J. E. LIVINGSTON.

MUSIC LEAF TURNER.

APPLICATION FILED JULY 27, 1911.

1,052,353.

Patented Feb. 4, 1913.

2 SHEETS—SHEET 1.

FIG. 1

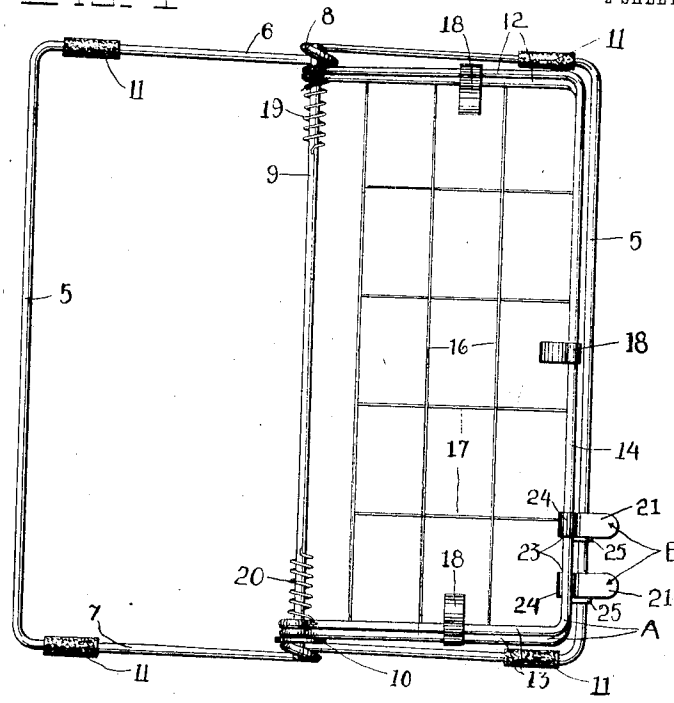


FIG. 2

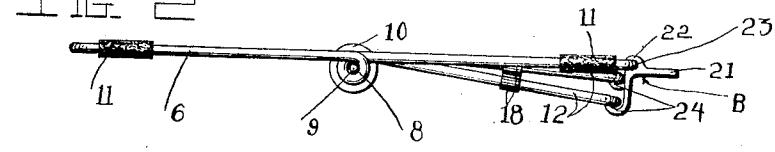
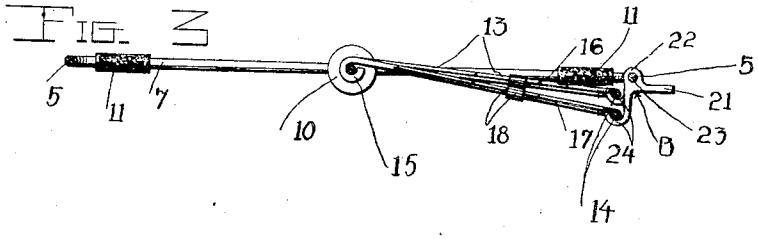


FIG. 3



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Witnesses

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FIG. 4

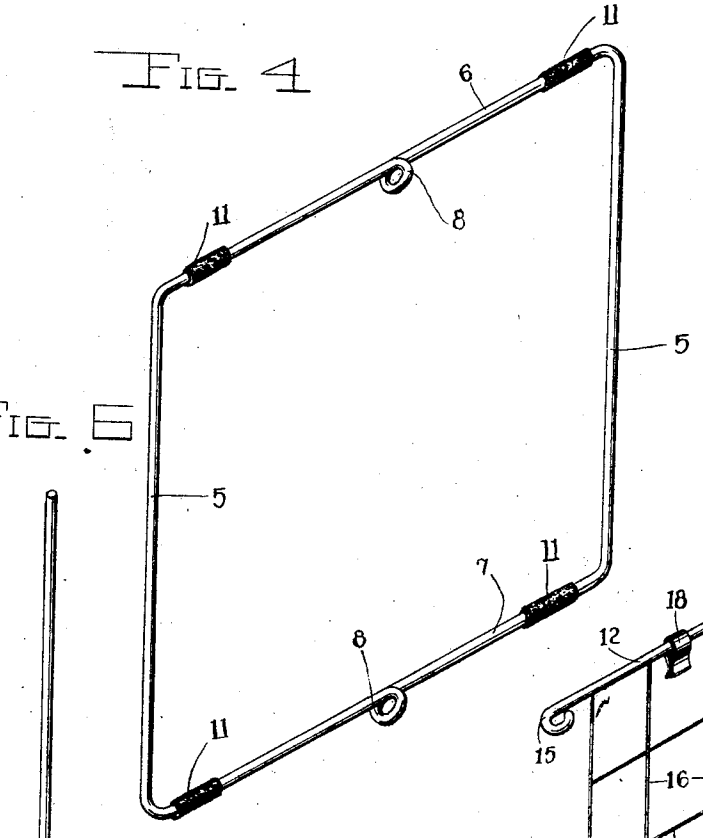
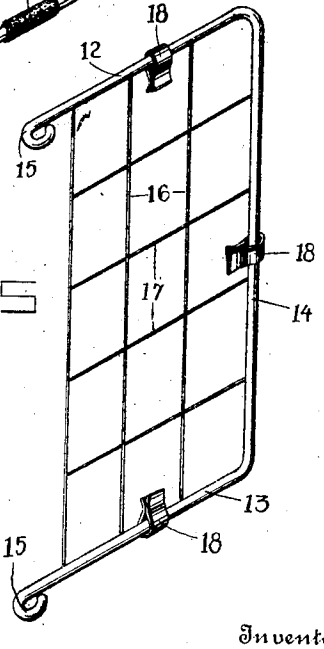


FIG. 6

FIG. 5



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UNITED STATES PATENT OFFICE.

JAMES E. LIVINGSTON, OF ALBIA, IOWA.

MUSIC-LEAF TURNER.

1,052,353. Specification of Letters Patent. Patented Feb. 4, 1913.

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To all whom it may concern:

Be it known that I, JAMES E. LIVINGSTON, a citizen of the United States, residing at Albia, in the county of Monroe, State of Iowa, have invented certain new and useful Improvements in Music-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 art to which it appertains to make and use the same.

This invention relates to music leaf turners, and has for its principal object to provide a device of the character described for automatically turning said leaves.

Another object of the invention is to provide a music leaf turner of the character described in which a novel form of latch is employed for releasing the leaves.

A further object of the invention is to provide a music leaf turner which is composed of a minimum number of parts, is therefore simple in construction, and is cheap to manufacture.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claim, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings: Figure 1 is a plan view of a music leaf turner constructed in accordance with my invention, showing a piece of music associated therewith, Fig. 2 is a top plan view thereof, Fig. 3 is a horizontal sectional view through such a turner, Fig. 4 is a perspective view of the frame, Fig. 5 is a perspective view of one of the leaves of the frame, Fig. 6 is a perspective view of the hinge pin.

Like reference numerals designate corresponding parts in all the figures of the drawings.

Referring to the drawings, the invention comprises an angular frame formed of metal and consisting of side arms 5—5 and top and bottom arms 6 and 7 respectively, the latter being each bent centrally to form a projecting eye 8. Disposed within these eyes is a bearing pin 9 having a collar 10 rigidly secured thereto above the eye of the bottom arm 7, whereby said bearing pin is held against any tendency of dropping out. Secured around the top and bottom arms 6 and 7 of the frame is any suitable cushioning material 11.

My invention further comprises a plurality of leaves A. There of course may be any number of leaves employed, but for the purpose of illustration, I have only shown two thereof. Each of these leaves includes a U-shaped frame consisting of spaced upper and lower arms 12 and 13 respectively and a connecting portion 14. The extremities of the arms 12 and 13 are respectively formed with eyes 15 adapted to be swingingly mounted upon the pin 9 at points below and above the eye 8 of the upper arm 6 and the collar 10. Connecting the arms 12 and 13 is a plurality of spaced wires 16, the wire adjacent the outer ends of the arms 12 and 13 being spaced from the eyes 15 thereof for a distance to permit of a sheet of music to be inserted thereunder, as will be hereinafter more fully described. Connecting the wires 16 and the connecting portion 14 is a plurality of other wires 17. It will thus be observed that the wires 16 and 17 coact to form a foraminous backing for the leaf. Carried by the arms 12 and 13 and the connecting portion 14 are clips 18, of any suitable construction. Disposed around the pin 9 adjacent its outer ends are coil springs 19 and 20 respectively. The spring 19 has one end rigidly connected to the pin 9, and its other end rigidly connected to the upper arm 12 of one of the leaves. The spring 20 has one end rigidly connected to the pin 9 and its other end rigidly connected to the lower arm 13 of the other leaf. By means of these springs the leaves are adapted to be resiliently held upon the left side of the frame. In order, however, to hold said leaves upon the right side of the frame, I have provided a pair of latches which are each designated as a whole by the reference letter B. Each of these latches is formed from a strip of sheet metal, and one end constitutes a finger piece 21. Ears 22 project from opposite sides of the finger piece 21, and are each formed with a perforation 23 wherethrough passes one end the end arms 5 of the frame. The finger piece 21 terminates beyond the ears 22 in an offset hook 24 adapted to engage the connecting portion 14 of either of the leaves A,

and thereby retain the said leaf in its open position; that is, on the right hand side of the frame. The hook 24 extends forwardly, so that it will be disposed normally in a line intermediate the arm 5 of the frame and the connecting portion 14 of the leaf. In order to release either of the leaves the finger piece 21 is depressed and the hook 24 is thereby raised, thus releasing the leaf and permitting its spring to shift the same to the left hand side of the frame. Collars 25 are disposed around the arm 5 directly below the latches B for holding the same in proper position.

In practice, when it is desired to insert a piece of music the upper and lower arms 6 and 7 of the frame are sprung apart to permit of the withdrawal of the hinge pin 9 and the leaves carried thereby. The back sheet of the piece of music is then positioned upon the frame. The second sheet of music is then inserted, the positioning of the sheet in this manner being rendered possible by reason of the fact that a sufficient space is created between the eyes 15 and the adjacent wire 16 of each leaf.

What is claimed is:—

In a music leaf turner, the combination with a main frame formed from a single length of wire and comprising upper and lower arms and side arms, the upper and lower arms being each centrally formed with laterally extending eyes, a pin having its ends fixedly secured in said eyes, a collar fixed to the pin directly above the bottom eye, a pair of leaves connected to the pin and adapted to swing upon either side of the frame, coil springs respectively disposed around the pin at each end thereof, one end of each spring being fixedly connected to the pin and the other end fixedly secured to a respective leaf for normally urging said leaves to one side of the main frame, and clips pivoted on one side arm of the frame for engaging the leaves to hold the latter against the tension of said springs.

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

JAMES E. LIVINGSTON.

Witnesses:

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ROY T. ALFORD.