(No Model.) 3 Sheets—Sheet 1.

C. P. JONES.

MUSIC LEAF TURNER.

No. 343,663. Patented June 15, 1886.

Fig. 1.

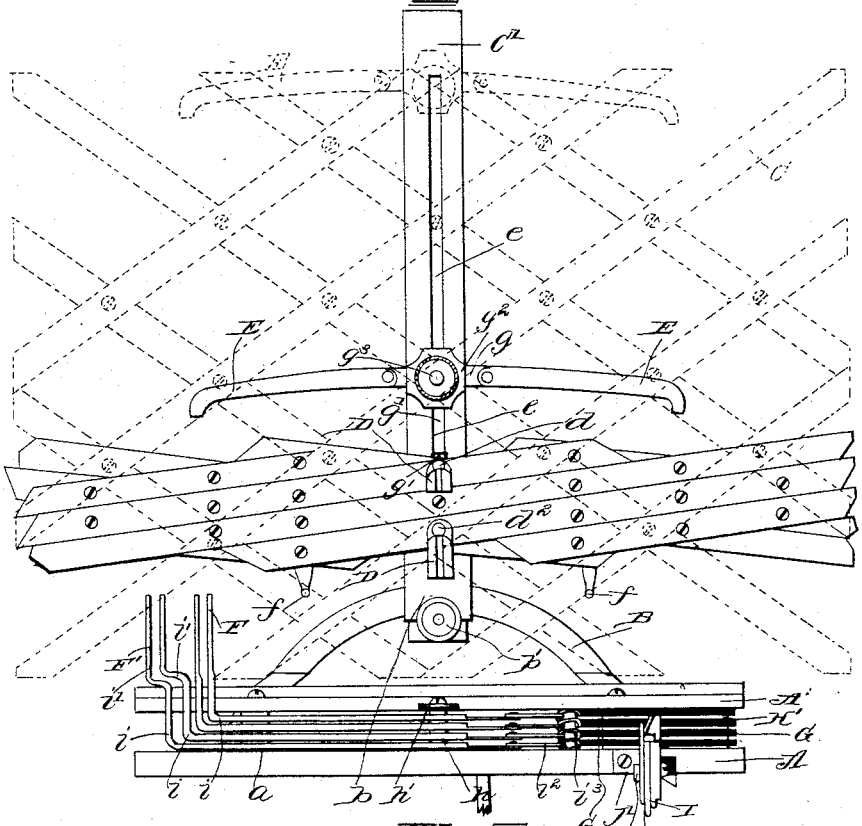
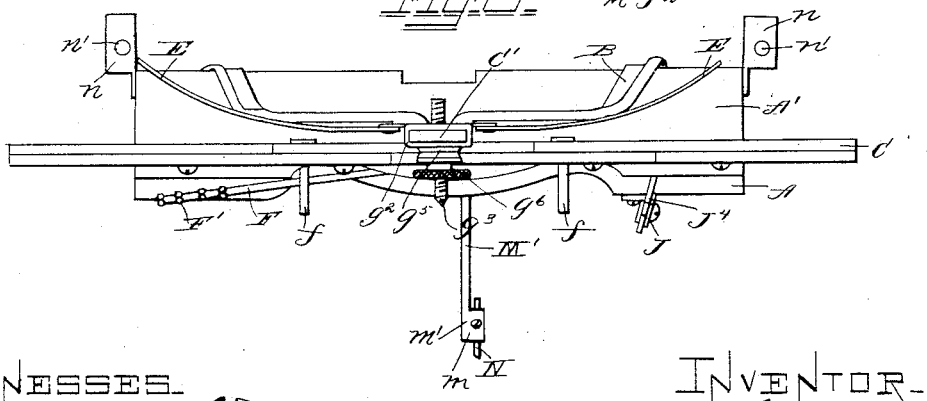


Fig. 2.



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(No Model.) 3 Sheets—Sheet 2.

C. P. JONES.

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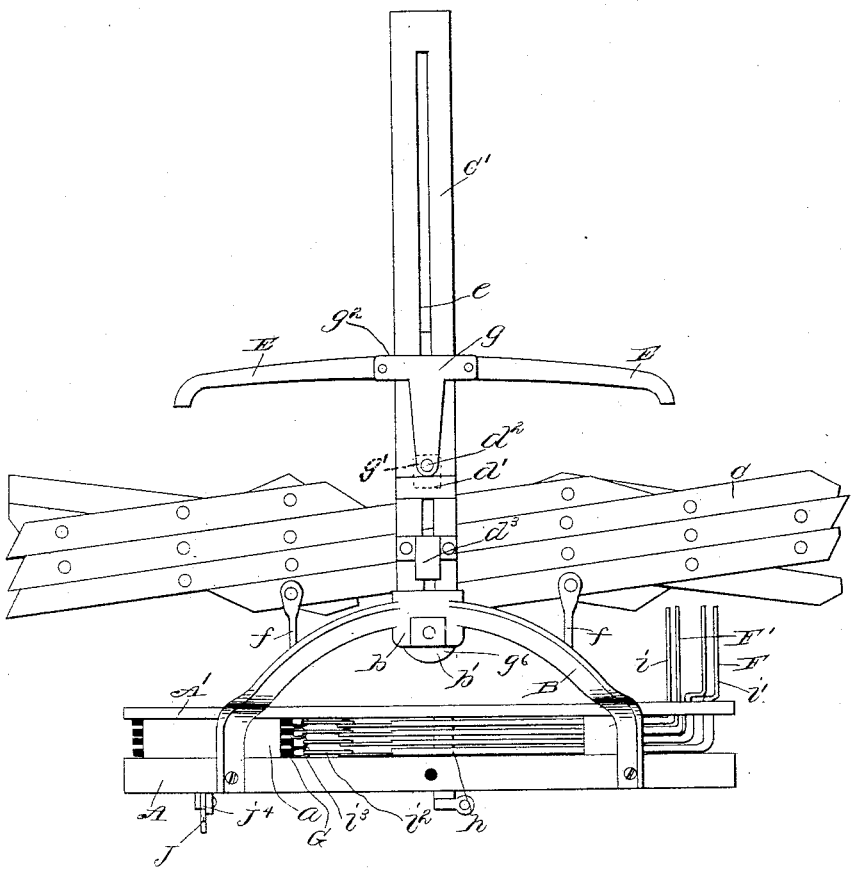
Fig. 3.



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Attorneys.

(No Model.) 3 Sheets—Sheet 3.

C. P. JONES.

MUSIC LEAF TURNER.

No. 343,663. Patented June 15, 1886.

Fig. 4.

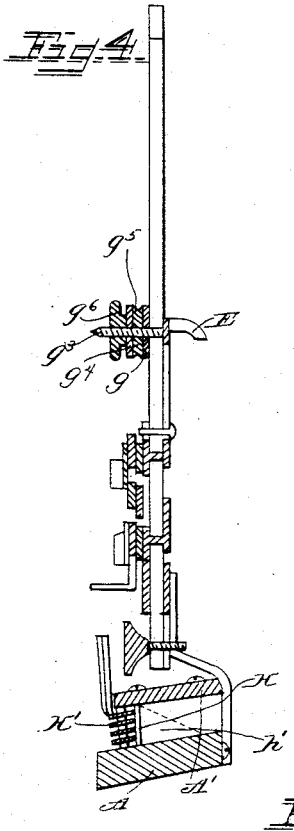


Fig. 5.

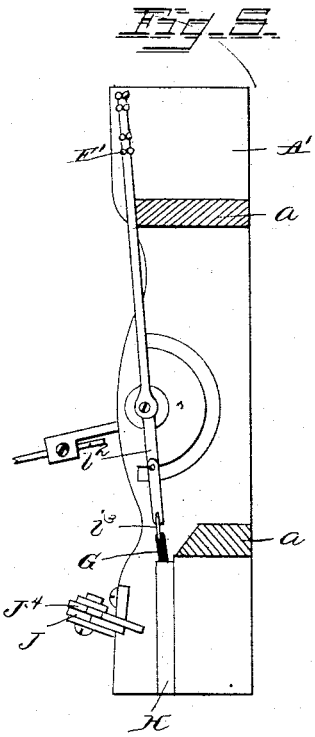


Fig. 6.

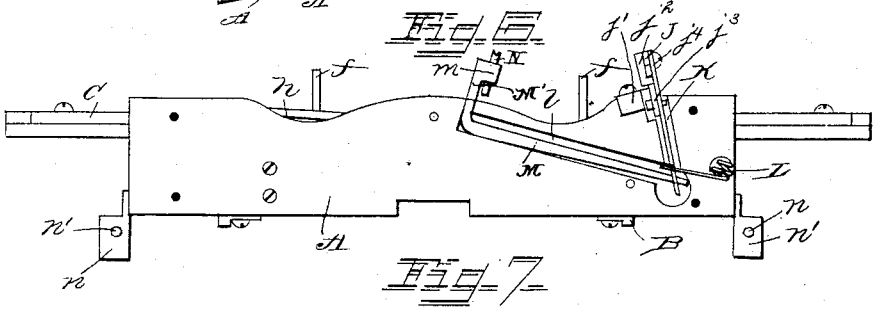
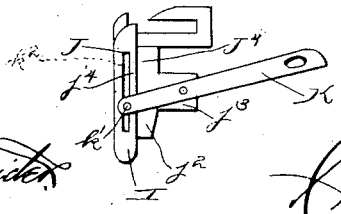


Fig. 7.



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UNITED STATES PATENT OFFICE.

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MUSIC-LEAF TURNER.

SPECIFICATION forming part of Letters Patent No. 343,663, dated June 15, 1886.

Application filed October 20, 1885. Serial No. 180,414. (No model.)

To all whom it may concern:

Be it known that I, CURTIS P. JONES, a citizen of the United States of America, residing at Old Lyme, in the county of New London and State of Connecticut, have invented certain new and useful Improvements in Leaf-Turners, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention pertains to improvements in combined book and sheet-music holders and leaf-turners, the same being adapted for use with musical instruments of any character, and to accommodate books or sheet-music of whatever size, as well as to readily permit of the turning of the leaves without the immediate application of the hand thereto, and about with the movement of the hand of the player as that required in playing the musical instrument, which are some of the advantages of my invention.

The invention therefore consists of the combinations of parts, substantially as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a front elevation of my invention, the rack being shown also in dotted lines extended, varying its holding capacity. Fig. 2 is a plan view. Fig. 3 is a rear elevation. Fig. 4 is a vertical central section thereof. Fig. 5 is a horizontal section taken immediately below the upper base piece or board, showing in plan view the leaf-turner arms with their fingers and springs, and the arm-retaining and tripping devices. Fig. 6 is an inverted view of the invention, and Fig. 7 is an enlarged detached view, in side elevation, of the leaf-turning, arm-retaining, and tripping devices.

In the embodiment of my invention I arrange above a bottom or lower base board, A, a second board, A′, secured upon transverse cleats or bars *a a*, fastened upon the board or base A, the front or face edges of which boards may, for the sake of finish or ornamentation, be configurated, the object of the duplication of which will appear farther on.

B is a casting or bracket, having an upper curved or semicircular portion, formed with rearwardly and outwardly extended portions, in turn formed with downward extensions, which are bolted or screwed to the rear edges of the lower base-board, A. The bracket or casting B is thus adapted to overhang and stand about centrally of the boards A A′, as a preferable position, and is formed or provided at the center of its semicircular portion at the front side with a socket or sleeve, *b*, and from said sleeve or socket depends a plate, into which works a thumb-screw, *b′*, the inner end of the tapered portion of the head of which screw forms a shoulder, the function of which will be presently seen.

C is the sheet-music or book rack or holder proper, which comprises a series of diagonally-crossing slats or bars connected together after the fashion of "lazy-tongs," and connected fixedly at its lower end to a central standard, C′, but has a sliding connection near its upper end with said standard, whereby the rack can be extended or contracted, in order to vary the size thereof according to the size of the sheet of music or book to be accommodated or held thereon. The connection between the rack and standard is effected at the upper end by a headed bolt or rivet, *d*, projecting from a plate, *d′*, and passed through a slot, *e*, in the standard and through the rack, said plate *d′* being fastened to the rear side of the standard, and at the lower end by analogous means, the rivet d^2 also passing through the slot *e* of the standard and the rack, and projecting from a plate, d^3, sliding upon the rear side of the standard.

D D are clasps or binders, which are so disposed upon the rack C that the rivets *d* d^2 aforesaid are further utilized to secure them in place, and which clasps or binders are each constituted of a spring-metal split tube, the longitudinal edges or lips of which tube are curved or turned inward, to prevent the same from tearing the sheet-music which they are designed to hold, the back edge of the music being inserted into said clasps or binders through the slots or spaces between the longitudinal edges of the latter. Beyond the bottom or lower edge of the rack project horizontal pins or stiff wires *f f*, being fastened to the rear side of the rack, which pins or wires are arranged a suitable distance apart and serve to support or hold a book, when the music is

in that form. Arranged upon the rear side of the standard C', and in a plane above the rack C, are two spring-arms, E E, having slight downwardly-projecting outer ends, which are brought into requisition when it is required to hold the leaves as against turning in at the upper corners or leaving their places, the said arms being sprung forward, and so as to cause the slight projections at their free ends to rest upon the leaves of the book or the sheet-music, as the case may be. The inner ends of these arms are pivoted to the cross-piece of an approximately T-shaped plate, *g*, with the lower end of its vertical portion or stem riveted to a plate, *g'*, arranged to move in alignment with the slot *e* of the standard C', and connected to the rack, to permit it to move therewith by the sliding rivet *d* of the rack. The cross-piece of the plate *g* is also clipped, as at g^2, to the standard C', which clip g^2 is adapted to slide upon the latter, and from the inner side of said cross-piece of the plate *g* projects a rectangular bar, g^3, which extends through the slot *e* of the standard and an angular closely-fitting slot, g^4, in the rear part of the clip g^2. Beyond the clip g^2 the bar g^3 is formed into a screw, and upon the latter is fitted a thick washer, g^5, (preferably wood,) and a milled thumb-nut, g^6, by the screwing up of which nut both the spring-arms E E and the rack C are firmly held at their point of adjustment.

The rack, with all of its above-described adjunctive parts, is held or sustained in an upright position by the insertion of the lower end of the standard C' into the socket or sleeve *b*, previously described, and allowing its slot to receive the screw *b'*, and then by turning the screw until the shoulder of its head is brought against the standard the latter will be firmly secured in position.

F F are the series of leaf-turning arms, which are arranged horizontally between the boards A A', and upon a common pivot or axis, *h*, secured at its ends to and about centrally of the said boards. These arms are each provided at its free end with two fingers, F', between which a leaf or sheet is received and carried in turning the same. These ends of the arms are bent or stand vertically, as at *i*, to secure the proper disposition of the fingers with relation to the leaves or sheet of music; also, in order to prevent the interference of the action of one with the other, the arms are varied successively in length, while the vertical portions *i i* of the more distant or outer ones are offset, as at *i' i'*, horizontally, to adapt them for engagement with the further removed leaves. The inner ends of these arms are each flexibly connected by a plate, i^2, and link or loop i^3 to a spring, G, (rubber or metal,) which is preferably arranged between plates H', spaced apart and fastened to or cast with a back plate, H, itself fastened to a block, *h'*, secured to the base-board A, the whole being arranged between the two boards A A'. The outer ends of the springs G are connected to a common pin passed through and fastened to the plates H'.

I is the leaf-turner-arm-retaining device, which consists of an edgewise-disposed open-slotted plate secured upon the bottom or base board, A, slightly obliquely to the transverse plane of the latter, the same having a right-angled bracket or flange, *j'*, projecting from one side of a downward and forward extension, j^2, thereof, which bracket or flange has its vertical portion let into and fastened to the front edge of the board, while its horizontal portion fits against the under side of the board. The forward and downward extension, j^2, of the retaining device I is also extended upward at the front end of the slot of said device, to prevent the leaf-turner arms from being forced out of said slot by the action of their springs, while the lower end of said extension j^2 is provided with an inwardly-projecting arm, j^3, extending under and partially let into a recess, *k*, in the lower side of the base-board A, the purpose of which will appear further on.

J is the leaf-turner-arm tripping or releasing device, which comprises a slide or the trip proper, J, arranged to move upon the forward extension, j^2, at its one side, and upon or in contact with a vertical shoulder or guide, j^4, formed upon said extension, said slide or trip having a headed pin or projection, *k'*, fitted to have movement in a vertical slot, k^2, in said extension j^2, to also guide and limit the movement of the trip or slide when actuated. The trip or slide is arranged in alignment with the opening of the slot of the arm-retaining device I, and is actuated so as to be moved past the forward end of said slot and to the opening of the slot, in order to separately lift the leaf-turner arms out of the retaining device I by a lever, K, let into a channel or recess in the under side of the base-board A and pivoted to the arm j^3, and to the said slide or trip proper, J. The inner end of the lever K is both acted upon by a spring, L, to hold the trip or slide normally depressed, and connected to a second lever, M, which spring is also let into the under side of and fastened to the board A. The lever M is likewise sunk and pivoted in a recess or channel, *l*, in the under side of the board A, sufficiently wide to permit of an axial movement, as well as of movement upon its pivot, of the lever, to readily accommodate the arm M' (with which the lever is provided) to the position of the hand of the player of the musical instrument. Said arm M' extends about at a right angle from the lever, and forwardly and downwardly, and in practice toward the key-board of the instrument, and closely to the hand of the player, in such contiguity as to permit of the actuation of the lever-arm in operating the tripping device to turn the leaves of the book or sheet-music by about the same movement of the hand as that required in playing the instrument, thus enabling the same to be readily or quickly operated, and

without any loss of time or break in the music, as would be experienced in the use of the hand directly in turning the leaves or music. The lower end of the lever-arm M′ is provided with an eye or socket, *m*, having an adjusting and holding screw, *m′*, which eye is designed to receive a wire rod, N, held therein by said screw, which rod, however, is only brought into use in the event the lever-arm M′ should fail to permit of its being adapted to be actuated by the hand of the player in the manner just described. The flexibility of the rod (being of wire) permits of its being readily bent, if required, to effect the result or end just named in connection with the lever-arm M′.

The contrivance as above described, as an entirety, is connected or adjusted to the ledge or cleat at the front of the musical instrument, just above the key-board, by clips or clamps *n*, secured to the ends of the base-board A, as shown in the plan view, Fig. 2, and adapted to be slipped and clamped upon said ledge or cleat by means of the binding or clamping screws and nuts *n′*, the screws working in the clamp or clamps near the inner connected ends of their plates and in nuts, as seen in the latter or same figure. This contrivance can be applied also to brass instruments played by the mouth, or wherever book or sheet music is used, and is readily constructed, simple, and cheap.

From the foregoing the operation is obvious, it only being necessary, with the leaves or sheets of the music placed between the fingers of the turner-arms and the latter placed in the retaining device, to actuate the lever-arm M′ or the rod N, as the case may be, when the said arms will be lifted out of the retaining device, and by the action of their springs be sprung to the opposite side of the base-boards A A′, thus effecting the turning of the leaves, which of course is done as the pages are wanted.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The music rack or holder comprising a series of crossing bars or slats connected together after the fashion of lazy-tongs, and having at the base supporting pins or projections, in combination with the central slotted standard, the T-shaped plate having a set or adjusting screw, and the spring-arms connected to said plate, substantially as shown and described.

2. The music rack or holder having at its center the split-tube clamps or binders connected by rivets to said rack, substantially as shown and described.

3. The music rack or holder comprising the lazy-tongs, jointed or connected slats or bars having clamps or binders, and the central standard, the upper end of the rack having a sliding connection with said standard, substantially as shown and described.

4. The music rack or holder comprising the lazy-tongs, connected bars or slats, the central slotted standard, and the set or adjusting screw having connection with the said rack, and adjustable along the slot of said standard, substantially as shown and described.

5. In a music rack or holder, the combination, with the bracket having a base support and a socket or sleeve, and a pendant provided with a shouldered set or holding screw, of the rack having a central slotted standard, substantially as shown and described.

6. The combination, with the rack having a central standard, of the connected base-boards and the bracket or casting of a semicircular construction at its upper portion, and provided thereat with a socket and pendant having a set or holding screw, the lower portions or arms of said casting or bracket being bent or extended outwardly and rearwardly and vertically and secured to said base-boards, substantially as shown and described.

7. The combination, with a music or book rack or holder comprising a series of crossing bars or slots connected together after the fashion of lazy-tongs, having supporting pins or projections, the split-tube clamps or binders secured in the center of said rack or holder, and the central slotted standard, of the spring-arms having a pivotal connection with a clip adapted to slide along said standard and be held by a set-screw at the point of adjustment, substantially as shown and described.

8. The combination, in a book or music rack, with the pivoted leaf-turner arms having vertical fingers and spring-actuated connection with the base or support of said rack, of the retaining device, substantially as described, and the tripping device comprising the slide connected to a spring-actuated lever, said lever being connected to a second lever pivoted in under the said base or support, and having an arm extending at about a right angle therefrom, substantially as shown and described.

9. In a book or music rack, the combination, with the two base-boards connected together, of the leaf-turners pivoted between said boards, the plates connected to said leaf-turners, the links or loops, the springs connected thereto, and the plates between which said springs are secured, substantially as shown and described.

10. The combination, with the spring-actuated leaf-turners pivoted between the two base-boards, of the retaining device having an open-slotted plate, the tripping device having a pin or projection fitted in a slot in the forward extension of said retaining device, the spring-actuated lever connected to said tripping device, and the second lever having an arm provided with an eye or socket, and a holding-screw for retaining a wire rod, substantially as shown and described.

11. A music rack or holder consisting of a rack comprising a series of crossing bars or slats connected together after the fashion of lazy-tongs, the split tubes, clamps, or binders,

the central slotted standard, the two base-boards, the casting or bracket having an upper curved portion, a socket or sleeve, the T-shaped clip provided with a screw sliding in said standard, the spring-arms, the leaf-turners pivoted between said base-boards, the springs secured between plates, and the spring-actuated tripping device connected to the retaining device, and the lever connected to the lever of said tripping device, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

CURTIS P. JONES.

Witnesses:
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ERASTUS E. CLARK.