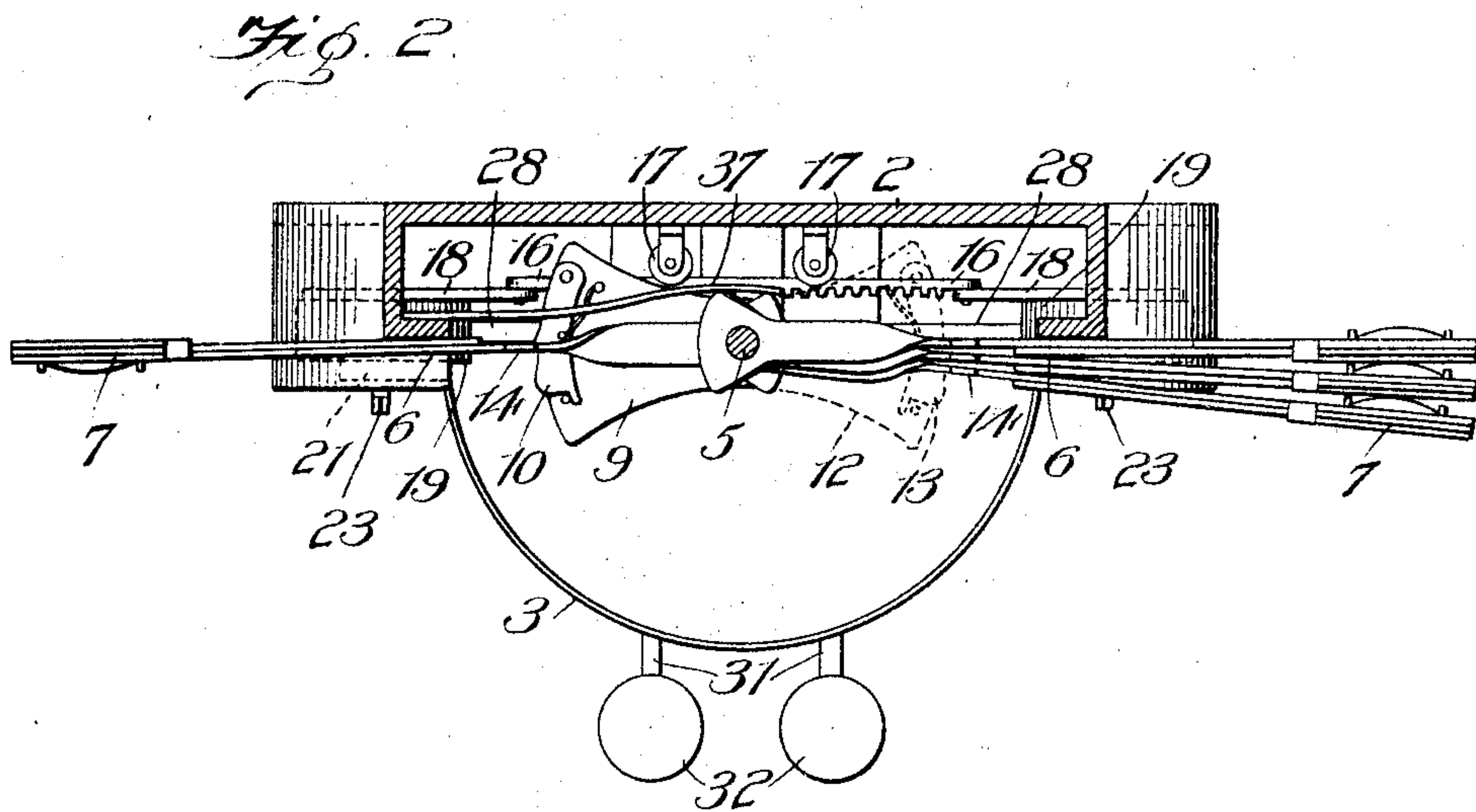
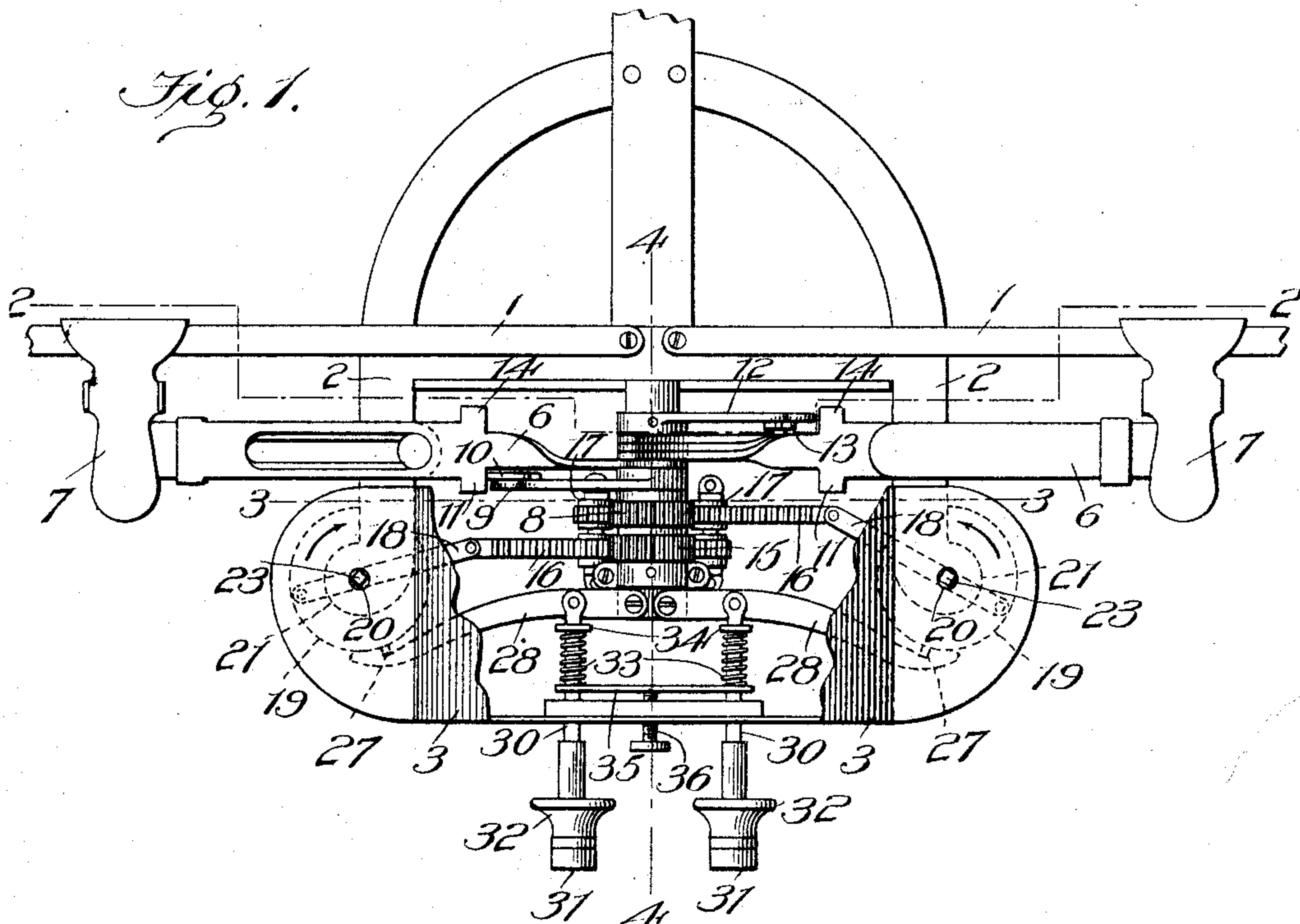


No. 815,047.

PATENTED MAR. 13, 1906.

C. E. SHULER.  
MUSIC LEAF TURNER.  
APPLICATION FILED JUNE 27, 1905.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

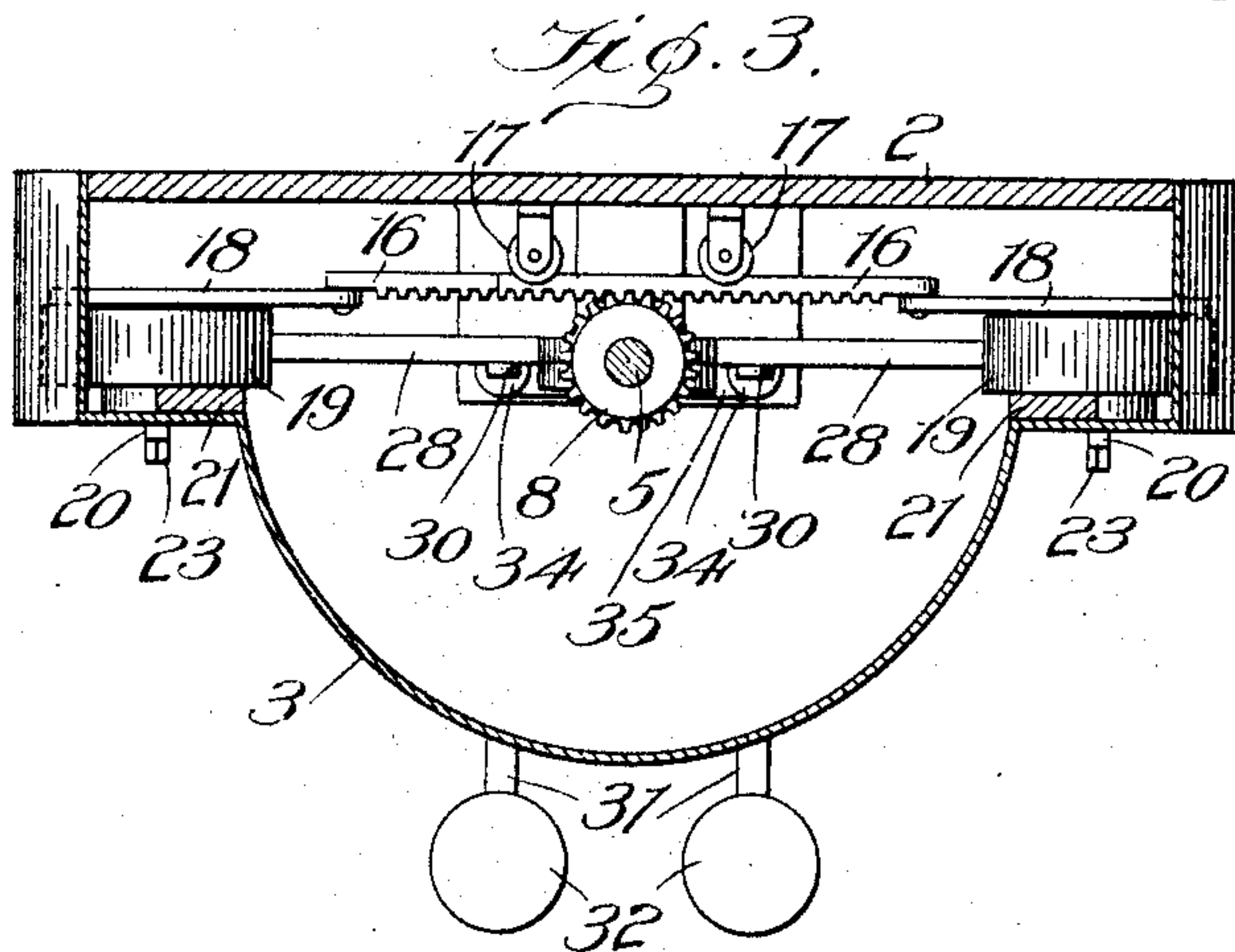


Fig. 5

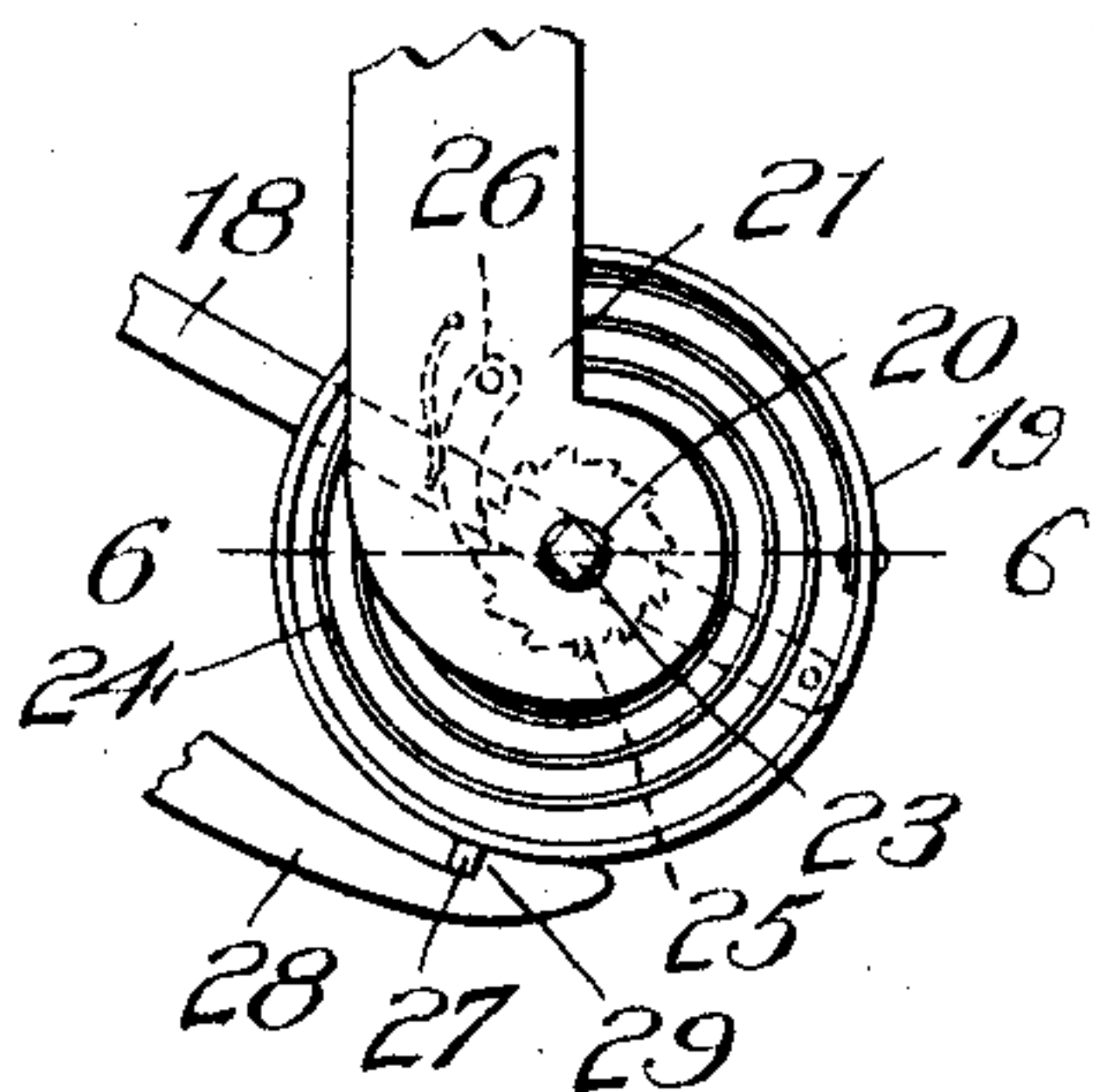


Fig. 6.

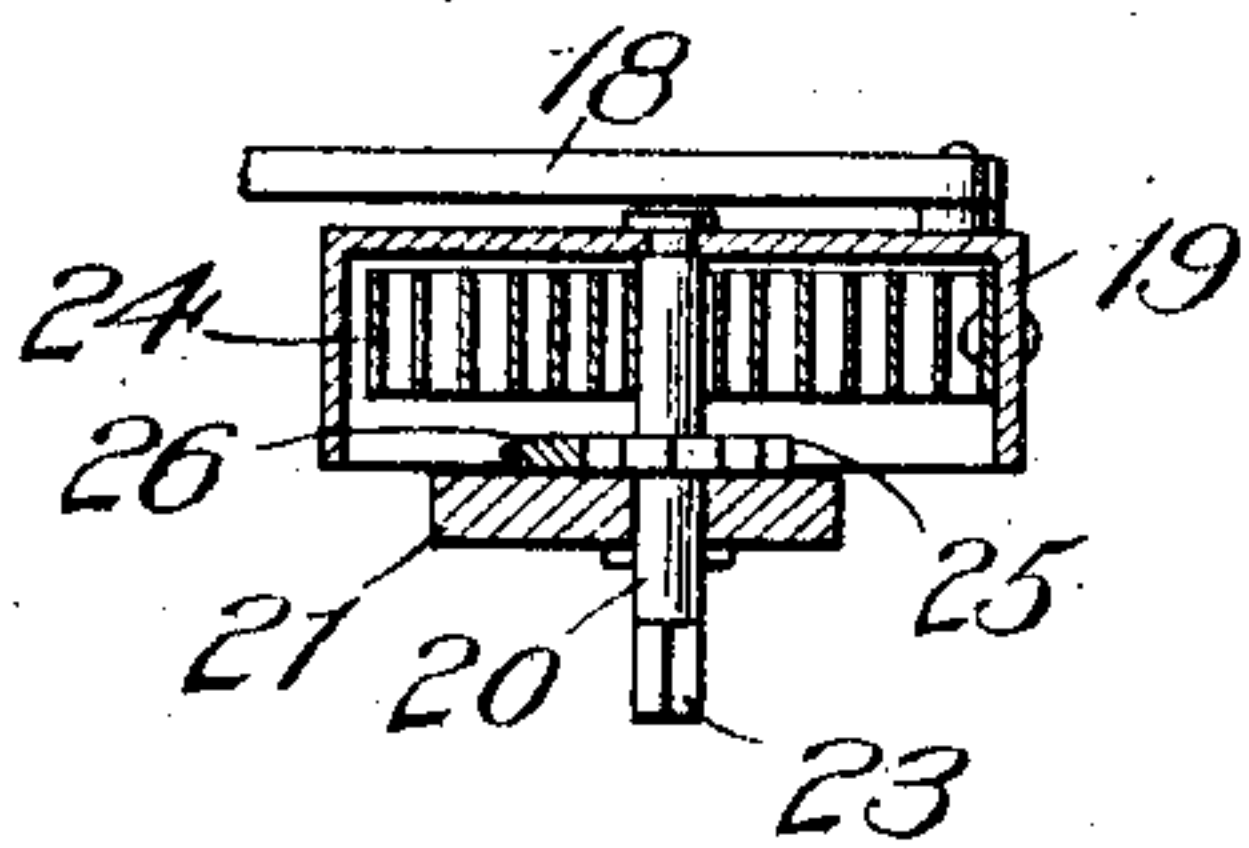


Fig. 4.

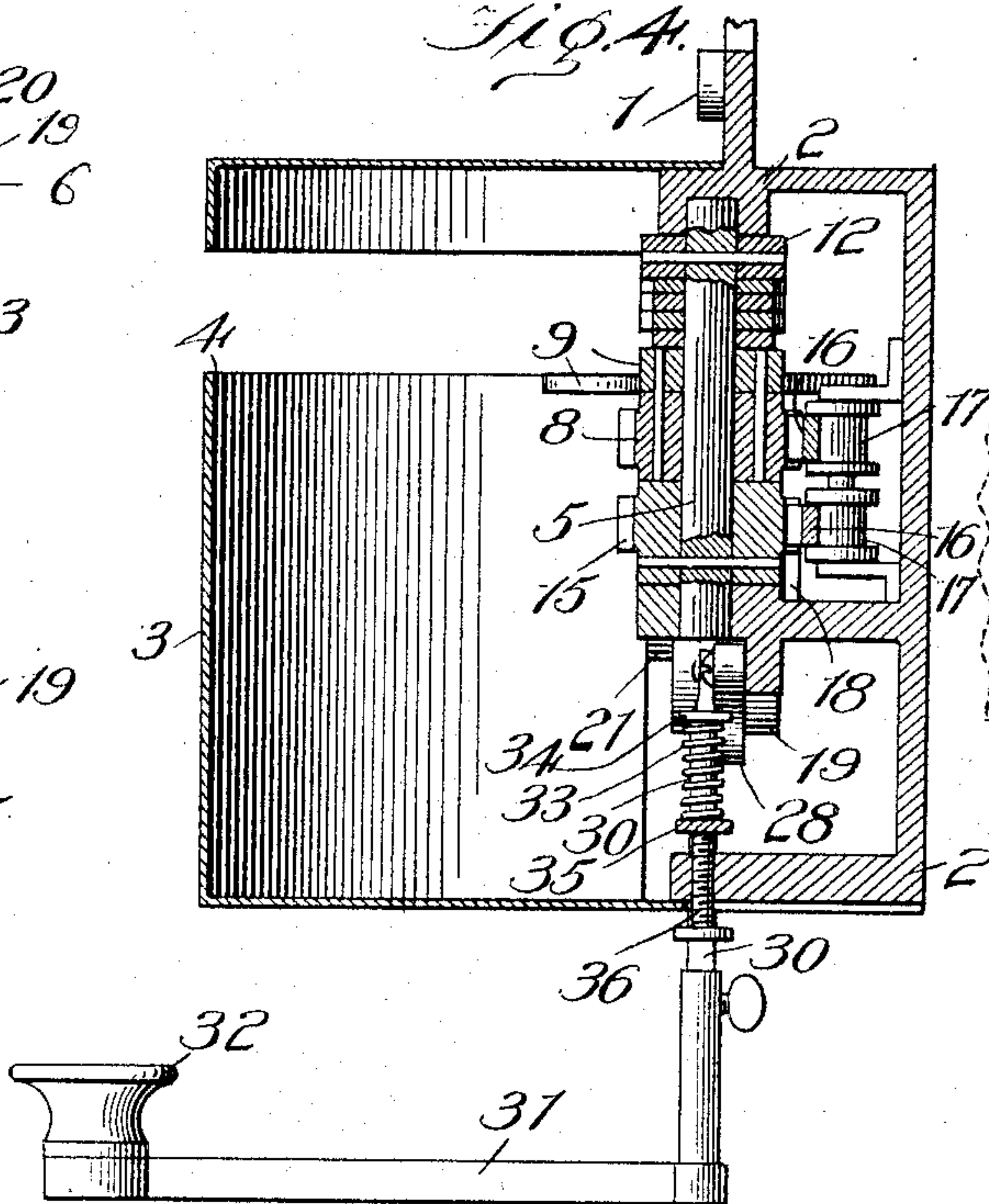
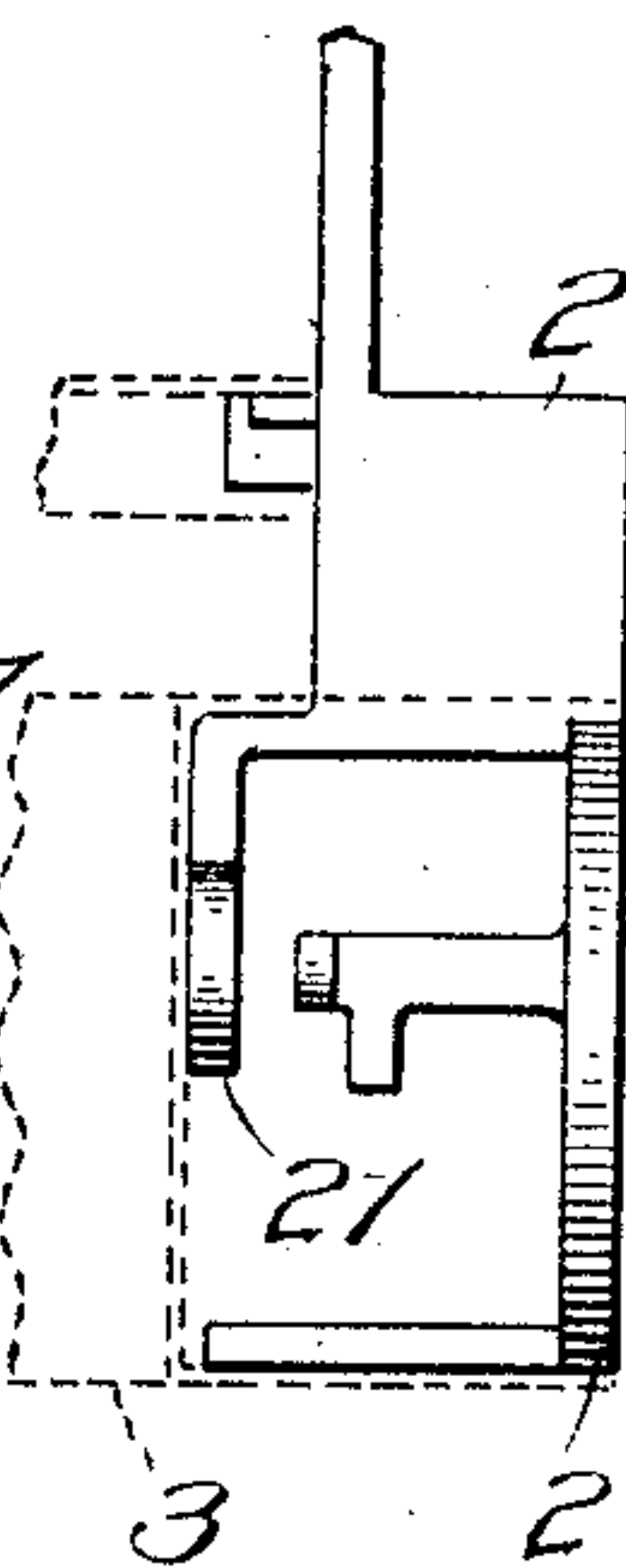


Fig. 7.



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# UNITED STATES PATENT OFFICE.

CHESTER E. SHULER, OF CLIFTON, KANSAS.

## MUSIC-LEAF TURNER.

No. 815,047.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed June 27, 1905. Serial No. 267,311.

*To all whom it may concern:*

Be it known that I, CHESTER E. SHULER, a citizen of the United States, residing at Clifton, in the county of Washington and State of Kansas, have invented certain new and useful Improvements in Music-Leaf Turners, of which the following is a specification.

This invention has relation to music-leaf turners; and it consists in the novel construction and arrangement of its parts, as hereinafter shown and described.

The object of the invention is to provide a means for turning the leaves of sheet-music.

In the accompanying drawings, Figure 1 is a front elevation of the music-leaf turner with part of the casing thereof broken away. Fig. 2 is a horizontal sectional view of the music-leaf turner cut on the line 2 2 of Fig. 1. Fig. 3 is a horizontal sectional view of the music-leaf turner cut on the line 3 3 of Fig. 1. Fig. 4 is a vertical sectional view of the music-leaf turner cut on the line 4 4 of Fig. 1. Fig. 5 is a side elevation of one of the disks for actuating the racks. Fig. 6 is a horizontal sectional view of one of the disks for actuating the said racks cut on the line 6 6 of Fig. 5, and Fig. 7 is a side elevation of that portion of the framework of the device which is adapted to hold the said spring-actuated disk.

To the base of the rack 1 (which is adapted to hold the piece of music) is affixed a frame 2, and attached to the said frame 2 is a casing 3, having the horizontal slot or opening 4. The shaft 5 is located within the casing 3 and is journaled in the frame 2. The said shaft extends vertically. The inner ends of the arms 6 are journaled upon the said shaft 5. Said arms are adjustable longitudinally and are provided at their outer ends with the clasps 7. The gear-wheel 8 is journaled upon the shaft 5 and is provided with the laterally-extending lug 9. Upon the said lug 9 is mounted a spring-actuated dog 10, which is adapted to engage successively the upper lugs 14 14 of the arms 6. The gear-wheel 15 is also fixed to the shaft 5 and is located immediately below the gear-wheel 8.

The mechanism above described, embracing the rack 1, casing 3, shaft 5, arms 6 and their attachments, gear-wheel 8 and its attachments, gear-wheel 15 and its attachments, form no part of this invention, as these parts are fully shown and described in my prior application for Letters Patent, filed June 5, 1905, Serial No. 263,802, and the novel features of such parts are claimed

therein; but these parts are illustrated and described in this application for the purpose of adding clearness to the present invention. Each of the said gear-wheels 8 and 15 is provided with a mechanism for turning the same, and as the parts constituting these separate mechanisms are similar in construction and arrangement a description of one will answer for both.

The horizontal rack 16 engages the teeth of the gear-wheel 15. The said rack 16 is maintained in the horizontal position by means of the grooved rollers 17 17. The link 18 is pivoted at one end to the outer end of the rack 16 and is also pivoted to the disk or casing 19. The said disk or casing 19 is journaled to the portion 21 of the frame 2. The pin 20 is squared at its outer end, as at 23, and is adapted to be turned by a key. (Not shown.) The coil-spring 24 is attached at one end to the pin 20 and at its other end to the periphery of the disk 19. The ratchet-wheel 25 is fixed to the pin 20 and is adapted to be engaged by the pawl 26, which is pivoted to the portion 21 of the frame 2. The disk 19 is provided on the outer surface of its periphery with a lug 27. The catch 28 is pivoted at its inner end to a portion of the frame 2 just below the end of the shaft 5 and is provided at its outer end with a notch 29, which is adapted to receive the lug 27.

The rod 30 is pivoted at its upper end to the catch 28 and extends down below the frame 2 and is provided with the arms 31, upon the forward end of which is located a button 32. The coil-spring 33 surrounds the rod 30 and is interposed between a collar 34, attached to said rod, and the vertically-adjustable plate 35. The screw 36 passes through the lower portion of the frame 2 and engages the plate 35. The said plate 35 engages both the springs 33, as illustrated in Fig. 1.

The operation of the device is as follows: The screw 36 is adjusted to elevate the plate 35 to give the springs 33 the proper tension. Presuming that the button 32 (shown to the left in Fig. 1) is depressed, the rod 30 is carried down against the tension of the spring 33. The catch 28 is swung down on its pivot and the notch 29 thereof passes below the lug 27 of the disk 19. The coil-spring 24, contained within the said disk, which has previously been wound up, causes the said disk to rotate in the direction indicated by the arrow in Fig. 1. As the said disk rotates



and the link 18 is carried around, the rack 16 is pushed in and the gear-wheel 15 is rotated, which carries around with it the shaft 5 and the lug 12. The dog 13 engages the lug 14 of the nearest arm 6 of the series, and the said arm 6 is turned, which carries with it the sheet of music previously placed with the clasp 7. Pressure is then removed from the button 32, and the coil-spring 33 moves the rod 30 up, which in turn carries the notch 29 of the catch 28 into the path of the lug 27, and the rotation of disk 19 is stopped as soon as the lug 27 enters the said notch 29. In the meantime the outer end of the link 18 has been carried entirely around the center of the disk 19, the rack 16 is drawn back to its normal position, and the gear-wheel 15 and its attachments is rotated back in the opposite direction to that above described.

The operation of the mechanism connected with the button 32, located to the right, as shown in Fig. 1, is the same as that above described for the other button, with the exception that the rotation of the gear-wheel 8 does not move the shaft 5, but does carry around the lug 9, which through its dog 10 turns the arms 6 back in the opposite direction. The flat spring 27 is attached at one end to the frame 2 and is adapted to bear against the inner ends of the arms 6 and hold the said arms in position after they have been turned.

Having described my invention, what I

claim as new, and desire to secure by Letters Patent, is—

1. A sheet-turner consisting of a shaft, a series of arms pivoted upon said shaft each adapted to engage a sheet and each adapted to swing, a means for swinging said arms successively in one direction, and a means for swinging said arms successively in the opposite direction, both of said arm-swinging means being of like construction and each having an operating-key, a tension device attached to each operating-key and a single means for regulating the stress of both tension devices simultaneously.

2. A sheet-turner consisting of a shaft, a series of arms pivoted upon said shaft each adapted to engage a sheet and each adapted to swing, a means for swinging said arms successively in one direction and a means for swinging said arms, successively in the opposite direction, both of said arm-swinging means being of like construction and each having an operating-key, a tension-spring attached to each operating-key, a plate engaging both said tension-springs and a screw engaging said plate and adapted to move the same.

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

CHESTER E. SHULER.

Witnesses:

HARRY O'BRIEN,  
D. A. BRAY.