

(No Model.)

C. H. VAN DEUSEN.
LEAF TURNER.

No. 473,246.

Patented Apr. 19, 1892.

Fig. 1.

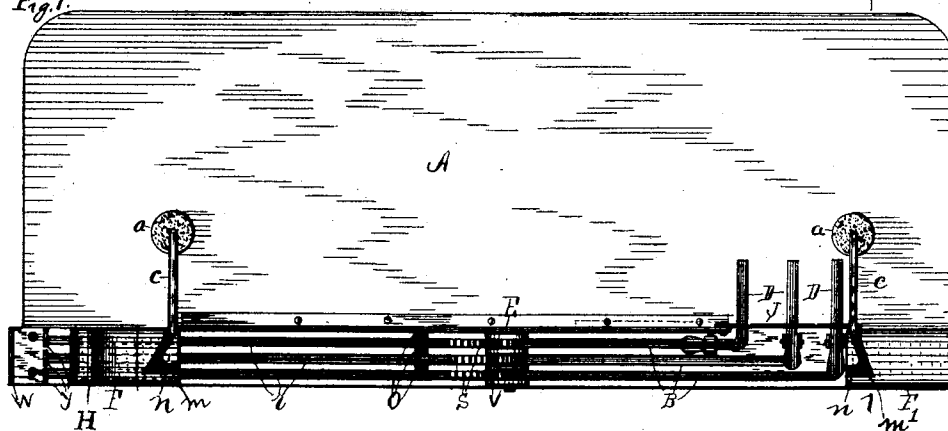


Fig. 2.

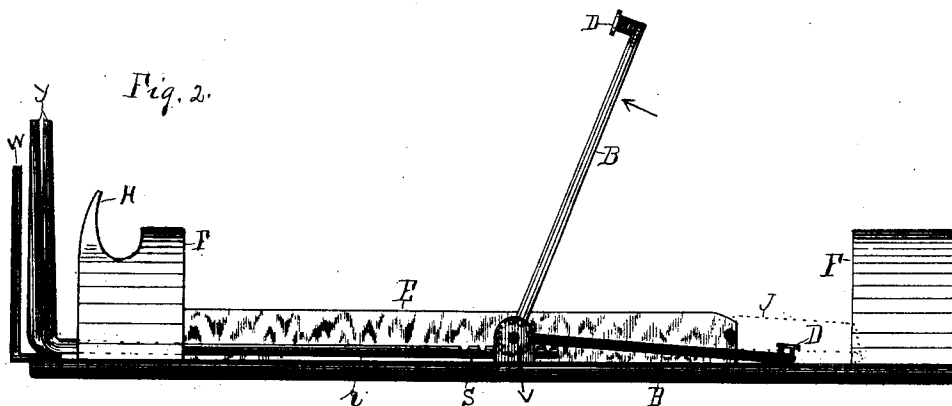


Fig. 3.

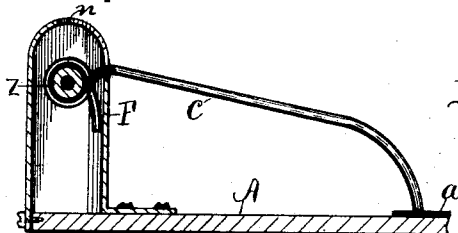
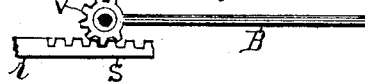


Fig. 4.



Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

CHARLES H. VAN DEUSEN, OF VERONA, ILLINOIS.

LEAF-TURNER.

SPECIFICATION forming part of Letters Patent No. 473,246, dated April 19, 1892.

Application filed May 1, 1891. Serial No. 391,291. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. VAN DEUSEN, a citizen of the United States of America, residing at Verona, in the county of Grundy and State of Illinois, 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 and the letters of reference thereon, forming a part of this specification, in which—

Figure 1 is a front elevation of the device. Fig. 2 is a bottom plan view showing an arm in the act of turning. Fig. 3 is a vertical section of the device, taken on line 1 of Fig. 1, looking to the left, showing one of the spring-clamps for holding a leaf of a book. Fig. 4 is a side view of one of the spring-jaws for grasping a book-leaf, and Fig. 5 is a side elevation of one of the racks and its pinion for operating one of the leaf-turning arms.

This invention relates to certain improvements in leaf-turners, designed more particularly for use on a piano for turning leaves of music, which improvements are fully set forth and explained in the following specification and claims.

Referring to the drawings, A represents a base-board for supporting the working parts of the device and for supporting a book, the leaves of which are to be turned.

E is a foot-rail secured on the upper side of board A, and is for supporting the lower end of a book when the board A is in proper position on a piano.

FF are housings for containing coil-springs on horizontal rods Z, the ends of which coil-springs extend out over board A and form spring-arms *c* for clamping the leaves of a book, not to be turned, to board A.

B B B are a series of arms having on their outer ends spring-jaws D, respectively, for grasping in successive order the leaves to be turned. The inner ends of said arms are pivotally connected to the upper side of board A, centrally between the housings F F, and are respectively provided on their inner ends with pinions V V V for engaging, respectively, the racks S of the sliding bars *r r r*, as shown particularly in Fig. 5. The opposite or outer ends of said sliding bars extend upward and form arms Y, by means of which they may be respectively reciprocated.

H and W are standards forming an object to grasp in connection with arms Y in order to reciprocate them.

J is a gate forming an extension of the foot-rail E, and is designed to be hinged or pivoted thereto and turned over backward, as shown in broken lines in Fig. 1, when the device is in operation. When not in operation, said gate is for the purpose of holding arms B down, as shown in full lines in said figure, so that they may be held in place when the device is not being used.

O are posts for holding separate and in place the reciprocating bars *r*.

When it is desired to remove the spring-arms *c* from pressure on the book, they are designed to be turned backward in the slot *m* (shown in the housings) and placed behind the shoulder *n*, which will hold said arms off the book as long as may be desired.

In operation the book or sheet of music is laid upon the board A so its back will be about central on said board. The spring-arms *c c c* are then let down to rest upon and hold the leaves not to be turned. The leaves to be turned are respectively placed one in each of the spring-jaws D, said jaws grasping them at their lower outer corners or near their corners, and being at such time in the position shown in Fig. 1. When it is desired to turn a leaf, or the first one of the series to be turned, the thumb of the left hand is placed against the standard H and the forefinger behind the standard Y of the bar *r* to be reciprocated forward. The operator may then move one of said bars *r* with its rack forward, and the result will be to partially rotate the pinion V, meshing with the bar and attached to one of the arms B, and reverse said arm and cause it to turn, as is shown in Fig. 2, and carry with it a leaf that may be grasped by its spring-jaw D, thus turning the leaf, and so each leaf may be turned in succession. Said leaves may be turned back to their first position simply by reciprocating racks S back to their first position, in which case the said thumb and finger would grasp standard W and arms Y. In this instance the device is shown as arranged to turn three leaves only; but it may be constructed with sufficient parts to turn any desired number of leaves. The spring-arms *c c c* have their outer ends arranged to rest on pads secured to the board A, so that

the leaves of a book resting on said pads will have a yielding support directly under said arms, so as to prevent injury to the book.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows, to wit:

1. The leaf-turner shown and described, consisting of the combination of the board A, having the foot-rail E, provided with the gate J, forming an extension thereof, the reciprocating racks S R Y, the arms B, having the spring-jaws D on their outer ends and the pinions V on their inner ends for engaging, respectively, said racks, the housings F F, respectively having the slots *m m'* forming the shoulders *nn'*, and the spring-arms *cc*, having

their inner ends forming a coil within said housings, all arranged to operate substantially as and for the purpose set forth.

2. In the leaf-turner shown and described, in combination with the board A, the housings F F, respectively having the slots *m*, forming the shoulders *n*, and the coil-springs arranged within said housings and having their ends extend to form the spring-arms *cc* for securing a book on said board, substantially as and for the purpose set forth.

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Witnesses:

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