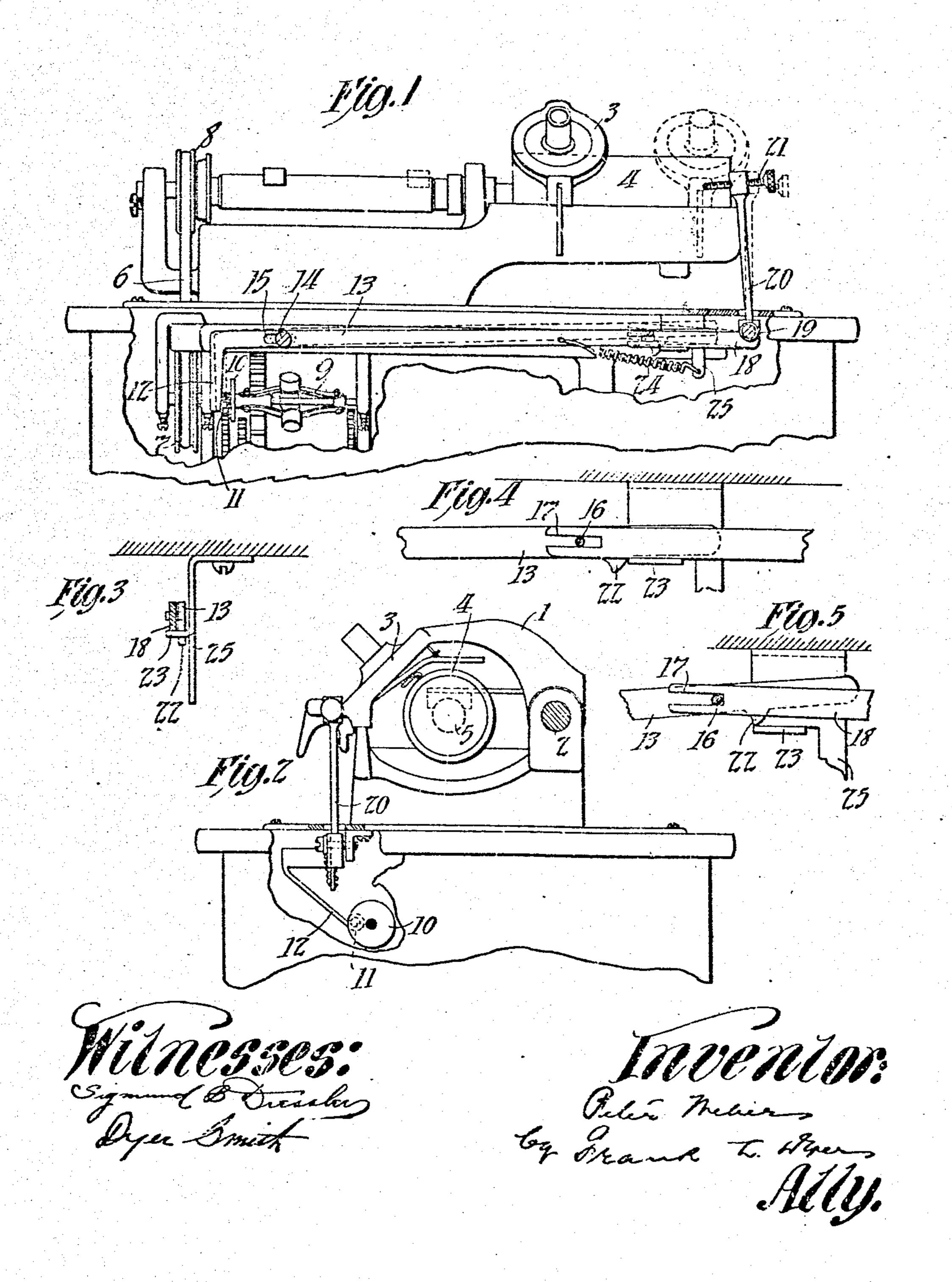
985,717.

Patented Feb. 28, 1911.



## UNITED STATES PATENT OFFICE.

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## PHONOGRAPH STOP DEVICE.

985,717.

Specification of Letters Patent. Patented Feb. 28, 1911.

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To all whom it may concern:

Be it known that I, Peter Weber, a citizen of the United States, and a resident of Orange, in the county of Essex and State 5 of New Jersey, have made a certain new and useful Invention in Phonograph Stop Devices, of which the following is a description.

My invention relates to phonograph stop 10 devices and the object thereof is to provide a simple, novel and efficient means for stopping the motor of the machine automatically when the reproducer reaches the end of the record or any other desired predetermined 15 point.

Other objects of my invention reside in the construction of parts and cembinations of elements hereinafter described in the following specification and particularly point-20 ed out in the appended claims.

Attention is hereby directed to the accompanying drawings, forming part of this

specification, in which-

Figure 1 is a front elevation of a phono-25 graph provided with my invention, the front of the cabinet of the machine being shown as partly broken zway to show the inclosed parts. Fig. 2 is an end view looking from the left in Fig. 1. Fig. 3 is a detail of con-30 struction, and Figs. 4 and 5 are details showing the positions of the link connections and detent means when the machine is in "on" and "off" positions respectively.

Referring to the drawings, the traveling 35 carriage 1 is slidably mounted on back rod 2, the carriage carrying reproducer 3, which carries the well known floating weight, stylus lever mounted thereon, and stylus carried thereby, in engagement with the record 40 4 on the mandrel 5. The machine is operated in the well known manner by the belt 6 passing over belt wheel 7, which is rotated by a motor, the belt passing over belt! wheel 8 from which the phonograph man-

45 drel and the feed screw are rotated.

The motor of the phonograph is provided with a governor 9, which has the usual governor disk 10, with which is adapted to co-act the friction pad 11 of felt or other 50 convenient material. This pad 11 is carried at the end of a downwardly extending arm 12 of a link 13 which extends in an approximately horizontal position and is supported at its left end, as shown in Fig. 1, by the

pin 14, which extends through the slot 15 55 in the link 13. At its right end the link 13 is provided with a pin 16 which rests slidably within slot 17 formed in the left hand end of bell crank 18, which is pivotally supported at 19 and provided with an up- 60 wardly directed arm 20 which extends through an opening in the top of the casing of the phonograph and has a head at its upper end through which extends the screw 21, the end of which is adapted to be con- 65 tacted by the traveling carriage at the point at which it is desired to stop the machine, which point may be changed by advancing or retracting the screw 21 of the member 20.

The link 13 is provided with a cam- 70 shaped projection 22 extending downwardly from the lower side thereof, this projection 22 co-acting with the stop 23 to hold the link 13 in its "off" position, or that position in which friction pad 11 is out of contact 75 with governor disk 10. Link 13 has attached thereto the spiral spring 24, the other end of which is secured to the stationary member 25, whereby a constant tendency is exerted on link 13 to move to 80 the right, as indicated in Fig. 1, and apply the brake by the contact of pad 11 on disk 10. This movement is prevented by the contact of projection 22 with stop 23, but the moment that the traveling carriage of 85 the phonograph contacts the end of screw 21, the left hand end of bell crank 18 provided with slot 17 is raised, the right hand end of link 13 being raised therewith because of the co-action of pin 16 carried by 90 link 13 and the slot 17 in the bell crank 18. With a slight upward movement of pin 16, cam projection 22 rides up over the top of stop 23, the spring 24 aiding in the movement, link 13 swinging about pin 14 as a 95 pivot, and at the same time sliding in the direction of its length across the said pin and applying the pad 11 to disk 10 to stop the motor. When it is desired to again start the machine, the arm 20 of the bell crank 18 100 is simply given a slight push to the left from the dotted to the full line position shown in Fig. 1, whereby cam projection 22 rides down over the edge of stop 23 into its latched position, spring 24 being again put 195 under tension and pad 11 removed from contact with disk 10.

Having now described my invention, what

I claim and desire to protect by Letters Patent is as follows:

1. In a phonograph, the combination with the governor disk of a member carrying a friction pad adapted to co-act with said disk to control the same, and carrying a cam projection, means tending to move said pad into contact with said disk, an abutment coacting with said projection to hold said pad out of contact with said disk, and a bell crank for lifting the end of said member to allow the cam projection to ride over said abutment, substantially as described.

2. In a phonograph, the combination with the governor disk of a member carrying a friction pad adapted to co-act with said disk to control the same, and carrying a cam projection, means tending to move said pad into contact with said disk, an abutment co-acting with said projection to hold said pad out of contact with said disk, a pin carried by said member, a member having a slot in which said pin is slidably supported, and means for raising the slotted end of said last named member to lift the end of said first named member to allow the said cam projection to ride over said abutment, substantially as described.

3. In a phonograph, the combination with the governor disk of a member carrying a friction pad adapted to co-act with said disk to control the same, and carrying a projection, means acting on said member tending to move said pad into contact with said disk, an abutment coacting with said projection to hold said pad out of contact with said disk, means slidably supporting said member at one end, means supporting

said member at the other end, and means for lifting said last named means to swing 40 said member pivotally about said first named supporting means and free said projection from said abutment, substantially as described.

4. In a phonograph, the combination with 45 the governor disk of a member carrying a friction pad adapted to co-act with said disk to control the same, said member being provided with an elongated slot at one end. a pin extending through said slot for she 50 ably supporting said member, a pin mount. ed at the other end of said member, a bell crank provided with a slot in which said last named pin rests, an abutment co-acting with a cam projection on said member, a 55, spring acting on said member and tending to apply said pad to said disk, and a traveling member adapted to contact an arm of said bell crank to lift said projection free of said abutment, substantially as described. 60

5. In a phonograph, the combination with a slidable brake-applying member pivoted and slidable with respect to its pivot, of means tending to slide the said member with respect to its pivot to apply the brake, de-65 tent means for the member, and means for moving the member pivotally to unlatch the same and permit it to so slide, substantially as described.

This specification signed and witnessed 70 this 4th day of June 1909.

PETER WEBER.

Witnesses:

CHAS. J. WETZEL,
DYER SMITH.