A. ZANDER.

DEVICE FOR TURNING MUSIC LEAVES.

APPLICATION FILED AUG. 13, 1910.

1,011,700.

Patented Dec. 12, 1911.

2 SHEETS—SHEET 1.

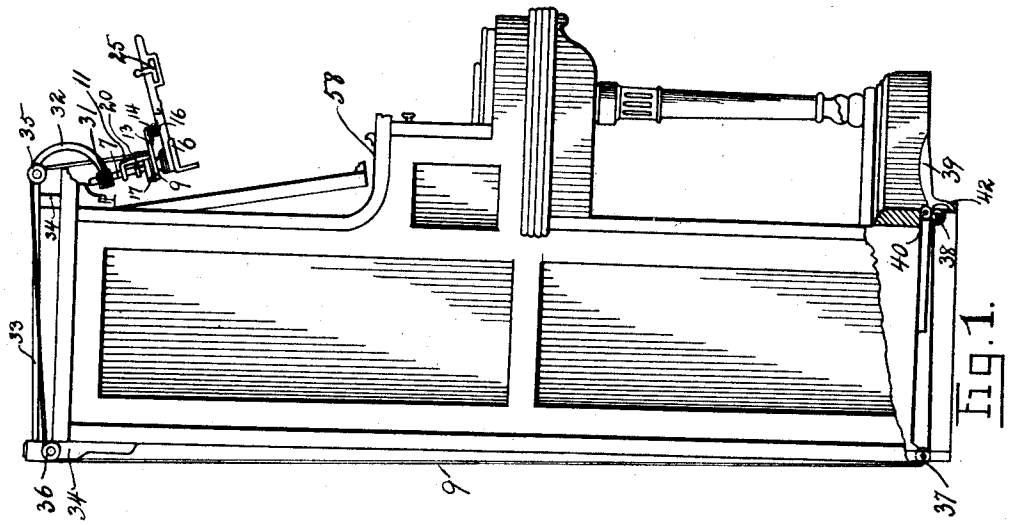

Fig. 1.

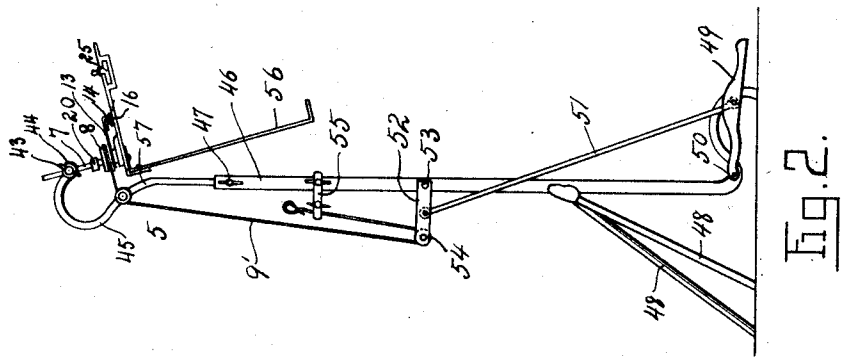

Fig. 2.

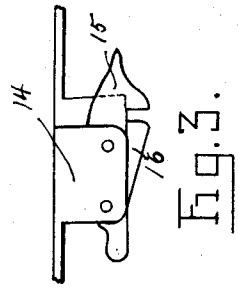

Fig. 3.

Witnesses

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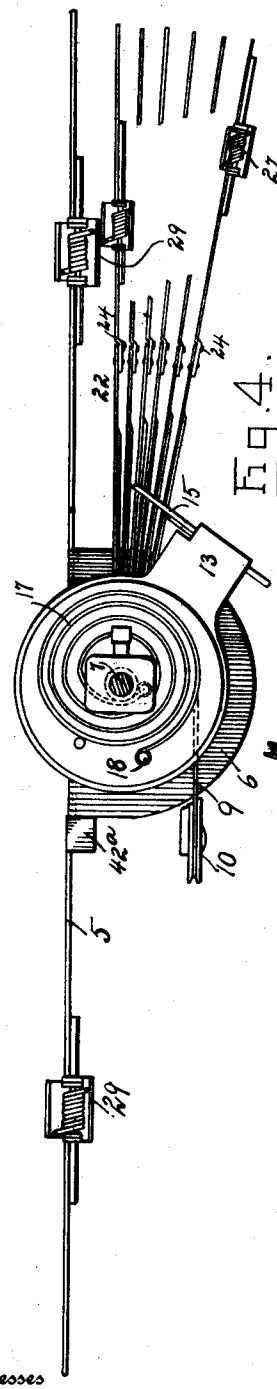

Fig. 4.

Fig. 7.

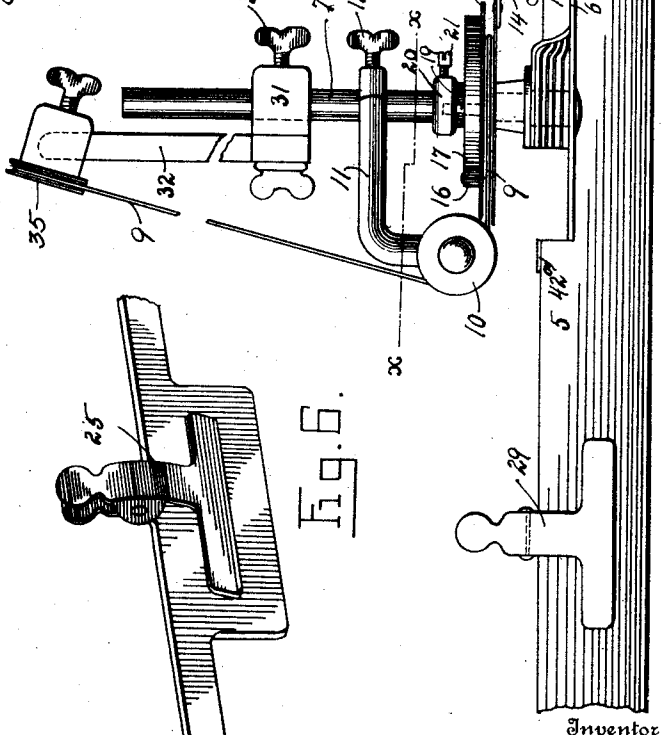

Fig. 5.

Fig. 6.

Witnesses

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DEVICE FOR TURNING MUSIC-LEAVES.

1,011,700. Specification of Letters Patent. Patented Dec. 12, 1911.

Application filed August 13, 1910. Serial No. 577,002.

To all whom it may concern:

Be it known that I, ARNOLD ZANDER, a citizen of the United States, residing at Two Rivers, in the county of Manitowoc and State of Wisconsin, have invented new and useful Improvements in Devices for Turning Music-Leaves, of which the following is a specification.

This invention relates to a device for turning music leaves, the object of the invention being to provide a device of this character adapted to be actuated by foot power and provided with means for turning either the leaves of loose sheet music, or the leaves of bound music books.

The invention contemplates a structure adapted to be mounted either upon a stand or directly upon a piano.

Further objects and advantages of the invention will be set forth in the detailed description which now follows:

In the accompanying drawing, Figure 1 is an end elevation of the piano with parts thereof in section illustrating the method of mounting the improved music leaf turning device thereon, Fig. 2 is a view illustrating the music leaf turning device mounted upon a stand, Fig. 3 is a detail view of a latch and stop mechanism hereinafter described, Fig. 4 is a horizontal section of the music leaf turner upon line *x*—*x* of Fig. 5. Fig. 5 is a front elevation of the structure shown in Fig. 4, Fig. 6 is a detail view of one of the clamps for engaging the music leaves, and Fig. 7 is a section upon line 7, 7, of Fig. 5.

Like numerals designate corresponding parts in all of the figures of the drawing:

The structure for engaging and turning the leaves of music is best illustrated in Figs. 4 and 5. Referring particularly to these figures, the numeral 5 designates a base or back bar having a horizontal plate 6 extending forwardly therefrom. A supporting rod 7 extends upwardly from the plate 6 and has mounted thereon for partial rotation a drum 8. A cord or cable 9 passes partially around this drum and over a pulley 10 that is mounted in a supporting bracket 11. This supporting bracket is secured upon the supporting rod 7 by means of a set screw 12. Extending downwardly from the under side of an extension 13, of the drum 8, are ears 14 between which a latch 15 and a stop 16 are pivotally mounted. A spiral spring 17 has one of its ends secured to the drum 8 at 18, and its opposite end secured to a pin 19 of a collar 20, said collar being secured by a set screw 21 upon the rod 7. It will therefore be seen that this spiral spring normally tends to turn the drum in such position as to throw the extension 13 thereof toward the right in Figs. 4 and 5. Mounted to swing in a horizontal plane upon the lower portion of the rod 7 are a plurality of arms 22, said arms comprising inner sections 22′ and outer sections 22″, said outer sections being hingedly connected to the inner sections at 23 and the inner sections being provided with lugs 24 that limit the downward movement of the outer sections. The outer sections 22″ carry spring actuated clamps, the elongated portions 26 of said clamps being forced by springs 27 toward enlarged portions 28 of the outer sections of the arms. These clamps are engaged with the various sheets or pages of the music that it is desired to turn. Spring actuated clamps 29 of the same character, are mounted upon the back or base bar 5 and serve to engage the cover portion of the music. The supporting rod 7 is secured by a set screw 30 in a head 31 of a goose neck 32, this goose neck extending rearwardly at 33 over the top of the piano as shown in Fig. 1 and being supported by members 34 mounted upon said piano. The cord or cable 9 passes over a pulley 35 carried by the goose neck and over pulleys 36, and under 37, and 38 carried by the piano frame.

A pedal 39 is pivotally mounted at 40 upon the piano and has an extension 42 to which the end of the cable or cord is attached. Downward movement of the pedal will result in throwing this extension downwardly and rearwardly, drawing the cord and consequently imparting a partial rotation to the drum 8 to swing the extension 13 of the drum toward the left in Fig. 4, it being understood that said extension will carry with it the front arm 8 and consequently will turn the first leaf or sheet of the music. This is accomplished by means of the latch 15 which at the beginning of the movement of the drum, is hooked over the first arm 8 as shown in Fig. 5. When, during the movement of the drum, the stop 16 contacts with a lifting plate 42^a (see Figs. 4 and 5), said stop member is lifted above the plane of the arms 22 and consequently when the pedal is released, the spring may act to return the drum to the position shown

in Figs. 4 and 5, leaving the first of the arms 22 swung over to the left in Fig. 4. The latch 15, then engages over the next arm 22, the stop 16 preventing the spring from throwing the latch far enough to engage any other than the second stop plate. The hinging of the two sections of the arms together, permits the clamps 24 to be swung upwardly above the upper edges of the sheet to be engaged thereby, and renders it unnecessary to bend or crease the sheets of music in placing the clamps in engagement with them.

In the form of the device shown in Fig. 2, the leaf turning structure is substantially the same and like references have been applied. In this case, however, the supporting rod 7 is clamped by means of a set screw 43 carried by a head 44 of a goose neck 45, this goose neck being vertically adjustable in a standard 46 by means of a set screw 47. Supporting legs 48 brace this standard and hold it in an upright position. A pedal 49 is pivotally connected at 50 to the lower end of the standard, said pedal being pivotally connected by a link 51 with a swinging lever 52. This swinging lever is pivotally connected at 53 to the standard 46 and carries a roller 54 at its outer end. The cable 9′ passes around this roller and its free end is secured in a clamp 55, said clamp being secured to the standard. The other end of the cable passes around the drum 8 as illustrated in Figs. 4 and 5. By virtue of this construction, the free end of the cable may be drawn through the clamp to vary the tension of the cable and to adjust the throw of the arms 22 to a certain extent. This adjustment of the length of the cable also accommodates the vertical adjustment of the goose neck with relation to the standard. A book rest 56 is riveted or otherwise secured at 57 to the back bar 5, it being understood that if the book is of sufficient height to be supported by either the book rest 56 in Fig. 2 or the book rest 58 in Fig. 1, much of the strain upon the clamps 29 is relieved, but if the book is too short for the book rest to be used, the book may be bodily suspended from said clamps.

From the foregoing description, it will be seen that simple and efficient means are herein provided for accomplishing the objects of the invention, but while the elements shown and described are well adapted to serve the purposes for which they are intended it is to be understood that the invention is not limited to the precise construction set forth, but includes within its purview such changes may be made within the scope of the appended claim.

Having described my invention, what I claim is:

The combination with a supporting member, of a spring actuated drum, a flexible member for actuating said drum, a plurality of swinging arms, each of said arms being made up of two sections normally in alinement with each other, spring actuated clamps upon the outer or free ends of said swinging arms adapted to engage the various sheets to be turned, said spring actuated drum carrying an extension with downwardly turned ears, a latch, a stop pivotally mounted between said ears, said latch engaging one of said arms at a time, and a fixed lifting plate upon the supporting base with which said stop engages when said drum is revolved, said latch carrying with it on each revolution of said drum one of said swinging arms and being raised so as to release said arm by said lifting plate at its limit of movement.

Signed by me at Wisconsin, this 12 day of July, 1909.

ARNOLD ZANDER.

Witnesses:
LYDIA MATTHIES,
GEO. H. DICKE.