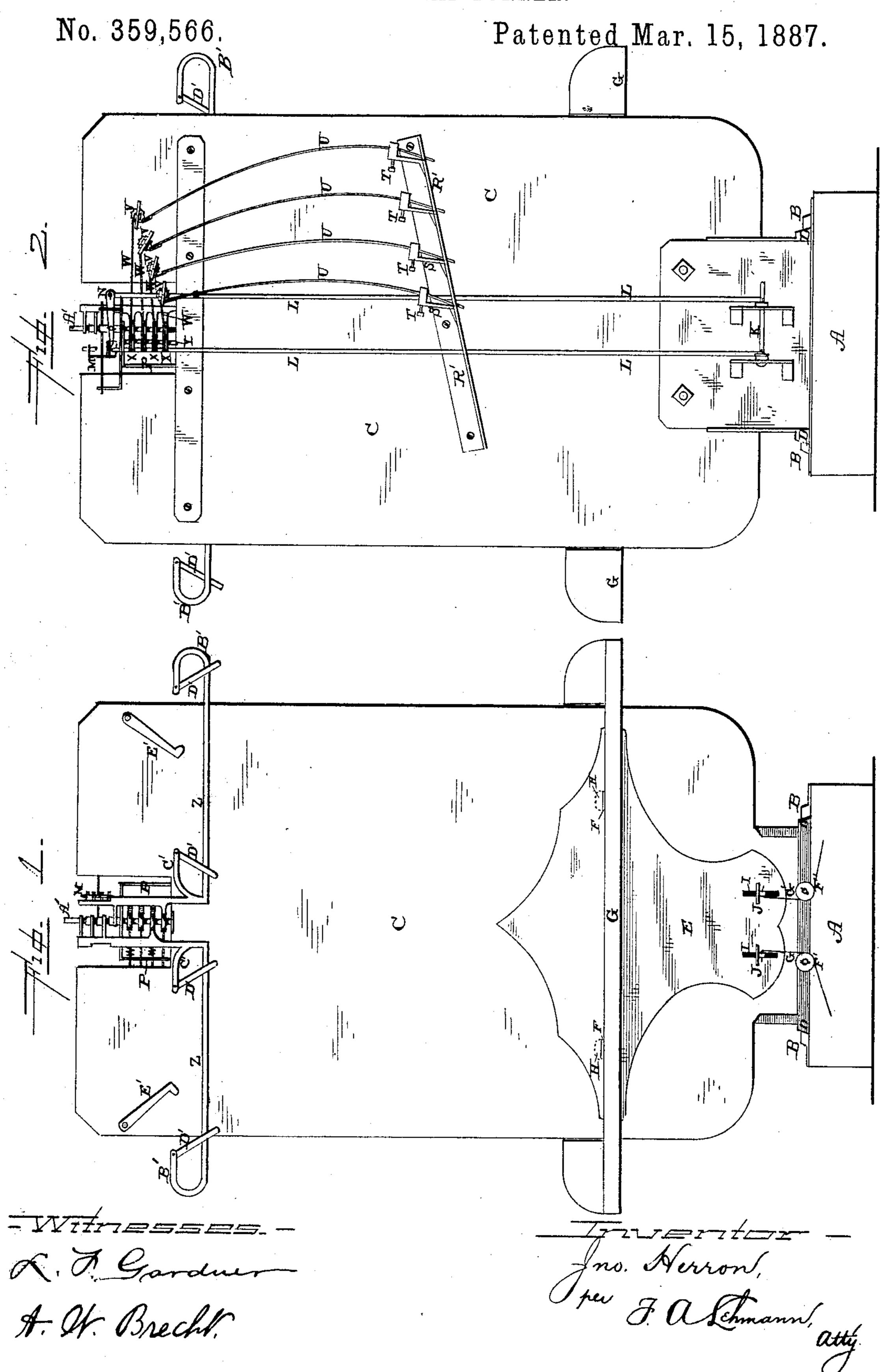
## J. HERRON.

#### MUSIC LEAF TURNER.

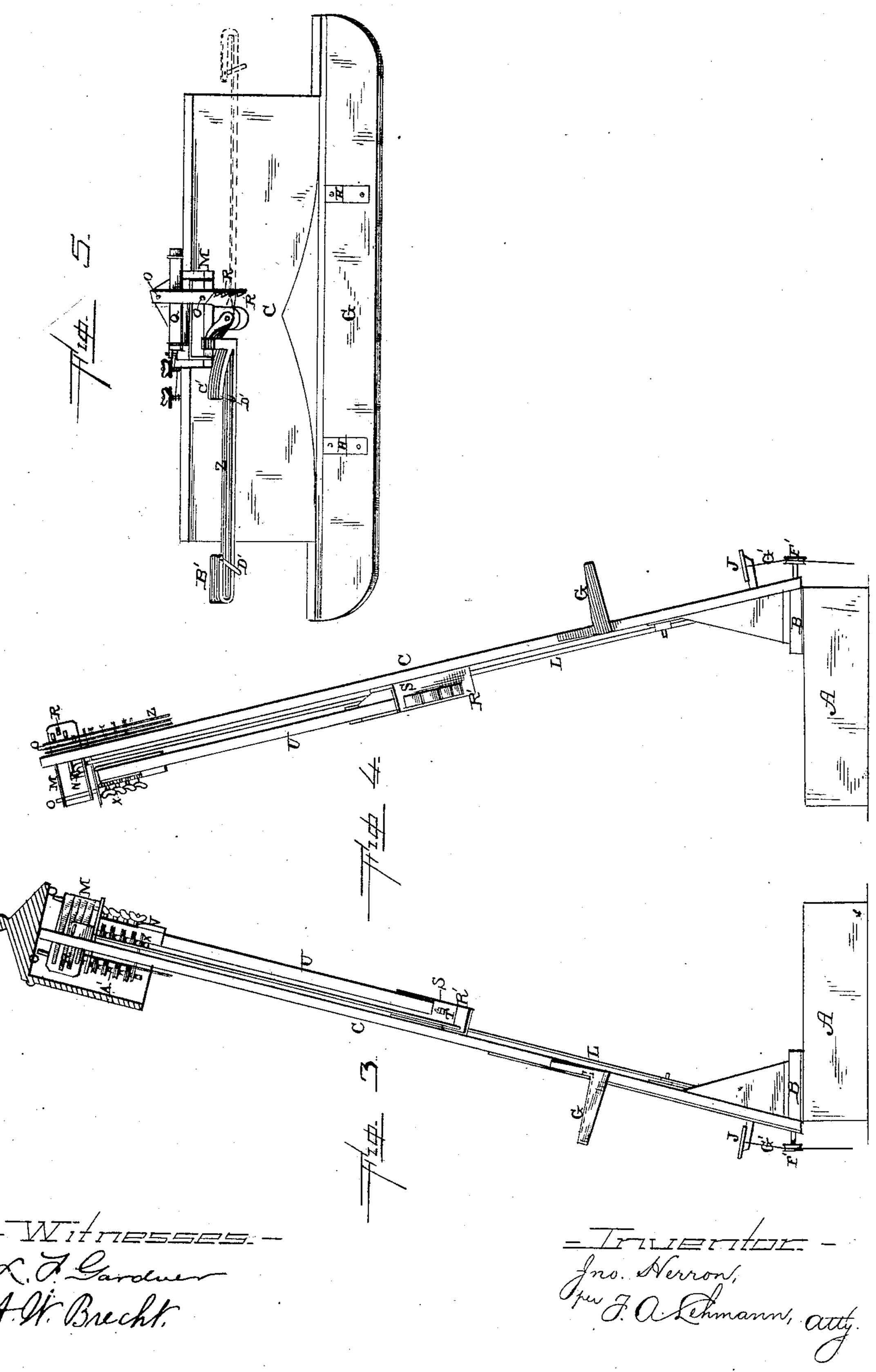


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### MUSIC LEAF TURNER.

No. 359,566.

Patented Mar. 15, 1887.



(No Model.)

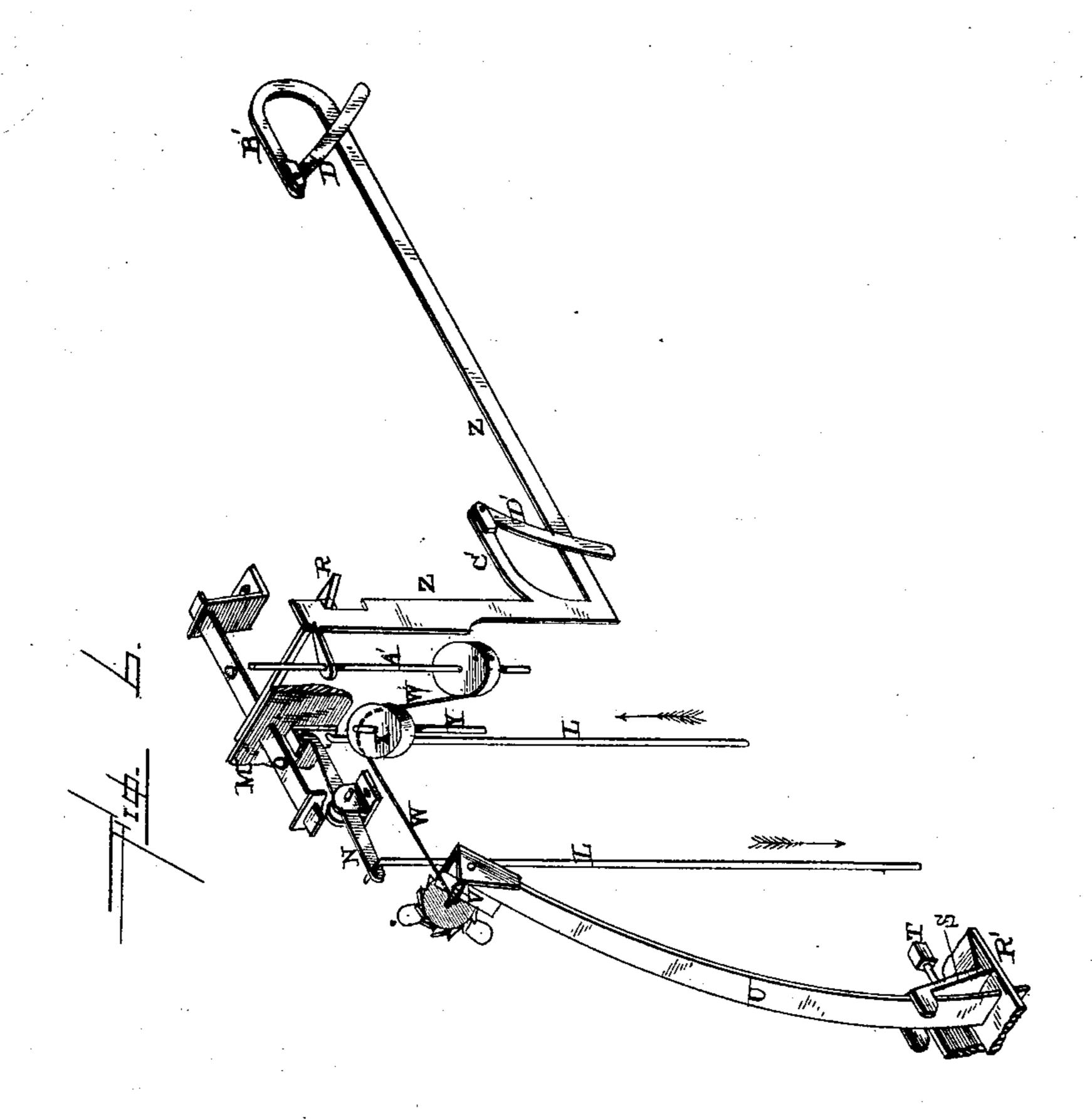
3 Sheets—Sheet 3.

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-Witnesses-X. H. Gardner A. W. Bricht Ino. Nerron,

per 3. a. Schmann,

atty.

# United States Patent Office.

JOHN HERRON, OF OLNEY, ILLINOIS.

#### MUSIC-LEAF TURNER.

SPECIFICATION forming part of Letters Patent No. 359,566, dated March 15, 1887.

Application filed November 6, 1885. Serial No. 182,036. (No model.)

To all whom it may concern:

Be it known that I, JOHN HERRON, of Olney, in the county of Richland and State of Illinois, have invented certain new and useful 5 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 pertains to make and use it, referto ence being had to the accompanying drawings,

which form part of this specification.

My invention relates to an improvement in music-leaf turners; and it consists in, first, the combination of two or more operating-rods, 15 a vertically-moving spring-actuated frame which is provided with spring-catches, and the metallic holders which are applied to the sheets of music; second, the combination of the operating-rods, the vertically-moving 20 spring-actuated frame provided with springcatches, the metallic holders which are applied to the sheets of music and which engage with the spring-catches, metallic springs, connecting-cords, and pulleys, whereby the metallic 25 holders can be successfully released from the spring-actuated frame, and thus made to turn the sheets of music; third, the combination of the metallic springs for causing the sheets of music to turn with ratchets, which are applied 30 to their upper ends, and the connecting ends, whereby the tension of the springs can be increased or decreased at will; fourth, the arrangement and combination of parts, which will be more fully described hereinafter.

The object of my invention is to provide a cheap and simple mechanism which can be placed in front of the player and by means of which the sheets of music can be quickly and readily turned either by the hands or feet, as

40 may be preferred.

Figure 1 is a front elevation of a device embodying my invention, a portion of the top piece being broken away so as to show the operating mechanism. Fig. 2 is a rear view of 45 the same. Figs. 3 and 4 are edge views taken from opposite sides. Fig. 5 is a plan view. Fig. 6 is a detail view of one of the turners by itself.

A represents the base, which has the two 50 dovetailed guides B formed upon its top. The

board or support C, which may be of any height and width desired, has corresponding flanges, D, formed upon its lower end, and these flanges are made dovetailed and tapering, so as to fit in the guides B, and thus sup- 55 port the board C in position upon the top of the piano, or any other suitable support that

may be provided for it.

Secured to the front of the lower end of the board or support C is a metallic plate, E, 60 which has the two holes F made through it. A narrow strip or board, G, is used for supporting the music or music-book, and this strip has secured to its top and projecting beyond its rear edge two metallic hooks, H, 65 which catch in the openings F, and thus support the strip in position. In order to remove this board or strip G, it is only necessary to turn its outer edge upward, when the strip can be readily removed.

Formed through the metallic plate E and the lower end of the board or support C are two openings, I, through which the two operating-levers J extend far enough to be readily and quickly operated by the fingers of the 75 player whenever it is desired to turn over a leaf. These two levers J are pivoted upon a cross-rod, K, which passes through suitable supports prepared for it upon the rear side of the board, and to which levers J, between their 80 fulcrums and the rear side of the board C, are attached the operating rods L. These rods L extend upward almost to the top of the board C, and one is fastened directly to the verticallymoving spring-actuated frame M and the other 85 to the operating-lever N, which is fulcrumed at its center and which operates the frame M whenever its corresponding lever J is depressed. The frame M moves vertically upon the two guides O, which project upward from 90 the frame P, and which has the spring Q passing through it, so as to always return it to position after having been operated through the levers J.

For the purpose of turning a sheet of music, 95 the spring Q is here shown as passing through two flanges which rise from the frame P and through the frame M; but the spring may be applied in any other manner that may be preferred. The spring Q, whenever it is free to 100 359,566

act, returns the frame M to its proper position after having been either raised or lowered. This frame M carries a number of springcatches, R, which correspond to the number 5 of arms or levers used for holding the sheets of music, and these spring-catches are arranged in such relation to each other as to release each spring-arm in its regular turn, and never to release more than one at a time.

Secured to the back side of the board C is a metallic casting, R', from which rise the bearings S, through the upper ends of which pass the set-screws T. Through the casting R', at the feet of the bearings S, are made holes, 15 through which the lower ends of the springs U pass. The set-screws T bear against the sides of the spring U and regulate their tension, so that the arms which are attached to the sheets of music can be made to move with 20 greater or less force, as may be desired, and thus turn the leaves of the music attached to them more or less quickly. To the upper end of each spring U is connected a small drum, V, around which is wrapped the cord, 25 wire, or chain W. Each drum is provided with a handle for operating it and a ratchet and pawl, so that after the cord has been once

30 or chain cannot become unwound. In exact proportion as the cords W are wrapped upon the drums V, so the springs U are made to exert a tension upon the arms Z for the purpose of causing them to move more or less 35 freely when left free to do so. Each cord, wire, or chain W passes around a guiding-pulley, X, which is placed upon a vertical rod, Y, which is secured in the frame P. These pul-

wound upon the drum to such an extent as

to adjust the tension of its spring U the cord

leys X simply serve as guides to change the 40 direction in which the cords W extend. Each one of these cords W has its front end passed around a pulley which is connected to its corresponding arm Z, which has one of the sheets of music connected to it. These arms Z are 45 pivoted upon the rod A', which passes through the frame P, and each spring, through its cord W, exerts its tension upon its corresponding

arm for the purpose of causing it to swing from one side of the board to the other, in 50 order to return the sheet of music which is connected to it in the usual manner. Each arm Z has a recess cut in its outer edge, and this recess forms shoulders, with which the spring-catches in the frame M engage for the

55 purpose of holding the arms in position ready to turn the sheets of music. When one of the levers J is depressed, it moves the frame M either up or down, so that the spring-catches will release the arm Z, and thus allow the

60 springs U to swing them around from one side of the board C to the other. The upper ends of the springs U have an endwise movement, while their lower ends are held rigidly in place. When a catch, R, is released, the upper free

65 end of the corresponding spring U will move to the left, conveying with it the drum, and l

consequently drawing after it the cord and turning the leaf of music.

Each one of the arms Z is provided with a turned-up end, B', and an arm, C', and to this 70 turned-up end B' and arm C' are connected the pivoted springs D', which catch over the outer sides of the sheets of music and bind them to the arms. These springs D' can be turned up out of the way, so that the sheets of 75 music can be readily brought in contact with the arms Z, and then, by turning down the springs D', the sheets of music are connected to the arms, so as to be turned thereby. There may be any desired number of these arms, as 80 the number is a mere matter of fancy.

Pivoted to the upper part of the board C are the two springs E', which serve to clamp the two outside sheets of music in position upon the board. These two springs hold the 85 first and last sheets always in place ready to be played, and at the same time support the music in position upon the board. Where a piece of music consists of only two sheets, the two pieces of music may either be supported 90 upon the strip G, or it may be placed under the springs E' and held entirely in position by them.

To the lower end of the board Care attached two guiding-rollers, F', around which two 95 cords, G', which extend in opposite directions, pass to the operating levers J. These cords or wires G', after passing round the guidingpulleys, extend toward opposite ends of the piano and are connected to treadles of any 100 kind, by means of which the player can turn the sheets of music by means of the feet, instead of having to stop to operate one of the levers J by hand.

Having thus described my invention, I 105 claim-

1. The combination of the board or support C and the metallic plate which is connected thereto, and which is provided with the holes F, with a support, G, provided with the hook 110 H, to catch in the openings F, substantially as described.

2. The combination of the operating levers J, the rods L, connected thereto, the verticallymoving frame provided with spring-catches, 115 and the pivoted arms which hold the sheets of music, and the springs for causing the arms to partially revolve, substantially as set forth.

3. The combination of the vertically moving spring-actuated frame provided with spring- 120 catches, and rods and levers for moving the frame, with the spring-actuated arms having shoulders to engage with the spring actuated catches, substantially as specified.

4. The combination of the springs U, the 125 cords W, the arms for holding the sheets of music, the spring-catches for holding the arms, and the rods and levers for operating the spring-catches, substantially as shown.

5. The combination of the springs U, pro- 130 vided with drums and ratchets at their upper ends, the cords W, guiding-pulleys, arms Z,

and the springs which are connected to the

arms, substantially as set forth.

6. The combination of the operating-levers J, the rods L, connected thereto, the lever N, the vertically-moving spring-actuated frame M, connected directly to one of the rods L, the spring-catches connected to the frame M, springs U, the connecting-cords, and the arms

which have the sheets of music connected to them, substantially as specified.

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

JOHN HERRON.

Witnesses:

FLETCHER T. PHILLIPS, J. W. DUNLAP.