

No. 786,157.

PATENTED MAR. 28, 1905.

L. J. ROSE.

MUSIC LEAF TURNER.

APPLICATION FILED MAY 24, 1904.

2 SHEETS—SHEET 1.

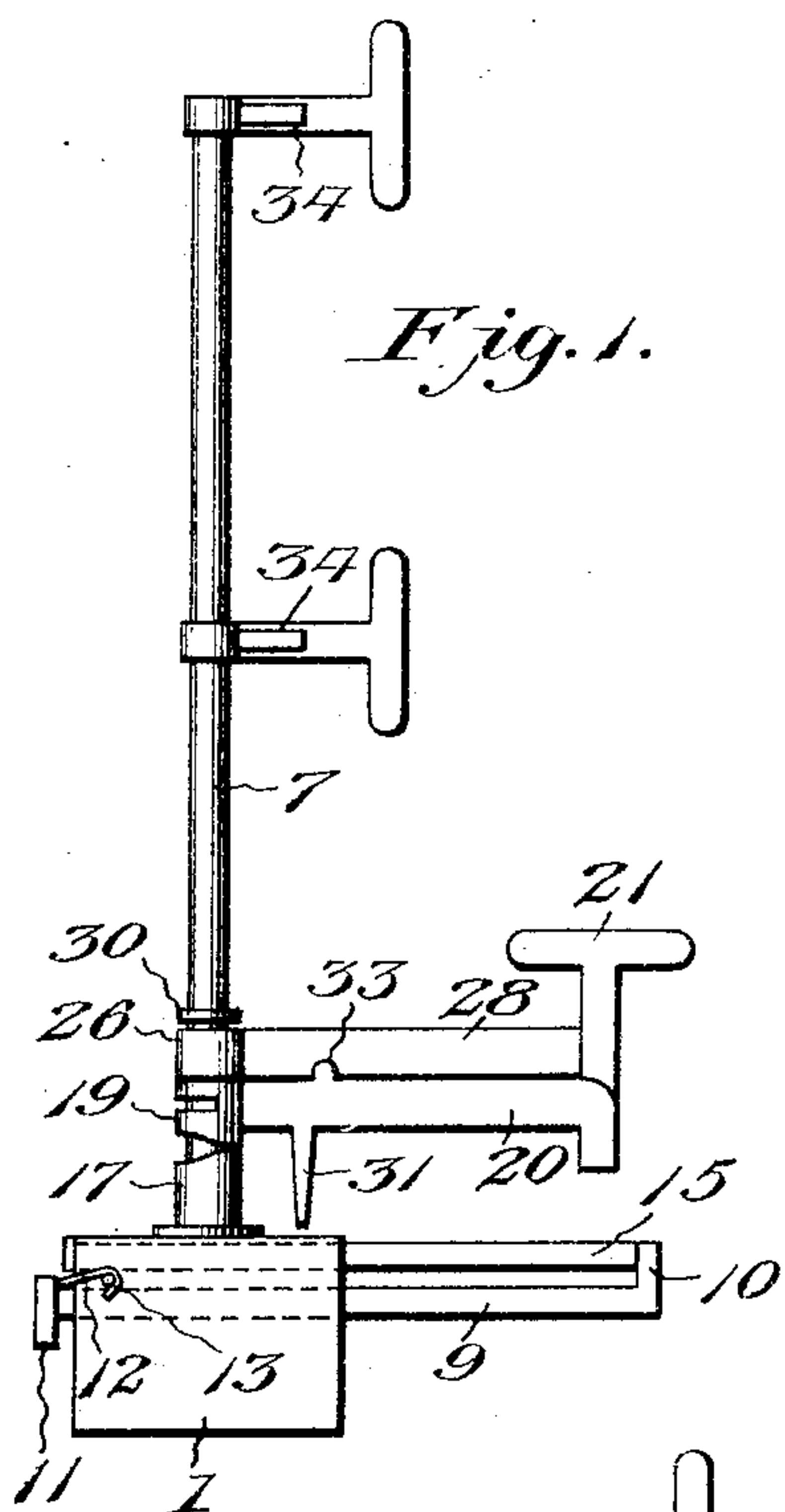


Fig. 1.

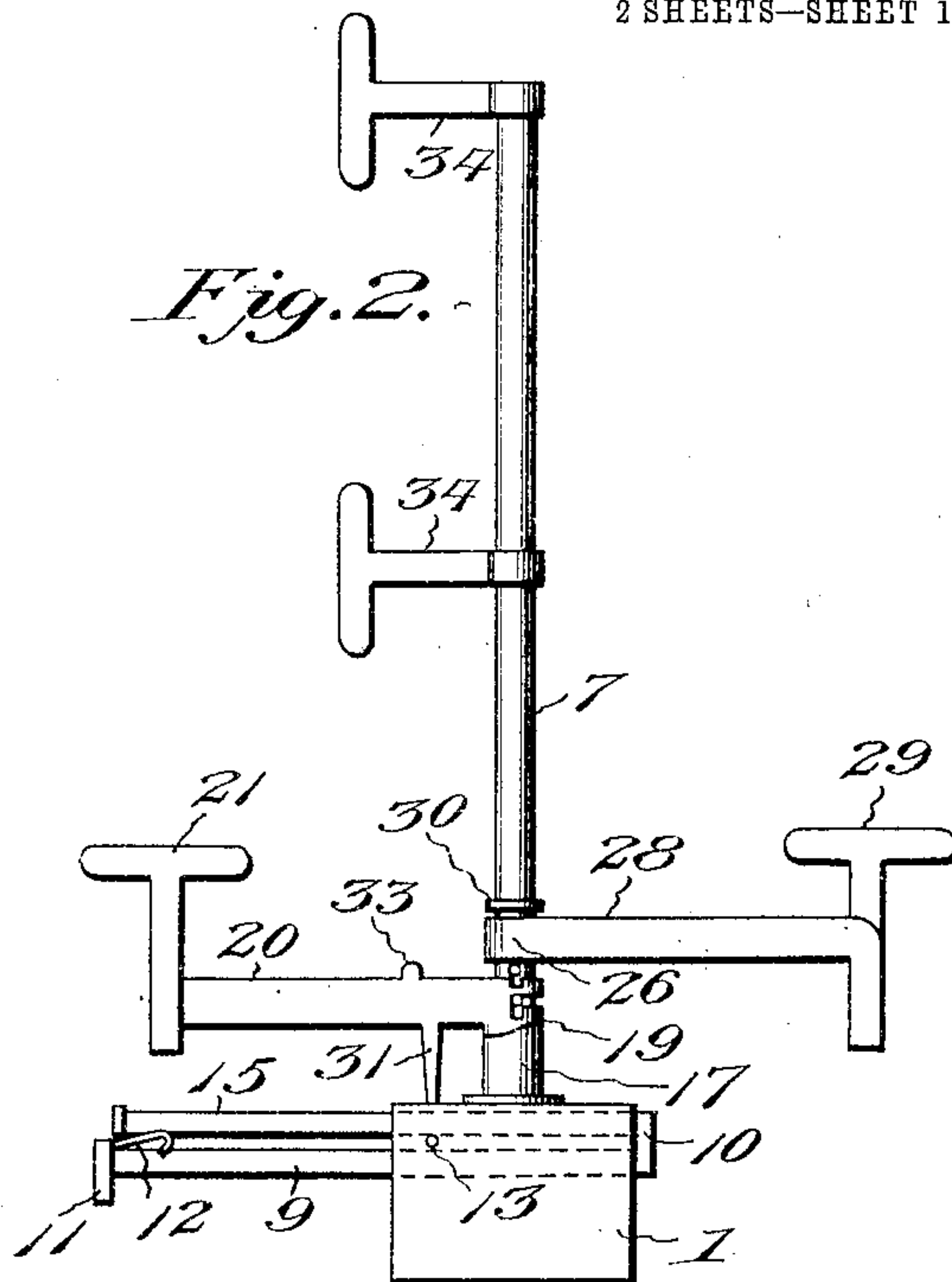


Fig. 2.

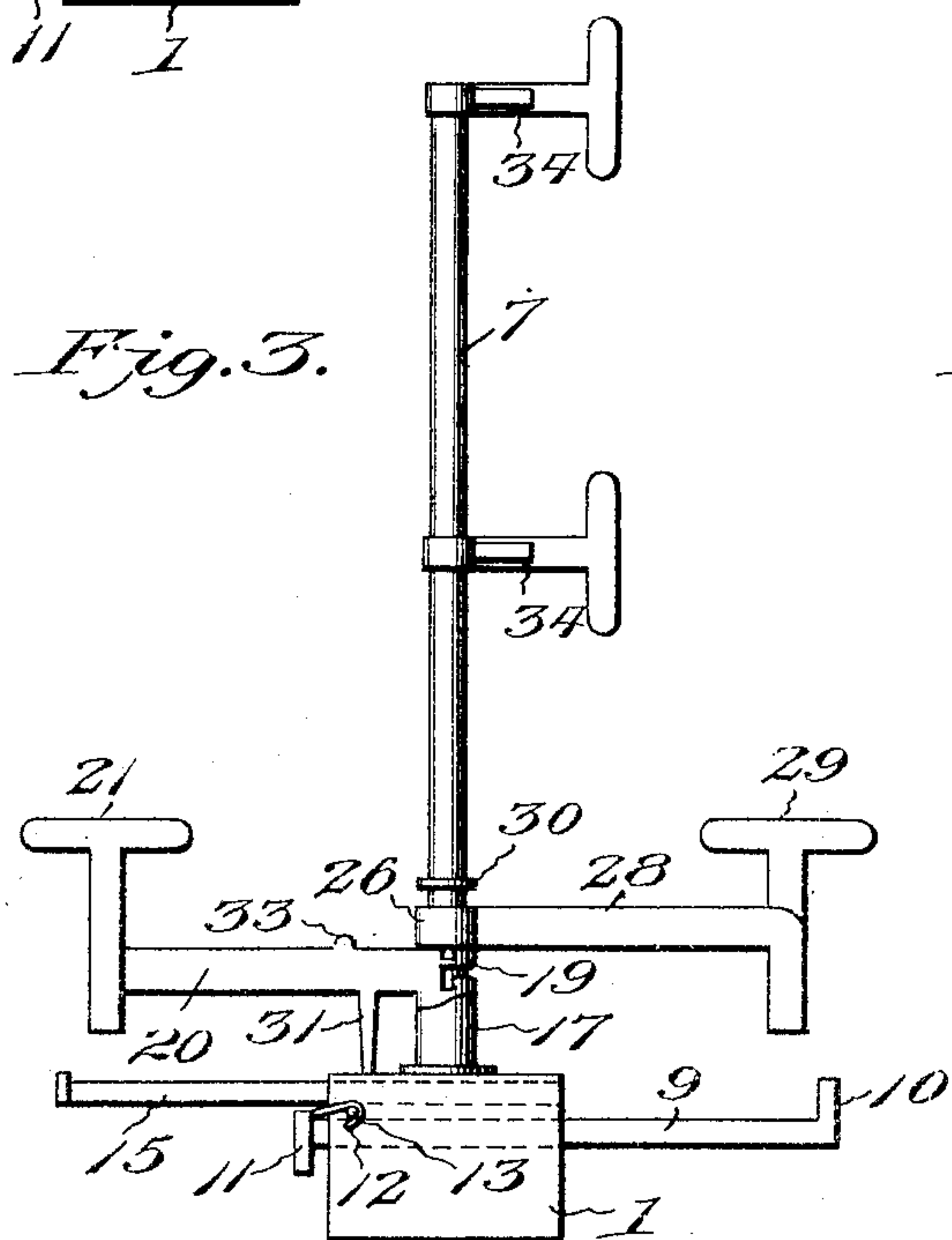


Fig. 3.

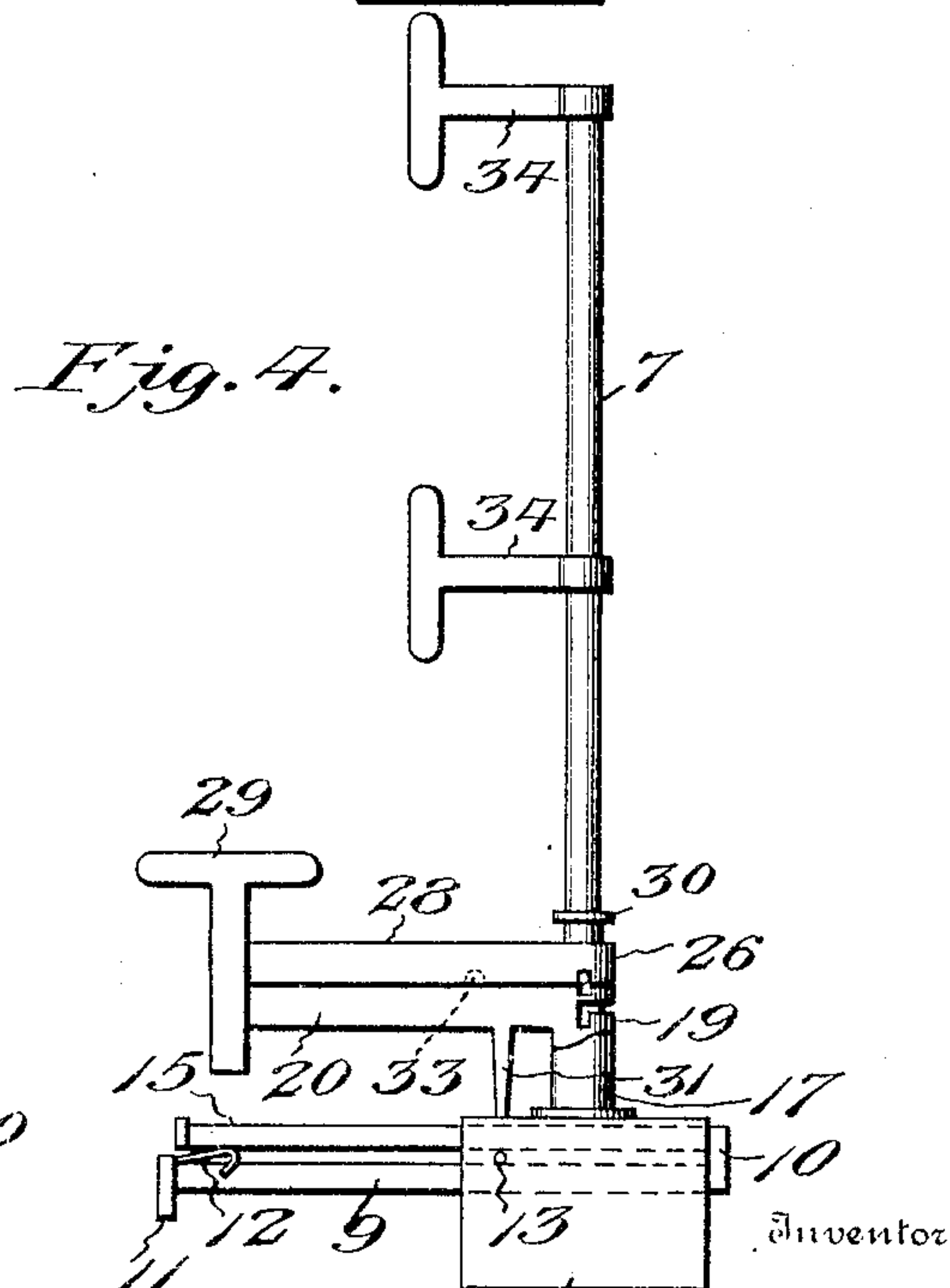


Fig. 4.

Witnesses

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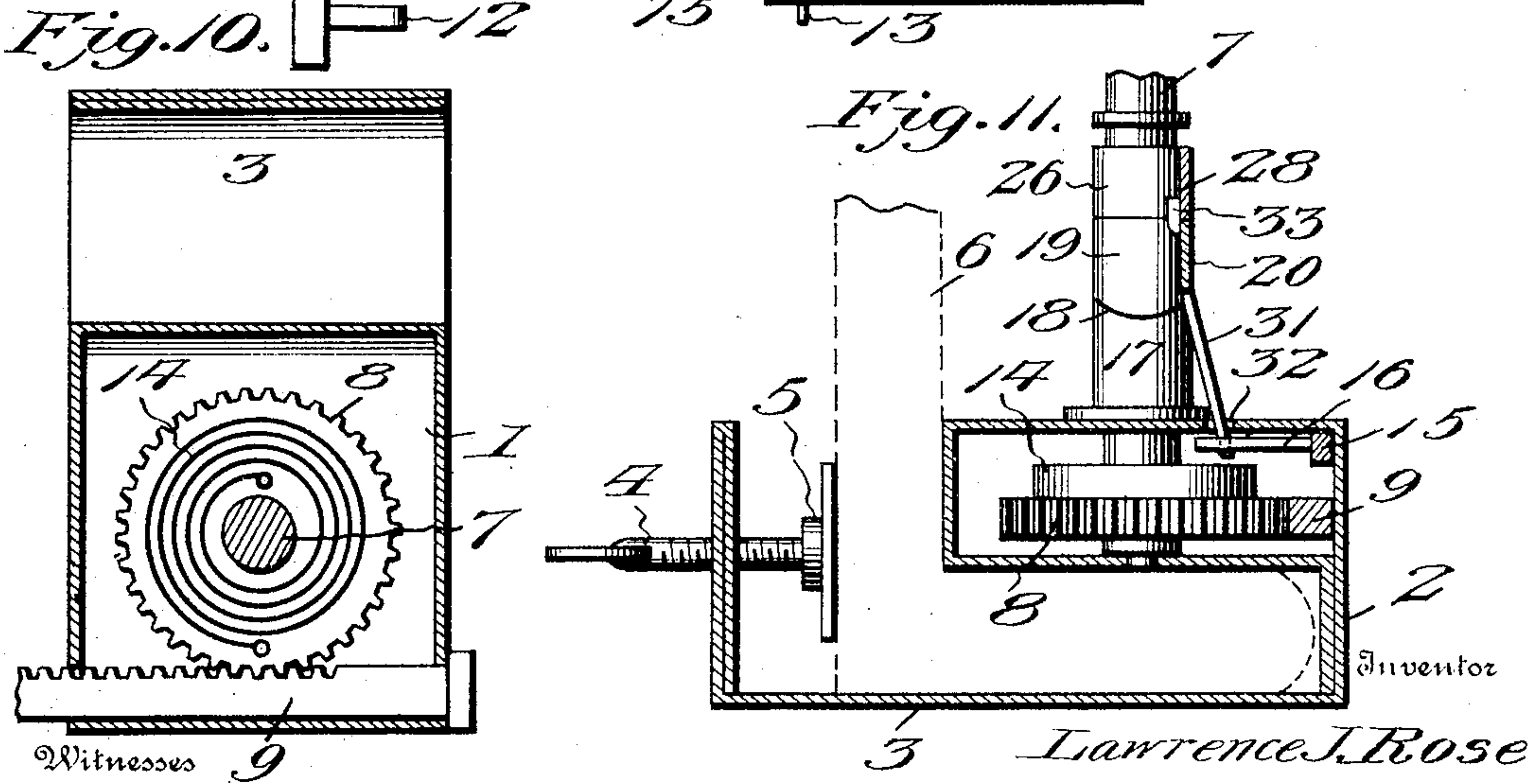
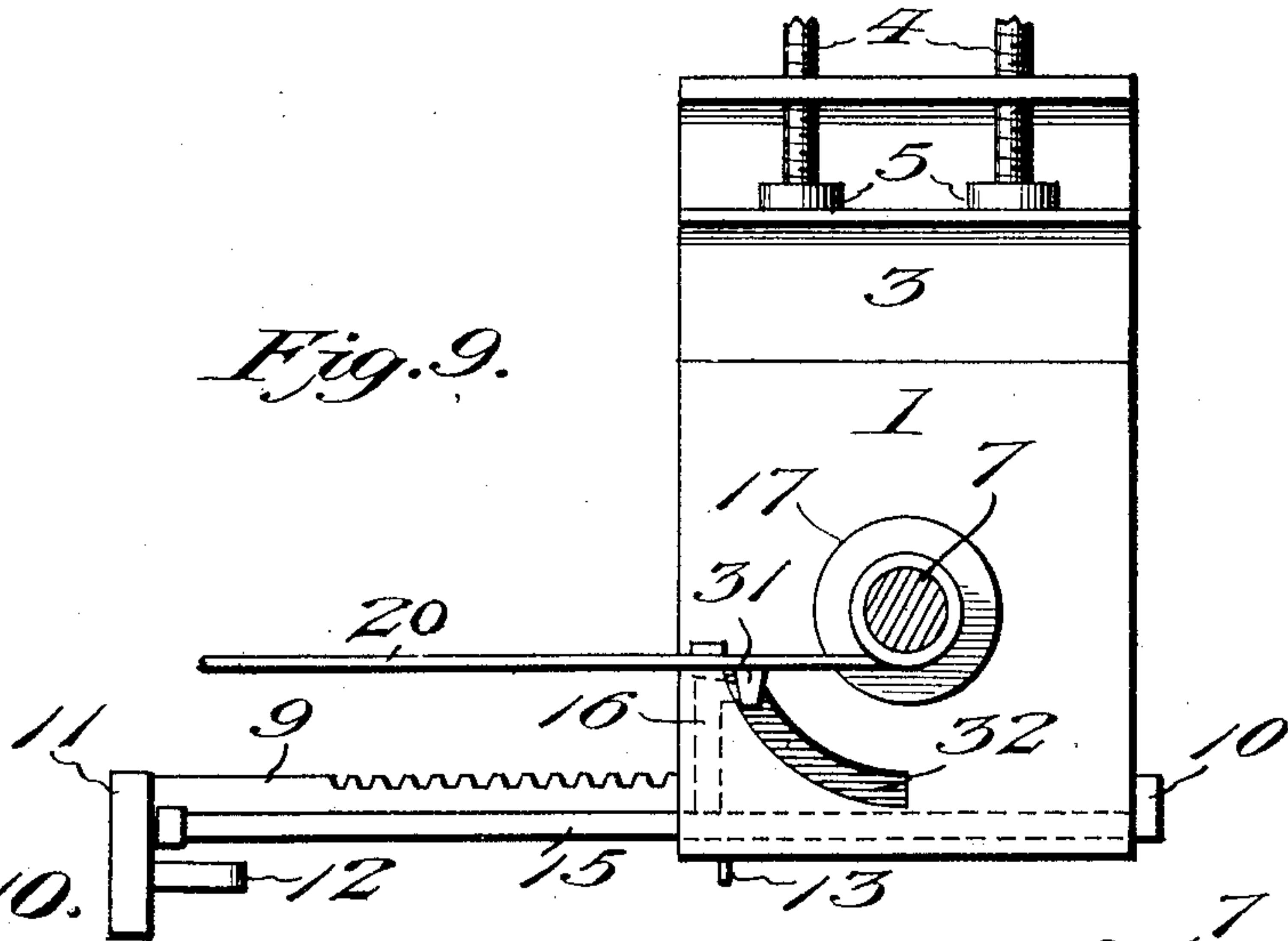
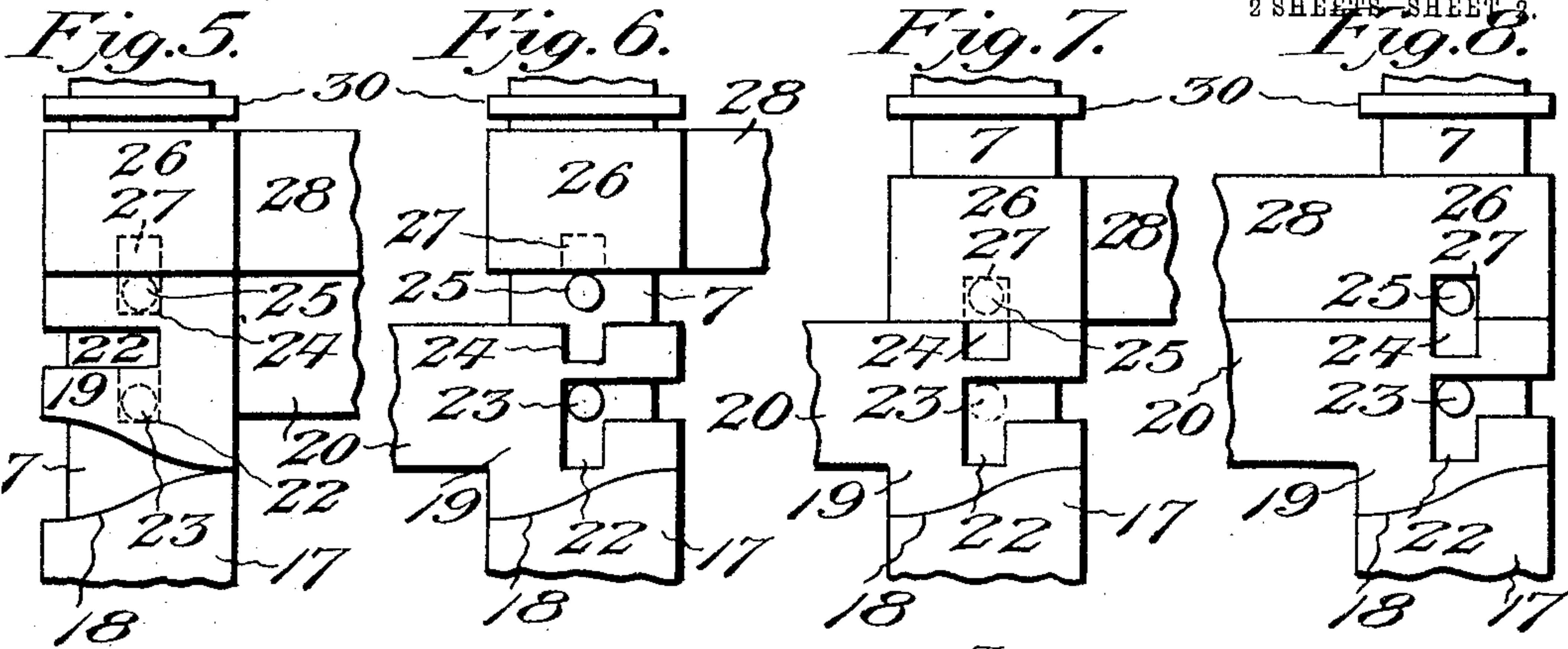
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2 SHEETS SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE.

LAWRENCE J. ROSE, OF ST. LOUIS, MISSOURI.

MUSIC-LEAF TURNER.

SPECIFICATION forming part of Letters Patent No. 786,157, dated March 28, 1905.

Application filed May 24, 1904. Serial No. 209,489.

To all whom it may concern:

Be it known that I, LAWRENCE J. ROSE, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented 5 new and useful Improvements in Music-Leaf Turners, of which the following is a specification.

My invention relates to new and useful improvements in music-leaf turners; and its object is to provide a device of simple construction which can be secured upon an ordinary music-rack or upon the rack of a piano without the necessity of providing any special construction therefor.

15 Another object is to provide means whereby the sheets of music can be conveniently turned in proper succession and can be turned backward for the purpose of repeating.

With the above and other objects in view 20 the invention consists of a casing having a rearwardly-extending portion provided with clamping means whereby the casing may be secured to a rack. A rod is revolvably mounted within the casing and extends upward therefrom, and secured to this rod is a gear which 25 meshes with a rack arranged transversely within the front portion of the casing. A slide is also located adjacent and parallel with the rack, and means are provided whereby 30 when the rack is moved in one direction the slide is carried therewith. A coiled spring is provided for holding the rack normally in one position, and a locking device is employed for holding the spring under tension with the rack 35 out of normal position. A sleeve incloses the lower portion of the revoluble rod and has its upper end curved to form a cam, on which is located a collar arranged at one end of an arm provided with a clip. This collar 40 has an L-shaped slot therein in which is mounted a stud, which extends from the revoluble rod, and a recess is also provided in the upper edge of the collar and which is adapted to receive another stud located on the rod and 45 which is arranged under a second collar loosely mounted on the rod. This last-mentioned collar has a recess in its lower edge for the

reception of the upper stud, and an arm extends from said collar and is provided with a clip of suitable construction. A depending 50 arm extends from the arm of the lower collar and is adapted to project into a curved slot formed within the casing and into the path of an extension projecting rearwardly from the slide within said casing. Clips are secured to 55 the rod at suitable points within the collars.

The invention also consists of the further novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, 60 showing the preferred form of my invention, and in which—

Figure 1 is a front elevation of my improved music-leaf turner and showing the positions of the parts prior to the turning of a sheet of 65 music. Fig. 2 is a similar view showing the positions assumed by the parts subsequent to the turning of the first sheet of music. Fig. 3 is a front elevation of the music-leaf turner and showing the positions of the parts immediately prior to the turning of the second 70 sheet. Fig. 4 is a front elevation showing the positions assumed by the arms and clips after the second sheet has been turned. Fig. 5 is an enlarged front elevation of a portion of the sleeve and of the collars upon the rod when the parts are in the positions shown in Fig. 1. 75 Fig. 6 is a similar view showing the relative positions of the collars and rod subsequent to the turning of the first sheet. Fig. 7 is a similar view showing the positions of the parts when the second sheet is ready to be turned. Fig. 8 shows the relation of the collars and rod after the second sheet has been 80 turned. Fig. 9 is a top plan view of the music-leaf turner with all but the lower arm removed from the rod. Fig. 10 is a horizontal section through the casing and showing the rack engaging the gear therein, and Fig. 85 11 is a vertical section through the casing. 90

Referring to the figures by numerals of reference, 1 is a casing having a depending flange 2 at the front edge thereof from which extends an angular arm 3, having clamping-screws

4 mounted therein, each of which is provided with a swiveled head 5. These heads are adapted to clamp a rack 6, which may be inserted between the casing 1 and the arm 3.

5 A rod 7 is revolubly mounted within the casing and extends upward therefrom, and secured to this rod is a gear 8, which meshes with a rack 9, slidably mounted within the casing, at the front thereof, and projecting

10 from the two sides of the casing. An upwardly-extending head 10 is formed at the right end of the rack, and a downwardly-projecting head 11 is formed at the other end thereof and is provided with a spring-catch

15 12, which is adapted when the rack is pushed to the right to engage a lug 13, formed on the front of the casing, and lock the rack in such position. This movement of the rack will tension a coiled spring 14, which is located

20 on the rod and is secured at opposite ends thereto and to the casing 1, respectively. Slidably mounted within the casing and adjacent and parallel with rack 9 is a slide 15, one end of which is adapted to contact with

25 the head 10, while the other end is arranged in a plane above the head 11 of rack 9. An extension 16 projects inward from the slide 15 and is for the purpose hereinafter more fully described.

30 The rod 7, as before stated, is revoluble with gear 8. This rod rotates within a stationary sleeve 17, which is secured to the top of casing 1 and has its upper end curved to form a cam-face 18. Resting on this sleeve is

35 a collar 19, which is revolubly mounted on rod 7 and has its lower face curved to correspond with the cam-face 18. An arm 20 extends laterally from the collar and is provided with a clip 21 at its free end. This arm is so ar-

40 ranged in relation to collar 19 that when it is extending to the right and parallel with the front of casing 1 the curved lower end of the collar 19 will be arranged exactly opposite to the cam-face 18 of sleeve 17. An L-shaped

45 slot 22 is formed within collar 19, and when the collar is in the position above described and which is illustrated in Fig. 5 a stud 23, which extends laterally from rod 7, is seated within the lower portion of said slot, as shown

50 by dotted lines in said figure. A recess 24 is formed within the upper edge of collar 19 and in alinement with the vertical portion of slot 22, and this recess is adapted to receive a second stud 25, extending laterally from rod

55 7 in vertical alinement with the stud 23. Stud 25 is seated within the recess 24 when stud 23 is located within the slot or vertical portion of slot 22. A second collar 26 is revolubly mounted on the rod 7 above collar 19

60 and has a recess 27 in its lower face, which is similar to the recess 24. An arm 28 extends laterally from collar 26 and has a clip 29 at the end thereof, which is similar to the clip 21 before described. When this arm 28 ex-

tends to the right and parallel with the front 65 of the casing 1, the recess 27 in collar 26 registers with the recess 24, as shown in Fig. 5. An annular flange 30 is formed upon rod 7 above the collars 19 and 26 and serves to limit the vertical movement of said collars 70 upon the rod. An arm 31 extends downward from arm 20 and is adapted to project into a slot 32, which is formed in the top of the casing 1 and is concentric with rod 7. When

75 arm 20 extends to the left of the rod 7, the depending arm 31 thereof rests within the path of the extension 16 before referred to. An ear 33 extends upward from arm 20 into the path of arm 28 whereby both arms may be turned from left to right by producing 80 such a movement of arm 20. Spring-clips 34 are secured to the rod 7 at suitable points thereon for the purpose of engaging a single sheet of music when desired.

To use the device for turning a piece of mu- 85 sic consisting of the two covers and inside sheet, the music is placed back of the rod 7 and the middle sheet is placed in engagement with the clip 21, while the second cover is placed in engagement with clip 29. The rack 90 9 and slide 15 are moved to the right, thereby tensioning the spring 14, and catch 12 is placed in engagement with lug 13, thereby locking the parts in the positions to which they are moved. The studs 23 and 25 on rod 7 and 95 the collars 19 and 26 will thus assume the positions shown in Fig. 5. The inside of the first cover and one side of the inside sheet of music will thus be exposed to view, and when it is desired to turn the middle sheet the catch 100 12 is pressed upward from lug 13. The tensioned spring 14 will promptly rotate rod 7 and gear 8 and will force the rack 9 from right to left. Head 10 of said rack will press the slide 15 with it. As the stud 23 is in engage- 105 ment with the vertical portion of slot 22 and stud 25 is seated within recess 24 of collar 19, it will be understood that when the rod 7 is turned in the manner above described said collar 19 will also be moved therewith, carry- 110 ing the arm 20 and clip 21 and the sheet of music connected to it. As collar 19 rotates it will travel downward on the cam-face 18, and the two studs 23 and 25 will thus become disengaged from the vertical portion of slot 115 22 and the recess 24, respectively, and stud 25 will assume a position under the straight lower end of collar 26 and support said collar, as shown in Fig. 6. The other face of the middle sheet and the inner face of the rear cover 120 will thus be exposed to view. Should it be desired to turn the middle sheet back again for the purpose of repeating any portion of the music thereon, it is merely necessary to press the slide 15 to the right. This will cause 125 the extension 16 thereof to press against the depending arm 31 of arm 20, which drops into the slot 32, when said arm 20 assumes a posi-

tion at the left of rod 7. Extension 16 will force the arm 31 along the slot 32 and will cause collar 19 to rotate and ride upward on the cam 18 until the studs 23 and 25 engage the vertical portion of slot 22 and the recess 24, respectively. The further return movement of the arm 20 will be continued by the studs 23 and 25, which are rotated with the rod 7 by the rack 9, movement being imparted to this rack in view of the fact that slide 15 presses against the head 10. By releasing the rack 9 after this return movement the parts will again assume the positions with arm 20 at the left of rod 7.

When it is desired to turn the rear or second cover of the music, the slide 15 is left in position at the left of rod 7 and casing 1, but rack 9 is slid to the right by means of head 11. Lug 23 is thus caused to travel within the horizontal portion of slot 22, and lug 25 slides under collar 26 until it arrives in position under the recess 27, when said collar will drop into engagement with stud 25, as shown in Fig. 7. The parts can be locked in this position by means of the catch 12; but as soon as it is desired to turn the second cover into position at the left of rod 7 it is merely necessary to raise catch 12, and the tensioned spring 14 will rotate rod 7 to the left and cause stud 25 to swing collar 26 and arm 28 therewith. To return the second cover to its first position for the purpose of repeating, it is merely necessary to press the rack 9 to the right. Should it be desired to return the two arms 20 and 28 to their positions at the right of rod 7, the slide 15 is pressed to the right. This will cause the arm 20 to swing to the right in the manner hereinbefore described, and as said arm has an ear 33 thereon which is in the path of arm 28 it will be understood that the two arms will be moved to the right simultaneously. Where only a single sheet of music is to be turned, the clips 34 can be used independently of the arms 20 and 28.

It will be seen that the device is very simple in construction and is of great convenience to musicians who are desirous of quickly and accurately turning the pages of sheet-music.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus described the invention, what is claimed as new is—

1. In a music-leaf turner, the combination with a casing; of a revoluble rod journaled therein, a gear secured thereon, a coiled spring secured at opposite ends to the gear and casing, a rack meshing with the gear and slidably mounted within the casing, means for locking

the rack against movement, a clip secured to and revoluble with the rod, a second clip loosely mounted upon the rod, and means for automatically locking said clip to the rod.

2. In a music-leaf turner, the combination with a casing having a revoluble rod journaled therein and extending therefrom; of a gear secured to the rod, a coiled spring adapted to be wound upon the rod, a laterally-movable rack engaging the gear, means for locking the rack in one position, a slide mounted within the casing and movable with the rack in one direction, a sleeve inclosing the rod and having a cam-face, a slotted collar loosely mounted upon the rod and bearing upon said face, a clip connected to the collar, and means operated by the rack and slide for rotating the collar in opposite directions, respectively.

3. In a music-leaf turner, the combination with a casing having a revoluble rod therein and projecting therefrom, a coiled spring secured to the rod, and means for rotating the rod to tension the spring; of a sleeve inclosing the rod and having a cam-face, a collar revolubly mounted upon the rod and supported by the sleeve, said collar having an angular slot and a recess therein, studs upon the rod adapted to engage the slot and the recess, a second collar revolubly mounted upon the rod and having a recess adapted to receive one of the studs, arms extending from the collars, and clips secured to the arms.

4. In a music-leaf turner, the combination with a casing having a revoluble rod therein and extending therefrom; of a coiled spring connected at opposite ends to the rod and casing, a gear revoluble with the rod, a rack meshing therewith, a slide within the casing movable in one direction with the rack, an extension upon the slide, a sleeve surrounding the rod and having a cam-face, a collar revolubly mounted upon the rod and bearing on the cam-face, said collar having an L-shaped slot and a recess therein, studs upon the rod adapted to engage the slot and recess for locking the collar to the rod, a clip connected to the collar, and a depending arm connected to the collar and adapted to project into the path of the extension.

5. In a music-leaf turner, the combination with a casing having a rod revolubly mounted therein and extending therefrom, and a gear secured to the rod; of a rack meshing with the gear and projecting laterally from the casing, a slide mounted within the casing and extending laterally therefrom, a head upon one end of the rack for contacting with and operating the slide in one direction, a sleeve surrounding the rod and having a cam-face, a collar revolubly mounted upon the rod and having a lower face similar to the cam-face of the sleeve, said collar being provided with an L-shaped slot and a recess, studs upon the rod adapted to engage the slot and recess, a sec-

ond collar revolubly mounted upon the rod,
a recess therein for receiving one of the studs,
arms extending from the collars, clips there-
on, an arm depending from the arm of the
5 lower collar, an extension upon the slide for
contacting therewith, and an ear upon the
arm of the lower collar.

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

LAWRENCE J. ROSE.

Witnesses:

WILLIAM A. MOORE,
EDWIN J. SHERBURN.