J. O. GEMSEY.

MUSIC LEAF TURNER.

APPLICATION FILED JAN. 2, 1920.

1,353,582.

Patented Sept. 21, 1920.

2 SHEETS—SHEET 1.

Fig. 1.

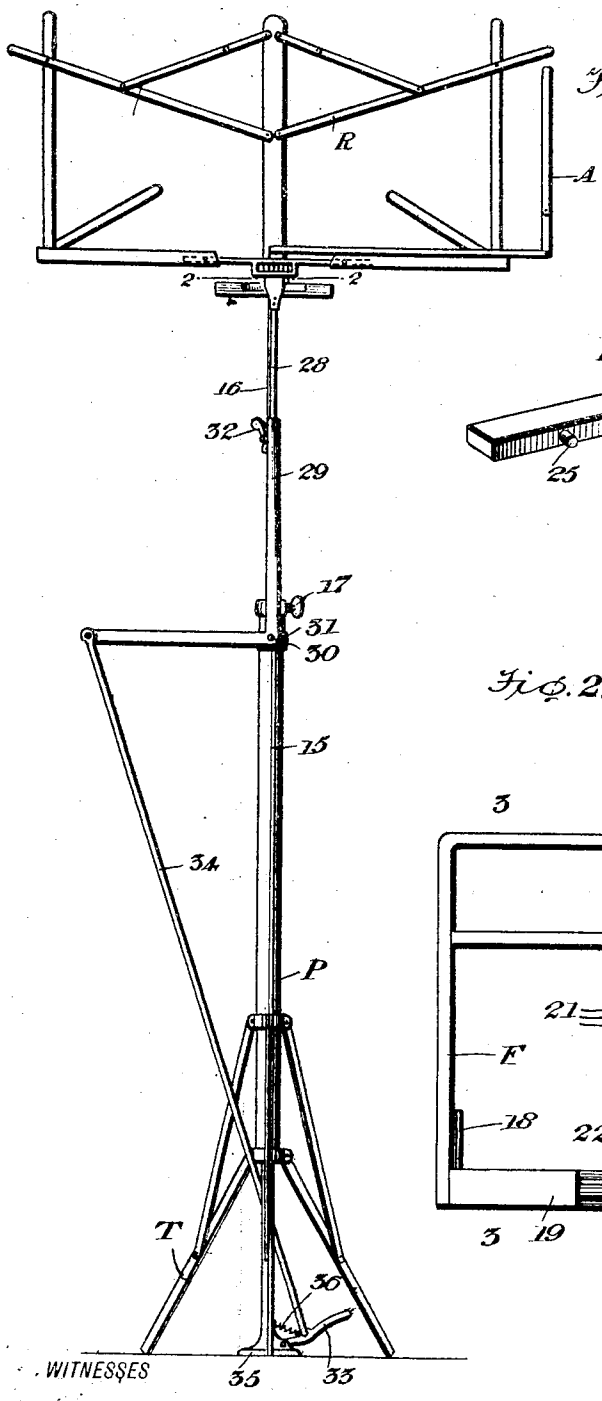


Fig. 4.

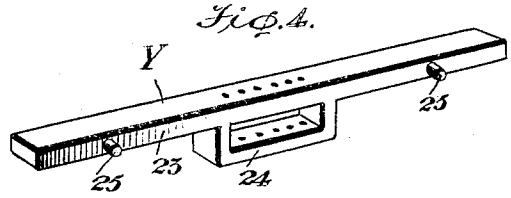
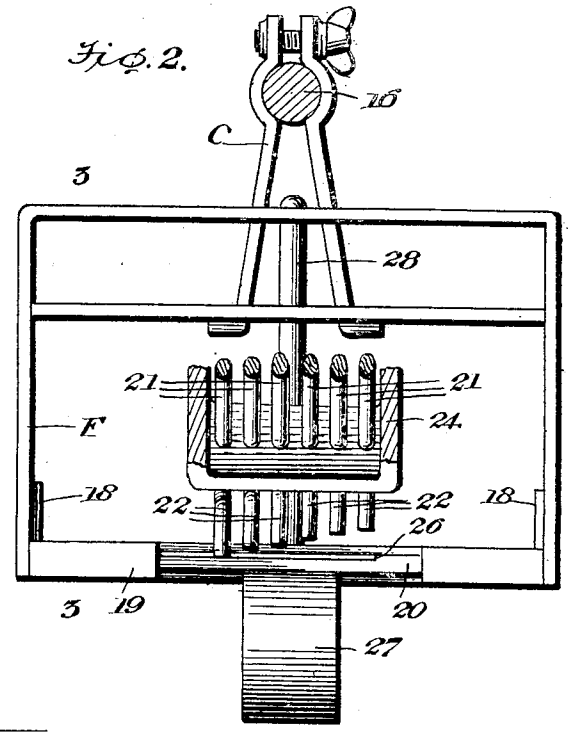


Fig. 2.



WITNESSES

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Fig. 3.

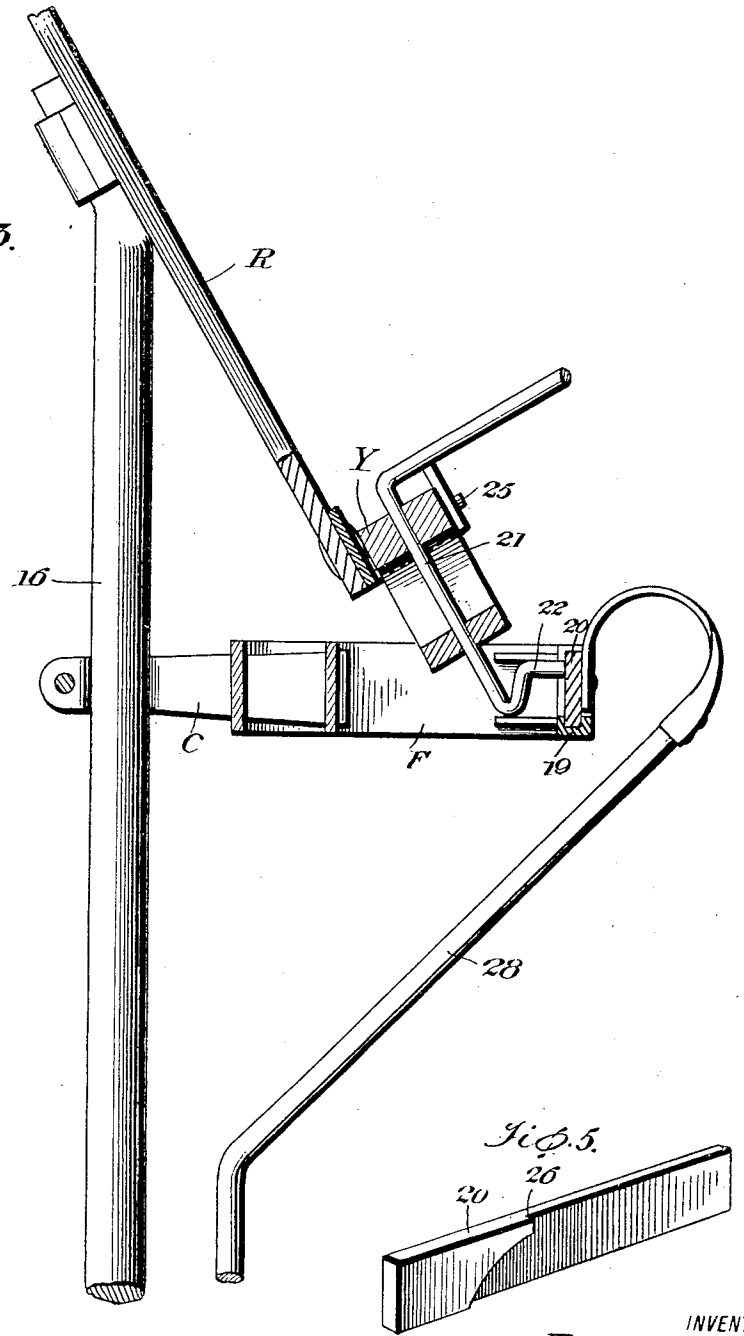


Fig. 5.

WITNESSES

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UNITED STATES PATENT OFFICE.

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MUSIC-LEAF TURNER.

1,353,582. Specification of Letters Patent. **Patented Sept. 21, 1920.**

Application filed January 2, 1920. Serial No. 348,752.

To all whom it may concern:

Be it known that I, JULIUS O. GEMSEY, a citizen of the United States, and a resident of Montevideo, in the county of Chippewa and State of Minnesota, have invented certain new and useful Improvements in Music-Leaf Turners, of which the following is a specification.

My invention relates to music leaf turners, and particularly to a device of this character which is adapted to be applied to a music stand of the standard construction.

The purpose of my invention is the provision of a music leaf turner of this character which can be readily adjusted to fit the stand irrespective of its height, the turning mechanism being adapted to be actuated by the foot of the operator for successively turning the leaves as they are played.

I will describe one form of music stand of conventional form and one form of leaf turning mechanism embodying my invention, and will then point out the novel features thereof in claims.

In the accompanying drawings:

Figure 1 is a view showing in front elevation the conventional form of music stand having applied thereto one form of leaf turning mechanism embodying my invention;

Fig. 2 is a transverse sectional view taken on the line 2—2 of Fig. 1.

Fig. 3 is a vertical sectional view taken on the line 3—3 of Fig. 2.

Figs. 4 and 5 are detailed views of the mechanism shown in the preceding views.

Similar reference characters refer to similar parts in each of the several views.

Referring specifically to the drawings and particularly to Fig. 1, I have here shown the conventional form of music stand as comprising a tripod T which supports and is foldable upon a pedestal P. The pedestal P comprises a tubular section 15 and a rod 16 which is telescopically associated with the latter and is adapted to be locked in any adjusted position by means of a set screw 17. The rod 16 supports upon its upper end a music rack designated generally at R.

The leaf turning mechanism embodying the subject matter of my invention comprises a frame F which is rigidly supported upon the rod 16 by means of a clamp C, as clearly shown in Figs. 2 and 3. The frame F is of substantially U-shaped formation with the confronting sides provided with ribs 18 upon which a guide bar 19 is slidably mounted. As shown in Fig. 3, the bar 19 is formed with a longitudinally extending groove which is adapted to slidably receive an actuating bar 20. The bar 20 is adapted to be moved longitudinally within the guide bar 19 for effecting the successive turning of a plurality of leaf turning frames A. As shown in Figs. 2 and 3, each frame A is provided with a depending portion 21 journaled in a yoke Y and formed at its lower end with a horizontally disposed finger 22. As shown in Fig. 4, the yoke Y comprises a bar 23 and a U-shaped portion 24 both of which are perforated at corresponding points to rotatably receive extensions 21. Adjacent the opposite ends of the bar 23, forwardly extending pins 25 are provided which are adapted to fit within suitable openings formed in the lower part of the music rack R. As shown in Fig. 1, the yoke Y spans the space between the lower portions of the music rack and being rigidly connected thereto, forms an effective support for the turning frames A.

As previously stated, the actuating bar 20 is designed to effect a successive turning of the frames A. In the present instance, this function is effected by a shoulder 26 provided on the inner side of the bar 20 by recessing a portion of the bar, as clearly shown in Fig. 5. As shown in Fig. 2, the fingers 22 of the frames A are of progressingly increasing lengths, with the longest finger at the extreme left. The bar 20 is actuated to cause the shoulder 26 to successively engage the fingers by a leaf spring 27 secured to the bar and to a rod 28, the lower end of which latter is telescopically fitted within the tubular end of a bell crank lever 29. As shown in Fig. 1, the lever 29 is fulcrumed at 30 upon a bracket 31 which securely embraces the tubular portion 15 of the standard. The rod 28 may be locked in any adjusted position within the lever 29 by a set screw 32. The lever 29 is operatively connected to a foot pedal 33 by means of a link 34. The foot pedal 33 is pivoted upon the base of an upright 35 which is fitted within the lower end of the tubular portion 15 of the pedestal P.

The lever 33 is biased to an elevated position by means of a spring 36 so that in the normal position of the lever, the mechanism connecting the same to the actuating bar causes the latter to occupy the position

shown in Fig. 2. When the lever 33 is depressed against the tension of the spring 36, a rocking of the lever 29 to the left is effected thus causing the bar 20 to move to the left within the guide bar 19.

The spring 27 serves to bias the actuating bar and guide bar inwardly toward the fingers 22, the guide bar being slidably mounted upon the ribs 18 as has been previously described. In the normal position of the actuating bar 20, the longest finger 22 contacts with the thin portion of the bar in advance of the shoulder 26. Now when the foot lever 33 is depressed, to effect a sliding of the bar 20 to the left, the shoulder 21 is caused to engage the finger and to thereby rotate the corresponding extension 21 within the yoke Y thus moving the corresponding frame A from right to left and turning the sheet of music supported by the latter. As the finger is turned by the shoulder 26, it thus engages the latter as it swings about the extension 21 as a center and thus moves downwardly beneath the shoulder and out of contact with the bar. As soon as the finger is free of the bar, the spring 27 effects a rearward movement of the bars 19 and 20 thus causing the bar 20 to abut the adjacent finger. As the bar 20 is returned to its normal position under the action of the spring 36 it slides over the end of the finger so that when in its final normal position, such finger engages the bar at a point in advance of the shoulder 26. It will therefore be seen that upon again moving the bar 20 to the left the next turning finger is rotated to effect a turning of the next leaf frame. This operation is successively repeated until all of the frames A have been turned, it being understood that the frames are returned to their normal position manually and independently of the actuating bar.

Although I have herein shown and described only one form of leaf turning mechanism embodying my invention, it is to be understood that various changes and modifications may be made herein without departing from the spirit of the invention and the spirit and scope of the appended claims.

Having described my invention, what I claim is:

1. A music leaf turner comprising leaf turning frames mounted for oscillatory movement, eccentrically disposed fingers formed on said frames, said fingers being of progressively increasing lengths, a guide bar supported for movement toward the fingers, an actuating bar slidably fitted within the guide bar, a shoulder formed on said actuating bar, means for biasing said bar toward said fingers, and actuating means for effecting a reciprocating movement of the actuating bar whereby said shoulder will be caused to successively engage and turn said fingers to effect the turning of said frames.

2. A music leaf turner comprising leaf turning frames mounted for oscillatory movement, fingers formed eccentrically on said frames and of progressingly increasing lengths, a frame, a guide bar slidable laterally in the frame, an actuating bar slidable longitudinally in the guide bar, a spring secured to the actuating bar for biasing the bars toward said fingers, a shoulder formed on the actuating bar, and foot operative means connected to said spring for shifting the actuating bar longitudinally within the guide bar to cause said shoulder to successively engage and turn said fingers.

3. A music leaf turner comprising a yoke, leaf turning frames pivoted within the yoke, eccentrically disposed fingers formed on the frames, a frame, a guide bar slidable laterally within the frame, an actuating bar slidable longitudinally within the guide bar, a shoulder formed on the actuating bar and adapted to engage said fingers, a spring secured to the actuating bar and arranged to bias the bar toward said fingers, a bell crank lever, a rod extensibly associated with said lever and connected to said spring, and manually operable means for oscillating said lever to effect a reciprocation of the actuating bar.

4. In combination, an extensible music stand, leaf turning mechanism comprising a yoke secured to the music rack of said stand, leaf turning frames pivotally mounted in said yoke, fingers eccentrically mounted on said frames, said fingers being of graduating lengths, a frame secured to the standard of said music stand and adjustable thereon, a guide bar movable laterally within the frame, an actuating bar slidable within the guide bar, a shoulder formed on said actuating bar, a spring secured to the actuating bar for biasing said bars toward said fingers, a bell crank lever adjustably supported on the standard of the music stand, a rod extensibly associated with said lever and connected with said spring, an up-right supported on said standard, a foot lever pivoted to said up-right, a link connecting said bell crank lever and foot lever, and a spring for biasing the foot lever to a predetermined position.

JULIUS O. GEMSEY.