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K. H. DILLON.

LEAF TURNER.

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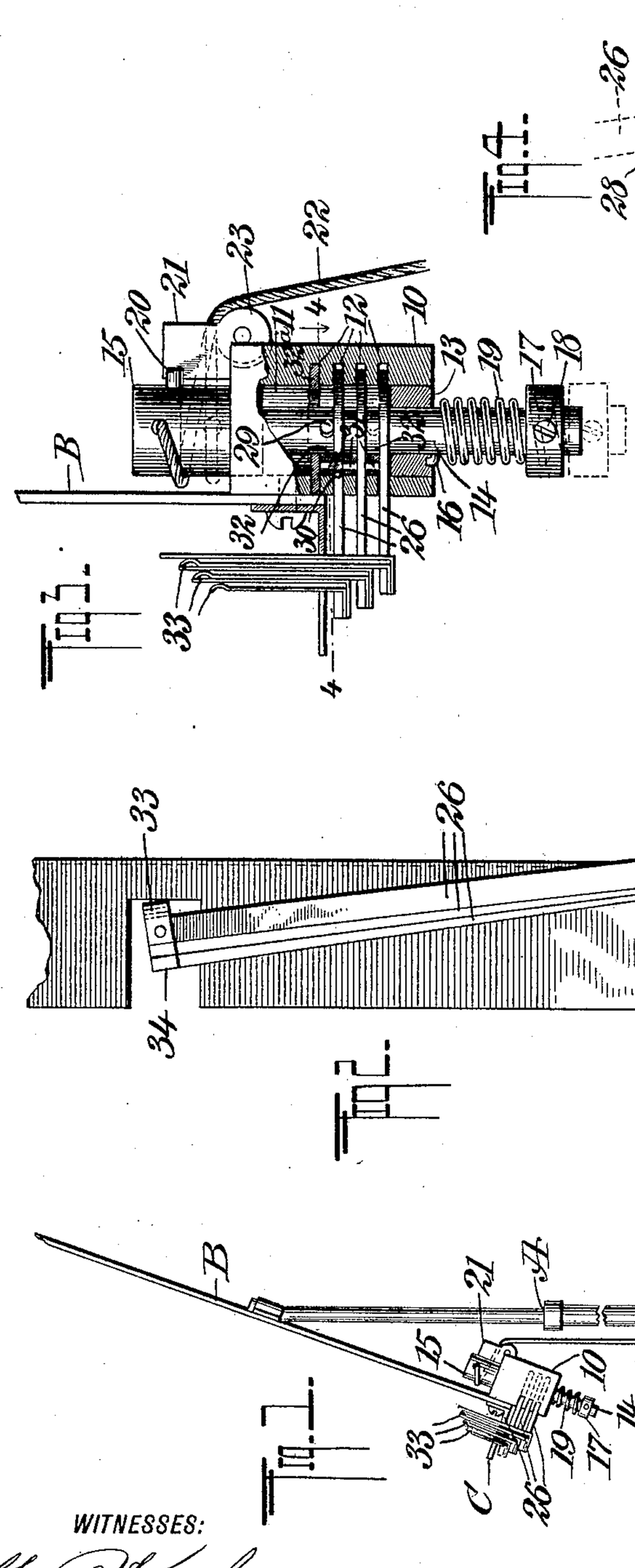

FIG. 1.

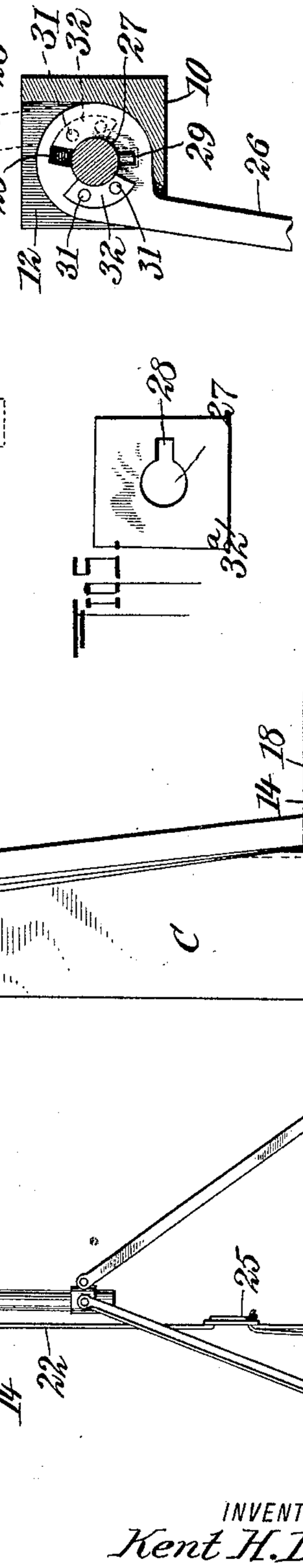

FIG. 4.

FIG. 5.

FIG. 2.

FIG. 3.

WITNESSES:

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LEAF-TURNER.

No. 829,855. Specification of Letters Patent. Patented Aug. 28, 1906.

Application filed September 25, 1905. Serial No. 279,950.

To all whom it may concern:

Be it known that I, KENT H. DILLON, a citizen of the United States, and a resident of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and Improved Leaf-Turner, of which the following is a full, clear, and exact description.

My invention relates to means for turning sheet-music and the like, it having for its principal object the provision of a simple and efficient apparatus of this character.

It consists in the various features and combinations hereinafter described and more particularly claimed.

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 side elevation of a music-stand, showing one embodiment of my invention applied thereto. Fig. 2 is an enlarged bottom plan view of the rack portion of the stand and the turning apparatus. Fig. 3 is a broken sectional elevation through the rack and turner. Fig. 4 is a horizontal sectional detail on the line 4 4 of Fig. 3, and Fig. 5 shows a top plan view of the closing-plate.

A designates a stand of any usual or desired form, having a rack B, which includes a music-supporting bar C. In the present instance my improved leaf-turner is shown as supported upon the rear of the rack-bar, and in this arrangement a block or supporting member 10 is secured to said bar by screws. Through the block extends a longitudinal passage 11, while through its inner rear side is a series of transverse parallel slots 12. The lower end of the passage is closed by a head 13, through which is an opening to receive a shaft 14, having at its upper extremity a cylindrical enlargement 15, bearing in the passage. Connected to the support, in the present instance by an angular end 16, engaging a depression in the head, and to a collar 17, secured upon the shaft outside the support by a set-screw 18, is a spring 19 of spiral form and exerting its tension torsionally upon the shaft and also longitudinally thereof to force it downwardly. The torsion of the spring acts to hold a pin or projection 20 from the enlargement 15 normally in contact with an extension 21 from the support, and thus limit its rotative movement in this direction. The shaft may be turned in the opposite direction by a cord or flexible member 22, secured to the enlargement 15 and at least partly encircling it, it then passing over a roll 23, journaled in the extension 21, and downwardly to a treadle 24, fulcrumed upon the stand in a position convenient for operation by the foot of the user. A suitable adjusting device 25 may be included in the cord for the purpose of varying its length.

Extending into the slots 12 are arms or turning members 26, here shown as three in number, having through them axially of the support-passage openings 27, through which the shaft passes. From these openings in at least the upper two arms extend slots 28 to permit the passage of a pin or projection 29 from the shaft. In each of the arms are openings 30 to separably receive pins 31, fixed to blocks or contact members 32, lying in the support-passage at the upper sides of the arms. Within the upper slot 12 is a plate 32^a, having an opening and connected slot similar to the arms. At the outer extremities of the arms are shown fingers, preferably in the form of spring-clips 33, for engaging the leaves to be turned. As here illustrated, these fingers enter in their extremes of movement recesses 34 in the bar C.

In assembling the apparatus, the support having been properly secured to the stand, the lower arm is inserted in its slot and the block 32 introduced through the opening at the upper end of the passage and its pins brought into engagement with the openings in the arm. The other arms and their contact-blocks are applied in the same manner and the plate 32^a placed within its slot. The shaft is now inserted through the plate and arm-openings and the spring and collar attached. In their normal position all the arms are at the right of the rack, as is shown in Fig. 2 of the drawings, the clips successively engaging the leaves to be turned. To shift the first leaf, the operator depresses the treadle with his foot, this rotating the shaft through the cord against the torsional stress of the spring. As the shaft turns the pin 29 contacts with the block of the upper arm and swings said arm to the left, moving the sheet with it. Upon relaxing the tension upon the cord the torsion of the spring returns the shaft to its initial position, at which the pin 20 contacts with the support extension. With the torsional stress relaxed the spring exerts its force longitudinally of the shaft, and this draws the pin 29 through the slot 28, which by the rotation of the arm has been

brought into the proper position to permit its passage. The pin now comes into coaction with the second arm, which may be operated in the same manner, as may also the third. When all the arms have been turned, the slots 28 are in alinement, and at this time by drawing the shaft upwardly the projection 29 may be restored to its original position, when the entire operation may be repeated. It will be seen that the plate 32ª will both limit this upward or setting movement of the shaft by the contact of the pin 29 therewith and will also prevent the displacement of the upper contact-block.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A leaf-turner, comprising a support, a shaft journaled in the support, a plurality of arms loosely mounted on the shaft and normally lying to one side of the support, means for partially rotating the shaft, means on the shaft for engaging the arms whereby to swing them to the opposite side of the support, and a spring for returning the shaft to its original position and for moving it into position to engage with the succeeding arm.

2. A leaf-turner, comprising a support, a shaft having a projection and rotatably mounted in the support, means for maintaining the shaft in a definite position, a plurality of arms each having a passage to receive the shaft and a projection for contacting with the projection thereof, at least one of said arms having a slot to receive the projection on the shaft said arm normally lying with the slot out of line with the projection, means whereby to partially rotate the shaft to swing the arm whereby to bring the slot into alinement with the projection on the shaft, and means for returning the shaft to its original position and for moving the projection through the slot.

3. A leaf-turner comprising a support, a plurality of arms pivoted thereon, each of said arms having a projection and at least one of the arms being provided with a slot, a shaft having a projection contacting with the arm projection and movable through the slot, and a spring connected with the support and exerting a torsional and longitudinal force upon the shaft.

4. A leaf-turner comprising a support, a plurality of arms pivoted thereon, each of said arms having a projection and at least one of the arms being provided with a slot, a shaft having a projection contacting with the arm projection and movable through the slot, a spring connected with the support and shaft, and a flexible member secured to and encircling an element rotatable with the shaft.

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

KENT H. DILLON.

Witnesses:
ROBERT W. CLOYD,
W. M. SEITZINGER.