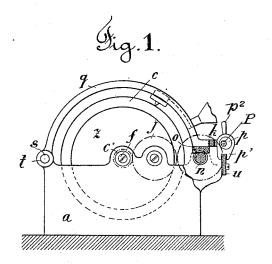
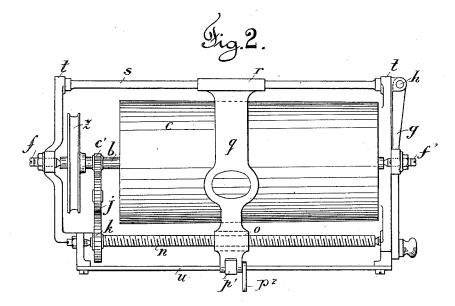
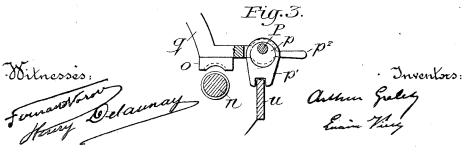
A. GRELET & L. VIVES. PHONOGRAPH.

(Application filed Nov. 16, 1899.)

(No Model.)







UNITED STATES PATENT OFFICE.

ARTHUR GRELET AND LUCIEN VIVES, OF PARIS, FRANCE.

PHONOGRAPH.

SPECIFICATION forming part of Letters Patent No. 649,725, dated May 15, 1900. Application filed November 16, 1899. Serial No. 737,171. (No model.)

To all whom it may concern:

Be it known that we, ARTHUR GRELET and LUCIEN VIVES, citizens of the Republic of France, residing at Paris, France, have invented certain new and useful Improvements in Phonographs, of which the following is a specification.

Our invention relates to phonographs of that class which are provided with means for reto leasing the nut of the carrier for the recorder or reproducer from the feed-screw, so that the said parts can be returned to starting position by hand.

The invention consists of certain features 15 of construction and combinations of parts to be hereinafter described and then claimed.

In the accompanying drawings, Figure 1 is a sectional end view of a phonograph provided with our invention. Fig. 2 is a plan view; 20 and Fig. 3 is an enlarged detail view of the nut-disengaging device, the nut being shown in disengaged position and the other parts accordingly.

Similar letters of reference indicate corre-

25 sponding parts.

Referring to the drawings, a indicates the frame, and b the shaft of the drum c, over which the records are placed, which shaft journals at the ends on the points of two screws ff'. The screw f' is mounted on an arm g, pivoted at h to the frame, so that the said arm may be swung to one side in order to permit the removal of or the insertion of a record. Pulley z is arranged on the shaft b, 35 so that the desired motion-transmitting device, either mechanical or electrical, may be

q indicates the carrier for the membrane, which at one end is provided with a box or 40 sleeve r, that is guided loosely on a fixed guide-rod s, fixed at t t to the frame a and arranged parallel with the shaft b of the record-drum c. n indicates a suitable feed-screw journaled in suitable bearings at the opposite 45 side of the drum c from guide-rod s and also parallel therewith. Said carrier q spans the upper part of the drum c and is provided with a half-nut o at its forward end, which nut meshes with said feed-screw during the 50 playing of a record and which feed-screw is

turned by intermeshing toothed wheels c', j, and k. The nut o may be released from the feed-screw n in order to permit the carrier qto be moved back to starting position. For this purpose a guide-rail u is fixed to the frame 55 a in front of and parallel with the feed-screw, while the carrier is extended over the said rail and provided with bearings for a short pivot P, on which is mounted an eccentric cam p and which is also provided with a handle p^{2} , 60 whereby the cam may be turned. On the cam is mounted loosely a runner-shoe p', so that the cam may turn therein, the lower end of said runner-shoe resting and being always guided on said rail u, except when it is desired 65 to swing the carrier away from the record-drum. When the nut is in engagement with the feed-screw, as shown in Fig. 1, the cam and its handle are in the position shown; but when the record has been played and it is de- 70 sired to return the carrier the handle p^2 and the cam p are moved down into the position shown in Fig. 3, so that the nut o is released from the feed-screw and the stylus disengaged from the record, the runner-shoe remaining 75 on the rail u, so as to guide and support the carrier. The described disengaging and guiding means serves to insure a steady motion of the carrier during both directions of movement thereof.

Having thus described our invention, what we claim as new, and desire to secure by Let-

ters Patent, is-

In a phonograph, the combination of the feed-screw for the carrier, the carrier provided 85 with a half-nut, a guide-rail adjacent to the feed-screw, a cam pivoted in the forward end of the said carrier and provided with a handle, and a runner-shoe in which said cam turns, said runner-shoe resting and running 90 on said guide-rail, substantially as set forth.

In testimony that we claim the foregoing as our invention we have signed our names in presence of two subscribing witnesses.

> ARTHUR GRELET. LUCIEN VIVES.

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Witnesses: FERNAND VOROU, HENRY DELANNAY.