J. F. McGUIRE.

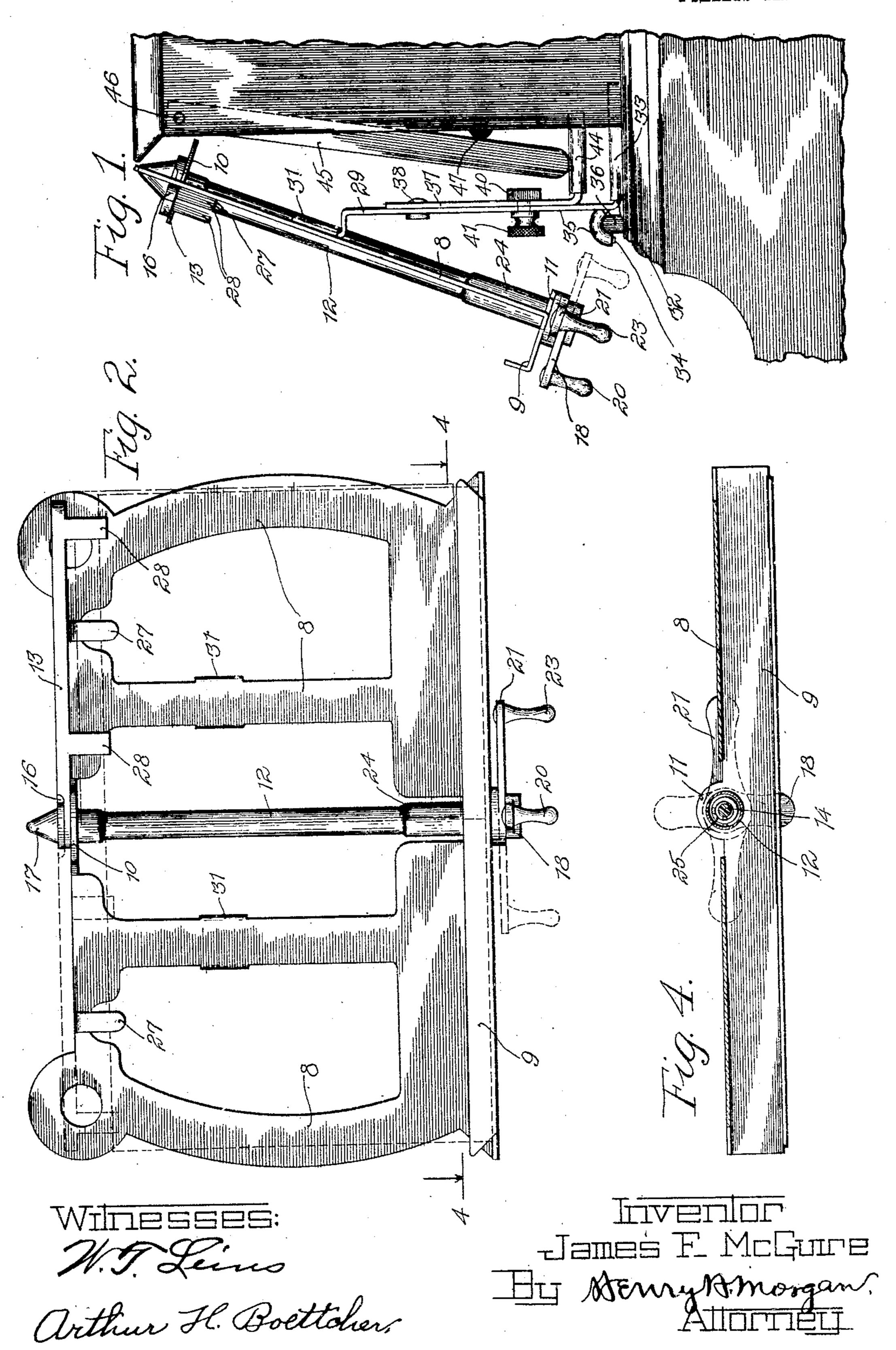
MUSIC LEAF TURNER.

APPLICATION FILED JAN. 15, 1909.

955,093.

Patented Apr. 12, 1910.

SHEETS-SHEET 1.

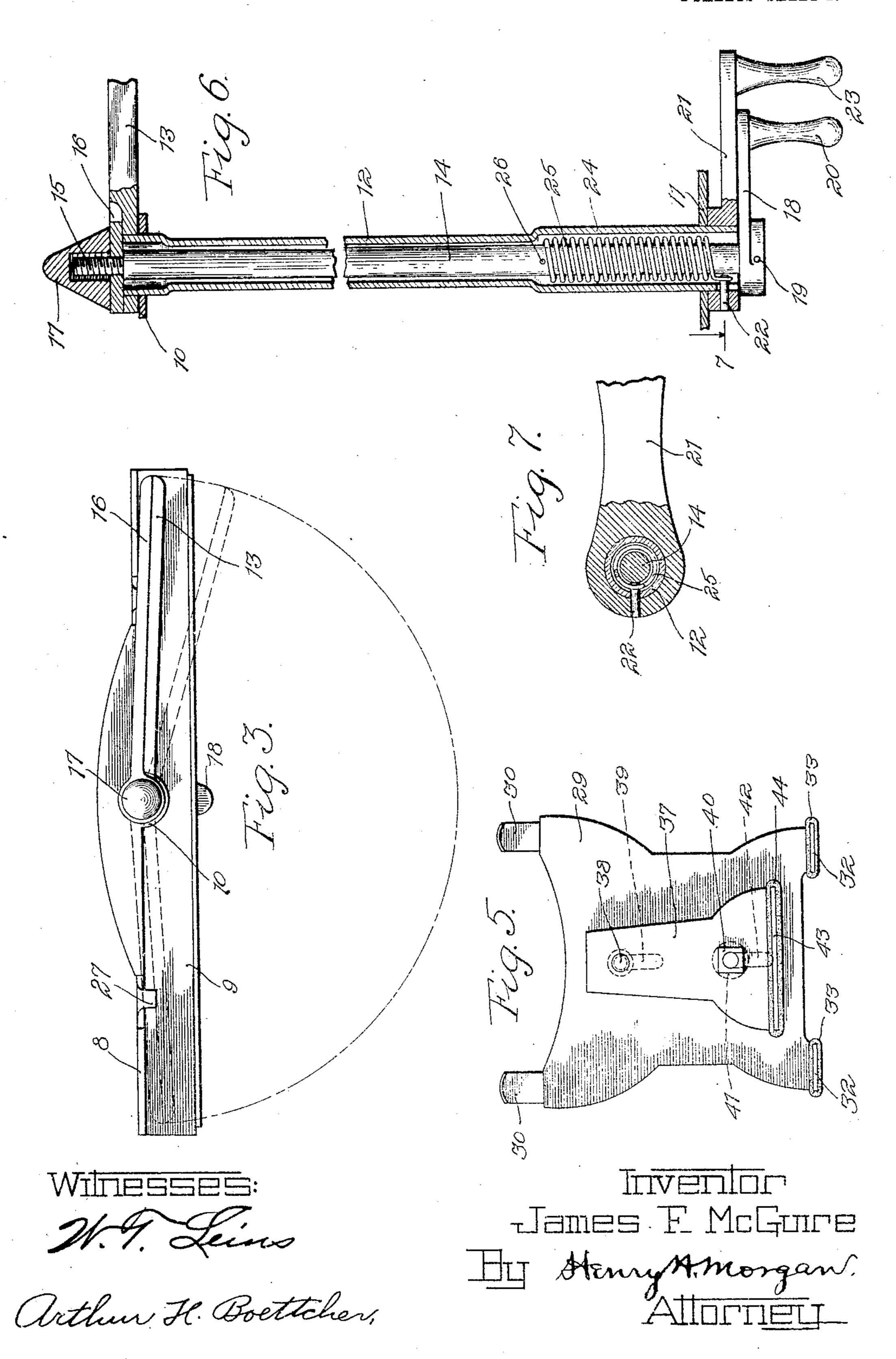


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2 SHEETS-SHEET 2.



## UNITED STATES PATENT OFFICE.

JAMES F. McGUIRE, OF CHICAGO, ILLINOIS.

## MUSIC-LEAF TURNER.

955,093.

Specification of Letters Patent. Patented Apr. 12, 1910.

Application filed January 15, 1909. Serial No. 472,514.

To all whom it may concern:

Be it known that I, James F. McGuire, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Music-Leaf Turners, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to music leaf turners and contemplates an improved structure whereby the desired manipulation of the leaves of the prevailing four page folio may

15 be greatly facilitated.

It is particularly the object of my invention to provide a structure which will be of simple design, which will constitute a minimum number of easily assembled parts, and wherein the operation will be simple and effective.

Simplicity and most general usefulness being, at once, the important purposes in the design of my invention, I have chosen to limit the chief adaptability thereof to the popular folio of a few pages which comprises an outside folder and an inner loose sheet, the structure of my invention providing efficient means whereby this loose sheet may be turned from side to side to properly and regularly display the successive pages.

This description will be more readily understood by reference to the accompanying drawings wherein a device embodying the features of my invention is illustrated.

In these drawings—Figure 1 is a side elevational view of the device of my invention, showing its attachment to a piano case; Fig. 2 is a front elevational view thereof, the attaching member being removed; Fig. 3 is a plan view of the device; Fig. 4 is a horizontal sectional view on the line 4—4 of Fig. 2; Fig. 5 is a rear elevational view of the attaching member; Fig. 6 is a longitudinal sectional view of part of the operative elements thereof; and Fig. 7 is a cross-sectional view thereof, the outer parts being shown in section on the line 7 of Fig. 6.

Like reference characters are applied to the same parts throughout the various figures.

The device of my invention comprises primarily a stationary element for attachment to an instrument case and a movable element

for carrying the loose sheet. The stationary element consists of a substantially upright resistance framework 8, and provided at the bottom thereof, a trough 9, in which trough the folio may be set to rest against 60 the framework proper. At the top of the framework 8 there is provided the centrally disposed flange 10 and at the bottom of the framework there is provided the registering flange 11. In these flanges 10 and 11 regis- 65 tering openings are provided in which openings a rotatable tube 12 is journaled. This tube has rigidly secured thereto at the top thereof immediately above the flange 10, a radially extending arm 13, which, as will 70 be hereinafter described, performs a function as one member of a clamping arrangement for gripping the loose sheet. Disposed inside this tube 12 and rotatable relative thereto is an actuating shaft 14, the upper 75 end of which is reduced as shown at 15. The reduced portion 15 of the actuating shaft has flat sides to correspond to a similar opening in the hub of the radially extending arm 16, the opposite clamping mem- 80 ber, thus insuring positive operative engagement between these two last named parts. The hubs of the radial arms 13 and 16 are reduced in thickness so that the clamping parts thereof may register properly, all as 85 shown in the drawings. The reduced portion 15 is provided with screw threads, as indicated, and takes into a clamping nut 17 which clamps the parts firmly together, as clearly shown in Fig. 6.

The lower end of the shaft 14 carries a radial arm 18 which is rigidly attached by means of a cotter pin 19. This arm 18 is provided with an actuating handle 20, and it is now apparent that any movement of 95 this actuating handle will effect corresponding movement of the arm 16 of the clamping arrangement. The lower end of the tube 12 is provided with the radially extending arm 21, which is operatively secured 100 to the tube by means of the cotter pin 22, being held in place between the flange 11 and the arm 18. The arm 21 is provided with the actuating handle 23.

The diameter of the tube 12 is slightly in- 105 creased at the lower end thereof, as indicated at 24, and in this enlarged portion a helical spring 25, surrounding the shaft 14, is disposed. One end of this spring is attached to the shaft, as shown at 26 in Fig. 110

6, and the other end is attached to the tube 12 by way of the cotter pin 22, as shown in said view. It is apparent now that there are two operative elements, one comprising 5 the clamping arm 13, the tube 12, and the actuating arm 21, and the other comprising the clamping arm 16, the shaft 14 and the arm 18. It is further evident that these two operative elements have a tension con-10 nection. The tension is arranged so as to draw the two members of the clamping arrangement together, thus, incidentally, separating the actuating handles. The handles 20 and 23 are normally relatively in the posi-15 tion best shown in full lines, Fig. 4, and it is apparent that, if the two actuating arms are brought together to the position shown in Fig. 6, the clamp comprising the arms 13 and 16 will be opened against the tension 20 of the spring. Subsequent release of the handles will permit the spring to bring the clamping members together. Rocking movement imparted to either of the handles will effect the movement of the entire movable 25 element from one side to the other. Thus the actuating element of the device has an inherent actuation and also a bodily movement from side to side relative to the framework, to secure the turning of the leaf.

The primary framework 8 is provided at its upper end with the downwardly extending ears 27, 27, beneath which the outer folder of the music folio may be disposed after having been set in the trough 9. The 35 remaining loose sheet, which is usually found in music of the character to which my invention is particularly adapted, is placed between the clamping arms 13 and 16 after the same have been separated by the actuation of the handles 20 and 23, their release effecting the proper gripping of the sheet. While this popular style of folio is of substantially uniform size, in order that the device may be adapted to the slightly 45 varying sizes, which are likely to occur, the arms 13 and 16 are each provided with the downwardly extending lugs 28, 28 which coact to grasp the loose sheet, as is shown in dot-and-dash lines in Fig. 2. The outer 50 folder is shown in dotted lines and the loose sheet is shown as raised slightly in order to escape the side of the trough in swinging.

To attach the device to a piano case, the following structure is provided (Figs. 1 and 55 5): An upright angle member 29 is provided at its upper end with lugs 30, 30, which are adapted to fit within the keepers 31, 31, on the framework proper. The lower end of this member 29 has the laterally extending toes 32, 32, which are provided with felt or rubber sleeves 33, 33, to avoid marring the instrument case. Extending from the member 29 in the opposite direction to that of the toes 32, 32, is an auxiliary catch 65 member 34, which is similarly provided

with a yielding sleeve 35 for the purpose of protection, this auxiliary member being adapted to fit over the music ridge usually found on an instrument of this kind and indicated at 36 in Fig. 1. Mounted upon the 70 rear of the member 29 is a second angle member 37, this member being adjustably set by way of the rivet 38 which slides in a slot 39 in the member 29. A bolt 40 is provided upon the member 37 and has a thumb nut 75 41 in threaded engagement therewith, this bolt operating in a slot 42 in the member 29, as indicated in Fig. 5. Thus, the member 37 may be adjusted into any desired position to the extent of the length of the slots 39 80 and 42 and may be so secured by means of the thumb nut 41. The lower end of the member 37 is provided with the laterally extending toe 43, which is covered with a sleeve 44 of yielding material, and this member 85 43 is adapted to fit beneath the swinging panel 45 usually found in modern instruments of this character. The swinging panel, as is usual in the art, is swung about its pivot 46 by means of a mechanism oper- 90 ated by the keyboard cover (not shown) and terminating in an abutment piece 47. It is now apparent that the members 43 and 32 may be spaced to adapt the device to the required distance in any instrument and 95 that it may be set in place and so held by the swinging panel when the keyboard cover has been opened.

In operation the successive display of the pages would be as follows: The loose sheet 100 would be initially placed on the right hand side (Fig. 2); this would present pages 1 and 2 of the folio to view. When these pages have been read the operator may quickly rock the actuating handles and the 105 loose sheet will be turned to expose pages

3 and 4.

I claim as new and desire to secure by Letters Patent:

1. In a music leaf turner, in combination, 110 a relatively stationary framework, two independently swinging members pivoted substantially concentrically upon said framework, and tension means for yieldingly connecting said swinging members to form a 115 clamp.

2. In a music leaf turner, in combination, a relatively stationary framework, a pair of independently swinging members pivoted substantially concentrically upon said 120 framework, and tension means operative between said members so that they may coact to form a clamp, said members being arranged to swing together as a unit relative to said framework.

3. In a music leaf turner, in combination, a relatively stationary framework, a pair of independently swinging arms pivoted substantially concentrically upon said framework and arranged to co-act to form a 130

clamp, a tension structure operating between said arms, and an operating handle for each of said arms.

4. In a music leaf turner, in combination, a relatively stationary framework, a pair of independently swinging clamp members pivoted substantially concentrically to said framework, and a spring operative between

said clamp members.

5. In a music leaf turner, in combination, a relatively stationary framework, a pair of independently swinging clamp members pivoted substantially concentrically to said framework, a spring operative between said clamp members, and an actuating handle

for each of said clamp members.

6. In a music leaf turner, in combination, a relatively stationary framework, a pair of independently swinging clamp members pivoted substantially concentrically to said framework, a tension member for maintaining said clamp members together to grip a sheet, and operating handles for said clamp members to facilitate manipulation of said clamp members relative to each other and their simultaneous movement relative to the framework.

7. In a music leaf turner, in combination, a relatively stationary framework, a tube rotatably mounted in said framework, an arm secured to said tube, a shaft rotatably mounted within said tube, an arm secured to said shaft, said arms being arranged to co-act as a clamp, and tension means for

35 maintaining said arms together.

8. In a music leaf turner, in combination, a relatively stationary framework, a tube rotatably mounted in said framework, an arm secured to said tube, a shaft rotatably

mounted within said tube, an arm secured 40 to said shaft, said arms being arranged to co-act as a clamp, and a spring disposed within said tube and surrounding said shaft and having its ends connected with the shaft and tube respectively to maintain 45 said arms together.

9. In a music leaf turner, in combination, a relatively stationary framework, a pair of substantially concentrically mounted shafts, radially extending arms at the upper 50 ends of said shafts, tension means operating between said shafts for maintaining said arms together, and a handle at the lower

end of each shaft.

10. In a music leaf turner, in combina- 55 tion, a relatively stationary framework, means for attaching said framework to an instrument case, a pair of independently swinging arms pivoted substantially concentrically upon said framework, and ten- 60 sion means for yieldingly connecting said swinging members to form a clamp.

11. In a music leaf turner, in combination, a relatively stationary framework, two independently swinging members pivoted 65 substantially concentrically upon said framework, lugs extending downwardly from said swinging members to grasp the leaf, and tension means for yieldingly connecting said swinging members to form a clamp. 70

In witness whereof, I have hereunto subscribed my name in the presence of two

witnesses.

JAMES F. McGUIRE.

Witnesses:

Joseph P. McGuire,

James McGuire, Sr.