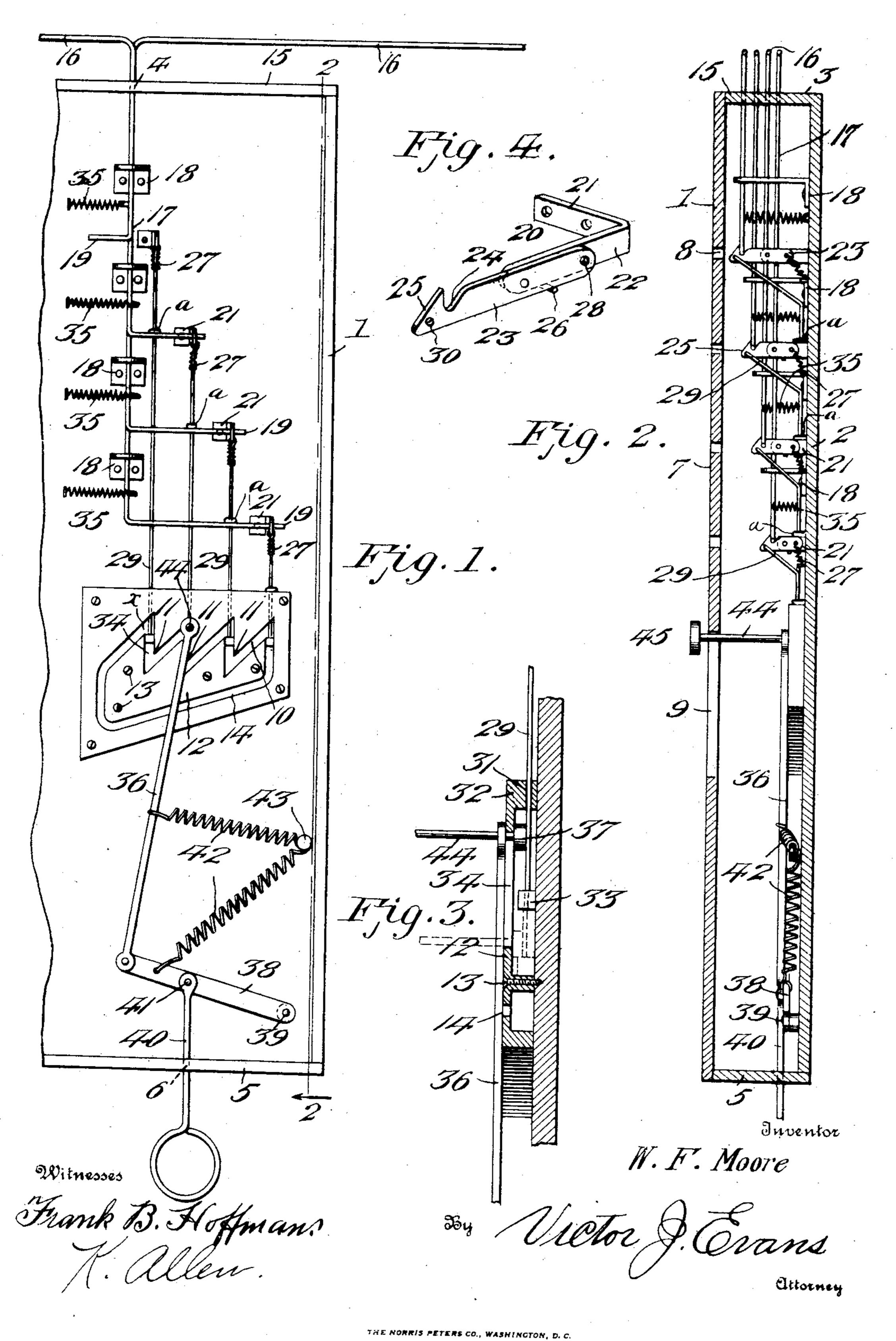
W. F. MOORE.

MUSIC LEAF TURNER.

APPLICATION FILED SEPT. 19, 1906.



UNITED STATES PATENT OFFICE.

WILLIAM FRANKLIN MOORE, OF OWEGO, NEW YORK.

MUSIC-LEAF TURNER.

No. 865,928.

Specification of Letters Patent.

Patented Sept. 10, 1907.

Application filed September 19, 1906. Serial No. 335,294.

To all whom it may concern:

Be it known that I, William Franklin Moore, a citizen of the United States, residing at Owego, in the county of Tioga and State of New York, have invented 5 new and useful Improvements in Music-Leaf Turners, of which the following is a specification.

This invention relates to music leaf turners and one of the principal objects of the same is to provide a device for this purpose which shall be simple in construc-10 tion and reliable in operation.

Another object of my invention is to provide a music leaf turner which will be quick in operation and which can be readily set for turning any desired number of leaves.

These and other objects are attained by means of the 15 construction illustrated in the accompanying drawings, in which:

Figure 1 is a front view of a music leaf turner made in accordance with my invention, the cover of the cas-20 ing being removed and the left hand portion of the casing being broken away. Fig. 2 is a vertical sectional view on the line 2—2, Fig. 1 and looking in the direction of the arrow. Fig. 3 is a detail sectional view of the releasing mechanism made on an enlarged scale. 25 Fig. 4 is a perspective view of one of the latches for holding the turning rods.

Referring to the drawing for a more particular description of the invention, the numeral 1 designates a casing for containing the operative mechanism, said 30 casing comprising a back 2 which forms a base for attaching the operative parts, a top portion 3 provided with openings 4 for the turning rods, a bottom 5 provided with an opening 6 for the operating key and a front portion 7 provided with a series of slots 8 in line 35 with the bent portions of the turning rods and an opening 9 to permit free movement to the setting rod.

Secured to the back 2 of the casing is the releasing device consisting of a plate or casting having a zig-zag slot 10 formed by means of the projections 11 and a cen-40 tral plate 12 secured by screws 13 to the back 2. Continuing from the slot 10 is a guideway 14 for a purpose which will presently appear. The turning rods 15 each consists of an angular portion 16 for turning the leaves, a shank 17 journaled in bearing brackets 18 and pro-45 vided with an angular inner end 19. The angular ends 19 of the turning rods 15 are held in one position by means of the latches 20, said latches each comprising a bracket 21 secured to the back 2 and having an outwardly projecting portion 22 upon which is pivoted the 50 latch 23, said latch having a notch 24 therein at its outer end and an inclined portion 25. A stop 26 projects outward from the arm 22 and serves to limit the movement of the latch 23. A spring 27 is secured at one end to the back 2 and at its other end to a hole 28 in the latch 23. 55 Releasing rods 29 are secured at one end in a hole 30

in the end of the latch 23 and the opposite ends of said

releasing rods pass through the openings 31 in the ratchet plate 32 and are each provided with an enlarged end 33 in line with the longitudinal portion 34 of the zig-zag slot 10. The rods 29 are permitted to slide in 60 stoppers or eyes a secured to the back 2. A spring 35 is secured to each turning rod at one end and at the opposite end to the back 2, the tension of said spring turning the portion 17 of the turning rods when the bent ends 19 are released from the latches 23. An operating 65 rod 36 provided with an enlargement 37 adapted to engage the enlarged portion 33 of the rods 29 is pivoted at its opposite end to a link 38 pivoted at 39 to the back 2. A key 40 is pivotally connected at 41 to the link 38. Springs 42 are connected respectively to the link 38 and 70 to the rod 36 and at their opposite ends said springs are secured to a pin or screw 43 secured to the back 2. The tension of the springs 42 is exerted to move the rod 36 toward the right in Fig. 1 and to hold the enlargement 37 up to the top portion of the zig-zag slot 10. Con- 75 nected to the upper end of the rods 36 is a setting pin 44 provided with a knob 45 by means of which the turning rods may be set in position to turn the leaves.

The operation of my invention may be described as follows: The inner ends 19 of the turning rods are en- 80 gaged with the latches 23 and the setting pin 44 is moved from the right hand end of the zig-zag slot 10 through the guideway 14 until the enlargement 37 is disposed at the left hand end of the ratchet plate at the point x. The arms 16 engage the leaves of the music to 85 be turned. By pulling downward on the key 40 the enlargement 37 engages the enlargement 33 and pulls the latch 23 until the portion 19 of the turning rod is released therefrom, when the spring 35 turns the rod and with it the leaf of music from right to left. The en- 90 largement 37 is then carried to the next vertical portion 34 of the slot 10 and in turn can be operated by means of the key 40 to actuate the next turning rod, as will be understood.

From the foregoing it will be obvious that a music 95 leaf turner made in accordance with my invention will be of comparatively simple construction, will be reliable in operation, cannot readily get out of order and will operate quickly to turn the leaves of music. The slots 8 in the front of the casing are in line with the 100 arms 19 of the turning rods and this arrangement permits the casing to be made of less thickness to provide space for the movement of said arms.

Having thus described the invention, what I claim is:

1. A music leaf turner comprising a series of turning rods, springs for turning said rods, spring actuated latches for holding said rods in one position, a plate having a zig-zag slot therein, and means mounted in said slot for releasing said latches, substantially as described.

2. A music leaf turner comprising a casing, turning rods mounted to partially rotate in said casing, springs for turning said rods, means for holding said rods in one

105

110

15

position, said means comprising latches to engage the ends of said turning rods, a plate provided with a zig-zag slot, means for releasing said latches, a rod mounted to move in said slot and carrying an enlargement to engage said means for releasing the latches and a key for operating said rod.

3. In a music leaf turner, the combination of turning rods, springs for turning said rods spring actuated means for holding said turning rods in one position, means for releasing said turning rods one at a time serially, said releasing means comprising a plate having a zig-zag slot therein and spring actuated releasing rods, each having

4. In a music leaf turner, a casing, turning rods mount-

an enlargement thereon to move in said zig-zag slot, substantially as described.

ed to move in said casing, springs for turning said rods means for holding said turning rods in one position, said means comprising spring actuated latches, rods connected to said latches and provided with enlarged ends, a plate provided with a zig-zag slot, a releasing rod having an 20 enlargement to engage the enlargements upon the end of the connecting rods and means for moving said operating rod in said zig-zag slot to actuate the turning rods serially, substantially as described.

In testimony whereof, I affix my signature in presence 25 of two witnesses.

WILLIAM FRANKLIN MOORE.

Witnesses:

FRANK A. DARROW.

JOHN T. GORMAN.