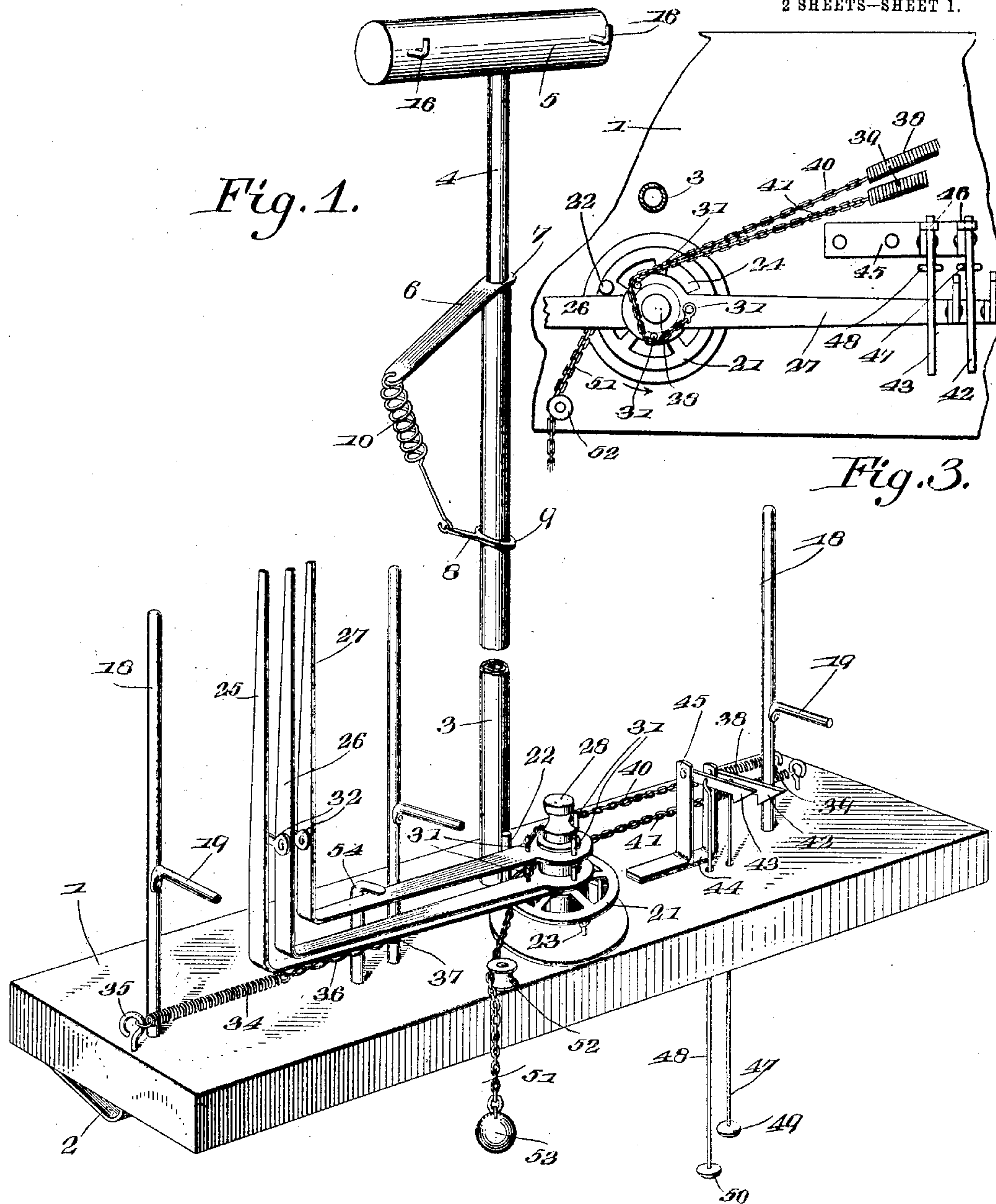


No. 810,497.

PATENTED JAN. 23, 1906.

F. O. MOORE.
MUSIC LEAF TURNER.
APPLICATION FILED NOV. 21, 1904.

2 SHEETS—SHEET 1.



Witnesses
E. J. Stewart
H. A. Shepard

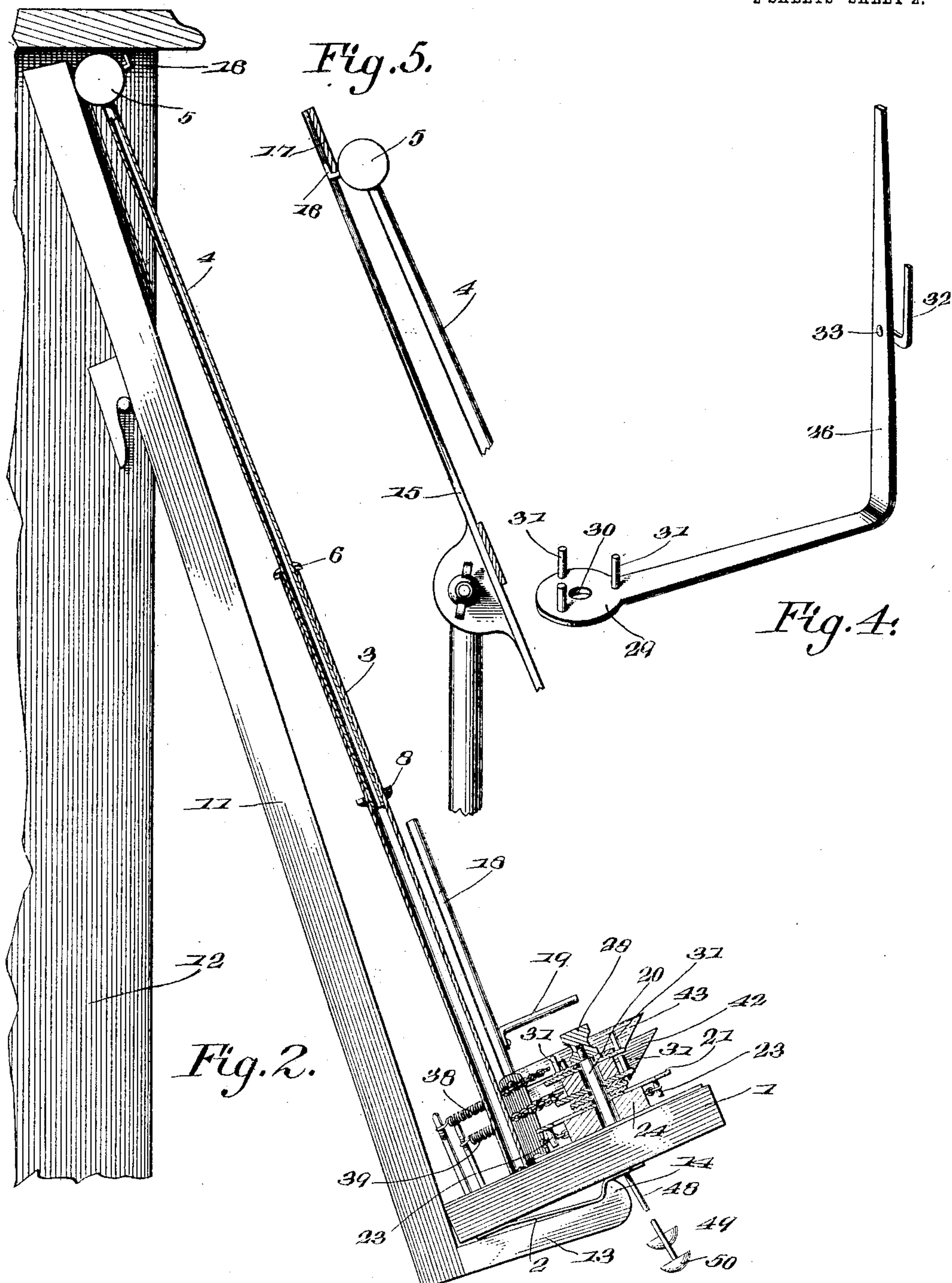
Franklin O. Moore, Inventor.
by *C. A. Snow & Co*
Attorneys

No. 810,497.

PATENTED JAN. 23, 1906.

F. O. MOORE.
MUSIC LEAF TURNER.
APPLICATION FILED NOV. 21, 1904.

2 SHEETS—SHEET 2.



Witnesses
E. J. Stewart
H. A. Shepard

Franklin O. Moore, Inventor.
by *C. A. Snow & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

FRANKLIN O. MOORE, OF LOS ANGELES, CALIFORNIA.

MUSIC-LEAF TURNER.

No. 810,497.

Specification of Letters Patent.

Patented Jan. 23, 1906.

Application filed November 21, 1904. Serial No. 233,709.

To all whom it may concern:

Be it known that I, FRANKLIN O. MOORE, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Music-Leaf Turner, of which the following is a specification.

This invention relates to music-leaf turners, and is designed to facilitate the mounting of the same upon the music-rack of a piano and also to permit of the device being supported upon an ordinary portable music-rack independent of the piano. In this connection it is proposed to clamp the device rigidly upon the music-rack without requiring alterations in the latter and without marring the same, thereby to facilitate the application and removal of the device.

Another object of the invention is to provide for convenient connection of the leaves of the music with the turning members of the present device and to conveniently effect the release of the turning members, so as to permit of the same turning the leaves whenever desired.

It is furthermore designed to provide for returning the leaves to their original positions whenever it is desired to repeat the music contained thereon.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a perspective view of a music-leaf turner embodying the features of the present invention. Fig. 2 is a longitudinal sectional view thereof, supported upon the music-rack of an upright piano. Fig. 3 is a detail top plan view. Fig. 4 is a detail perspective view of one of the leaf-turning members. Fig. 5 is a fragmentary sectional view illustrating the manner of supporting the device upon a portable music-stand.

Like characters of reference designate corresponding parts in each and every figure of the drawings.

For the support of the several parts of the present invention there is provided a base or

platform 1, having a foot 2 upon its under side and adjacent each end thereof, so as to tilt the platform downwardly and rearwardly. Midway between the ends of the platform and adjacent the back thereof is a tubular post or standard 3, which rises for a suitable distance from the platform, with another post-section 4, telescoping within the upper portion thereof and carrying a cross-head 5 at its upper end. The purpose of the telescopic post-section 4 is to vary the length of the post and is capable of being supported in any adjusted position by means of a clamp consisting of a substantially radial arm 6, pierced at one end by an opening 7, through which the post member 4 loosely projects. A similar but somewhat shorter link or arm 8 is disposed below the link or arm 6 and is provided with an opening or eye 9, loosely receiving the post member 3, there being a helical spring 10 connecting the outer free ends of the link members with a tendency to draw said ends together and therefore tilt the links, so as to frictionally grip the two post-sections. The upper link 6, of course, rests upon the top of the lower post-section 3 as a support, and when the link 8 is drawn downwardly, so as to tilt the two links, and thereby grip upon the two post-sections, the upper section 4 will be supported against downward movement. By elevating the lower link 8, so as to destroy the tension of the spring 10, the upper post-section 4 may be raised or lowered to any predetermined degree, and then by sliding the link 8 downwardly until it grips upon the post-section 3 the upper post-section will again be rigidly supported in its adjusted position.

When, as shown in Fig. 2 of the drawings, the present device is applied to the music-rack 11 of an upright piano 12, the base or platform 1 is placed upon the ledge 13 at the bottom of the rack with each leg or shoulder 2 engaging the ledge back of the upstanding rib or flange 14 at the outer edge of the ledge. The upper post-section 4 is then drawn upwardly into snug engagement with the under side of the top of the piano, and then the clamp is set, as hereinbefore described, to hold the post-section 4 in its extended position, thereby clamping the device between the top of the piano and the ledge of the music-rack. By this manner of supporting the device upon the music-rack it is held against accidental displacement therefrom, while at the same time it does not mar any

portion of the case of the piano, nor does it require any alterations therein.

To support the device upon a portable music-stand, a portion of which has been indicated at 15 in Fig. 5 of the drawings, the cross-head 5 is provided with a pair of hook-shaped projections 16, which are designed to engage the under side of the upper cross-bar 17 of the music-stand, the base or platform 10 of the device, of course, resting upon the usual ledge (not shown) at the bottom of the rack, whereby the present device may be clamped upon the portable music-stand in substantially the same manner as upon the 15 music-rack of a piano. In addition to its endwise adjustment the upper post member 4 is capable of rotation so as to bring the hooked projection 16 at the back of the device for engagement with the upper cross- 20 bar of a portable music-rack and to locate the hooks at the front of the device when applied to the music-rack of a piano in order that the projections may not scratch the front of the rack.

25 In front of the post 3 and alined longitudinally of the platform is a series of standards 18, each of which is provided with a forwardly-directed arm 19, constituting a support for the lower edge of the music.

30 A comparatively short post 20 rises from the base or platform and is alined in front of the standard 3. Upon the lower portion of this post is a rotary shifting member 21, preferably circular in form and provided with a projection 22, rising from what is normally the back portion of the member, and a series of pendent projections 23 are provided upon the under side of the member, there being a 35 suitable washer or spacing-disk 24 interposed between the member 21 and the platform 1. A substantially L-shaped arm 25 has the outer end of its horizontal position rotatably engaging the post immediately above the shifting member 21, and above the arm 25 is a series of 40 similar arms, there being two such arms shown in the present drawings and designated 26 and 27, said arms, of course, progressing in length from the uppermost arm downwardly. Suitable spacing-disks or washers are interposed 45 between the several arms, and a retaining-nut 28 is provided upon the top of the post to prevent displacement and lateral play of the arms. The arms 25, 26, and 27 are substantial duplicates in form, and, as best illustrated in 50 Fig. 4 of the drawings, it will be seen that each arm has a substantially horizontal radial member terminating at its outer end in an upstanding member and at its inner end in a segmental enlargement or head 29, pierced 55 by an opening 30 for the reception of the post 20. With the exception of the lowermost arm each of the heads is provided with a series of three upstanding projections 31 for a purpose that will be hereinafter de- 60 scribed. Upon the outer side of the upstand-

ing member of the arm is a substantially L-shaped clip 32, which has the outer end of its substantially horizontal member connected to the arm, as at 33, it being designed to insert the bottom edge of a leaf of music between 70 the clip and the upstanding portion of the arm to retain the leaf upon the arm vertically when the device is used out of doors, so as to prevent displacement of the leaves by the wind.

75 When the device is not in use, all of the leaf-turning arms are at the left-hand side of the device. The outermost arm 25 is yieldably maintained at the left-hand side of the device by means of a spring 34, which is se- 80 cured to the adjacent end portion of the base or platform, as at 35, there being a chain 36 or other flexible connection secured to the free end of the spring and connected to the under side of the arm 25, as at 37. At the 85 opposite end of the platform are similar springs 38 and 39, which are located in rear of the adjacent post 18, and have chains 40 and 41 secured to the free ends of the respective springs and engaged with certain of the 90 upstanding projections 31 of the respective arms 27 and 26, the chains, of course, passing in rear of the post 20, so as to yieldably maintain the leaf-turning arms at the left-hand 95 side of the device. When any one of the arms is turned upon the post 20 to the right-hand side of the device, the chain which is connected thereto will coil about the guard pro- 100 jection 31, and thereby draw upon the adjacent spring, and thus place the same under ten-

To maintain the arms 26 and 27 at the right-hand side of the device, two vertically-swinging catches 42 and 43 are pivotally supported at their rear ends upon brackets 44 and 45, 105 rising from the top of the platform 1. These catches are arranged to engage over the horizontal portions of the respective leaf-turning arms, the catch 43 being located slightly above the catch 42, so as to engage the upper arm 110 27 and to permit the next lower arm 26 to swing beneath said catch 43 without interference thereby into engagement with the catch 42. It will be understood that these catches 115 gravitate into engagement with the leaf-turning arms, and each bracket is provided with a stop-shoulder 46 for engagement with the upper side of the rear end of each catch, so as to limit downward movement thereof and 120 maintain the same in position for automatic engagement with the proper leaf-turning arm. Suitable trip-rods 47 and 48 hang from the respective catches and pass downwardly through perforations in the platform, the lower ends 125 of the trip-rods being provided with suitable buttons or handles 49 and 50 to facilitate manipulation thereof.

A flexible connection 51, preferably a chain, is connected to one of the pendent projections 23 of the rotatable shifting member 21, and 130

passes around the several projections in rear of the post 20, and extends forwardly across a guide member 52, and hangs down in front of the platform with a weighted knob or handle 53 upon the free extremity of the chain. By pulling upon the chain or flexible connection 51 the shifting member 21 will be rotated in the direction of the arrow on Fig. 3 of the drawings, whereby the projection 22, carried by the shifting member, will engage the horizontal portions of the leaf-turning arms and swing the same around the post 20 to the right-hand side of the device.

A suitable stop-post 54 rises from the platform 1 at the left-hand side of the standard 3 in the path of the return swinging movements of the arm, so as to stop the latter when they have made a complete half-rotation.

In using the present device the book or sheet-music is supported upon the arms 19 of the posts 18, the leaf-turning arms 26 and 27 being swung around to the right-hand side and engaged with the catches 42 and 43, the first leaf to be turned engaging with the member 27 and the next leaf to be turned with the member 26, and so on, according to the number of leaf-turning arms provided upon the device. When it becomes necessary to turn over the first leaf, the trip-rod 48 is elevated, so as to release the catch 43 from the horizontal portion of the leaf-turning member 27, whereupon the spring 38 will automatically swing the member 27 around to the left, thereby quickly and automatically turning the leaf. The successive leaves are similarly turned by elevating the successive trip-rods. After a leaf has been turned and it is desired to repeat a portion of the music said leaf may be returned to its original position by pulling upon the flexible connection 51, so as to rotate the member 21 and through the medium of the projection 22 to swing to the right the leaf-turning member which has been previously turned to the left and also the member 25, said member 25 operating to return the leaf to the right-hand side and the other member traveling over to the right and automatically engaging with one of the catches, so as to remain at the right-hand side of the device until it is desired to swing the leaf-turning member around to the left. The member 25, of course, automatically returns to the left-hand side of the device when the pull member 51 is released, as said member is required to hold the title leaf or page of the music against the music-rack. It will here be explained that the member 25 is normally located at the left of the device, so as to hold the title page or leaf of the music against the music-rack, and is moved only in the event of a repeat to turn one or more leaves from the left to the right and is never used to turn a leaf from the right to the left, wherefore it is neither necessary nor desirable to employ a catch to hold the member 25 at the right of

the device, as it is designed to have said member automatically returned to the left after the leaf or leaves have been turned from the left to the right and the pull member 51 released.

While the trip-rods 47 and 48 have been shown as projecting only a slight distance below the base 1, so as to be in position for convenient manipulation by hand when the device is supported upon the rack of a piano, it is also contemplated to extend these rods in order that they may be manipulated by the foot or the knee when the device is supported upon a portable music-rack.

Having fully described the invention, what is claimed is—

1. A music-leaf turner comprising a base, a post rising therefrom, a series of leaf-turning members mounted to swing concentrically upon the post and progressing in length, a title-page holder mounted concentric with the leaf-turning members and having a concentric winding-reel, a guide carried by the base, a flexible element connected to the reel with its free end passing across the guide into an accessible position, the flexible element being wound upon the reel in a direction to swing the title-page holder from the left to the right when the flexible element is pulled across the guide, means tending to yieldably maintain the leaf-turning members at the left of the device, means for detachably holding all of the leaf-turning members at the right of the device, means for individually releasing the leaf-turning members, and means carried by the title-page holder for engagement with the leaf-turning members to swing the same from the left to the right.

2. A leaf-turner comprising a base, a post carried thereby, a swinging leaf-turning member having an opening loosely receiving the post and provided with a plurality of projections disposed in a concentric series around the opening, a spring connected to the base and having a flexible connection with one of the projections and exerting a tendency to yieldably maintain the leaf-turning member at the left of the device, said flexible connection being adapted to wrap around the series of projections when the leaf-turning member is swung to the right, means to removably hold the leaf-turning member at the right of the device, and means to release the leaf-turning member.

3. A music-leaf turner comprising a base, a post rising therefrom, a pair of superposed leaf-turning members mounted to swing about the post, the upper leaf-turning member having a reel rising therefrom around the post, the lower leaf-turning member having a pendant reel, springs connected to the base and connected respectively to the reels of the upper and lower leaf-turning members and exerting tendencies to maintain the leaf-turning members yieldably at the left of the device, means

to detachably hold the upper leaf-turning member at the right of the device, means to release the upper leaf-turning member, and a flexible controlling element wound upon the 5 reel of the lower leaf-turning member to swing the latter from the left to the right, said lower leaf-turning member having means for engagement with the upper leaf-turning member to swing the latter therewith from the left 10 to the right into engagement with the holding means therefor.

4. A leaf-turner comprising a base, individual superposed leaf-turning members mounted to rotate concentrically upon the base 15 and progressing in length from the uppermost to the lowermost member, a title-page holder mounted to rotate concentrically with the leaf-turning members below the lowermost member, the title-page holder having pendent projections disposed in a concentric series around 20 the pivotal axis of the holder, each of the leaf-turning members being provided with upstanding projections disposed in a concentric series about its pivotal axis, springs connected 25 to the right-hand side of the base and flexibly connected to certain of the upstanding projections of the leaf-turning members with a

tendency to yieldably maintain the latter at the left of the device and capable of winding about the projections when the leaf-turning 30 members are turned from the left to the right, catches carried by the base and disposed to individually engage the leaf-turning members when swung to the right of the device, means for individually releasing the catches, a spring 35 connected to the title-page holder and to the left-hand portion of the base, a guide carried by the base, and a flexible controlling element wound upon the pendent projections of the title-page holder and passing across the guide 40 with its free end accessible for manipulation thereof to swing the title-page holder from the left to the right, said title-page holder having an upstanding projection for engagement with the leaf-turning members to swing 45 the same from the left to the right.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FRANKLIN O. MOORE.

Witnesses:

FRED. W. HEATHERLY,
ENSLEY L. POTTER.