A. MERKT.

Leaf-Turners.

No. 197,285. Patented Nov. 20, 1877.

Fig. 1

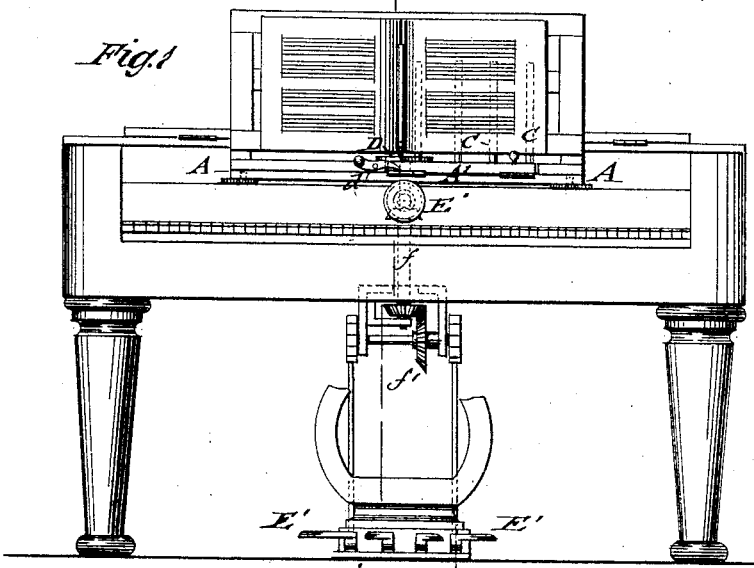


Fig. 2.

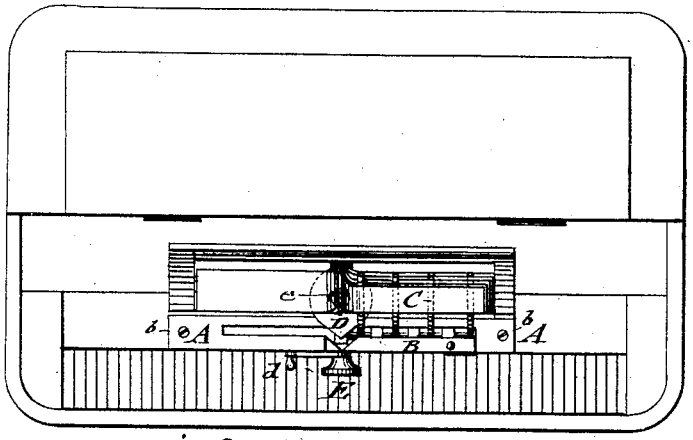


Fig. 3

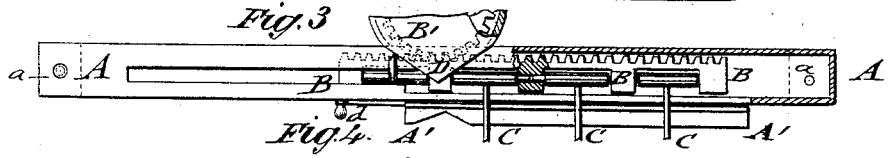
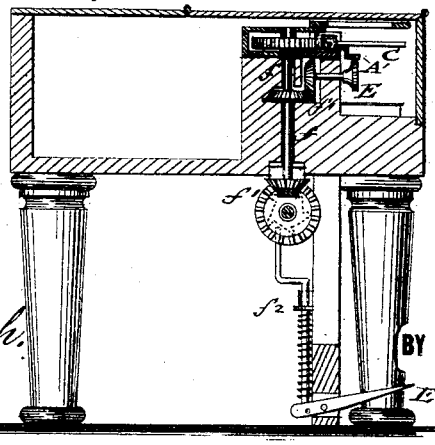


Fig. 4.



WITNESSES:

Francis. McArdle.

J. H. Scarborough.

INVENTOR:

A. Merkt.

BY Munn & Co.,

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ADOLPH MERKT, OF NEW YORK, N. Y.

IMPROVEMENT IN LEAF-TURNERS.

Specification forming part of Letters Patent No. **197,285**, dated November 20, 1877; application filed September 29, 1877.

To all whom it may concern:

Be it known that I, ADOLPH MERKT, of the city, county, and State of New York, have invented a new and Improved Music-Leaf Turner, of which the following is a specification:

In the accompanying drawings, Figure 1 represents a front view of my improved music-leaf turner, shown as attached to a piano. Fig. 2 is a top view of the same; Fig. 3, a sectional top view of the turner on larger scale, detached from the piano; and Fig. 4, a vertical transverse section of a piano with closed lid, showing the connection of the music-leaf turner with the operating-pedals.

Similar letters of reference indicate corresponding parts.

This invention has reference to an improved music-leaf turner for pianos, organs, music-stands, &c., that may be worked in easy and reliable manner, in either direction, by hand or foot, so as to facilitate the turning of music-leaves during the playing of the piano or other instrument.

The invention consists of a slotted guide-casing secured to the piano or music-stand, and having a reciprocating rack-bar with hinged fingers, worked by suitable mechanism, either by pedals or by a front button, in connection with an angular projecting center portion of the slot.

The guide-casing has a hinged front portion, that may be opened to swing the fingers into horizontal position for arranging them in the leaves of the music.

Referring to the drawing, A represents a guide-casing of suitable metal, which is finished in nickel-plating or other manner, and attached by end holes *a* to fixed pins *b* of the piano or organ, in front of the hinged music-rack, or, when used in connection with a music-stand, arranged as a part of the rack of the same.

A rack-bar, B, slides in the guide-casing A, and carries any desired number of fingers C, which are hinged to the rack-bar, and extended upward through the slotted top part of the casing A.

The casing is twice the length of the rack-bar, so that the same may be moved by an intermeshing gear-wheel, B′, to either side of the center of the casing.

A fixed center-point, D, with inclined or curved sides, projects over the slot of the casting A, and forms, in connection with the correspondingly-recessed front portion of the casing, an angular or curved guide slot or way, that admits the passage of the fingers C around the projecting point when the rack-bar is moved to either side, but which throws the fingers, by the contact with the inclined sides of the projecting center-point, quickly forward and back as they pass around the same.

When the fingers are successively arranged between the leaves of the music, and the rack-bar is then moved from the right to the left side, by means of suitable operating mechanism turning the gear-wheel B′, the motion of the fingers, when passing the center-point, causes the turning of the leaves and their retention on the other side.

The front part A′ of the casing on the right side thereof is hinged and locked by a suitable catch, *d*, so as to admit, when being opened, the throwing down of the entire series of keys into horizontal position, either for the purpose of arranging the fingers between the leaves of the music, or, in a piano or organ, for closing the lid of the same, as shown in Fig. 4.

The cog-wheel B′, that works the rack-bar B, is inclosed by a casing extending from the rear of the center part of the casing A, and the shaft of the cog-wheel B′ is provided with a triangular or square recess, *e*, that fits on the similarly-shaped end of a vertical shaft, *f*, which passes up through the piano-case or pillar of the music-stand, and is turned in either direction, so as to move the rack-bar from one side to the other in the casing A, by bevel-wheels f^1, connected with a horizontal shaft and front button, E, below the rack, or by bevel-wheels and ratchet-wheels connected by spring-acted rods f^2 with pedals E′, arranged sidewise of the common pedals, or between the feet of the music-stand, the bevel-wheels being, in the latter case, placed near the pedals and below the pillar of the stand.

During the playing of the instrument the music is turned by means of the feet operating either pedal, while for the adjustment of the music before playing or during playing the button may be used.

In case any part of the music is to be repeated,

the left-hand pedal is used, as it moves the vertical shaft and the rack-bar in opposite direction, it requiring, however, two depressions of the pedal to return a leaf from left to right, as the fingers that carried the leaves over have to be returned by one depression of the pedal, and the sheet by the second.

The forward-swinging motion of the leaf-turning fingers exerts a lifting or separating action on the leaf, so as to raise it without suction from the next leaf below. The finger then turns the leaf and clears the same, and, finally, by the return motion of the fingers, holds it in position on the opposite side.

The music is retained in fixed position on the rack by a center spring-wire or other securing device, so that the leaves can be turned around the fixed center to either side.

The music-leaf turner works in quick, reliable, and noiseless manner, and may be conveniently attached to any piano or organ, or arranged on a music-stand, as desired.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A music-leaf turner made of a guide-casing having a top slot with angular or curved central portion, and of a movable rack-bar sliding therein, and having hinged and swinging fingers, substantially in the manner set forth.

2. The combination of a guide-casing having top slot with angular or curved center portion with a movable rack-bar having hinged fingers, and with suitable mechanism for working the rack-bar in either direction, either by hand or foot, or both, substantially as set forth.

3. The combination of the slotted guide-casing having hinged front section with the sliding rack-bar, and hinged fingers to admit the throwing of the fingers into horizontal position for arranging them in the leaves of the music, substantially in the manner and for the purpose specified.

ADOLPH MERKT

Witnesses:
PAUL GOEPEL,
C. SEDGWICK.