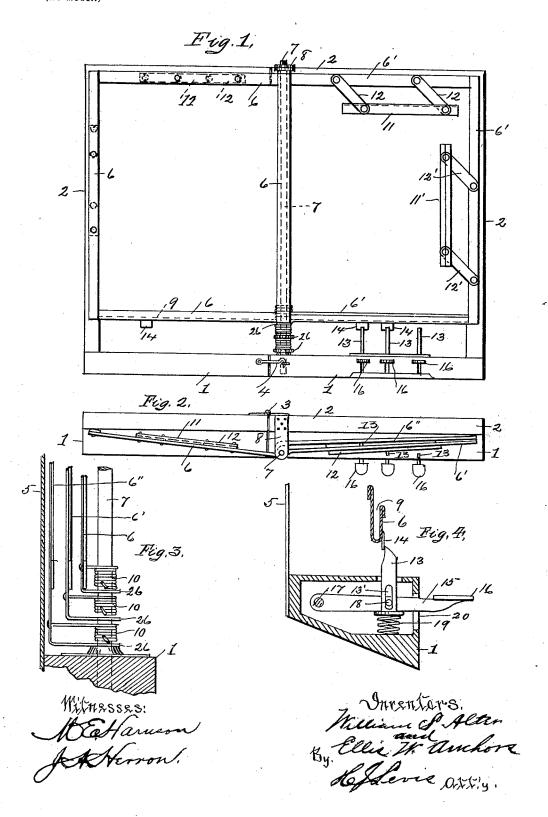
## W. S. ALTER & E. W. ANCHORS. MUSIC OR BOOK LEAF TURNER.

(No Model.)

(Application filed Apr. 28, 1899.)



## UNITED STATES PATENT OFFICE.

WILLIAM S. ALTER AND ELLIS W. ANCHORS, OF TARENTUM, PENNSYLVANIA.

## MUSIC OR BOOK LEAF TURNER.

SPECIFICATION forming part of Letters Patent No. 646,405, dated April 3, 1900.

Application filed April 28, 1899. Serial No. 714,895. (No model.)

To all whom it may concern:

Beitknown that we, WILLIAMS. ALTER and ELLIS W. ANCHORS, citizens of the United States of America, residing at Tarentum, in 5 the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Music or Book Leaf Turners; and we do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

Our invention relates to certain new and useful improvements in music or book leaf turners, and has for its object to construct such a device as will be automatic in its operation, whereby a performer may turn one page after another and obviate the necessity of ceasing the performance for turning the

Our invention finally consists in the novel combination, construction, and arrangement of parts, as will be hereinafter more specifically described, and particularly pointed out

25 in the claims.

In the accompanying drawings, Figure 1 is a front elevation of our improved music-leaf turner, showing one of the leaf-retaining frames turned and the other retained by catches, the said view showing the general construction and arrangement of our improved device. Fig. 2 is a plan view of the same. Fig. 3 is an enlarged side elevation of a portion of the central hinge-bar, showing the manner in which each individual frame is hinged and fitted with springs for turning or revolving the same. Fig. 4 is an enlarged sectional elevation of the base, taken at the releasing-keys.

To construct a music-leaf-turning device in accordance with our invention, we provide a base-piece 1, having an inclined under surface to conform with the angle of the shelf of a piano or organ. This base is connected to a frame 2 in the form of an oblong and is divided into two sections, the one joined to the other by suitable hinges 3, which admit of the said sections being folded together to occupy a small space. Centrally arranged in suit-50 able bearings 8 of this frame 1 2 is a sup-

porting-shaft 7, to which each individual leaf-holder is loosely hinged or connected by means of angular projecting portions 26, arranged at the top and bottom of the said holders. Each of these holders 66'6" consists of 55 a thin metallic frame provided at the base with a groove 9, in which the music-leaf is held, and at one side and top with adjustable grooved pieces 11, pivoted or loosely connected by short links 12 in a manner that the said 60 pieces 11 may be moved in the position shown at the right of Fig. 1 or folded close to the frame, as shown at the opposite side of said frame. Connecting the base of each of the holders 6 6' 6" is one end of a spring 10, coiled 65 spirally about the supporting-shaft 7, and the other ends of the said springs attached to the bar in a manner that will place a tension upon the springs to throw the holders from right to left. These holders 6 6' 6" are held the one 70 over the other at the right of the frame 12 by vertically - arranged bars 13 engaging with small depending pieces 14, attached to the base of each holder. These bars or locks are connected to horizontally-arranged levers 17, 75 pivoted within the base 1, and connected to the said bars by means of pins 18, operating in slots 13'. Attached to the outwardlyprojecting ends of the levers 15 are fingerkeys 16, which when pressed downward will 80 carry the bars 13 in the same direction, thereby releasing their hold upon the catches 14. The lever 15 and bar 13 are brought back to their normal position by a spring 19, arranged

In operation the sheets of music are arranged in the holders 6 6' 6" by entering their edges into the grooves 9 at the base and into the grooves of each of the adjustable pieces 11 and at the top and side and all the holders 90 turned to the right and held secure in that position by the locks 13.

To turn the music, it is only necessary to press the proper releasing-key 16, and the spring 10, being under tension, will revolve 95 the first holder 6 from right to left.

By the use of the adjustable side and top pieces 12 music-sheets of any ordinary size may be held in the holders, as is obvious.

Various slight modifications may be made 100

in the construction and details of our invention without departing from the spirit of the same.

Having thus described our invention, we claim—

1. In a music-leaf turner, the combination of a base, a frame connected thereto and consisting of two sections hinged together, a journaled supporting-shaft, a series of spring-actuated leaf-turners consisting of an oblong frame connected to said shaft, adjusting means for the music-leaves consisting of a grooved bar pivotally connected to a pair of links which are pivotally connected to the turners, a series of spring-actuated vertical bars for retaining the said turners in the locked position, and means for operating the said bars, substantially as described.

2. In a music-leaf turner, the combination 20 with a base having an upwardly-extending frame suitably connected thereto, of a sup-

porting-shaft journaled within the frame, a series of coiled tension-springs mounted on said shaft, a leaf-turner connected to each of said springs, an adjusting means for the leaves consisting of a grooved bar pivotally connected to a pair of links which are pivotally connected to each of the leaf-turners, a series of spring-actuated vertical bars for retaining the said turners in a locked position, and a series of levers pivotally secured in the said base for operating the said bars, substantially as described.

In testimony whereof we have hereunto affixed our signatures in the presence of two 35 subscribing witnesses.

WILLIAM S. ALTER. ELLIS W. ANCHORS.

Witnesses:
JAS. J. MCAFEE,
M. E. HARRISON.