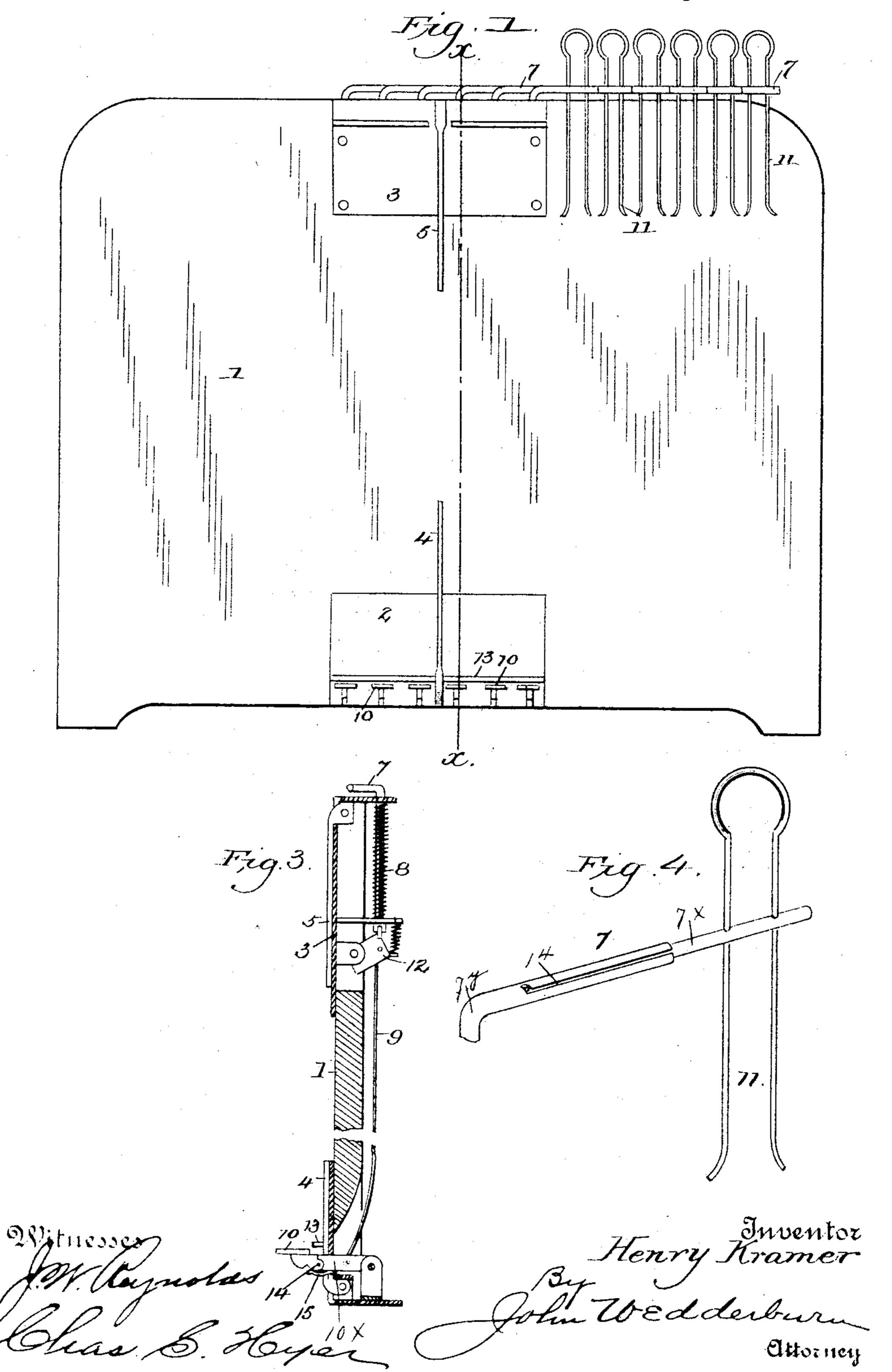
H. KRAMER.
LEAF TURNER.

No. 539,991.

Patented May 28, 1895.

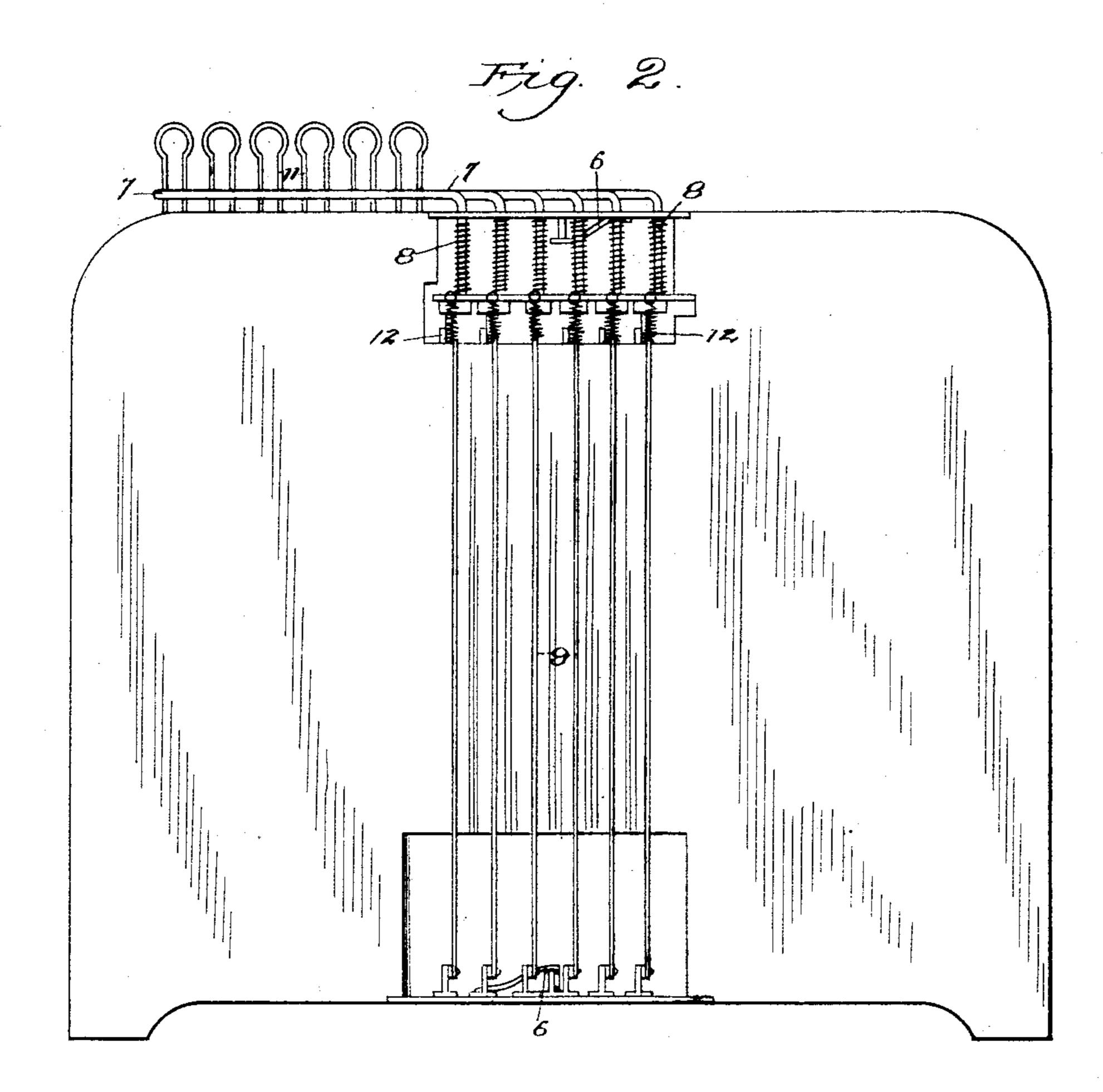


(No Model.)

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Witnesses Michaeles Chal & Hyer Henry Kramer.

By
John Wedderburn

Ottorney

## United States Patent Office.

HENRY KRAMER, OF SAN FRANCISCO, CALIFORNIA.

## LEAF-TURNER.

SPECIFICATION forming part of Letters Patent No. 539,991, dated May 28, 1895.

Application filed June 19, 1894. Serial No. 515,051. (No model.)

To all whom it may concern:

zen of the United States, and a resident of San Francisco, in the county of San Francisco and 5 State of California, have invented certain new and useful Improvements in Leaf-Turners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the to art to which it appertains to make and use the same.

This invention relates to music leaf turners, and has for its object to improve the device described and illustrated in application Serial 15 No. 496,386, filed by me January 10, 1894.

The invention consists in the combination with a series of leaf turning rods of separate actuating mechanism for each of said levers, a series of pivoted key levers adapted to suc-20 cessively throw into operation the actuating mechanism of the respective rods, the said key levers having hinged portions adapted to remain in their depressed position after each has been depressed.

The invention is clearly illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of the improved device. Fig. 2 is a similar view of the back portion. Fig. 3 is a vertical section on the 30 line x x, Fig. 1. Fig. 4 is a detail perspective view of a portion of the device.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

Referring to the drawings, the numeral 1 designates a frame work constructed of wood, which serves as a support for the music or book to rest upon, and has metallic plates 2 and 3 to cover the mechanism under the same 40 or in rear thereof, the said plates being nickeld or otherwise ornamented. In this instance also, pins or rods 4 and 5 are engaged by springs 6 respectively at their upper and lower ends, the said pins or rods extending only 45 partially over the frame work, and open at the center, so that they can be easily manipulated and raised to permit the sheet music to be placed thereunder against the said frame work, and then closed against the sheet so as 50 to keep the latter in position and prevent the frame work is located a series of protrud- | cylinder at the same time.

Be it known that I, HENRY KRAMER, a citiland have a resilient action through the medium of springs 8 and which are connected 55 by rods 9 with keys 10 at the bottom of the frame work through the medium of arms 10x. The ends of the wire arms are supplied with forks or pins 11 and are adapted to move on the said wires and are to be inserted in the 60 sheets desired to be turned by the device. The keys 10, as well as the forks 11, are similarly numbered, that is, the keys and forks correspond in numbers, so that when a key of one number is operated, it will actuate the cor- 65 responding fork or pin. Catches 12 may also be employed in this construction, and at the upper and lower part of the frame work is a rim or projection 13 upon which the sheets of music rest. The keys are so arranged as to 70 revolve on a hinge 14, and the moment each key is operated or struck it turns over on the hinge and releases a spring 15 at the same time and remains in that position until brought back to its former position after the 75 play. Thus it will be seen that the player can see at a glance which of the keys have already been struck and he is sure to strike the next or the right one without referring to the number of the key and without fear of 80 having forgotten the number struck last.

That part of the wire arms 7x which contains the pins is detached from the part 7<sup>y</sup> which is connected with the mechanism in the rear of the device, and the pins or rods 85 are made stationary. When ready to play, the player with his right hand inserts the detachable portion 7<sup>x</sup> of the wire arm in the sheet, the longer pin under and the shorter over the sheet, while with the left hand he go holds the part 7<sup>y</sup> of the wire arm and pushes into it with his right hand the portion 7x, or pushes the two together toward his right until they lock and are thus ready for play. There is a bayonet slot 14 formed in the cylindrical 95 part of the arm to admit of the shank on the upper part of the detached portion entering the same and thus keeping it in position and preventing it from flying out when the said arm is sprung back by the touch of the key 100 or otherwise. When through playing, the player can remove or draw out with ease, the movement of the same. At the upper part of | detachable part from the music and from the

Having thus described the invention, what is claimed as new is—

1. In a music leaf turner, the combination with the leaf turning rods and actuating mech-5 anism therefor, of the pivoted key levers for throwing into operation said actuating mechanism, the said key levers having hinged portions adapted to remain in their depressed position after being depressed, substantially to as and for the purpose described.

2. In a music leaf turner, the combination with a series of leaf turning rods, a separate actuating mechanism for each of said rods, of a series of pivoted key levers adapted to suc-

cessively throw into operation the actuating 75 mechanisms of the respective rods, the said key levers having hinged portions adapted to remain in their depressed position after each has been depressed, substantially as and for the purpose described.

In testimony whereof I have signed this specification in the presence of two subscrib-

ing witnesses.

HENRY KRAMER.

Witnesses:

B. C. HAWES,

R. Gallegos, Jr.