

No. 687,869.

Patented Dec. 3, 1901.

C. A. TAGUE.  
MUSIC LEAF TURNER.

(Application filed Apr. 24, 1901.)

(No Model.)

3 Sheets—Sheet 1.

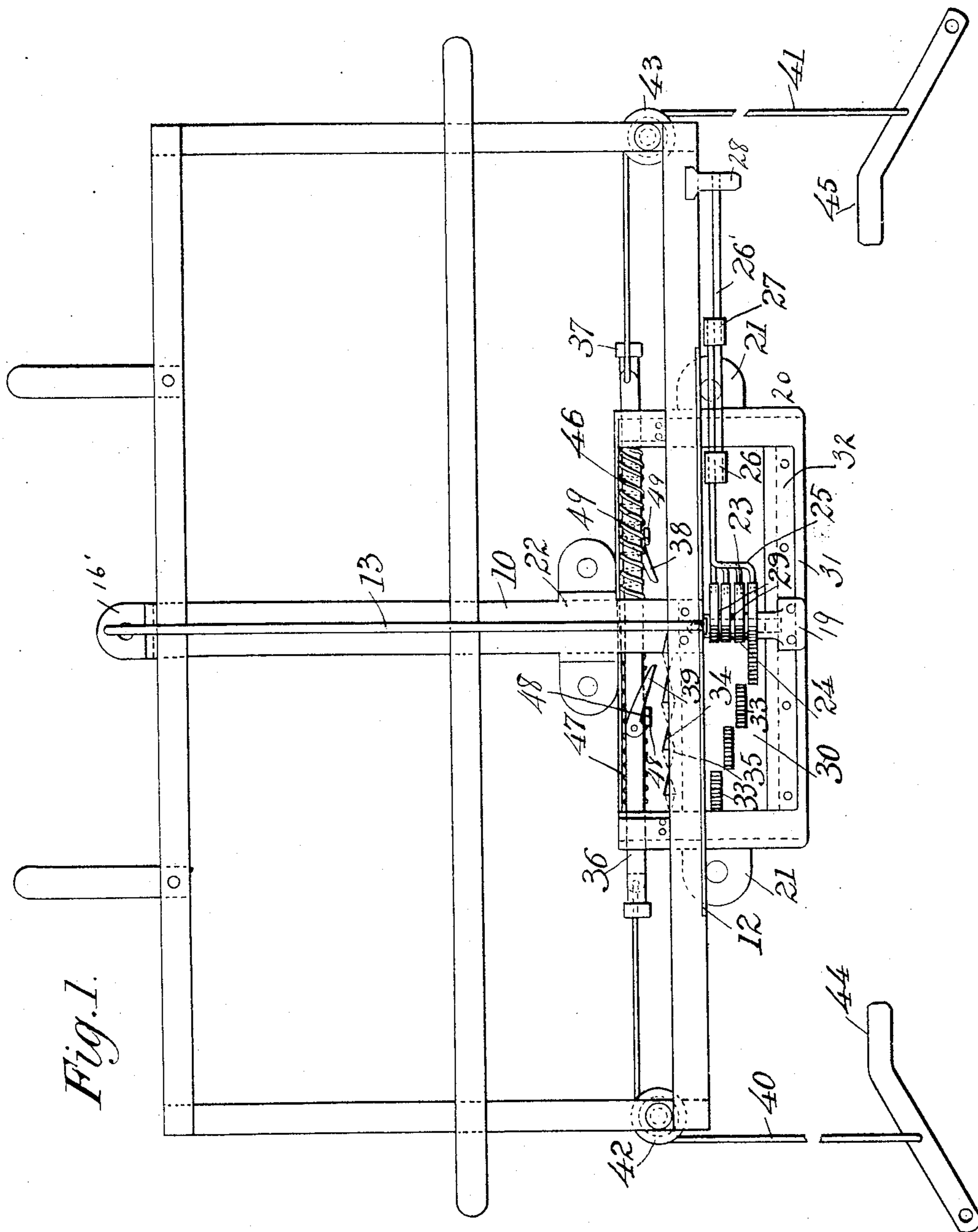


Fig. 1.

Witnesses:

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Geo. H. Chandler.

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Fig. 3.

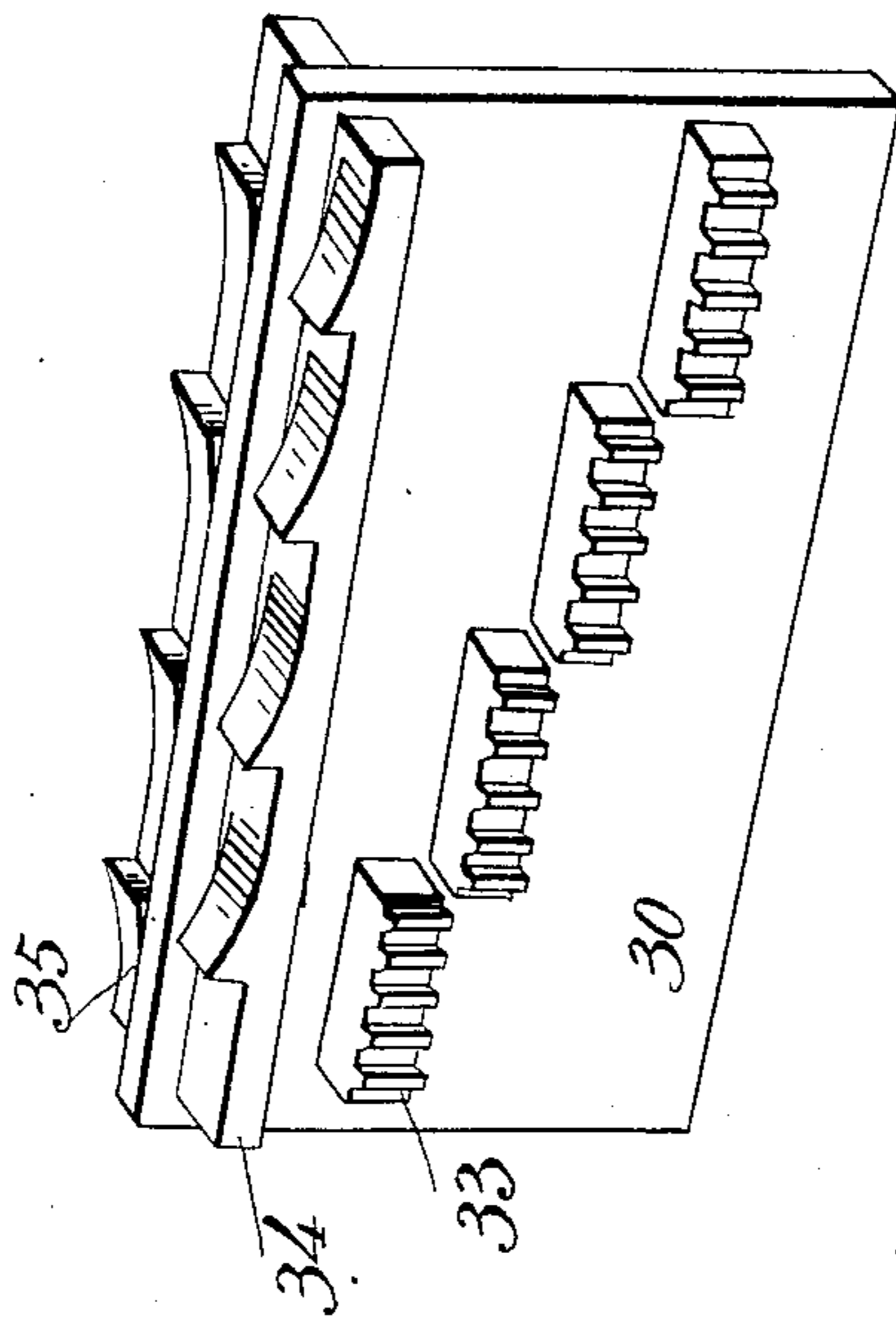


Fig. 5.

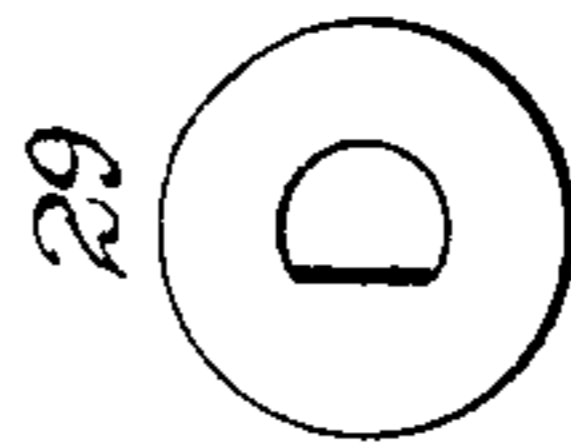


Fig. 4.

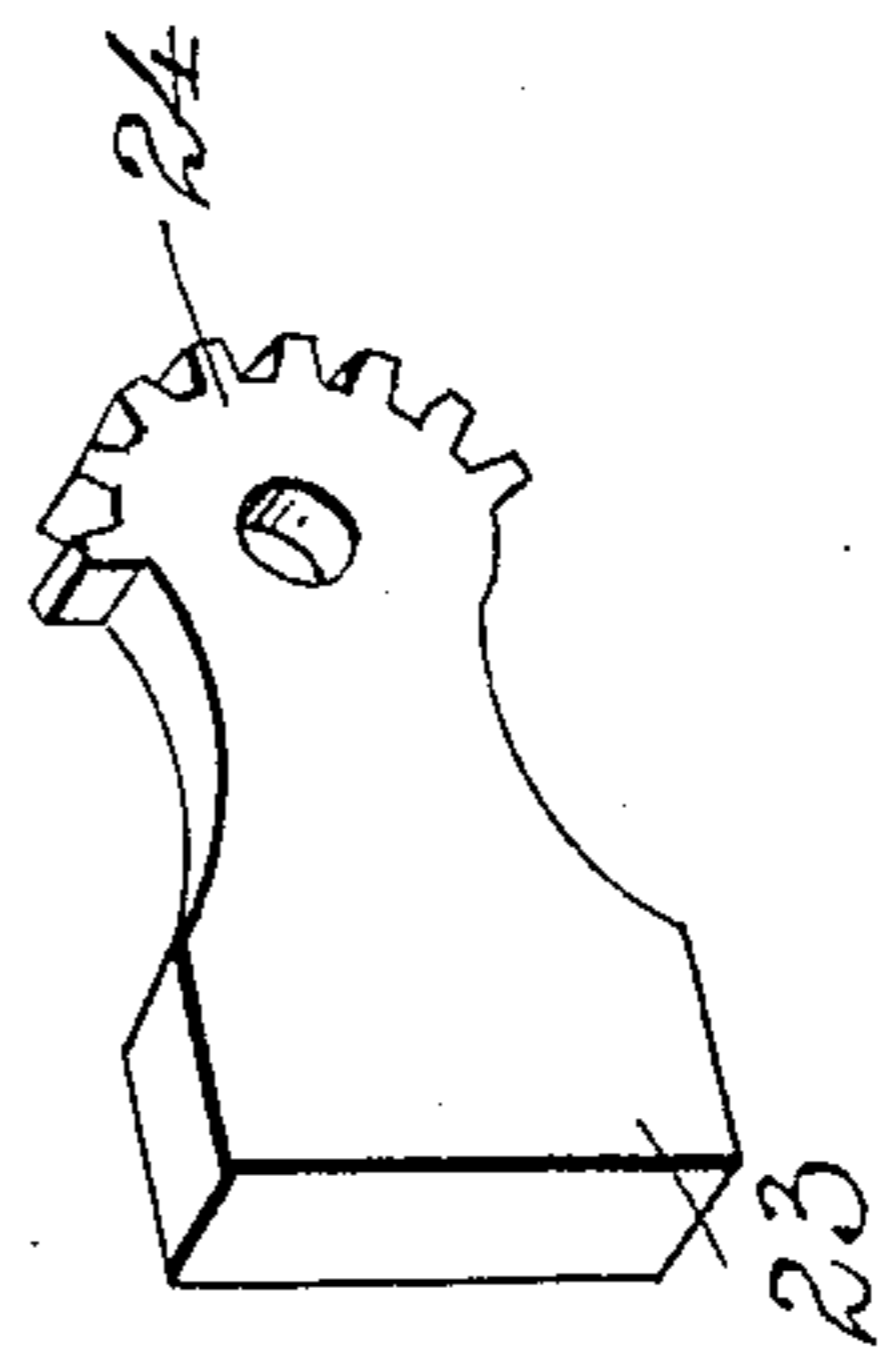
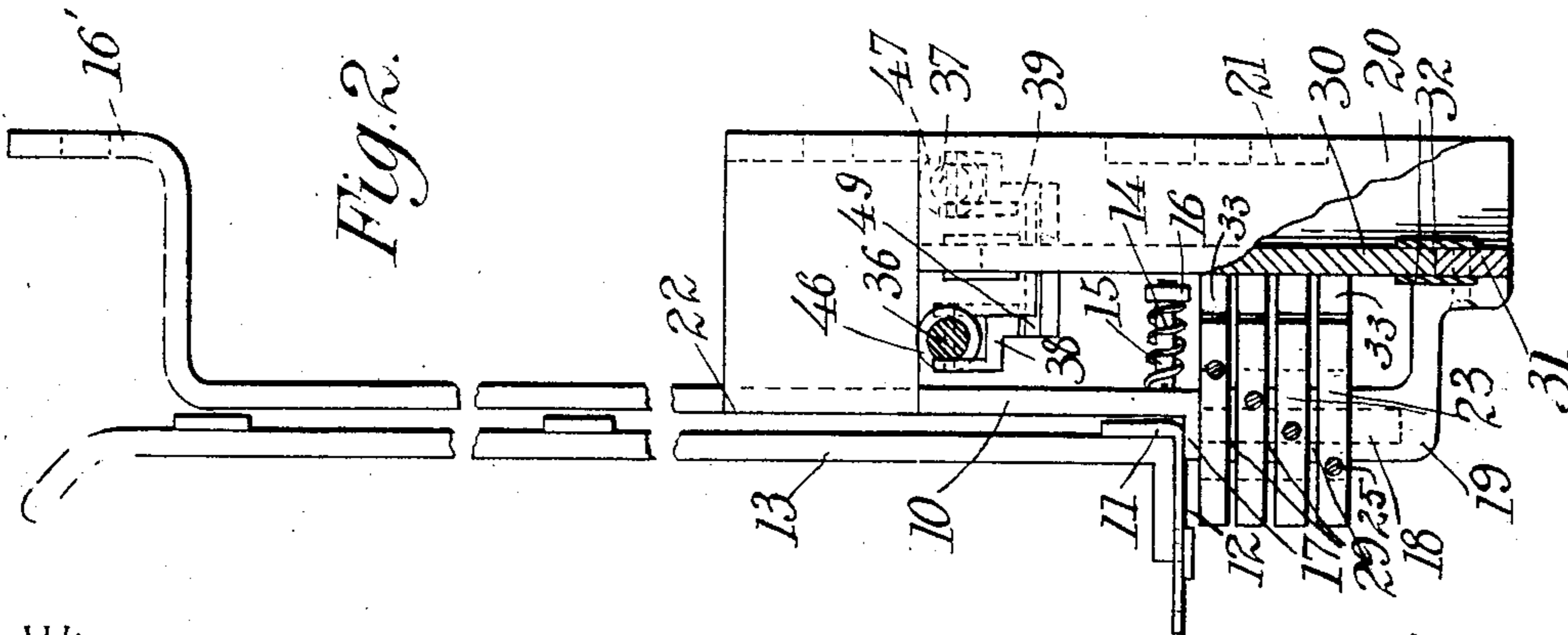


Fig. 2.



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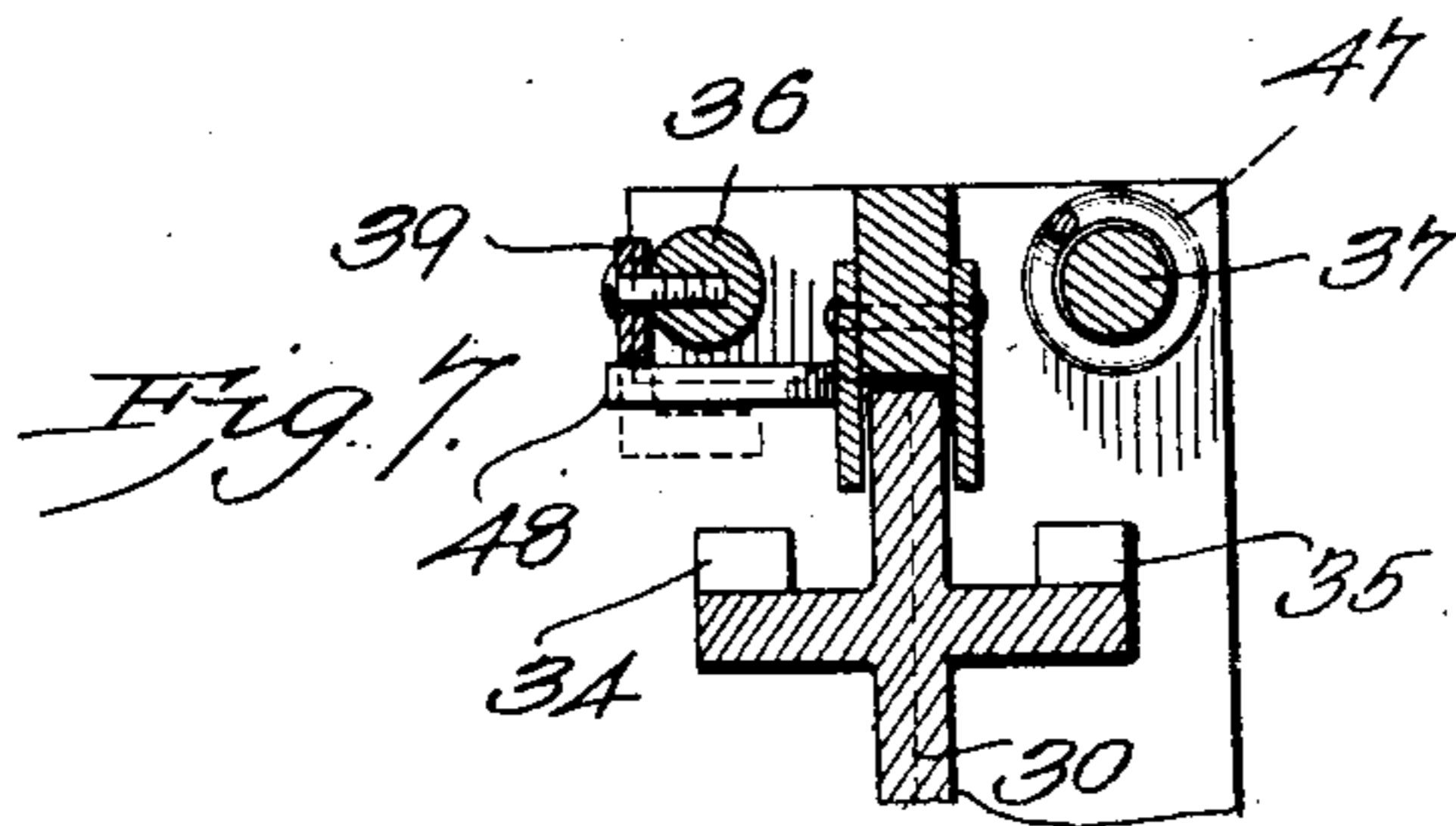
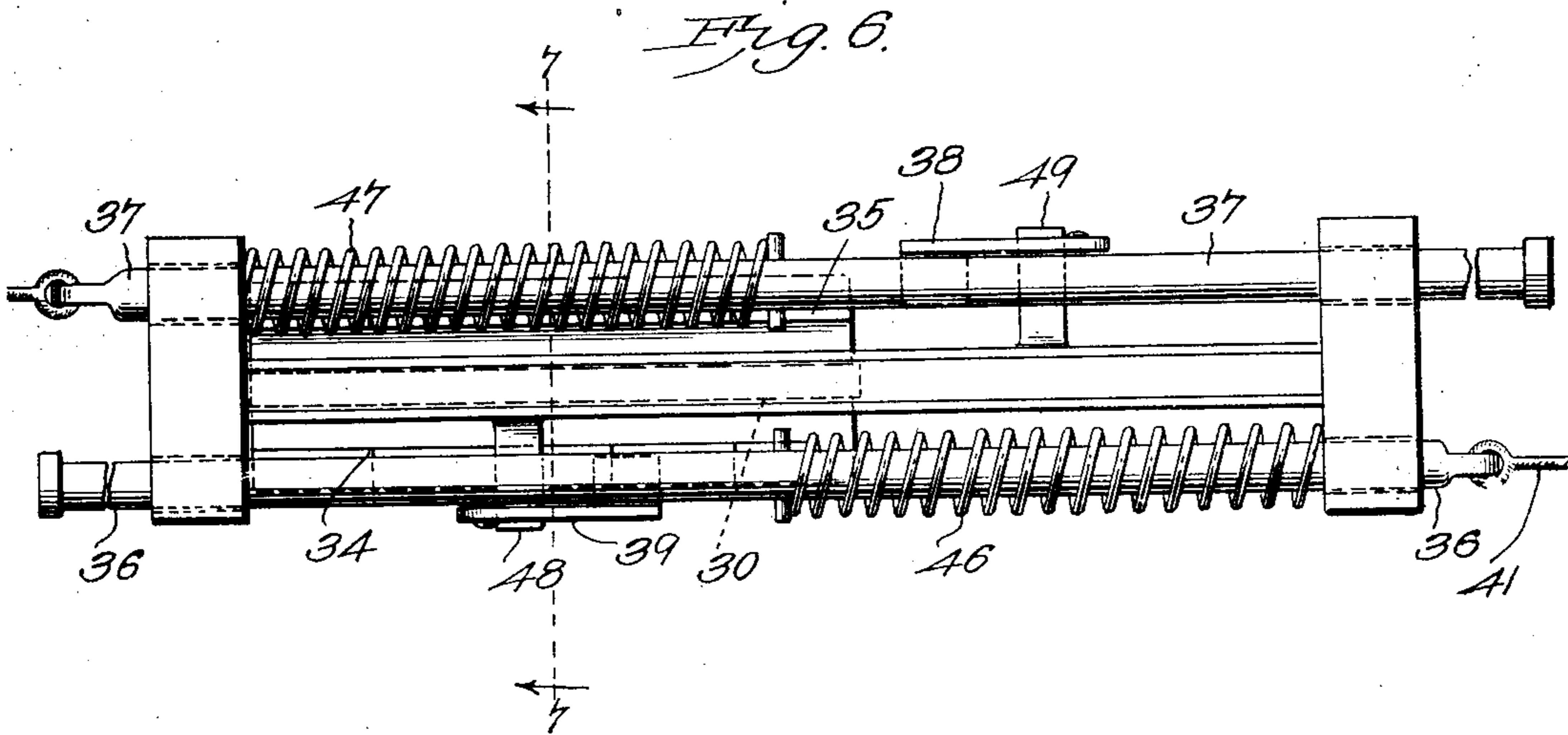
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3 Sheets—Sheet 3.



Witnesses  
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# UNITED STATES PATENT OFFICE.

CHARLES ALLEN TAGUE, OF ROCHESTER, NEW YORK.

## MUSIC-LEAF TURNER.

SPECIFICATION forming part of Letters Patent No. 687,869, dated December 3, 1901.

Application filed April 24, 1901. Serial No. 57,309. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES ALLEN TAGUE, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented a new and useful Music-Leaf Turner, of which the following is a specification.

This invention relates to music-leaf turners; and it has for its object to provide a device of this nature which will be simple in construction and most efficient in its operation, a further object of the invention being to provide a device which may be reversely operated to return music-leaves to their former positions when parts are to be repeated, other objects and advantages of the invention being apparent from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a front elevation showing the music-leaf turner with the operating-pawls in their disengaged positions. Fig. 2 is an end elevation of the device, a portion thereof being broken away to show the mounting of the shifting plate. Fig. 3 is a perspective view of the shifting plate. Fig. 4 is a detail perspective view showing the head of one of the turning-arms. Fig. 5 shows in plan one of the spacing-washers for the heads of the shifting arms. Fig. 6 is a view in plan showing more clearly certain parts not fully exhibited in the other figures. Fig. 7 is a transverse sectional view taken on the line 7-7, Fig. 6, and looking in the direction of the arrow thereon.

Referring now to the drawings, the device consists of a central back plate 10, to which is secured an angle-plate 11, having a forwardly-projecting portion 12, forming a music-rest, the back plate and angle-plate having the usual music-supporting frame connected thereto, as shown. The music is disposed with the lower edges of the pages thereof upon the portion 12 and is held to lie closely against the back plate 10 by means of a retaining-bar 13, which is held yieldably against the back plate by means of a spiral spring 14, disposed upon the stem 15, passed through an opening in the back plate, one end of the spring bearing against the back plate and the opposite end against an adjusting-nut 16 on

the stem. The upper end of the plate 10 is bent rearwardly to form the attaching-foot 16', having a perforation to receive an attaching-screw, and the lower end of the plate has the rest 17 for the plate 11, and below which rest it is reduced and formed cylindrical to present the spindle 18. The spindle 18 is engaged in the socket at the end of a bracket 19, bolted against the front and adjacent to the lower edge of a casing 20, having the perforated ears 21, which receive attaching-screws. The upper portion of the back plate is connected with the casing by the portion 22.

Upon the spindle 18 are rotatably disposed the heads of the turning arms. Each of these arms includes the head in the form of a block 23, having a segmental gear 24 at one end and from the opposite end of which projects the section 25 of an arm, this section being in the form of a rod having a slide 26 intermediate of its ends, through which is slidably passed the outer section 26' of the arm, this outer section having also a slide 27, which receives the section 25. At the outer end of the section 26' is a clip 28 for engagement with the lower edge of a music-sheet. The heads are perforated to receive the spindle, and the lowermost head rests upon the bracket 19, while between each pair of heads is a washer 29, (shown in detail in Fig. 5,) one side of which is flattened to fit upon the spindle, one side of which is correspondingly flattened. The washers are thus held against rotation and prevent rotation of one head from another. Each inner member or section 25 of an arm is bent upwardly from the head, excepting the uppermost arm, so that all of the arms at their outer portions lie in the same horizontal plane and are concealed one by another. By engagement with the gears of the heads successively said gears, and therewith the heads, may be successively rotated to swing the arms from one position to another. To thus successively operate the heads, a shifting plate 30 is provided, the lower edge thereof being disposed upon the track 31 at the bottom of the casing and between the guide-plates 32, secured to the side faces of the track, while the upper edge is slidably engaged with the upper portion of the casing. On the front face of the shift-plate are secured or formed racks 33, one for each of the

gears of the heads, and these racks are displaced upwardly and laterally in succession and are so disposed that when the plate is moved in one direction the lowermost rack  
 5 will first engage the gear of the lowermost head and will rotate the head to correspondingly move the arm and when the rack passes from engagement with the gear the arm will have been moved to its opposite position, and  
 10 at the same time the second rack will have initially engaged the second gear, when further movement of the plate will turn the second arm and bring the third rack into initial engagement with the third gear. When the  
 15 plate has finally reached the limit of its movement, all of the arms will have been shifted. Upon return movement of the plate the gears are engaged by the racks in reverse order and the arms are returned to their former posi-  
 20 tions. To thus shift the plate and in such manner that it will have an intermittent movement, each step of which will be sufficient to move the plate to shift an arm, the upper portion of the plate has racks 34 and 35  
 25 projecting from opposite faces thereof and directed upwardly, and these two racks have their teeth disposed in opposite directions. Two rods 36 and 37 are slidably mounted in the upper portion of the casing on opposite  
 30 sides of the shifting plate 30, and these two rods carry the pawls 38 and 39 for engagement with the two racks, respectively, the pawls projecting toward each other. Attached to the outer ends of the rods are cords  
 35 40 and 41, which are taken over pulleys 42 and 43 and then downwardly to pedals 44 and 45, so that when either pedal is depressed the connected rod will be drawn longitudinally, the rods being returned when released by the  
 40 spiral springs 46 and 47, bearing at their outer ends against the ends of the casing and connected at their inner ends to the rods. These spiral springs encircle the rods, and they hold the rods normally so that the pawls  
 45 connected thereto will lie upon the cross-pieces 48 and 49, fixed to the frame of the structure, and be held raised from engagement with the racks, and thus normally there is nothing to prevent movement of the arms

from one position to another by hand. When  
 a pedal is depressed and the connected rod is moved in an active direction, the pawl slides off from the cross-piece and into engagement with its respective rack, when further movement of the rod carries the pawl  
 55 forwardly while engaged with the rack and the shift-plate is moved to actuate an arm. When the pedal is released, the rod carries the pawl to its former position, and it is ready for movement by the rod to advance the  
 60 plate another step. If the other pedal be depressed, the other pawl engages and moves the rack to move the plate and turn the proper arm in an opposite direction to its last movement. Thus the leaves of music  
 65 with which the arms are engaged are shifted first one way and then the other, depending upon the pedal that is depressed.

What is claimed is—

1. In a device of the class described, the  
 70 combination with movable turning-arms having gears, of a horizontally-movable shift-plate having racks disposed for engagement with their respective gears successively, oppositely-disposed racks carried by the plate,  
 75 and separate bars having pawls for engagement with their respective last-named racks to move the plate in opposite directions.

2. In a device of the class described, the  
 80 combination with turning-arms, of a horizontally-movable shift-plate constructed and arranged for operative engagement with the arms successively to shift them, oppositely-disposed racks carried by the plate, rods  
 85 having means for moving them, pawls carried by the rods for engagement with their respective racks to move the plate in opposite directions, and means for holding the pawls normally from engagement with the  
 90 racks to permit of shifting of the arms independently of the pawls.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CHARLES ALLEN TAGUE.

Witnesses:

C. C. EARLY,

I. M. A. DIERUF.