

H. R. KIMBLER.
MUSIC LEAF HOLDER AND TURNER.
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1,034,916.

Patented Aug. 6, 1912.

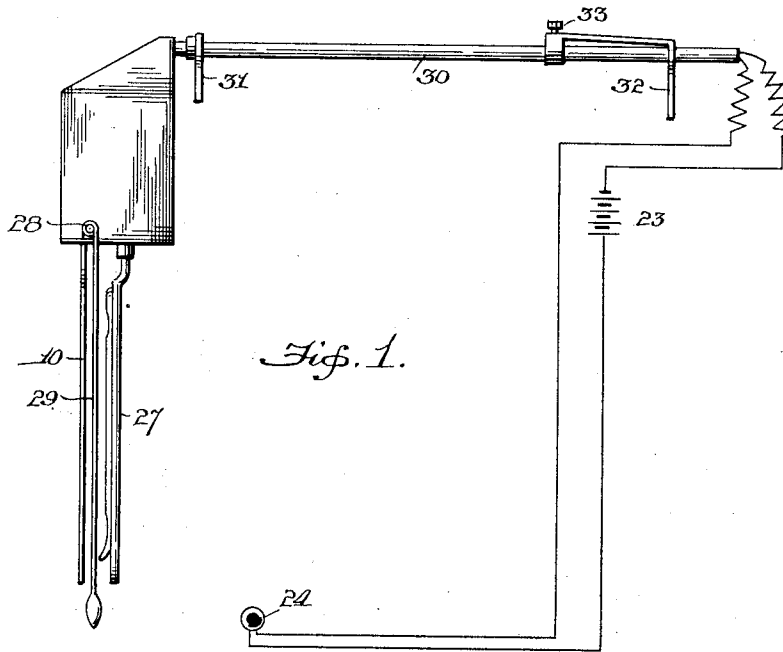


Fig. 1.

Fig. 2.

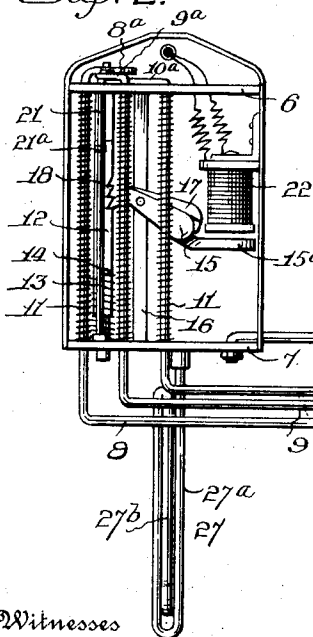


Fig. 3.

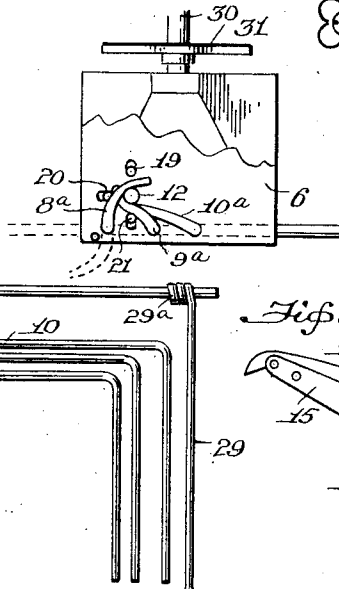


Fig. 4.

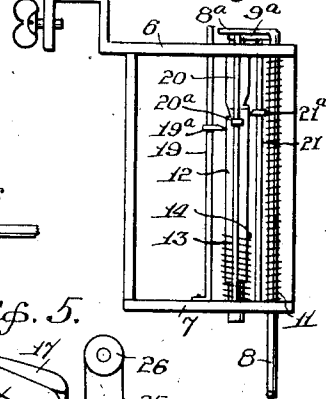
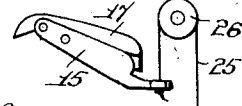


Fig. 5.



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MUSIC-LEAF HOLDER AND TURNER.

1,034,916.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HENRY R. KIMBLER, a citizen of the United States, residing at San Antonio, in the county of Bexar and State of Texas, have invented a Music-Leaf Holder and Turner, of which the following is a full and complete specification.

The primary object of my invention is to provide a simple, compact and inexpensive device for attachment to a music stand, piano or organ, for the purpose of holding and mechanically turning the leaves of sheet-music and music books.

A further object of my invention is to provide a device of this character with mechanism comprising only a few parts so constructed and arranged that the simple operation of a pawl by means of either an electro-magnet or foot-lever will quickly and positively release the leaf-turning wires one at a time.

Other objects and advantages of the invention will hereinafter appear, and what I claim as new and desire to secure by Letters-Patent is more specifically set forth in the appended claims.

In the accompanying drawings, forming a part of this specification: Figure 1 is a side view of the device, showing a means of attachment. Fig. 2 is a front view of the device, the front or cover of the case being removed. Fig. 3 is a plan view, a part of the inclosing case being broken away. Fig. 4 is a side view of the device, including a modification of the means of attachment. Fig. 5 is a detail view of the operating pawl.

Like numerals of reference indicate like parts in all the figures of the drawings.

In carrying out my invention the mechanism for operating the leaf-turning wires is supported in a suitable box or casing having upper and lower plates 6 and 7, respectively, and through these plates project the vertical portions of the leaf-turning wires. In the present instance I have shown three wires, designated as 8, 9 and 10, the upper terminal of each wire being bent at right angles above the plate 6, to engage a detent and spring-actuated rods, hereinafter described, while the vertical portions of said wires, between the plates 6 and 7, are provided with springs, as 11, for turning the wires from right to left.

The detent or vertically movable post 12, is mounted between the plates 6 and 7, and

is reduced at its ends, as shown, to limit the movement of the same in either direction, said detent being elevated by means of a spring 13, which is interposed between a pin 14 on the detent and the bottom plate 60. The detent 12 projects above the upper plate a sufficient distance to engage the bent terminals of the three wires, said terminals being disposed at different heights so as to be released consecutively as the detent is depressed, for instance the bent terminal, as 8^a, of the wire 8 is uppermost so that said wire will be the first to be released when the detent is slightly depressed to clear said terminal; the bent terminal 9^a of the wire 9, being on the next lower plane so as to release said wire when the detent is further depressed, and the terminal 10^a of the wire 10 is on a still lower plane, or immediately above the top plate 6 so that it will be released when the upper end of the detent is brought below the upper surface of said top plate. As each wire is released it is thrown from left to right by means of the spring 11 connected thereto 80 and to the casing, as will be understood.

Any suitable means may be provided for depressing the detent, or imparting a step by step movement thereto. In the present instance this is accomplished by means of a pawl 15, pivoted to a vertical post 16, and having a gravity catch 17 pivoted at the outer end thereof to engage ratchet teeth 18 at one side of the detent, said ratchet-teeth corresponding in number with the leaf-turning wires employed, and for the purpose of holding the detent at each operation of the pawl I provide a series of spring rods, designated as 19, 20 and 21, each having a dog, as 19^a, 20^a, and 21^a, respectively, engaging notches in the sides of the detent, (see Fig. 4). These spring-actuated rods, carrying the dogs, project above the top plate 6, so that they may be operated by the bent terminals of the wires to release the detent when said wires are pushed around to the right, the upper terminals of said spring rods being at different elevations so that they may be engaged by their respective wire-terminals and not interfere with the movement of the others; for instance, the upper end of the spring-rod 21 is just high enough to be engaged by the terminal of wire 10, and not interfere with the movement of the other termi- 110

nals, and rod 20 projects a little higher, to be engaged by the terminal of wire 9 and not interfere with the movement of the terminal of wire 8, which latter is adapted to engage the upper end of the rod 19. It will be seen, therefore, that when the pawl is operated to depress the detent the extent of the first tooth wire 8 will be released, as shown in dotted lines in Fig. 3, and the dog on rod 19 will then spring into engagement with the detent to hold it depressed, and when the detent is again depressed by the pawl, to the extent of the next tooth wire 9 will be released and the dog on rod 20 will engage the detent to hold it depressed, the same operation taking place with respect to wire 10 and dog on rod 21. Now to reset the wires they may be returned one at a time, or all together, as the bent terminal of each wire will engage and release its respective holding rod.

The actuating pawl 15 may be operated in any suitable manner, and I prefer to employ an electro-magnet, 22, having wire connections with a battery 23 and push-button 24, in which instance the pawl is provided with an extension or tail-piece, 15^a, serving as an armature. However, in some instances the pawl may be operated by an ordinary foot-lever, (not shown), connected thereto by a cord 25 passing over a pulley 26.

For the purpose of holding sheet-music in connection with the leaf-turning device, I provide a spring-clip, 27, formed of spring-wire bent upon itself as shown in Figs. 1 and 2, to provide the support 27^a and spring tongue 27^b, the latter having offsets at its ends to impinge against the sheet-music at these points, and in order to hold each leaf until it is turned by a wire I provide a holding device comprising a supporting-rod 28, upon which is slidably mounted a weighted rod 29, said weighted rod having a coiled end 29^a through which the supporting-rod 28 passes.

The device itself may be attached to the music-stand, piano or organ in any suitable manner, but in order that it may be attached to an upright piano, or an organ, without marring the same, I provide an attaching-rod 30, secured to the upper end of the inclosing box or casing, and having a fixed plate, as 31, adapted to engage the front edge of the top of the piano or organ, and an adjustable plate 32 which engages the rear edge, the adjustable plate being secured by a set-screw 33, as shown in Fig. 1, or I may provide an ordinary form of clamp, as shown in Fig. 4.

Having thus described my invention, I claim:—

1. In a music leaf turner, the combination with a supporting bracket, of spring-actuated leaf turning wires having their upper terminals bent at an angle and dis-

posed one above the other, a detent engaging said terminals and having ratchet-teeth and notches corresponding in number with the wires, a pawl engaging the ratchet-teeth to impart a step by step movement to the detent, and spring dogs—one for each wire—engaging the notches in the detent and released by the wires, respectively, when the latter are moved back to their normal position, substantially as shown and for the purpose set forth.

2. In a music leaf turner, the combination with a support having upper and lower plates, of leaf turning wires bent to form vertical bearing portions extending between the plates and at their upper ends bent to locate their terminals one above the other, springs mounted on the wires between the supporting plates and operating to turn said wires from one position to another, a detent engaging the terminals of the wires to hold the latter against the action of the springs, means for imparting a step by step movement to the detent, and dogs, one for each wire, engaging the detent and released by said wires, respectively, when moved back to their normal position, substantially as shown and described.

3. In a music leaf turner, the combination with a support having upper and lower plates, of leaf turning wires bent to form vertical bearing members extending between the plates and at their upper ends bent to locate their terminals one above the other, springs mounted on the wires between the supporting plates and operating to turn said wires from one position to another, a detent engaging the terminals of the wires to hold them against action of the springs and having a series of notches corresponding in number with the wires, spring rods, one for each wire, having dogs engaging the notches in the detent and terminating at different elevations corresponding with the terminal members of the wires, respectively, and means for imparting a step by step movement to the detent, substantially as shown and for the purpose set forth.

4. A music-leaf turner, comprising a series of leaf-turning wires having engaging portions at different elevations, a detent with which said portions engage, said detent having notches, and spring rods having dogs engaging the notches in the detent, said rods projecting in the paths of the engaging portions of the leaf-turning wires respectively; together with means for imparting a step by step movement to the detent, substantially as shown and described.

5. A music leaf turner, comprising a series of leaf turning wires bent to form vertical bearing portions and at their upper ends further bent to locate their terminals one above the other, a detent with which the terminals engage having ratchet-teeth and

notches corresponding in number with the
wires, and spring dogs, one for each wire,
engaging the notches and released by the
terminals of the wires, respectively, when
5 the latter are moved back to their normal
position; together with a pawl engaging the
ratchet-teeth on the detent and having a
projecting tail-piece, and an electro-magnet
in proximity to the tail piece for operating

the pawl, substantially as herein shown and 10
described.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

HENRY R. KIMBLER.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
