

**No. 712,609.**

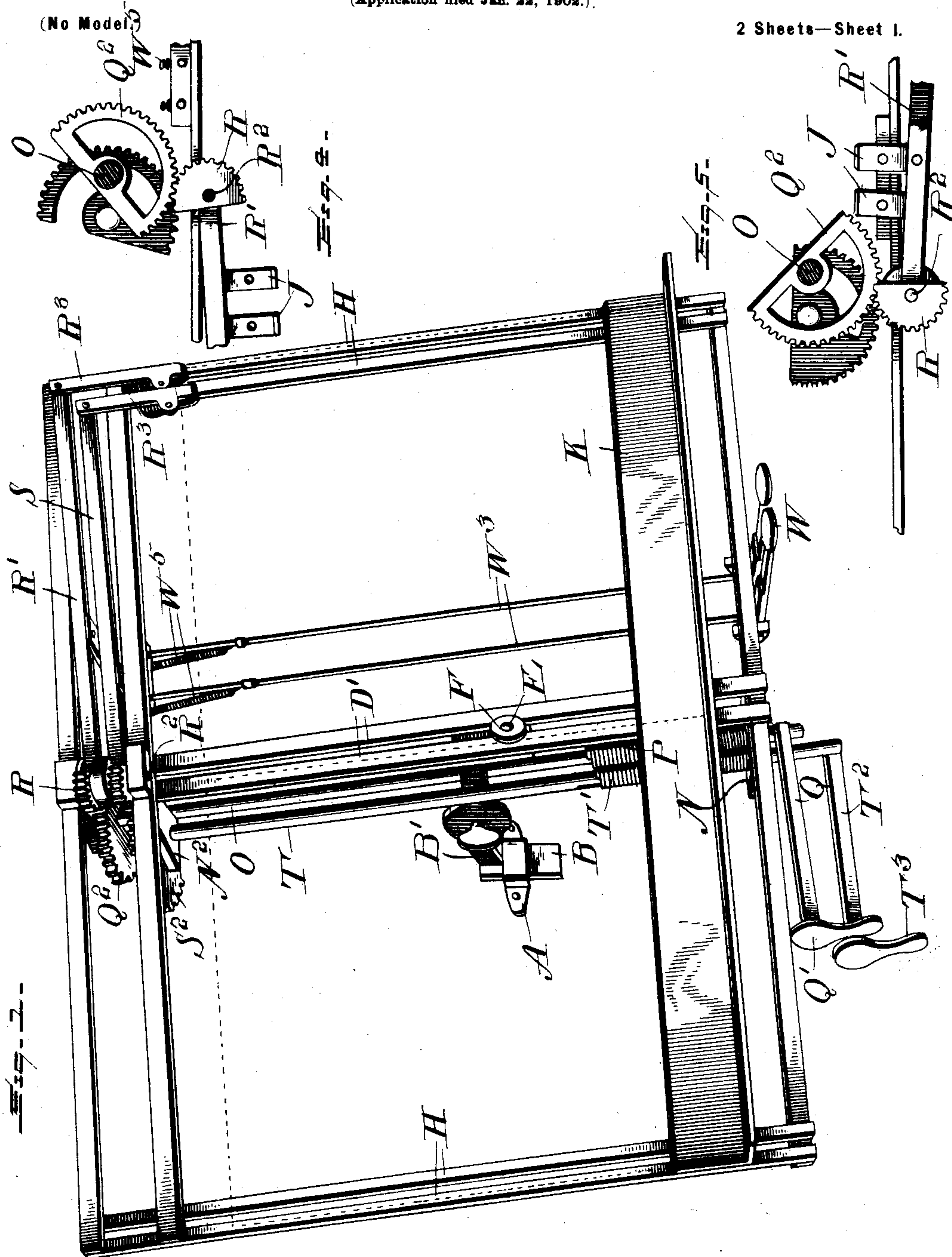
**Patented Nov. 4, 1902.**

**J. E. SOLOMON & M. L. SPENCE.**

**MUSIC LEAF TURNER.**

(Application filed Jan. 22, 1902.)

**2 Sheets—Sheet 1.**



*WITNESSES:*

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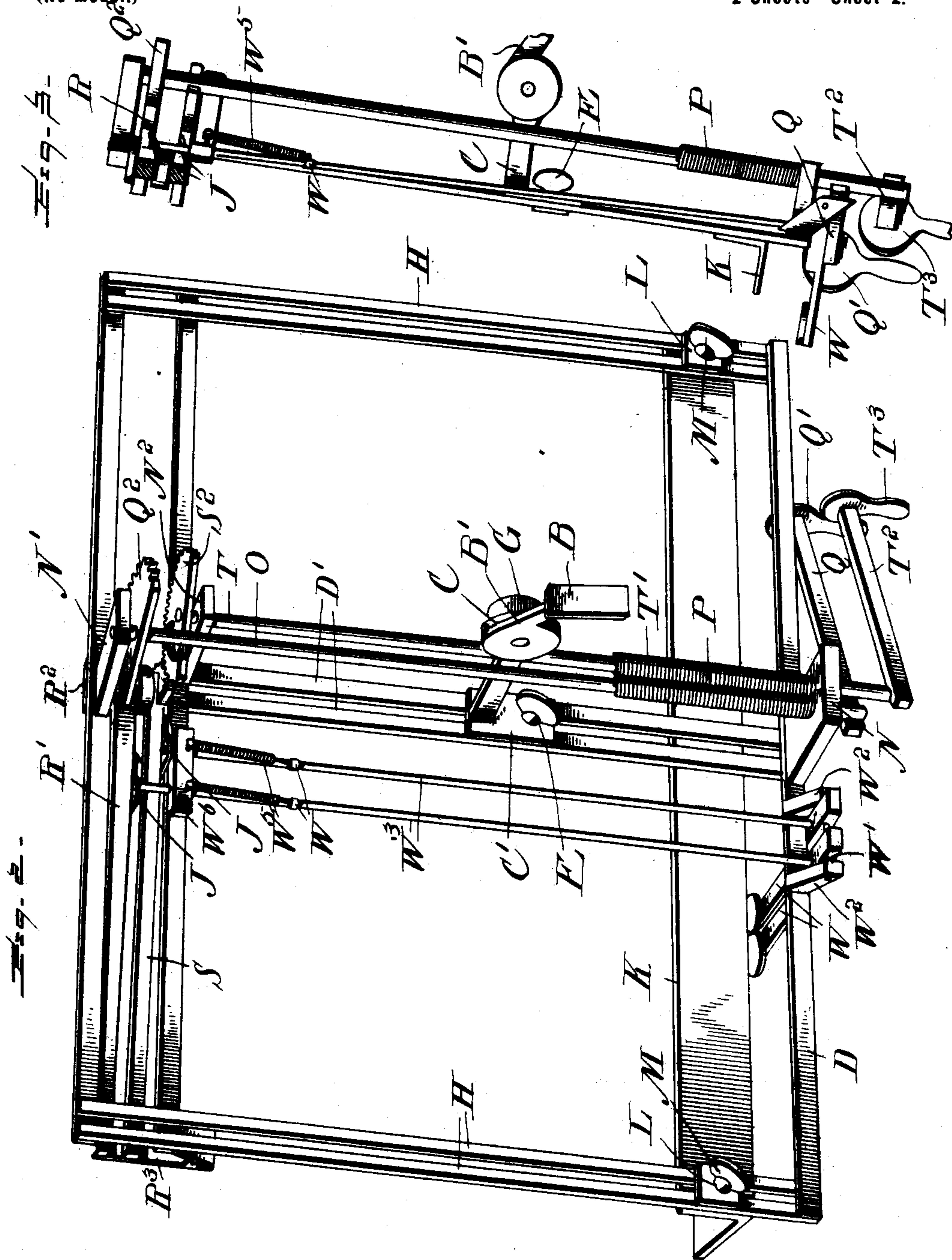
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# UNITED STATES PATENT OFFICE.

JOHN E. SOLOMON AND MARTIN L. SPENCE, OF SWEEDSBORO, NEW JERSEY.

## MUSIC-LEAF TURNER.

SPECIFICATION forming part of Letters Patent No. 712,609, dated November 4, 1902.

Application filed January 22, 1902. Serial No. 90,814. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN E. SOLOMON and MARTIN L. SPENCE, citizens of the United States, residing at Sweedsboro, in the county of Gloucester and State of New Jersey, have invented certain new and useful Improvements in Music-Leaf Turners; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to music-leaf turners; and it consists in various details of construction and combination of parts, as will be hereinafter more fully described and then specifically defined in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings similar letters of reference indicate like parts throughout the several views, in which—

Figure 1 is a perspective of our improved music-leaf turner. Fig. 2 is a rear view of the music-leaf turner. Fig. 3 is a sectional view vertically through the turner, parts being shown in elevation. Fig. 4 is a horizontal sectional view through the upper portion of the music-rack, showing the segment-gear members for actuating the leaf-turners. Fig. 5 is a cross-sectional view taken in the same plane as Fig. 4, but showing the gear-segments in different relative positions.

Reference now being had to the details of the drawings by letter, A designates a keeper, which may be fastened to a piano or other musical instrument and is adapted to receive the music-leaf-holding bracket-arm B, having an arm B', with one face serrated to engage a similar serrated face on the arm C, having a clamping-plate C'. The frame D of the music-leaf turner has two upright strips D', which are spaced apart, and a screw E passes through an aperture in plate C', through the space between the strips D', and is adapted to engage a plate F, Fig. 1, which is apertured and threaded. By turning the screw said plates C' and F may be made to securely clamp the opposite faces of the

strips D' and hold the music-leaf turner at a suitable height, while clamping the two serrated plates C and B' in different positions with reference to each other by means of the thumb-screw G.

At the opposite ends of the rack or music-leaf holder are two pairs of strips H H, and K designates a shelf on which the music is designed to rest. Clamping-plates L are provided, which are apertured to receive the thumb-screws M, which pass through the plates L, the spaces intervening between each pair of strips H, and engage threaded apertures in the upright portions of the music-supporting shelf. By this means it will be observed that the shelf may be held clamped in any desired position.

In the bracket extensions N N', extending rearward from the music-leaf turner, are journaled the ends of the rotary post or rod O, about which rod is mounted a coil-spring P, having one of its ends secured to the bracket N, while its other end is fastened to the rod O. A lever Q is fastened to the lower end of rod O and is provided with a handle Q'. The upper end of rod O carries a toothed segment Q<sup>2</sup>, which is in mesh with a segment-gear R, formed on the pivotal end of the arm R', said arm being pivotally mounted on the pin R<sup>2</sup> and carrying a leaf-clamping device R<sup>3</sup> at its free end. A second arm S is provided, which has a gear-segment at one end and is also pivotally mounted on pin R<sup>2</sup>, the segment-gear of which arm is in mesh with the toothed segment S<sup>2</sup>, keyed to rotate with the rod T, which is mounted in apertures in the bracket-arms N and N<sup>2</sup>. A coiled spring T' is mounted on the rod T, having one end secured to the bracket N, its other end fastened to the rod T. To the lower end of rod T is a lever T<sup>2</sup>, having a handle T<sup>3</sup> secured to its end, whereby the rod T may be rotated and in so doing putting the spring T' under tension.

W W designate two key-levers, which are pivotally mounted on the pins W', carried by the arms W<sup>2</sup>, and rising from each of said levers W is a rod W<sup>3</sup>, normally held at their upper limits by means of the coil-springs W<sup>5</sup>, secured to the collars w at their lower ends and at their upper ends to the block W<sup>6</sup>. Secured to each of the arms R' and S is a plate J, each having an aperture to receive the up-



per end of a rod  $W^3$ , the free end of each plate being upwardly curved, as shown.

In operation after the music-leaf turner has been adjusted to an instrument at any  
 5 desired angle the clamping devices  $R^3$  are clamped to the pages of the music and in readiness to be turned. The arms S and  $R'$  are held in the positions shown in the drawings by the apertured plates J engaging over  
 10 the upper ends of the rods  $W^3$ , the rods being depressed against the tension of the springs  $W^5$  as the curved ends of plates J come into contact with said rods  $W^3$ . As the rods T and O are rotated by means of the levers  $T^2$   
 15 and Q to swing the leaf-engaging arms to the positions shown in the drawings, the springs P and  $T'$  will be under tension and will return to their starting or normal positions when the levers W are depressed sufficiently to allow  
 20 the upper ends of the rods  $W^3$  to clear the apertures in the plates J. The first lever W to the right of the operator will be connected to the rod T, which will release the lever or arm  $R'$ , which is clamped to the first leaf of  
 25 the sheet or book of music, and the second arm S will be clamped to the second leaf of the music, and, if desired, several additional arms may be used where it is desired to turn a number of pages of music. If it should be desired  
 30 to return all of the leaves of music, the levers  $T^2$  or Q are thrown toward the key-levers W. If but one of the leaves is to be returned to positions held by clamping devices in Fig. 1, only one lever  $T^2$  is operated, as will  
 35 be readily understood.

Having thus described our invention, what we claim to be new, and desire to secure by Letters Patent, is—

1. A music-leaf turner, comprising a leaf-  
 40 holding rack adapted to be adjustably held to an instrument, rotary spring-actuated rods

mounted in the frame of the rack, segment-gears keyed to said rods and levers for turning said rods under tension of the springs secured thereto, leaf-carrying arms pivotally  
 45 mounted on the frame, segment-gears on said arms which gears are in mesh with the gears on said rods, apertured plates secured, one to each of said arms, the pivoted keys and rods mounted thereon, springs adapted to hold the  
 50 key-carrying rods at their upper limits whereby they will engage and hold the arms carrying the leaves under tension of the springs of said rotary rods, as set forth.

2. In a music-leaf turner, a rack adapted to  
 55 be adjustably held to an instrument, the music-leaf shelf adjustably held thereon, the rods T and O journaled in the frame of the rack, the levers  $T^2$  and Q secured respectively to said rods, the coiled springs about said rods,  
 60 fastened at corresponding ends to the rack, and to the rods, the segment-gears keyed to the rods T and O, the arms  $R'$  and S, the segment-gears on the pivotal ends of said arms  
 65 and in mesh with the segment-gears on said rods, the apertured plates J having their free ends curved, the keys W pivoted to the rack, the rods carried by said keys, the springs secured to said key-carried rods, the upper ends  
 70 of the latter adapted to yield as the plates J come into contact therewith and to enter the apertures in said plates, to hold the arms carrying the leaves under tension of the spring-actuated rods T and O, as set forth.

In testimony whereof we hereunto affix our  
 75 signatures in presence of two witnesses.

JOHN E. SOLOMON.  
 MARTIN L. SPENCE.

Witnesses:

JNO. C. RULON,  
 GEORGE M. ASHTON.