

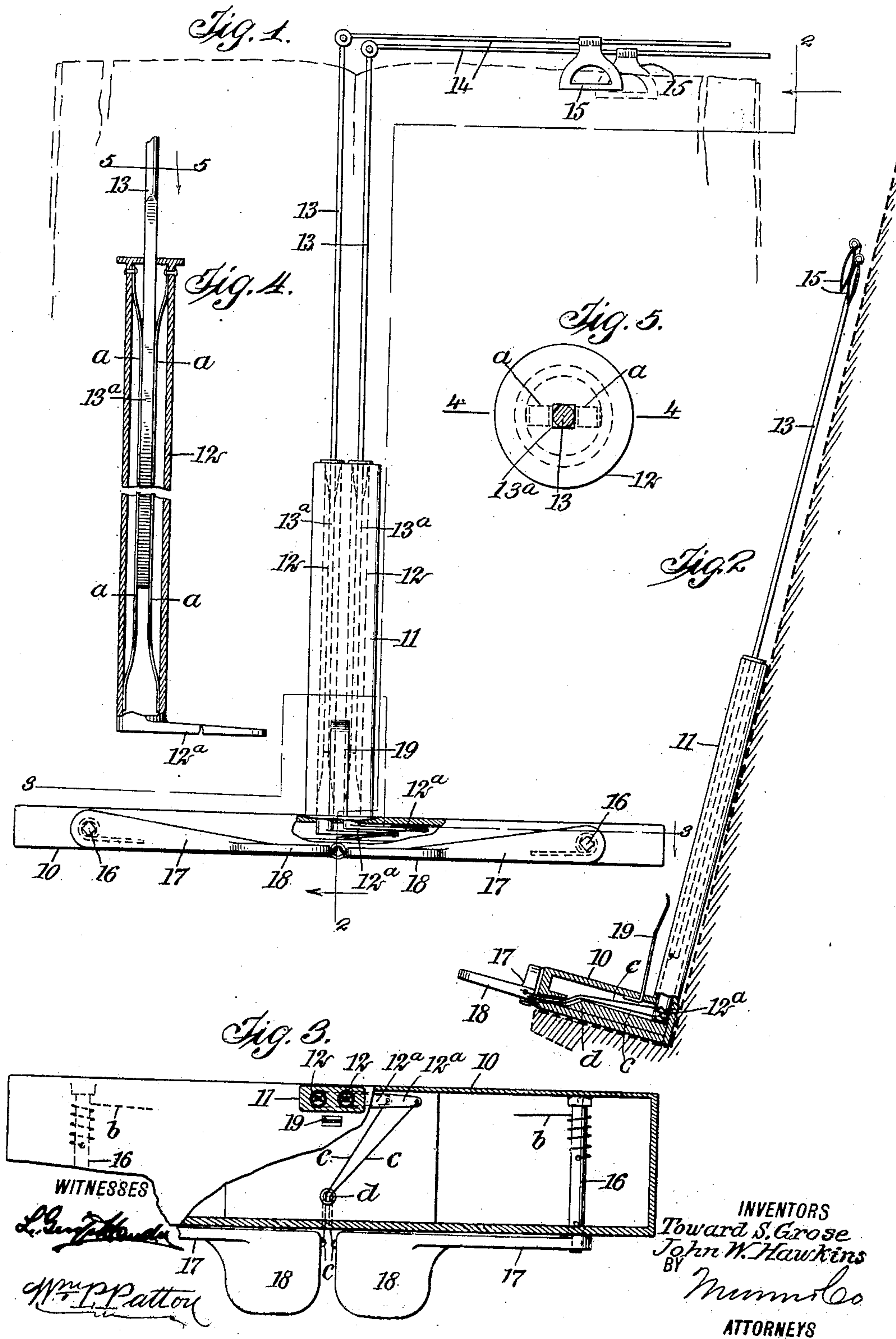
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MUSIC LEAF TURNER.

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Patented July 5, 1910.



WITNESSES

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# UNITED STATES PATENT OFFICE.

TOWARD SYLVESTER GROSE AND JOHN WESLEY HAWKINS, OF PHILADELPHIA,  
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MUSIC-LEAF TURNER.

963,545.

Specification of Letters Patent.

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*To all whom it may concern:*

Be it known that we, TOWARD S. GROSE and JOHN W. HAWKINS, both citizens of the United States, and residents of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and Improved Music-Leaf Turner, of which the following is a full, clear, and exact description.

The purpose of our invention is to provide novel details of construction for a leaf turner which is well adapted for successively turning the leaves of a bound book, or loose leaves whereon different pieces of music are imprinted, and thus relieve the player of a piano or the like from interruption while executing music on such an instrument.

The invention consists in the novel construction and combination of parts, as is hereinafter described and defined in the appended claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a partly sectional front elevation of the improved leaf turner; Fig. 2 is a vertical transverse sectional view, substantially on the line 2—2 in Fig. 1; Fig. 3 is an enlarged partly sectional plan view, substantially on the line 3—3 in Fig. 1; Fig. 4 is a vertical transverse sectional view; substantially on the line 4—4 in Fig. 5; and Fig. 5 is a partly sectional plan view, substantially on the line 5—5 in Fig. 4.

In the drawings that illustrate the constructive details of the improvement, 10 represents an elongated base for the support of other features of the device. The base 10 is rectangular and of suitable dimensions for its service. At the longitudinal center and near the side of the base piece 10 that is rearward in service, a casing 11 of suitable material is erected thereon; said casing having greater width than depth may be substantially rectangular in cross section, as indicated in Fig. 3. In the casing 11, a plurality of similar cylindrical spring boxes 12 are rotatably supported adjacent to each other, two of said elongated boxes being shown in position within the casing by dotted lines in Fig. 1, and in section in Fig. 3. In each of the similar boxes 12 that are tubular, two resilient plate springs  $a, a$ , are

secured at their ends, the bodies thereof that face toward each other being essentially flat and parallel with each other, as shown for one box and pair of springs in Fig. 4. Each spring box 12 is supported in the casing 11 so as to be freely rotatable, and at the lower end of the casing, the spring boxes project somewhat below it. An arm  $12^a$  is extended laterally in the same direction from the lower end of each spring box 12 and affords means for rocking said boxes separately or together in either direction.

A preferably metal rod 13 is provided as a vertical extension from each box 12, said rods having their lower portions  $13^a$  square in cross section, and thus adapted for insertion down between the springs  $a, a$  in a respective box 12, as is indicated for one rod and box in Figs. 4 and 5. Upon the upper end of each rod 13, an arm 14 is jointed, so that said arms may be rocked, but not too freely, as it is essential that they will remain where adjusted. On each arm 14, a spring clip 15 is slidably mounted, of such a character as will permit its easy attachment upon the edge of a sheet of music or the leaf of a book.

At a suitable distance from the casing 11, and near the respective ends of the base piece 10, a rock shaft 16 is journaled in the front and rear walls of the latter. On the end of each rock shaft 16, that projects at the front wall of the base piece 10, a lever 17 is mounted at one end, these levers extending toward each other, and on their adjacent ends having an enlargement 18 for convenient manipulation. On each rock shaft 16, a coiled spring  $b$  is mounted, having one end thereof secured to the shaft and the other end attached to the base piece, and the trend of said coiled springs is such, that they will return the shafts and levers thereon to normal position if the levers are depressed at their free ends and pressure thereon is removed.

On the enlarged end 18 of each lever 17, one end of a flexible connection  $c$  is secured, and thence said connections are extended through an opening in the front wall of the base piece 10 and then passed over a support  $d$ , from which said flexible connections diverge toward the ends of the arms  $12^a$ , whereon they are respectively secured, as shown in Figs. 2 and 3.

The complete device that has been de-



scribed may be seated on a music rack of usual form, that is in the usual position on a piano or organ and which inclines rearward.

5 A piece of music printed on loose sheets, may be held in position on the improved leaf turner by engaging the lower edges of the sheets at their center fold with an upright spring finger 19, which is secured on  
10 the top wall of the base piece 10. The arms 14 are now adjusted to a proper height by sliding the squared portions 13<sup>a</sup> of the rods 13 to a proper elevation in the spring boxes 12, said squared portions having such a  
15 relative engagement between the springs *a*, *a* as will dispose the arms 14 in contact with the upper edge of the leaf or sheet it is to turn. The clip 15 on a respective arm 14 is now engaged with the leaf or sheet at  
20 its upper edge near the center of width, and it will be seen that by the depression of the free end of an appropriate lever 17, the leaf or sheet engaged therewith will be turned along with the arm 14, that will be  
25 rocked from side to side of the device by the pull of the attached flexible connection *c* on the arm 12<sup>a</sup> that is to be rocked.

It will be understood that the instrument may be readily attached to an ordinary leaf  
30 turner or may be substituted therefor and operate with equal certainty.

It is claimed for the improvement that it is extremely simple, practical, convenient in use and can be produced at moderate cost.

35 Having thus described our invention, we claim as new and desire to secure by Letters Patent:

1. A leaf turner, comprising a base piece, an upright casing on the base piece, an  
40 upright box rotatable in the casing, springs in the box, a rod having parallel sides that are embraced by the springs, an arm extended laterally from the upper end of the rod, a spring clip on the arm, a rockable lever  
45 on the base piece, and means connecting the lever with the box adapted for turning said box, rod and arm when the lever is rocked.

2. A leaf turner, comprising a hollow base piece, an upright casing thereon, a plu-  
50 rality of cylindrical boxes rotatable in the casing, each box having a laterally extended arm at the lower end thereof, two plate springs positioned oppositely in each box, a rod in each box having opposite flattened  
55 sides embraced by the springs, an arm extended laterally from the upper end of each rod, a plurality of levers rockably mounted

upon one side of the hollow base piece, and means connecting said levers with the arms on the rotatable boxes, which adapt the de- 60 pression of the levers to turn the boxes, rods and arms on said rods.

3. A music leaf turner, comprising an elongated rectangular hollow base piece, an upright casing on the base piece, a plurality 65 of cylindrical boxes journaled at their ends side by side in the casing, two plate springs disposed oppositely and spaced apart parallel with each other in each box, an arm on the lower end of each box extended laterally 70 and located in the base piece, a rod for each box having parallel sides at and near its lower end whereon the springs press, a laterally extended arm on the upper end of each rod, a spring clip on each rod, a rock 75 shaft journaled in the base piece near each end thereof, a lever on a projected end of each rock shaft, a coiled spring on each rock shaft adapted for raising a lever thereon when said lever is depressed, and a flexi- 80 ble connection extended between each lever and a respective arm on the lower end of a corresponding box.

4. In a music leaf turner, a tubular rota- table member, springs in said member, a 85 rod provided with means for engaging a leaf, said rod extending into the member and engaged by the springs, whereby it is adjustably held in said member, and means for rotating the member. 90

5. In a music leaf turner, a hollow base having an opening in its front wall, a rota- table member mounted on the base and pro- 95 vided with an arm at its lower end, a vertically adjustable arm carried by the rota- table member and having means for en- gaging a leaf, a spring pressed rock shaft mounted in the base and having one end projecting through the base, a lever on the projecting end of the rock shaft, and a flexi- 100 ble connection having one end secured to the arm on the lower end of the rotatable member, passed through the opening of the base, and its other end secured to the said lever. 105

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

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Witnesses:

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AUGUSTINE C. METZINGER.