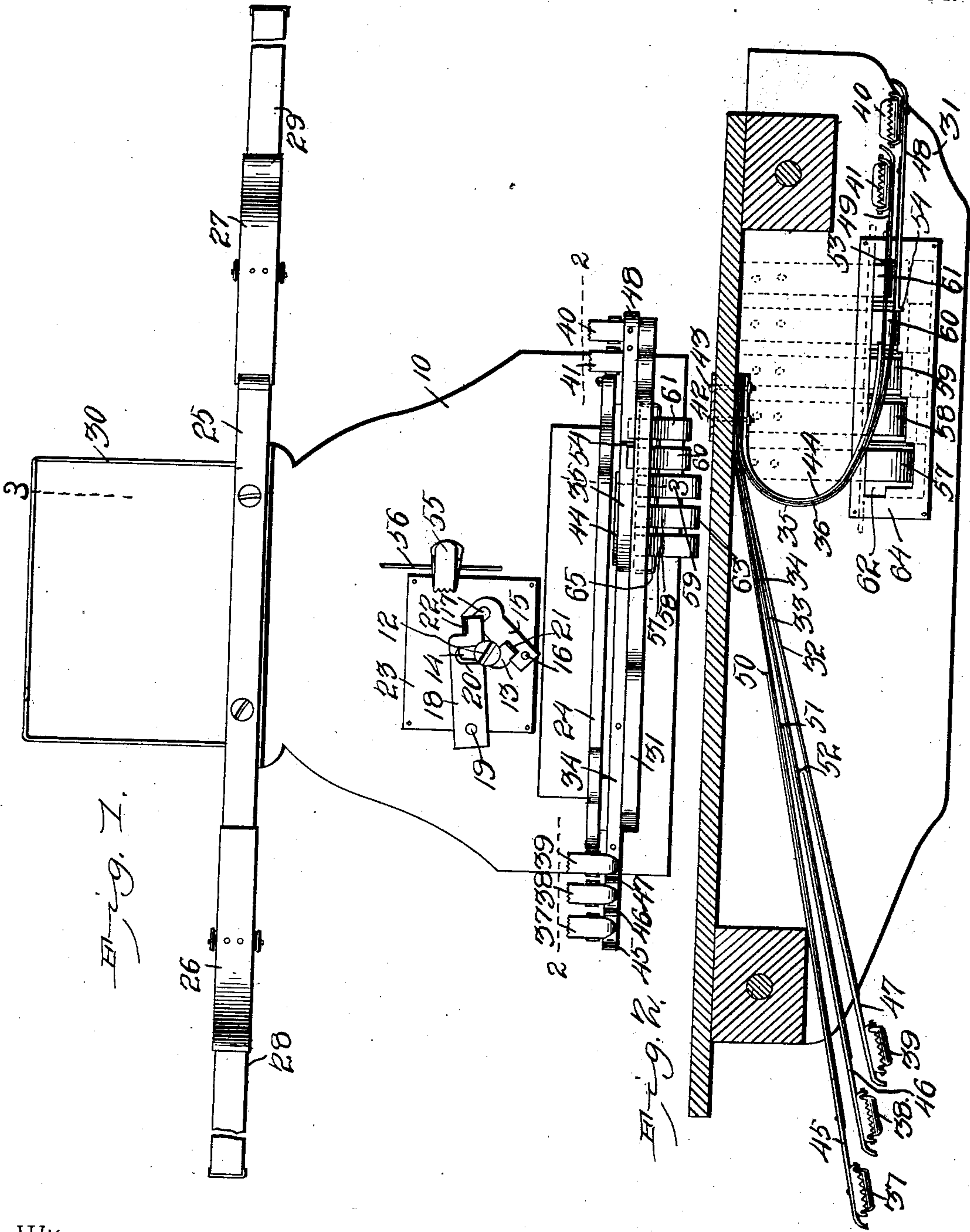


A. D. CRIST.  
MUSIC HOLDER AND LEAF TURNER.

APPLICATION FILED JULY 24, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses  
C. H. Woodward

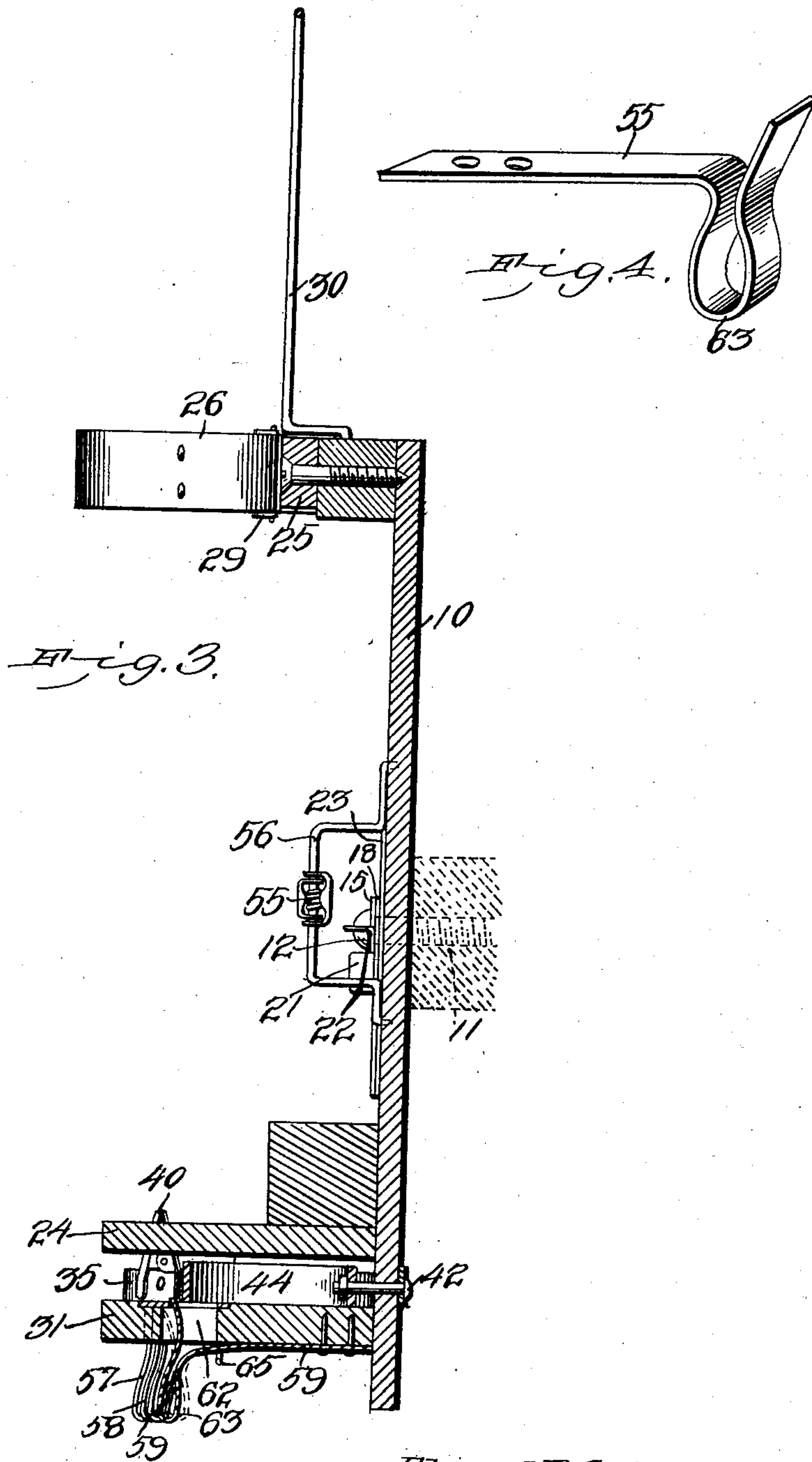
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# UNITED STATES PATENT OFFICE.

ALFRED D. CRIST, OF ADA, OHIO.

## MUSIC-HOLDER AND LEAF-TURNER.

SPECIFICATION forming part of Letters Patent No. 718,984, dated January 27, 1903.

Application filed July 24, 1902. Serial No. 116,861. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED D. CRIST, a citizen of the United States, residing at Ada, in the county of Hardin and State of Ohio, have invented a new and useful Music-Holder and Leaf-Turner, of which the following is a specification.

This invention relates to devices for supporting music in convenient position for the performer, more particularly upon pianos, organs, and similar instruments, but which may be employed upon music stands or racks, if required.

The object of the invention is to produce a simply-constructed device which may be readily attached to the music-rack and operative by the performer without interference with the playing for the purpose of turning the sheets of music when required or to support the sheets of music in proper position with relation to the keyboard.

The invention consists in certain novel features of construction, as hereinafter shown and described, and specified in the claims.

In the drawings illustrative of the invention, Figure 1 is a front elevation. Fig. 2 is a horizontal section on the line II II of Fig. 1. Fig. 3 is a vertical section on the line III III of Fig. 1. Fig. 4 is a perspective view of one of the spring-catches detached.

The improved device comprises a supporting-frame 10, adapted to be attached to the music-rack of a piano, organ, or similar instrument, but which may also be attached to the music-supporting racks employed by musicians in orchestras and in similar locations. The means by which the frame 10 is connected to the rack consists in a stud 11, projecting from the rack and having a head 12, adapted to engage an aperture in the frame, the aperture formed with an enlarged lower end 13 to receive the head of the stud and a reduced upper portion 14 to receive the shank of the stud, so that in connecting the frame to the rack the head of the stud will pass through the enlarged opening 13 and the frame dropped down, causing the reduced portion 14 to engage the shank of the stud, and thereby prevent the removal of the frame unless it be elevated and drawn forward. To prevent the removal of the frame, a locking-lever 15 is employed, the lever pivoted at 16

to the frame 10 and provided with an open slot 17, adapted to engage the shank of the stud between the head 12 and the frame 10. As an additional securing means a second lever 18 will be pivoted at 19 to the frame 10 at right angles to the lever 15 and also provided with an open slot 20, adapted to engage the shank of the stud between the head 12 and the lever 15. The levers 15 18 will be provided with sufficient springiness to cause them to engage the head 12 with sufficient force to prevent their removal when in use, but which will yield to a pressure sufficient to disengage them, and to aid in this removal the levers are provided, respectively, with finger-grips 21 22, as shown. The frame 10 will be provided, preferably, with a metal wear-plate 23, through which the aperture 13 will be formed and to which the levers 15 18 will likewise be attached. By this simple means a very effective and easily-operated means for detachably connecting the frame 10 to the music-rack or other support is provided.

At the lower part of the frame a music-supporting bracket 24 is formed, upon which the lower edges of the music will rest, and attached longitudinally upon the upper end of the frame 10 is a bar 25, having means at the ends for engaging the outer edges of the sheets of music or the leaves and backs of music-books when the latter are employed. The holding means on the ends of the bar 25 consist of spring-supported clips 26 27, attached to sliding ferrules or sleeves 28 29, engaging the bar, so that the clips may be adjusted horizontally of the bar to adapt them to the width of the music being held. These music-holding clips 26 27 are substantially the same as those illustrated in my former patent, No. 704,003, dated July 8, 1902, and therefore need no further description in the present application. Extending upward from the frame 10 above the bar 25 is a wire loop 30, forming an additional support to the upper portions of the sheets of music. Attached to the frame 10 below the bracket 24 is another bracket 31, spaced from the bracket 24 and adapted to support the leaf-turning mechanism.

The leaf-turning mechanism consists in a plurality of flat spring-actuated arms super-



imposed at one end and connected by one or more rivets passing through all of the arms and engaging the frame 10 between the bracket 24 31 and with clips at the other ends adapted to engage the individual sheets of music. As many of the spring-arms may be employed as required, but for the purpose of illustration five are shown and designated by the numerals 32 33 34 35 36, the arm 32 being the longest and the arm 36 being the shortest, while the intermediate arms 33 34 35 are of graduated lengths between the outside arms, as shown, so that the clips indicated at 37 38 39 40 41 will not interfere when the arms are operated. The arms 32 33 34 35 36 will preferably be united to the frame 10 by at least two rivets 42 43, and these rivets will be utilized to also support a curved guide 44, around which the arms will bend when the device is set for use, so that the clips 37 to 41 will always come to the same point when the arms are bent in position for use. This curved guide 44 is therefore an important feature of the invention and adds materially to the efficiency of the device, as it insures the uniform action of the arms. The spring-arms are provided upon their outer ends, respectively, with metal strips 45 46 47 48 49, the clips 37 to 41 being attached, respectively, to the strips and the inner end of each strip turned outward, as at 50 51 52 53 54, to form detents by which the spring-arms are held in their operative position by means hereinafter described.

Attached to the frame 10 and extending outwardly therefrom is a spring-clip 55, connected movably to a bracket 56, supported from the frame 10 and adapted to engage the centrally-folded portions of unbound sheet-music when the latter is employed. This clip 55 is adapted to be turned flatwise of the rack when not in use or when bound music-books are employed upon the rack. When the device is to be used for unbound music, the folded central portions are engaged by the clip 55 and the outer leaves engaged, respectively, by the clips 26 27, the front leaf by the clip 26 and the back leaf by the clip 27, as will be obvious. The last intermediate leaf will then be engaged by the clip 41 on the shortest spring-arm 36, the next leaf by the clip 40, and so on in regular order. If the number of the spring-arms exceed the number of the sheets of music being used, the unused spring-arms will simply remain dormant and will not interfere with the action of the arms in use.

Means are provided for supporting the spring-arms in their engaged position, which means are releasable as required by the performer, and this supporting means consists of a series of spring-latches 57 58 59 60 61, one for each of the spring-arms and connected in proper position upon the under side of the bracket 31 and extending by their operative ends through an aperture 62 in the bracket, as shown. One of these spring-latches is

shown detached and in perspective in Fig. 4, and as they are all exactly alike a description of one will suffice for all. Each of the latches is connected by one end to the under side of the bracket 31 and each formed with an upwardly-projecting tongue at the opposite end and with a loop 63, formed intermediately of its ends, as shown, the loop portions projecting below the bracket 31 and providing a finger-grip by which the latches are operated, and the upwardly-projecting tongues extending above the upper surface of the bracket and adapted to engage the detents 50 51 52 53 54 upon the spring-arms in successive order. Attached to the upper part of the bracket 31, adjacent to the outer edge of the aperture 62, is a plate 64, preferably having a series of graduated recesses adapted to be engaged by the upwardly-projecting tongues of the latches and support them in step-like positions, so as to engage the plates 45 46 47 48 49 and their connected detents and to maintain the clips 37 to 41 in position sufficiently separated to prevent interference, as more clearly illustrated in Fig. 3. By this means each of the spring-arms will be independently supported and interference between the arms obviated. The loops 63 are thus within easy reach of the finger of the performer, who has but to touch them to release them from engagement with their respective spring-arms and leave the spring-arm free to throw the sheet of music held by it around in the opposite direction, as required, and by successively releasing the spring-catches the leaves of music will be successively turned in corresponding order.

This makes a very simple, complete, and easily-operated device, which may be extended to any desired extent to adapt it to turn as many leaves as required and that may be employed upon any instrument having a music-rack or upon racks disassociated from any instrument, as before noted.

The device may be of any required size or material and constructed to conform in design with the instrument to which it is attached, so that it will not disfigure the instrument or be out of harmony therewith. The metal parts will be preferably plated and formed in fanciful design or otherwise ornamented according to taste. A guard-strip will preferably be arranged beneath the latches 57 to 61, as indicated at 65, to limit their downward throw, so that they cannot be disengaged entirely from the bracket 31.

It will be noted by reference to Fig. 2 that the plate 64 projects by its inner edge a short distance over the outer side of the aperture 62, so that a shoulder or catch is formed to engage the upper projecting ends of the spring-latches when the latter are depressed to retain them in their depressed position, so that they will not interfere with the action of the remaining unreleased spring-bars. It will be obvious that when the first spring-latch is released it must be retained in its downward



position, so that its projecting tongue will not emerge above the upper surface of the plate 64 and form an obstruction to the movement of the next spring-bar, and the shoulders or catches formed by the projecting portion of the plate 64 provide for thus supporting the spring-latches when not in use. When the device is again set for action, the tongues of the spring-latches will be forced from beneath the catches formed by the projecting portion 64 and permitted to project above the plate in position to be engaged by the detents on the spring-arms, as before described.

Having thus described my invention, what I claim is—

1. In a music-leaf turner, a plurality of arms yieldingly held in one position and provided at their free ends with means for detachably engaging the leaves, arm-engaging latches for holding the arms in the other position and having tongues mounted to yield in directions respectively perpendicular to and parallel with the planes of movement of said arms, and a catch for engagement by said tongues when withdrawn from the paths of the arms to maintain the tongues in their withdrawn positions.

2. In a music-leaf turner, a plurality of arms yieldingly held in one position and provided at their free ends with means for detachably engaging the leaves, arm-engaging latches for holding the arms in the other position and having tongues mounted to yield in directions respectively perpendicular to and parallel with the planes of movement of said arms, and a catch-plate disposed adjacent to said latches for engagement by said tongues when withdrawn from the paths of the arms and adapted to maintain said tongues in their withdrawn position.

3. In a music-leaf turner, a plurality of arms yieldingly held in one position and provided at their free ends with means for detachably

engaging the leaves, arm-engaging latches for holding the arms in the other position and having tongues mounted to yield in directions respectively perpendicular to and parallel with the planes of movement of said arms, said latches having intermediate loops forming finger-grips for operating said latches, and a catch for engagement by the tongues of said latches when withdrawn from the path of the arms to maintain the tongues in their withdrawn position.

4. In a music-leaf turner and holder, a supporting-frame, a curved guide connected to said supporting-frame, a plurality of superimposed spring-arms having means at their free ends for consecutively and detachably engaging the music-leaves, and connected by their other ends between said guide and the supporting-frame, and means under the control of the performer for detachably engaging and consecutively releasing said spring-arms, substantially as described.

5. In a music-leaf turner and holder, a music-rack having a stud provided with an enlarged head and projecting therefrom, a supporting-frame having an aperture enlarged at its lower end to receive the head of said stud and engaging the shank of the stud by its reduced upper portion, a spring lever-catch pivotally engaging said frame and provided with a recess adapted to engage the shank of said stud between its head and said frame, and a supplemental spring-lever disposed upon said frame and provided with a recess adapted to engage the shank of said stud between the enlarged head and said spring lever-catch, substantially as described.

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

ALFRED D. CRIST.

Witnesses:

J. V. McCOPPIN,  
E. E. McCOPPIN.