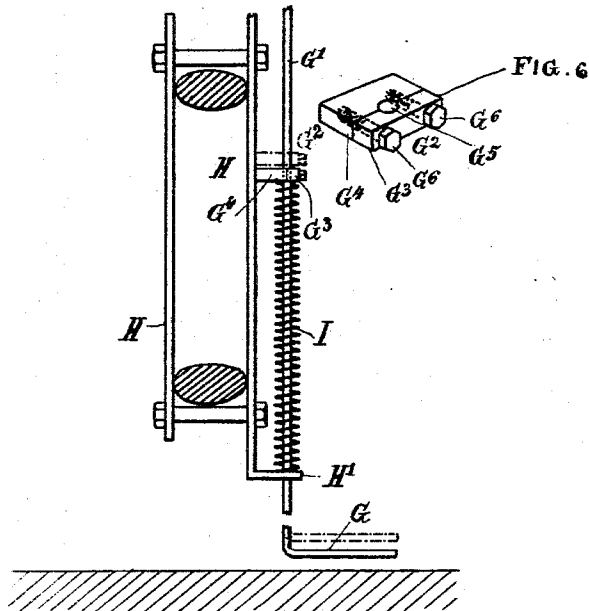
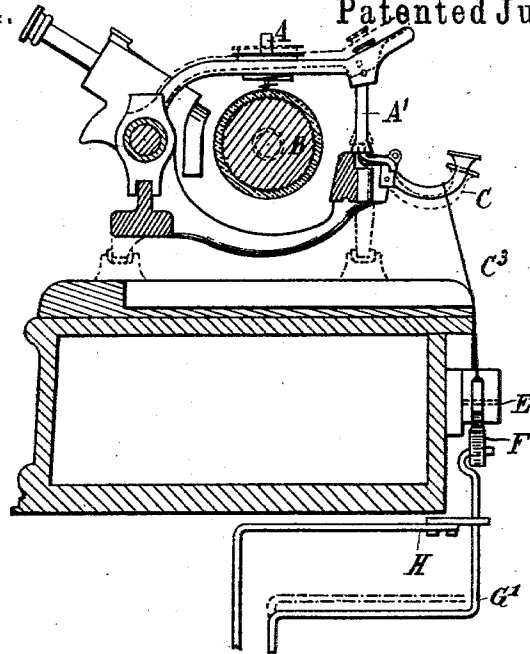


L. S. ROBINSON.

PEDAL APPARATUS FOR CONTROLLING RECORDING AND
REPRODUCING APPARATUS OF PHONOGRAPHS.

No. 562,664.

Patented June 23, 1896.



Witnesses:

Thomas Durant
J. M. Fowler Jr

Inventor:

Lectie S. Robinson,
by *Chas. & Chas.*
his Atty.

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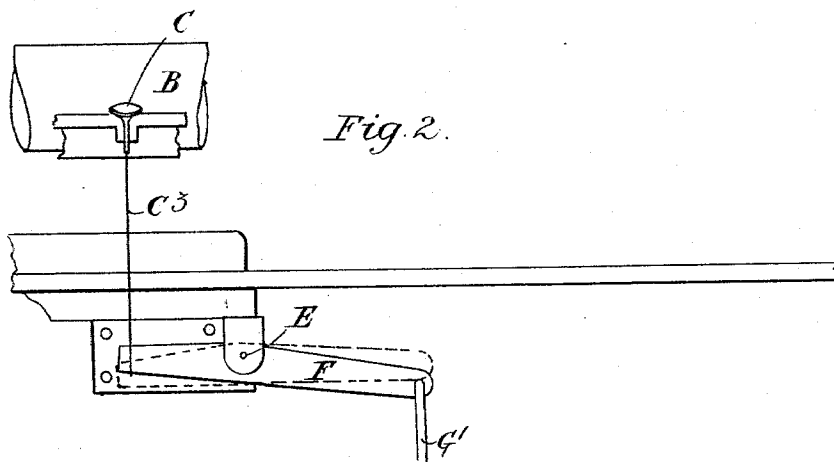


Fig. 3.

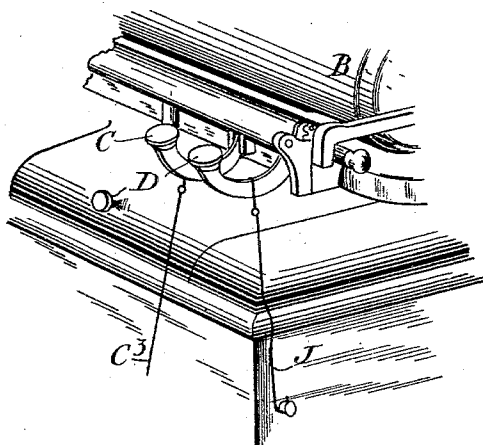


Fig. 4.

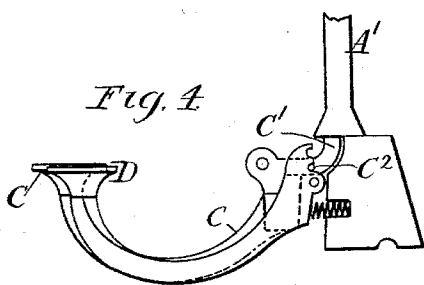
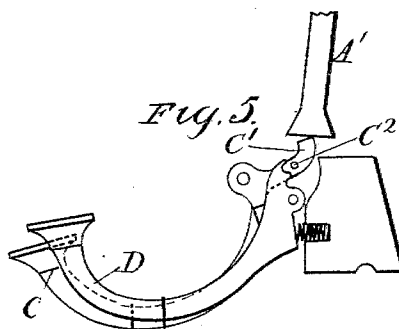


Fig. 5.



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Inventor:
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by Christ & Hunt
his Attys

UNITED STATES PATENT OFFICE.

LESLIE STEPHEN ROBINSON, OF LONDON, ENGLAND,

PEDAL APPARATUS FOR CONTROLLING RECORDING AND REPRODUCING APPARATUS OF PHONOGRAPHS.

SPECIFICATION forming part of Letters Patent No. 562,664, dated June 23, 1896.

Application filed November 4, 1895. Serial No. 567,895. (No model.) Patented in England December 18, 1894, No. 24,588.

To all whom it may concern:

Be it known that I, LESLIE STEPHEN ROBINSON, a subject of the Queen of England, residing at London, England, have invented certain new and useful Improved Pedal Apparatus for Controlling the Recording and Reproducing Apparatus of Phonographs, (for which I have obtained Letters Patent in Great Britain, No. 24,588, dated December 18, 1894,) of which the following is a specification.

This invention relates to improved pedal apparatus for controlling the recording and reproducing apparatus of phonographs.

According to my invention I combine with a pedal which when controlled by the foot or otherwise renders the phonograph or the like operative, an automatic device to render the instrument inoperative when such control ceases. With such apparatus the user of the instrument has his hands free, for handling documents, for instance, and, moreover, on releasing the pedal he raises the needle clear of the record-cylinder, but leaves everything in readiness for instant operation, which recommences immediately upon depression of the pedal, whereby the needle is restored to the acting position.

In the accompanying drawings, Figure 1 is a vertical section showing apparatus constructed according to my invention applied to an Edison-Bell phonograph of a usual and well-known type, the section being taken transversely to the cylinder thereof. Fig. 2 is a view at right angles to Fig. 1. Fig. 3 is a view in perspective of a portion of the phonograph, showing the "on" and "off" levers; and Figs. 4 and 5 are views, drawn to a larger scale than that of Fig. 1, to illustrate the action of the "off" and "on" levers of the phonograph. Fig. 6 is a perspective view, also on a larger scale, of a detail of Fig. 1.

Like letters indicate like parts throughout the drawings.

A is the recorder and reproducer, hinged so as to be movable toward or away from the record-cylinder.

C is the off lever, and D an on lever. The off lever has a laterally-extended bail or working face C', upon which the recorder and producer A bears by means of a strut A'. The on lever D, which in effect is a spring-detent, tends always to engage automatically with a pin C²

on the off lever C, so that normally when the outer end of the latter is fully depressed, as in Fig. 5, the on lever causes the off lever to retain, through the bail C' and strut A', the recorder and reproducer A clear of the record, cylinder B. The on lever, as hereinafter explained, is not necessary for the purposes of my invention, and is in Fig. 5 shown as being prevented from engaging the off lever.

With such apparatus I combine improvements as follows:

To the frame of the instrument I pivot at E a lever F, coupled at one end to the off lever C by a wire or other connection C³, and at the other end to a pedal G by a rod G'.

H is a guide-frame secured to the main frame of the apparatus to guide the rod G', which reciprocates vertically in slots therein.

I is a helical spring which encircles the rod G' and is in compression between the part H' of the guide-frame H and a stop G², which encircles and is fixed on the rod. The stop G² (see Fig. 6) is made in two parts G³ G⁴, with an opening at G⁵ between them. Two screws G⁶ pass through the part G³ and engage with the part G⁴. By tightening up these screws after the stop G² has been placed on the rod G', the latter being received in the opening G⁵, the two parts G³ G⁴ are drawn together to grip the rod firmly, so that the stop may not slip thereon. The spring I tends to keep the rod G' and its connections in the position in which they are shown in dotted lines in Figs. 1 and 2—that is to say, in a position in which the recorder and reproducer A is retained clear of the cylinder B. By depressing the pedal G the action of the spring I is overcome and the off lever C rises while the bail C' drops to allow the recorder and reproducer A to descend into contact with the cylinder B, as indicated in full lines in Fig. 1.

In order that the recorder and reproducer may be free to descend when the outer end of the off lever is released, the on lever D must not be operative to hold the off lever. Therefore I retain the on lever in an inoperative position by a wire hook J, Figs. 3 and 5, attached to the instrument, or I remove it altogether.

Instead of the spring H, I may use for a similar purpose springs applied to other parts of the apparatus, or I may use a counterbalance

upon the recorder and reproducer, and connect the pedal apparatus directly thereto, or I may employ any other pedal-controlled devices to cause the instrument to become inactive when the pedal control ceases.

I may arrange the pedal to move laterally when depressed, into a notch, like a harp-pedal, for instance, or otherwise retain it in its lower position.

- Apparatus constructed and operating according to my invention may be applied to the starting and stopping levers of phonographs or the like, instead of being used to operate upon the recorder and reproducer; and although I have described by way of example the application of my invention to an Edison-Bell phonograph I do not limit my invention to that particular application.

I claim—

1. In a phonograph, the combination with the recorder having the depending strut, of the lever C having the laterally-extending bail at its inner end upon which the strut rests, the pivoted lever F connected at one end to said lever C, the movable rod G' co-operating with the opposite end of said lever F, the spring for elevating said rod, and a pedal for depressing the rod against the tension of the spring; substantially as and for the purpose set forth.
2. In a phonograph, the combination with the recorder having the depending strut, of

the lever for holding said recorder out of operation, the pivoted lever connected at one end to said first-mentioned lever, the rod co-operating with the opposite end of said pivoted lever, and means for operating said rod; substantially as described.

3. In a phonograph the combination with an off lever such as C and an on lever such as D of a spring-controlled or counterbalanced lever such as F a pedal G and means for retaining the on lever out of action substantially as and for the purpose described.

4. In a phonograph, the combination with the recorder, the lever for holding said recorder out of operation, the pivoted lever connected at one end to said first-mentioned lever, the reciprocating rod co-operating with the opposite end of said pivoted lever, a guide-frame secured to the frame of the apparatus, in which the rod reciprocates, the stop at the lower end of the frame and the adjustable stop carried by the rod, and the spring encircling the rod, and confined between the two stops; substantially as described.

In testimony whereof I have hereto set my hand in the presence of the two subscribing witnesses.

LESLIE STEPHEN ROBINSON.

Witnesses:

HAROLD WADE,

B. E. DUNBAR-KILBURN.