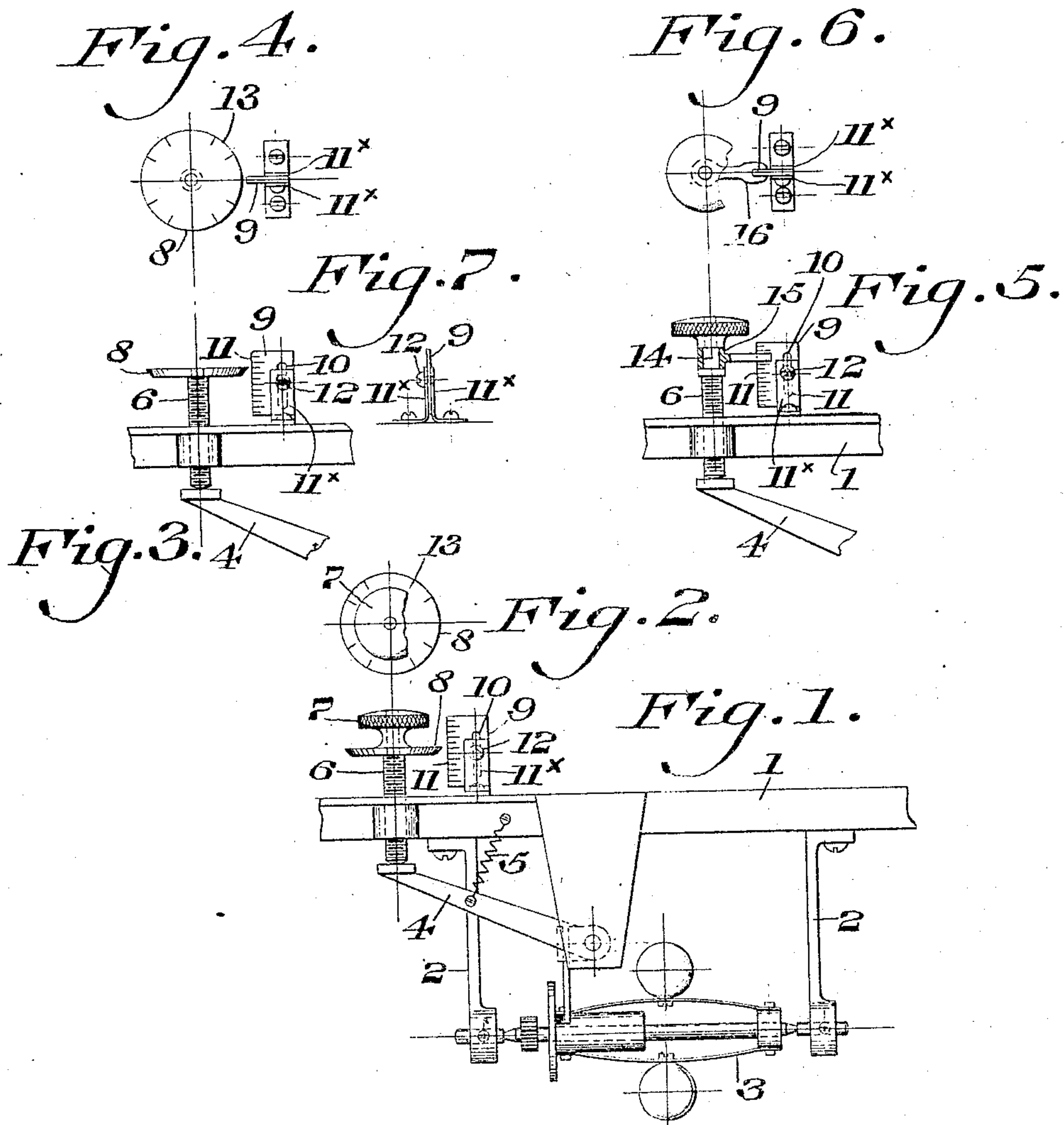


No. 876,673.

PATENTED JAN. 14, 1908.

W. W. WOOSTER.
SPEED REGULATOR AND INDICATOR.
APPLICATION FILED APR. 9, 1907.



Witnesses:
P. F. Nagle
L. Douville.

Inventor
Warren W. Wooster.
By Diedersheim & Fairbanks.
Attorneys.

UNITED STATES PATENT OFFICE.

WARREN W. WOOSTER, OF BERLIN, NEW JERSEY.

SPEED REGULATOR AND INDICATOR.

No. 876,673.

Specification of Letters Patent.

Patented Jan. 14, 1908.

Application filed April 9, 1907. Serial No. 367,286.

To all whom it may concern:

Be it known that I, WARREN W. WOOSTER, a citizen of the United States, residing at Berlin, in the county of Camden, State of New Jersey, have invented a new and useful Speed Regulator and Indicator, of which the following is a specification.

My invention relates to a new and useful time indicator for phonographs and the like and consists of means in suitable relation with the adjusting device of the revoluble part or parts of the phonograph or other device for the purpose of predetermining the velocity or rate of speed at which said part or parts shall revolve.

It further consists of other novel details of construction, all as will be hereinafter fully set forth.

Figure 1 represents a side elevation of a portion of a phonograph or like device, showing my time indicator in position. Fig. 2 represents a plan view of the adjusting screw, a portion of the head being broken away. Fig. 3 represents a side elevation of a portion of the device shown in Fig. 1, with a different form of screw employed. Fig. 4 represents a plan view of some of the parts shown in Fig. 3. Fig. 5 represents a partial side elevation and partial sectional view, showing a form of screw that may be employed. Fig. 6 represents a plan view thereof, showing a portion of the head of the said screw broken away. Fig. 7 represents a front elevation, showing the manner of mounting the scale.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings. In the drawings, I have shown a device for indicating the speed at which the revoluble parts of a phonograph or a like device are to rotate in order to give the desired speed to the reproducing parts.

It will be evident that certain changes may be made in the construction shown which will come within the scope of my invention and I do not, therefore, desire to be limited in every instance to the exact construction shown.

1 designates a bed plate of the machine, to which is suitably attached, the hangers or bearings 2 carrying the governor 3.

In suitable connection with the governor 3 is a lever 4, which is pivotally mounted at a suitable stationary point and has connected therewith, a spring 5 tending to move the

same upwards, it being understood that the proper movement of the lever 4 acts upon the governor 3 to cause the same to rotate in a slower and faster manner as desired.

In threaded engagement with a suitable portion of the device is a set screw 6, which bears upon the end of the lever 4 for adjusting the position of the same, said set screw having a disk or head 8, and a thumb piece 7 thereon, it being understood that as the set screw 6 is rotated it will move upwards or downwards in its support and will cause the free end of the lever to be moved in a corresponding direction and thus control the governor.

9 designates a plate or scale which is provided with a slot 10 and has the graduations 11 thereon suitably numbered or provided with indicators in order that readings may be made therefrom.

11^x designates ears suitably connected in the present instance with the bed plate 1 adjacent the set screw 6, it being noted that the scale or plate 9 is adapted to be carried on said ears and that a set screw 12 passing through said ears and the slot 10 in the plate is adapted to lock the same in proper position, it being understood that by reason of this construction, the scale or plate can be raised or lowered to a desired adjusted position. By reason of the position of the scale, the disk 8 will register in its movement with the various graduations of the scale, so that the position of said set screw and of the lever 4 can be positively determined and thus the speed of the phonographs regulated.

Upon the upper face of the disk 8, I may provide graduations or a scale 13, so that the position of the set screw can be made in an accurate manner and to any degree of fineness.

It will be understood that the scale or plate 9 can be adjusted depending upon the phonograph or the like to which it is applied, after which the readings can be made as above described.

In Figs. 3 and 4, I have shown the set screw 6 without the head 7, the disk 8 thereon serving as a means for engaging with the hand of the operator to rotate the screw.

In Figs. 5 and 6, I have shown the disk 8 as omitted and I have provided the set screw 6 with a neck 14 adapted to receive a collar 15 from which projects the yoke 16, the arms of said yoke being adapted to seat or receive the scale or plate 9, so that the

arms of the yoke will register with the graduations of the scale in order that readings may be accurately taken.

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

1. In a device of the character described, a lever, a set screw co-acting with said lever to adjust the same, a disk on said set screw, graduations on said disk and a scale adjacent said screw having graduations thereon from which readings may be taken depending upon the position of the disk.

2. In a device of the character described, a lever, a set screw directly engaging and co-acting with said lever, a graduated member carried by said set screw, a scale independent of and coacting with said graduated member and having graduations thereon with which said member registers whereby the speed of the device can be determined and means for adjusting said scale parallel with said set screw.

3. In a device of the character described, a lever, a set screw having its end resting directly upon and co-acting with said lever, a disk on said set screw, a head on said set screw above said disk and of smaller diame-

ter, and a scale adjustably mounted adjacent said disk from which readings can be taken directly by said disk.

4. In a device of the character described, a lever, a set screw co-acting with said lever, a plate having graduations thereon, ears suitably supported, and means for adjustably connecting said scale with said ears whereby said scale can be adjusted with respect to the mechanism.

5. In a device of the character described, a lever, a set screw coacting with said lever, a yoke carried by said set screw and a scale adjustably mounted adjacent said set screw and seated in said yoke.

6. In a device of the character described, a lever, a bodily movable set screw independent of and bearing on said lever to adjust the position thereof, a thumb piece or head on said set screw, an indicating member carried by said set screw and a scale mounted in proximity to and parallel with said set screw and at right angles to said indicating member.

WARREN W. WOOSTER.

Witnesses:

JOHN A. WIEDERSHEIM,
C. D. McVAY.