

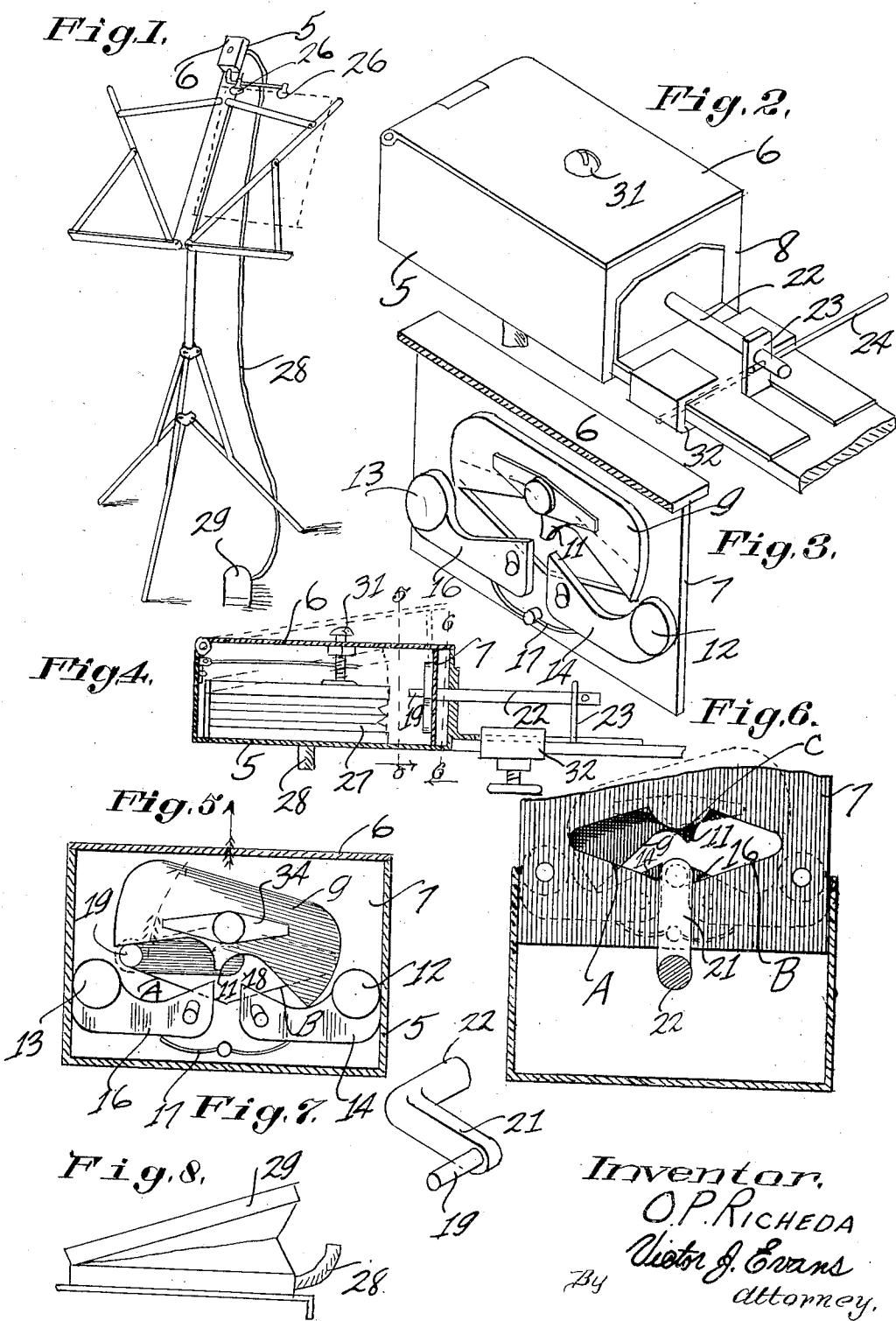
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MUSIC LEAF TURNER

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UNITED STATES PATENT OFFICE

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MUSIC LEAF TURNER

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This invention relates to improvements in music leaf turners.

The principal object of this invention is to produce a simple device wherein the sheet of music may be automatically turned without the operator employing the hands.

Another object is to produce a device which is simple in construction, light in weight and one which may be readily attached to the ordinary music rack.

A further object is to produce a device which may be actuated in either direction.

A still further object is to produce a device which is positive in its operation.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a perspective view of a music rack having my device attached thereto,

Figure 2 is an enlarged perspective view showing the end of my device,

Figure 3 is a fragmentary perspective view of the actuating pawls,

Figure 4 is a cross sectional view of my device,

Figure 5 is an enlarged detail cross sectional view showing one of the positions of the actuating pawls,

Figure 6 is a similar view showing the raised position of the pawl carrier,

Figure 7 is a fragmentary perspective view of the end of the crank, and

Figure 8 is a side elevation of the foot bellows.

In the playing of sheet music which is positioned upon a music rack, it is necessary for a person to move the hands or at least one hand from the instrument in order to turn the music or else it is necessary to have a second person present to accomplish the turning. Applicant has devised a very simple mechanism wherein the player by simply manipulating a foot bellows can readily turn the page forward or backward.

In the accompanying drawings wherein for the purpose of illustration is shown a pre-

ferred embodiment of my invention, the numeral 5 designates a box-like structure having a hinged cover 6. This hinged cover has a downwardly extending plate 7 which is positioned at a point adjacent the end 8 of the box-like structure (see Figure 4). This plate 7 carries a pivoted transfer pawl 9 which has a depending tip 11, the purpose of which will be later seen. Pivoted as at 12 and 13 are locking pawls 14 and 16 respectively, which are held in their normal position of Figure 3 by a spring 17. The ends of these pawls are spaced apart so as to provide a notch 18 into which the end 19 of a crank 21 is adapted to lie as shown in Figure 6. This crank is connected to a shaft 22 which has bearings in the front 8 of the box and an upstanding lug 23. An arm 24 is attached to the shaft 23 and carries clips 26 thereon, (see Figure 1). A bellows 27 is located within the box 5 and is connected by a tube 28 to a foot bellows 29. This bellows 27 is adapted to contact an adjacent screw 31.

Carried in the hinged cover 6 a spring 15 is secured to the box-like structure 5 and as its end passes thru a hole formed in the screw 31 with a result that the spring 15 tends to at all times hold the hinged cover 6 in its closed position so that when the bellows pushes thereagainst it will overcome the action of the spring and as soon as released, the spring will return the cover to crossed position.

The manner of operating my device is as follows:—

Assuming that the same is attached to a music stand, as for instance, by a clamp 32, the parts will lie in position shown in Figure 5, and assuming that it is desired to turn the sheet, the operator presses upon the bellows 29 which in turn opens the bellows 27 to dotted line position of Figure 4 which moves the hinged cover 6 and plate 7. This upward rising of the plate 7 causes the end 19 of the crank arm to ride upon either the cam A or the cam B depending upon which side the crank happens to be lying upon. As the end of the crank moves along the cam, the pawls 14 and 16, as the case may be, will be depressed until the end of the crank has arrived at the position shown in Figure 6. By

now releasing the pressure on the bellows, the hinged cover will drop, the end of the lever will then engage the transfer pawl 9 upon one side of the tip 11 and as it strikes the cam surface C it will throw the crank in that direction. When the crank arrives at the end of its travel, as for instance assuming that the crank in Figure 6 is traveling toward the left of the drawing, it will arrive at the position shown in Figure 5 and will therefore tip the transfer pawl 9 to the full line position of this figure and as a consequence the same will be frictionally held in this position by a spring 34 so that the next time the end of the 15 crank travels down the incline or cam A it will depress the end of the pawl 16 and come to rest in the notch 18 and upon the next release the end of the lever will engage the right hand side of the tip 11 and as a consequence the crank will be thrown to the opposite side of the device. As a result of this construction each operation and release of the bellows, the sheet attached to the clips 26 will be turned in either one direction or the other. 20

25 It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same and that various changes relative to the material, size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:

35 1. In a sheet turner, a box-like structure, a hinged cover attached thereto, a plate secured to said cover, pawls pivotally mounted on said plate, a crank arm carried by said box-like structure and engaging a slot formed in 40 said plate, said pivoted pawls being adapted to control the movement of said crank arm.

2. In a music sheet turner, a box-like structure, a hinged cover attached thereto, a plate secured to said cover and extending into said 45 box, pawls pivotally mounted on said plate, a slot formed in said plate, said slot having inclined surfaces, a crank arm pivoted to said box-like structure the end of said crank arm extending through said slot and engaging 50 said pawls, an arm connected to said crank arm and a clip carried by said last mentioned arm for engaging sheet music in the manner described.

55 3. In a music sheet turner, a box-like structure, a hinged cover attached thereto, a plate secured to said cover and extending into said box, pawls pivotally mounted on said plate, a slot formed in said plate, said slot having 60 inclined surfaces, a crank arm pivoted to said box-like structure, the end of said crank arm extending through said slot and engaging said pawls, an arm connected to said crank arm and a clip carried by said last mentioned 65 arm for engaging sheet music and means for

actuating said hinged cover from a remote point.

4. In a music leaf turner, a box-like structure a hinged cover secured thereto, spring means positioned between said box-like structure and said cover for normally maintaining said cover in closed position, a plate secured to said cover and extending into said box, a pair of locking pawls pivotally mounted on said plate, a slot formed in said plate and having inclined cam surfaces, a crank arm pivot in said box-like structure and having its end extending thru said slot and adapted to engage said locking pawl, an arm connected to said crank arm, and a clip carried by said last mentioned arm for engaging sheet music a transfer pawl pivotally mounted on said plate, and means for actuating said hinged cover against the tension of said spring from a remote point.

In testimony whereof I affix my signature.

ORESTE P. RICHEDA.

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