement in a longitudinal direction.

On the inner faces of the bars F and at points intermediate the sets of lugs E, E' is arranged another set of lugs E², provided with transverse pins E³, engaging slotted arms H', formed or secured on a sleeve H, mounted to slide at its forward end on the tube B, and at its rear end on a collar I, held on the tube B and abutting against the head B². A spring J is coiled on the tube B within the sleeve H and rests with its rear end on the collar I, the forward end of the spring pressing against the forward end of the sleeve H to move the sleeve H in a forward direction, the movement of the sleeve H in this direction being limited by a stop collar K, held adjustably on the tube B by a set screw K'.

Phonograph records G, as now usually constructed, have a tapering bore; that is, the rear end is larger in diameter than the front end, and in order to insure contact of the bars F throughout their length with the inner tapering wall of the record G, it is necessary that the bars F be correspondingly inclined, as plainly shown in Figs. 1 and 2.

When the holder is in position on the feed shaft A, as shown in Fig. 1, and it is desired to place a record G in position on the arms F, the operator places the rear end of the record against the terminals F³ of the arms F, as indicated in dotted lines in Fig. 1, and then pushes the record in the direction of the arrow a', so that the arms F are caused to swing rearward and inward to allow the record to pass the humps F², the record finally abutting with its rear end against the

stop lugs F', and at the time the humps F² have passed out of the front end of the record and now abut against the front end of this record. When the arms F are caused to swing rearward and inward, as above described, the pins E³ act on the arms H' to move the sleeve H in a rearward direction against the tension of the spring J, and when the record reaches its final position on the arms F and the operator releases the record G, then the pressure exerted by the spring J against the sleeve H in a forward direction causes the arms H' of the sleeve to press against the pins E³ and lugs E² in a like direction, thus forcing the bars F in firm contact with the inner surface of the record G and thereby cause the record G to turn with the holder fastened to and turning with the feed screw A. When it is desired to remove the record G, the operator takes hold of the record and pushes the same toward the right in the inverse direction of the arrow a', to cause the forward end to act on the humps F² with a view to swing the bars F inward at their forward ends, the links D permitting such movement. The record is now readily slipped off the holder and the arms F swing outward to their full extent by the action of the spring J on the sleeve H, the movement of which and that of the bars F, being finally limited by the sleeve H abutting against the stop collar K.

The bars F are preferably curved at their outer faces to conform to the inner surface of the records, thus providing a large gripping surface to hold the records against turning on the bars. As the arms F are mounted to swing bodily toward and from the axis of the feed shaft A and the arms are normally held in an outermost position by the action of the spring-pressed sleeve H, it is evident that the arms readily yield bodily to permit of placing the records gently in position or removing the same therefrom, and hence all injury to the records is completely avoided and the holder readily accommodates records of different sized bores.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A holder for phonograph records, comprising a plurality of longitudinal bars mounted to swing toward and from the axis of the holder, means whereby the movement of the bars longitudinally in one direction will move them toward the axis of the holder, and spring pressed means for returning the bars.

2. A holder for phonograph records, comprising in combination with the feed shaft, a plurality of bars arranged longitudinally of the shaft and mounted for movement toward and from the shaft, means whereby

a bodily movement of the bars longitudinally of the shaft in one direction will swing them toward the shaft and a spring for returning the bars.

3. The combination with the feed shaft of the phonograph, of a holder for the records comprising a plurality of longitudinal bars, means for mounting the bars to permit them to move radially with respect to the shaft and longitudinally thereof, means whereby the longitudinal movement in one direction will move the bars toward the shaft and a spring for returning the bars.

4. The combination with the feed shaft of the phonograph, of a holder for the records comprising a tube for attachment to the shaft, a plurality of longitudinal bars, links pivotally connecting the bars with the tubes, a sleeve slidable on the tube and having a connection with the bars for moving said bars in the same direction with the tube, and a spring for returning the tube.

5. A holder for phonograph records, comprising a tube for attachment to the feed shaft of the phonograph, longitudinal bars grouped around the said tube, links pivotally connecting the said tube with the said bars, a spring-pressed sleeve mounted to slide on the said tube, and provided with radially extending slotted arms, and pins on the bars engaging the slots in the said sleeve arms.

6. A holder for phonograph records, comprising a tube for attachment to the feed shaft of the phonograph, longitudinal bars grouped around the said tube, links pivotally connecting the said tube with the said bars, a spring-pressed sleeve mounted to slide on the said tube, and provided with radially extending slotted arms, pins on the bars engaging the slots in the said sleeve arms, and a collar adjustably secured on the said tube for limiting the sliding movement of the said sleeve.

7. In combination with a phonograph feed shaft, of a tube for the passage of the said feed shaft, set screws for fastening the tube centrally to the said feed shaft, bars grouped around the said tube, sets of links pivotally connecting the bars with the said tube, and a spring-pressed sleeve mounted to slide on the said tube and having a pivotal connection with the said bars at points intermediate the said sets of links.

8. A holder for phonograph records, provided with a plurality of longitudinal bars grouped around the axis of the holder and mounted to swing simultaneously toward and from the said axis and means for mounting the bars whereby to permit them to tilt on their longitudinal axis toward and from the axis of the holder.

9. A holder for phonograph records, provided with a plurality of longitudinal bars

grouped around the axis of the holder and
mounted to swing simultaneously toward
and from the said axis, each of the bars be-
ing provided at one end with an outwardly-
5 extending stop lug and at the other end with
an integral hump having an inwardly-bent
terminal.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

WILLIAM T. LONG.

Witnesses:

R. R. WHITE,
F. M. BROWN.