

J. D. BOWERS & L. MAYHUE.

PHONOGRAPH.

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968,530.

Patented Aug. 30, 1910.

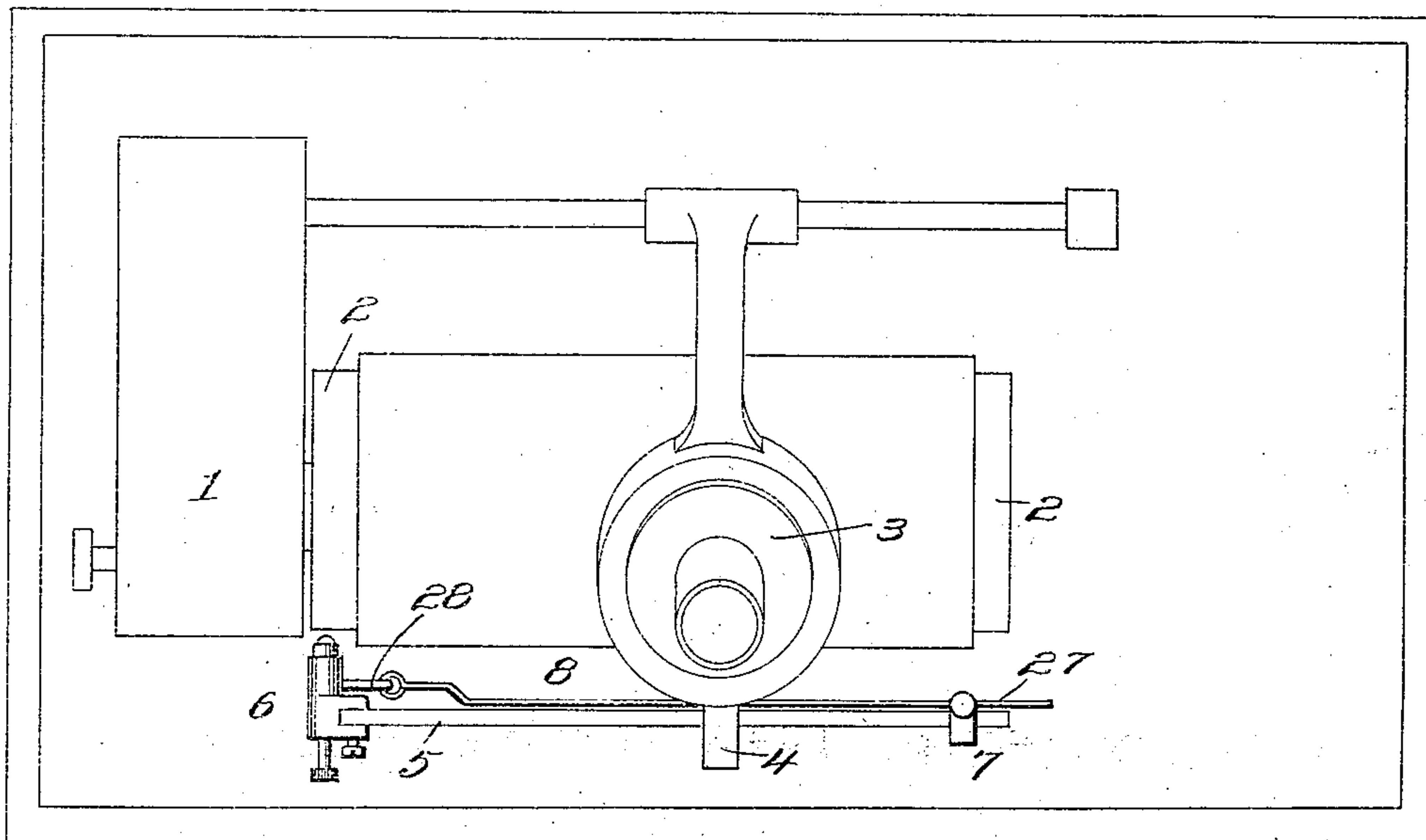


Fig. 1.

Fig. 2.

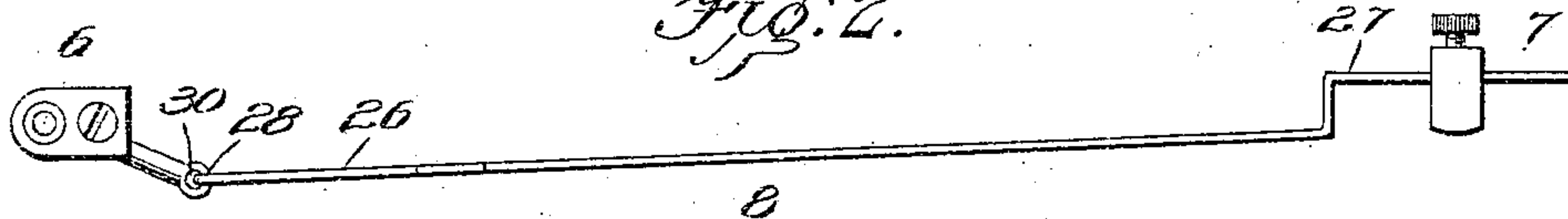


Fig. 3.

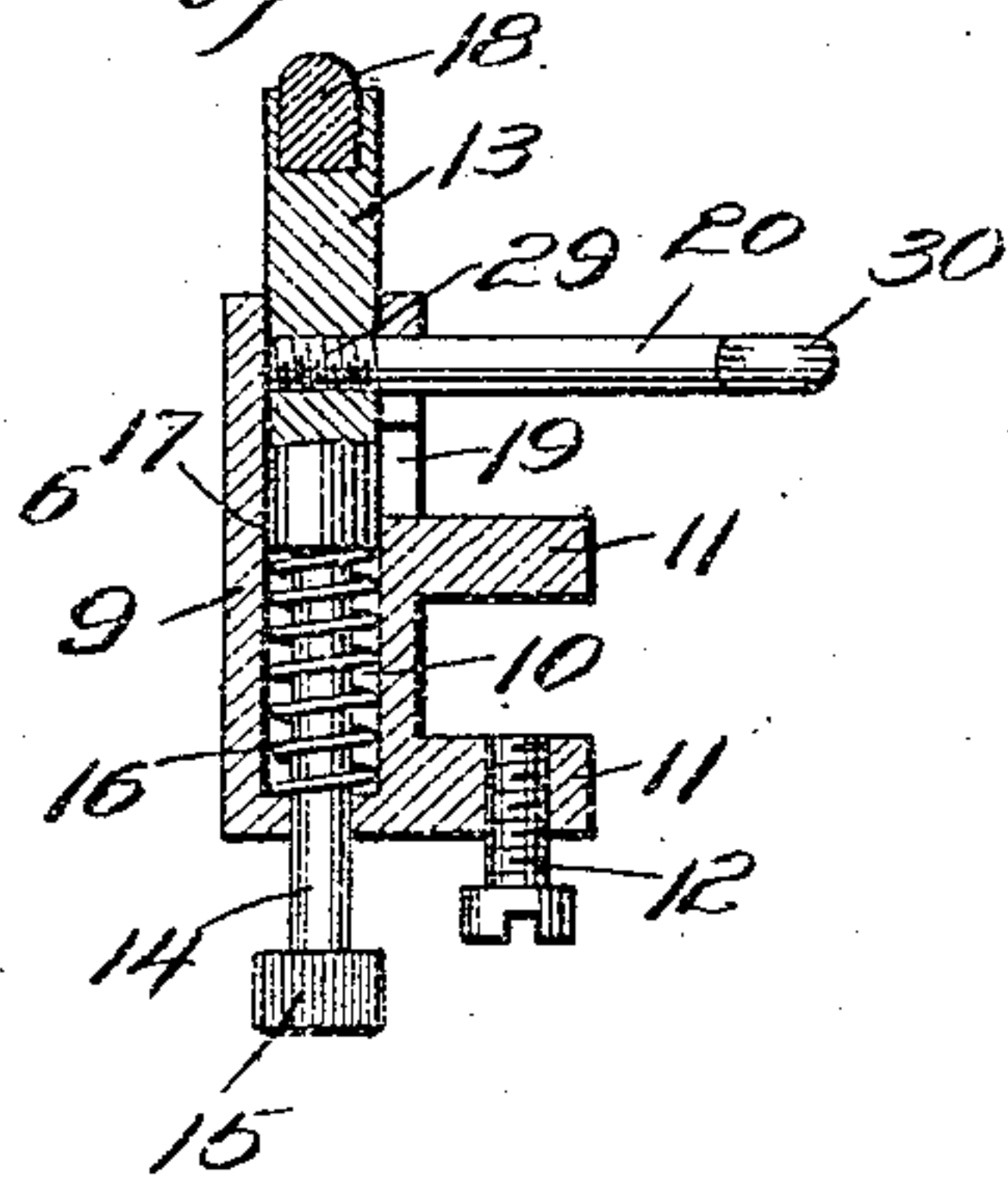


Fig. 4.

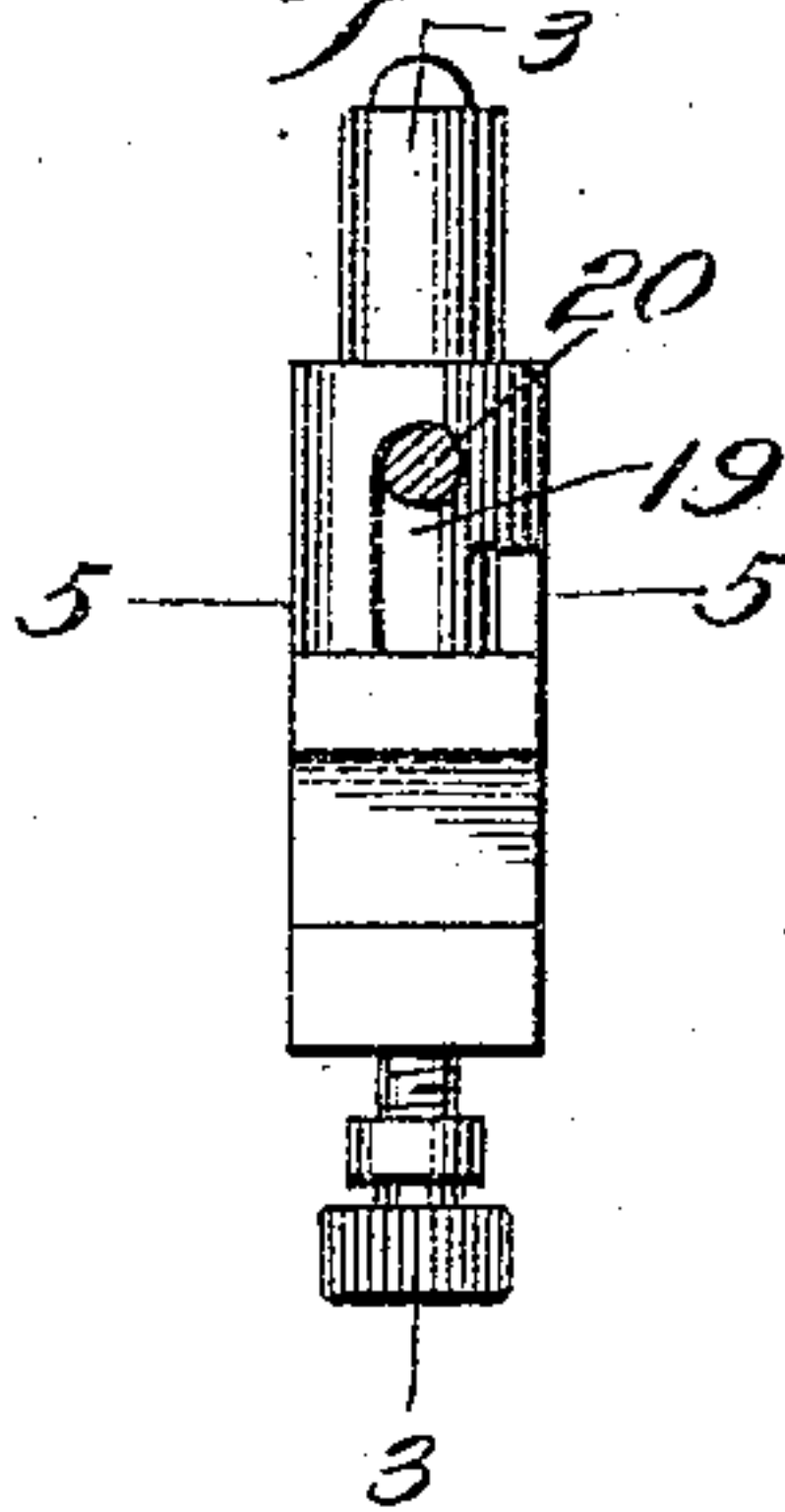


Fig. 6.

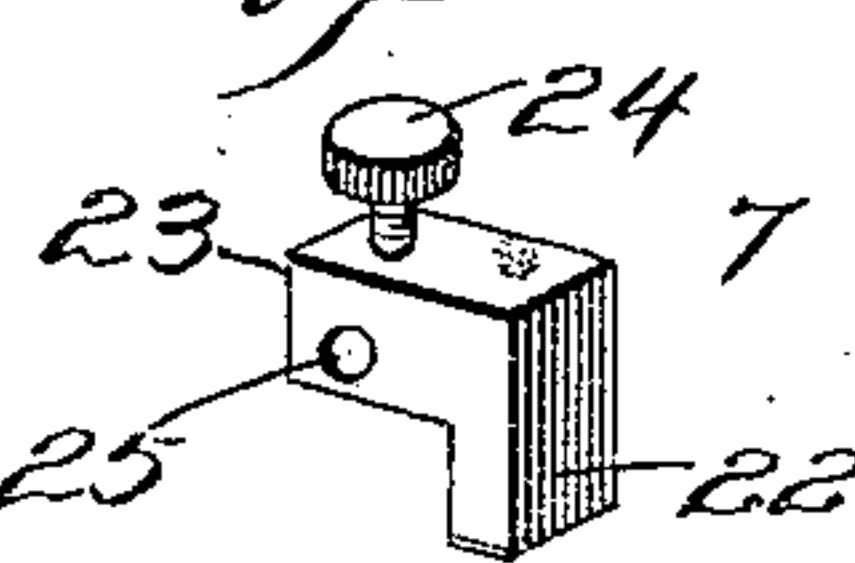
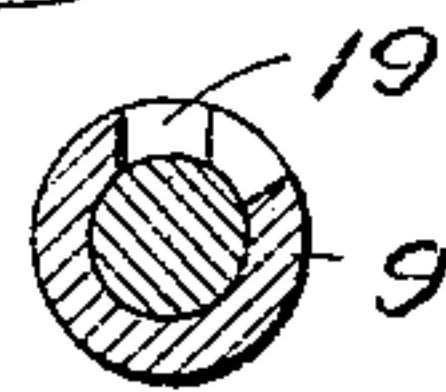


Fig. 5.



Witnesses

Geo. A. Schuman Jr.
Harry M. Best.

Inventors

John D. Bowers
Leon Mayhue.

By

Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

JOHN D. BOWERS AND LEON MAYHUE, OF SALT LAKE CITY, UTAH.

PHONOGRAPH.

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To all whom it may concern:

Be it known that we, JOHN D. BOWERS and LEON MAYHUE, citizens of the United States, residing at Salt Lake City, in the county of Salt Lake and State of Utah, have invented new and useful Improvements in Phonographs, of which the following is a specification.

The present invention relates to phonographs, and particularly to attachments for automatically stopping the machine when the record has been played.

One object is to provide a device of this character which is simple and effective in operation.

Another object is to provide such a device which is adapted to be readily attached to the present form of machine.

These and other objects may be attained by the construction shown in the accompanying drawings in which:

Figure 1 is a plan view of a phonograph machine showing our invention applied, Fig. 2 is a view of the invention detached from the machine, Fig. 3 is a vertical sectional view of Fig. 4, on the line 3—3, Fig. 4 is an elevation of the braking device, Fig. 5 is a sectional view on the line 5—5 of Fig. 4, and Fig. 6 is a detail view of the trip detached.

In the drawings 1 represents the motor of a phonograph machine, 2 the record carrying drum, 3 the sound box having the lug 4, and the rider bar 5.

The invention herein contemplated is adapted for attachment to the rider bar 5.

The present device comprises the brake member 6, the trip member 7, and the connecting link 8.

The brake member consists of the cylindrical portion 9 having a longitudinal bore 10 formed therein. Laterally projecting spaced fingers 11 on the portion 9, one of which carries the adjusting screw 12, serve as a clamp by means of which the member 6 is secured to one end of the rider bar 5. Sliding in the bore 10 is a plunger 13. The lower portion 14 of the plunger is reduced and protrudes through the bottom of the member 6, and has its extremity provided with a milled head 15, adapted to be grasped by the fingers of the hand to adjust the plunger 13. A coiled spring 16 is seated between the shoulder 17 of the plunger and the bottom of the bore and encircles the reduced end 14 thereof. The spring keeps the

plunger 13 at its upward limit of movement. Seated in a recess in the upper end of the plunger 13 is a friction block 18 of rubber, leather or other suitable material. A bayonet slot 19 is formed in the side of the portion 9 and directly above the upper of the clamp fingers 11. An eye bolt 20 secured in any suitable manner as by a threaded end 29 to the plunger 13, lies in the bayonet slot 19.

The trip member consists of the block 7 having the depending portion 22 and horizontal portion 23. The portion 23 is vertically perforated to receive the adjusting screw 24, and transversely perforated as at 25 to receive the end 27 of the connecting link 8.

The connecting link 8, is bent near each end transversely and forwardly at an angle so that its ends 26 and 27 lie in a plane parallel with the main portion thereof. The end 26 is provided with an eye 28 adapted to engage in the eye 30 of the bolt 20, and form a loose connection.

The operation of the device is as follows: The brake member 6 is secured to one end of the rider bar 5 by means of clamping fingers 11 and screw 12. The block 7 is placed on the opposite end of the rider bar 5 so that its horizontal portion 22 rests on the bar, and the portion 23 lies against the outer face of the bar. The link 8 is inserted in the perforation 25 and adjusted so that the block 7 is positioned the proper distance from the opposite end of the rider bar 5, to be engaged by the lug 4 on the sound box 3. The plunger 13 is pulled back by means of the head 15 and turned until the bolt 20 engages in the transverse portion of the bayonet slot 19. The phonograph is started, and when the sound box 3 reaches the end of the record the lug 4 will engage the trip block 7 and move it along the rider bar, thereby communicating motion through the link 8 to the bolt 20. The bolt 20 will be moved in the slot 19 until it comes opposite the longitudinal portion thereof. The spring 16 will then act on the plunger 13 and force it outward bringing the friction block 18 against the record drum 2, which will stop the machine. The trip 7 may be adjusted longitudinally accordingly as the records are longer or shorter.

It will thus be seen that a very simple and effective device is produced, and one which will not easily get out of repair. Further a

device is produced which can be readily attached to the rider bar of a phonograph without any alterations in the form or construction of the machines on the market.

5 Having thus described the invention what is claimed as new is:

10 1. The combination with a phonograph having a rider bar, of a brake member secured at one end of said rider bar and including a trigger, a link loosely connected at one end to the trigger, and a trip block longitudinally adjustable on the link near its opposite end and loosely riding on the rider bar.

15 2. The combination with a phonograph having a rider bar, of an automatic stop comprising a brake member having a hollow body provided with a bayonet slot, a spring pressed plunger playing in the hollow body and having a friction block on its
20 outer end, a laterally projecting apertured

lug on the said plunger and riding in said bayonet slot, laterally projecting parallel arms on the hollow body adjacent one end of the bayonet slot adapted to straddle the rider 25 bar of a phonograph, one of the arms carrying a binding screw whereby the brake member is clamped to the rider bar near one end thereof, an L-shaped trip member loosely engaging the rider bar near its opposite end 30 and provided with an aperture and clamping screw, and a link adjustable in the aperture of the trip member and having its opposite end engaging in the aperture of the said lug on the spring pressed plunger. 35

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN D. BOWERS.
LEON MAYHUE.

Witnesses:

R. T. HARBACH,
J. FLETCHER, Jr.