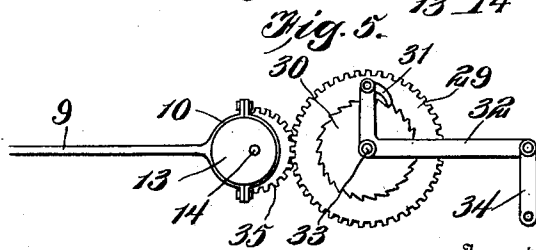
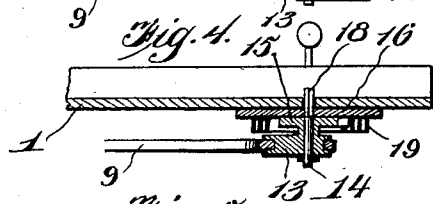
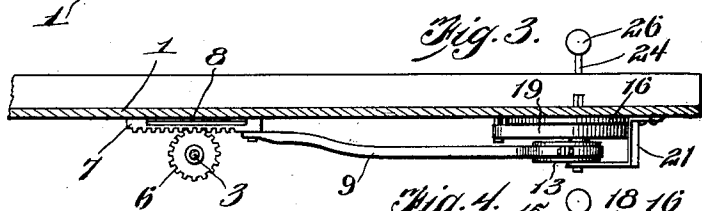
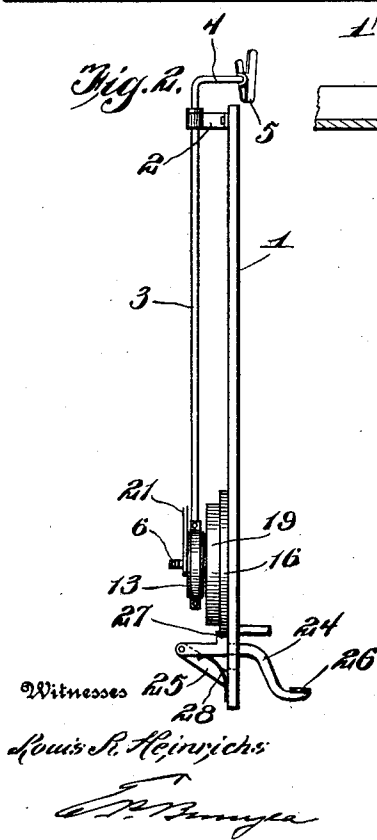
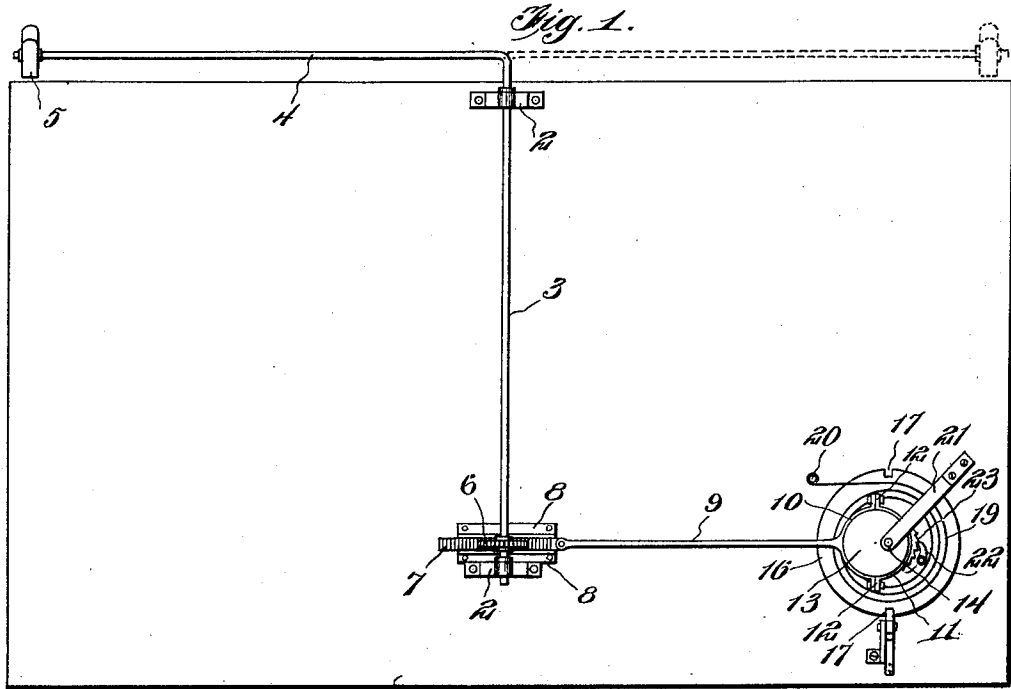


W. A. LEWIS.
MUSIC LEAF TURNER.
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1,012,377.

Patented Dec. 19, 1911.



Inventor
William A. Lewis

By *Victor J. Evans*
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM A. LEWIS, OF ASHTABULA, OHIO.

MUSIC-LEAF TURNER.

1,012,377.

Specification of Letters Patent.

Patented Dec. 19, 1911.

Application filed August 11, 1908. Serial No. 448,036.

To all whom it may concern:

Be it known that I, WILLIAM A. LEWIS, a citizen of the United States of America, residing at Ashtabula, in the county of Ashtabula and State of Ohio, have invented 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 means whereby a leaf may be turned in either direction alternately.

In playing an ordinary three-page piece of music the player often finds it necessary after having turned the sheet over to expose the second and third pages of the music to start again at the beginning or at some portion of the first page.

It is one of the principal objects of my invention to provide means of simple and efficient character which will turn the sheet first toward the left to expose pages 2 and 3 of the music, and if found necessary by touching the push button or operative means the leaf can be turned back to expose the first page.

The objects and advantages incident to this class of devices may be attained by means of the construction illustrated in the accompanying drawing, in which,—

Figure 1 is a rear elevation of a music leaf turner made in accordance with my invention. Fig. 2 is an edge view of the same. Fig. 3 is a sectional view taken transversely at a point immediately above the operative mechanism. Fig. 4 is a detail sectional view taken through the eccentric and the spring. Fig. 5 is a plan development of a modified form of operating mechanism.

Referring to the drawing, the numeral 1 designates a baseboard of a size sufficient to hold a sheet of music flat when open. Journaled in bearings 2 on the board is the music turning shaft 3 having an arm 4 bent at right angles thereto and at the end of the arm 4 a suitable clasp 5 for engaging the sheet of music. On the shaft 3 a pinion 6 is secured, said pinion engaging a reciprocating rack bar 7 mounted in a guideway 8 secured to the base 1 immediately under the pinion 6. Pivotally connected to the rack bar 7 is a connecting rod 9 having an eccentric strap member 10 formed thereon. The other member 11 of the eccentric strap is secured to the member 10 by means of outwardly extending flanges 12 and bolts ex-

tending through said flanges. This eccentric strap passes around an eccentric spool 13 pivoted upon a post 14, said post extending through the eccentric and through an extended portion 15 of the same which is placed upon a disk 16 having oppositely disposed notches 17. The post 14 passes through the base 1 and is provided with a squared portion 18 for accommodation of a key. A spring 19 secured at one end to the extended portion 16 of the eccentric has its other end secured at 20 to the base 1. A brace 21 is secured to the base and is connected at its opposite end to the post 14 to give sufficient strength to the eccentric. A pawl 22 engages a ratchet wheel 23 on the extension 16 to eliminate the necessity of turning the turning arms backward and forward during the winding operation. A lever 24 pivoted to a bracket 25 secured to the base 1 is provided with a press button 26. Said lever has a lug 27 which is held up against the periphery of the disk 16 by a spring 28. This lug prevents the rapid unwinding of the spring.

The operation of this portion of my invention may be briefly described as follows: Assuming that the sheet of music has four pages, the music is opened at page 2 where the production begins, and hence pages 2 and 3 are exposed. The clasp 5 is thrown to the right and engaged with page 3 of the music. When the player is ready to turn the sheet he touches the button 26, and the spring 19 exerts its tension to rotate the eccentric 13 by pulling upon the connecting rod 9 and throwing the arm 4 toward the left, carrying with it pages 3 and 4 of the music and exposing to the player page 4. Should it be necessary after playing to the bottom of page 4 to again return to page 2 by touching the button 26, the eccentric will rotate and return the arm 4 to the right. Thus the arm 4 is alternately turned to the right and left at each alternate pressure upon the button 26.

I have shown in Fig. 5 mechanism whereby the spring 19 is omitted and the device is actuated by a pawl and ratchet mechanism operable by hand. In this modified form the gear wheel 29 carries a ratchet wheel 30 which is engaged by a pawl 31 on an elbow lever 32 pivoted upon a shaft 33, said lever having an operating arm 34. The wheel 29 engages a pinion 35 mounted on the eccentric shaft 14. By means of this construc-

tion the eccentric 13 is rotated to move the arm first in one direction and then in the other by means of the lever 32 and its pawl.

From the foregoing it will be obvious that my invention is of a simple character; that it will operate smoothly and efficiently for its purpose, and owing to its simple nature and the few parts required can be produced at slight cost.

I claim:—

A music turner comprising a baseboard, a vertically disposed shaft journaled on the baseboard and bent to form a horizontally extending turning arm, a gear mounted on the lower end of the shaft, a laterally extending guide mounted on the baseboard adjacent the gear, a rack bar slidably fitted in the guide and engaging the gear, a rod pivoted to one end of the rack bar and extending laterally therefrom, a stub shaft rotatably supported adjacent the said guide, one end of said shaft extending through the baseboard and squared for the reception of a winding key, a disk having diametrically opposite peripheral notches fixed upon the stub shaft at the rear of the baseboard, a coiled tension spring having one end secured to the baseboard and the other end to the said

shaft, a ratchet wheel loosely mounted upon said shaft in rear of the disk, a ratchet pawl carried by the disk and adapted to engage with the ratchet to lock the disk against rotation in one direction, a peripherally grooved eccentric pulley loosely mounted on the opposite end of the shaft and integrally formed with the said ratchet, an eccentric strap arranged in the groove upon the pulley and connected with the laterally extending arm from the rack bar, an arm secured to the baseboard beneath the center of the said disk and a trip arm pivoted to one end of the arm and having a lug intermediate of its ends adapted to engage the notches of the disk, one end of said trip lever projecting through the baseboard and provided with a finger piece, and a spring arranged beneath the trip arm and serving to hold the lug yieldingly into engagement with the said disk, substantially as and for the purpose set forth.

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

WILLIAM A. LEWIS.

Witnesses:

C. J. STARKEY,

LOUIS E. STARKEY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."