

No. 886,015.

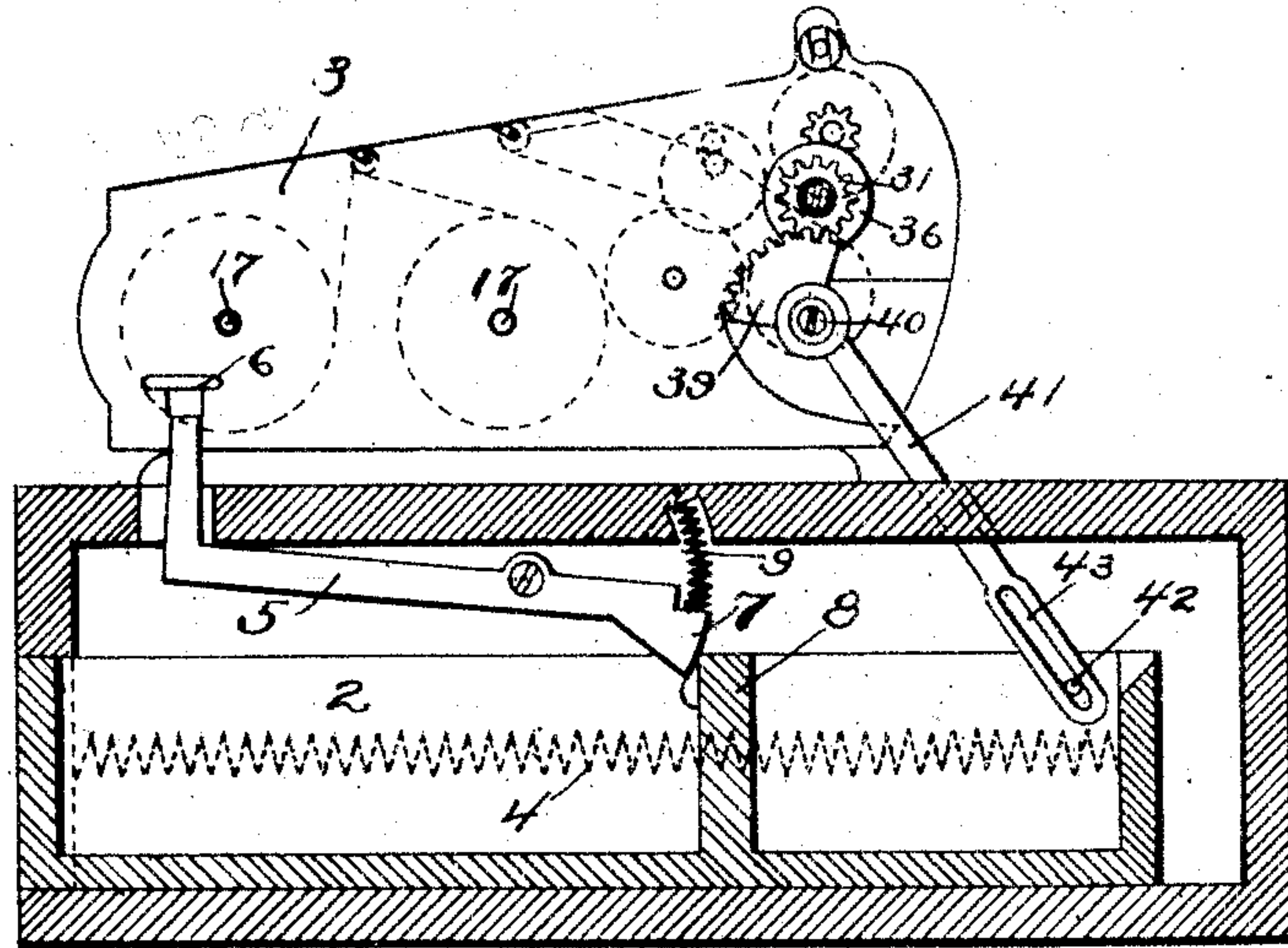
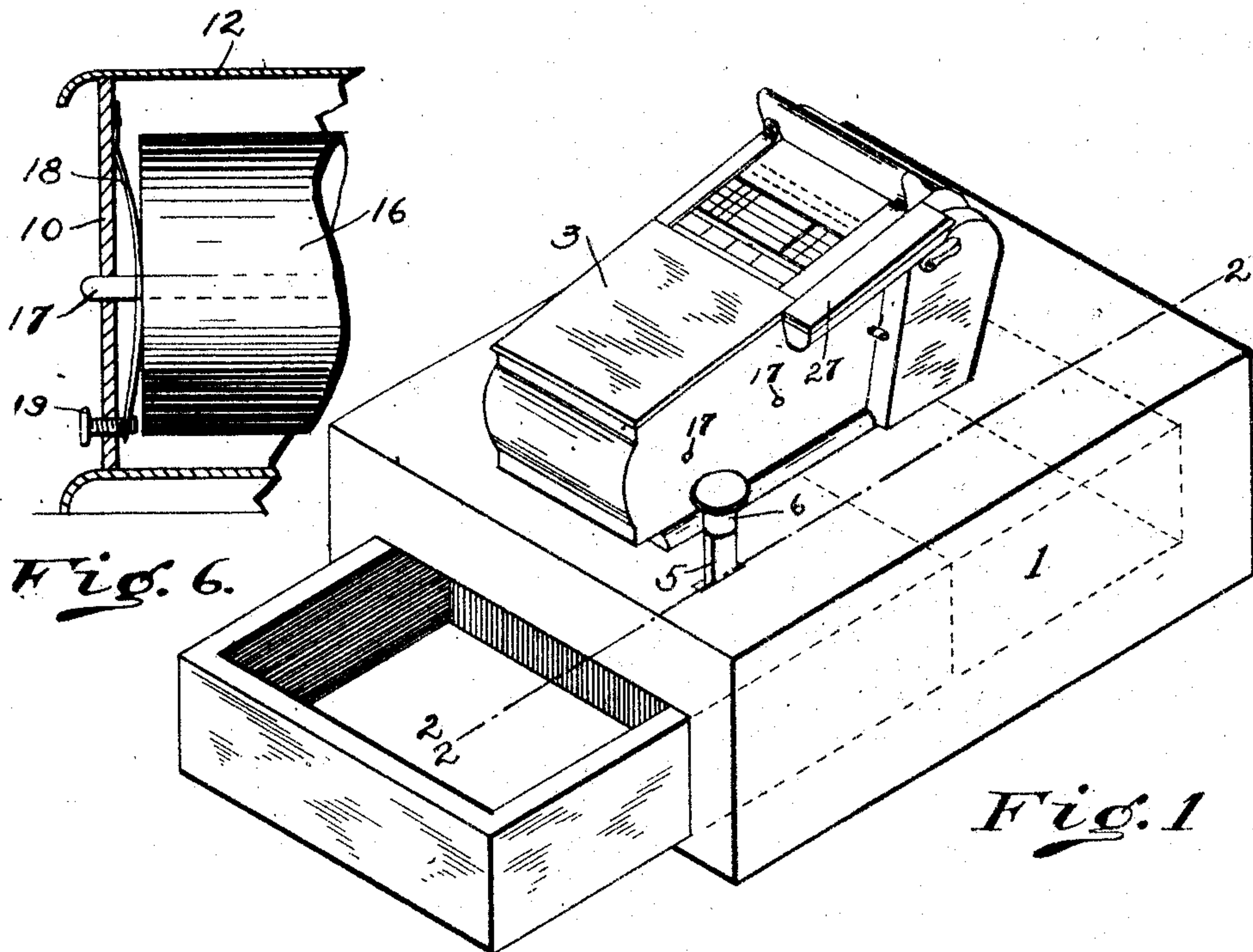
PATENTED APR. 28, 1908.

T. F. SCHIRMER & M. C. STERN.

AUTOGRAPHIC REGISTER.

APPLICATION FILED DEC. 11, 1905.

2 SHEETS—SHEET 1



Witnesses  
William F. Hall.  
R. O. Hargill,

Fig. 2.

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Theodor Schirmer  
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by Alfred M. Allen  
Attorney

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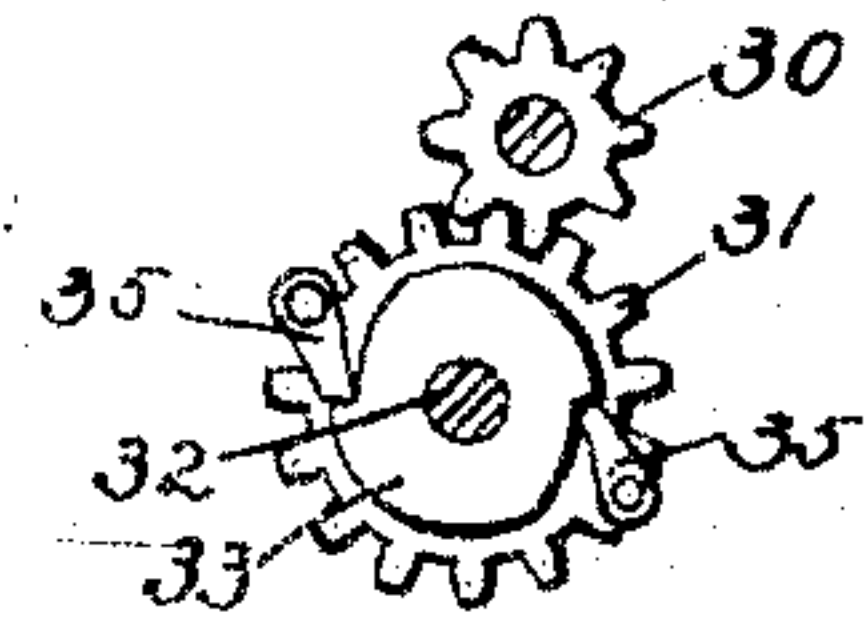
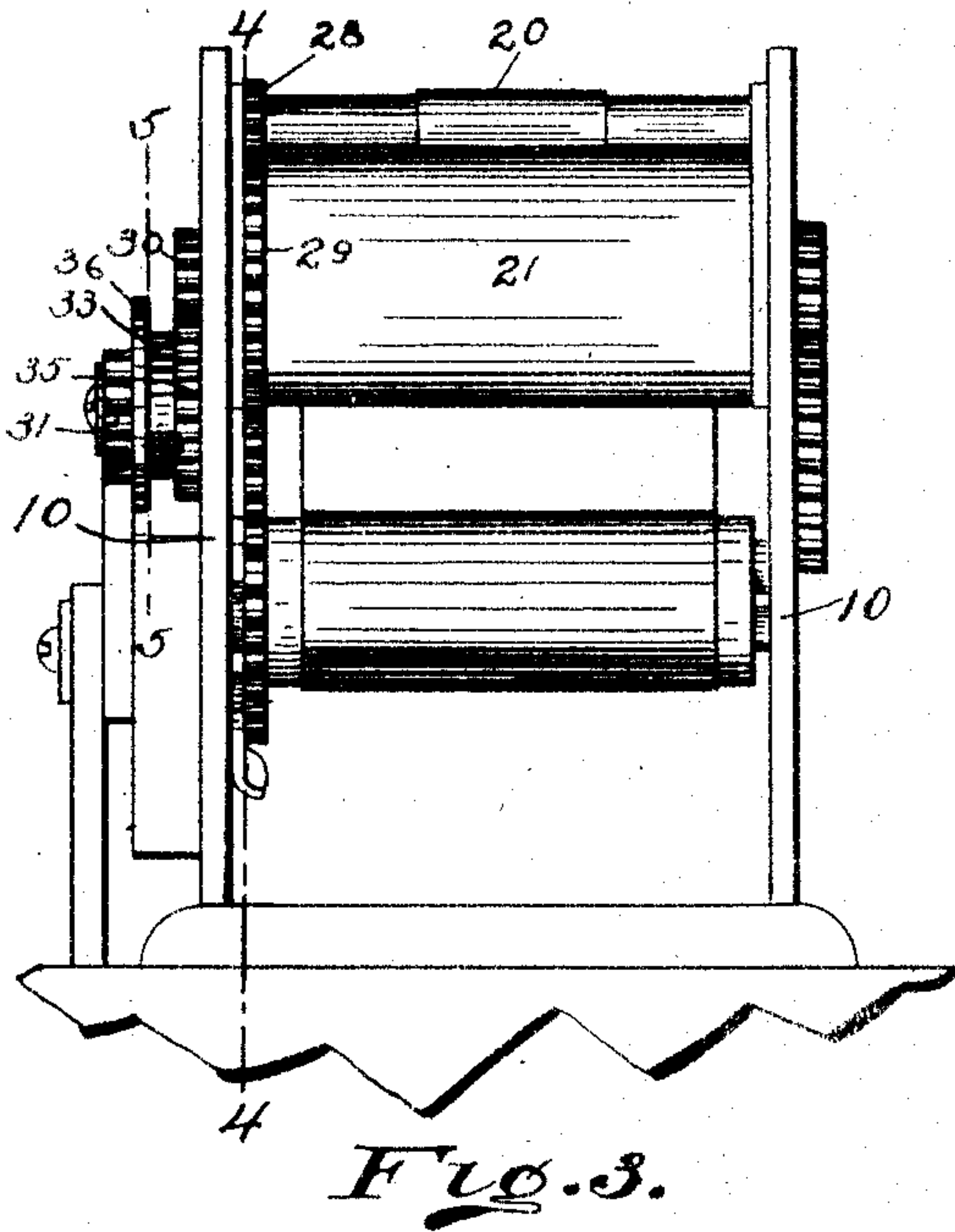
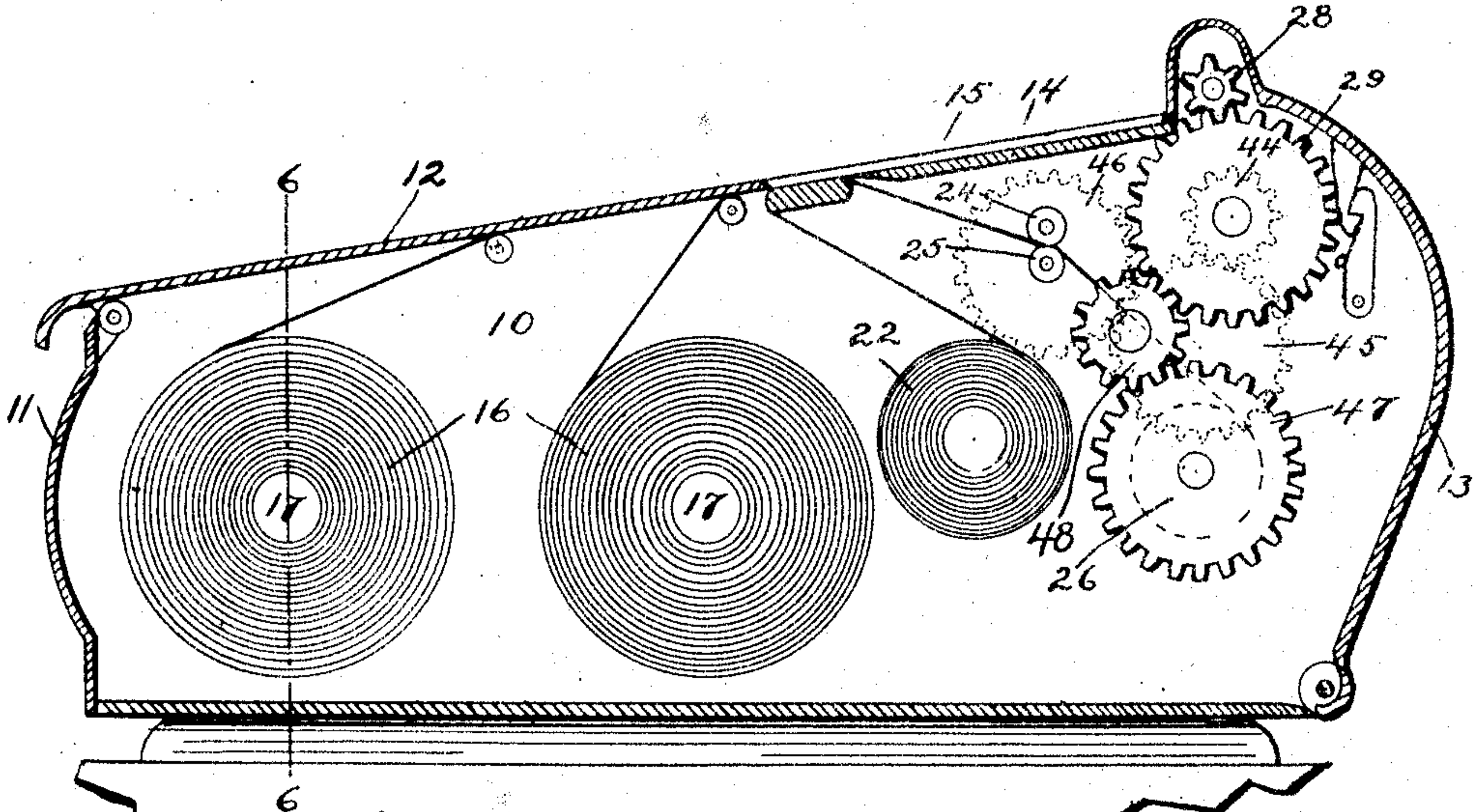


Fig. 5.



Witnesses

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Fig. 4.

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# UNITED STATES PATENT OFFICE.

THEODOR F. SCHIRMER AND MILTON C. STERN, OF DAYTON, OHIO, ASSIGNORS TO THE EGRY AUTOGRAPHIC REGISTER COMPANY, OF DAYTON, OHIO, A CORPORATION OF OHIO.

## AUTOGRAPHIC REGISTER.

No. 886,015.

Specification of Letters Patent.

Patented April 28, 1908.

Application filed December 11, 1905. Serial No. 291,361.

*To all whom it may concern:*

Be it known that we, THEODOR F. SCHIRMER and MILTON C. STERN, citizens of the United States, residing in Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Autographic Registers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

Our invention relates to improvements in autographic registers for making duplicate copies of bills, sales checks and the like, in which a money till or cash drawer compartment is employed with connecting mechanism intermediate the money till and feeding mechanism for the register whereby the opening of the money till will actuate the register, and the invention consists of that certain novel construction and arrangement of parts to be hereinafter particularly pointed out and claimed.

In the drawings Figure 1 is a perspective view of our improved register with the cash drawer open. Fig. 2 is a sectional side elevation taken on the line 2—2 of Fig. 1. Fig. 3 is an end elevation of the register with the end casing removed. Fig. 4 is a sectional side elevation of the register taken on the lines 4—4 of Fig. 3. Fig. 5 is a detail section of the driving mechanism for the feed roller, taken on lines 5—5 of Fig. 3. Fig. 6 is a detail cross section of one of the paper rolls, showing the tension device, taken on the line 6—6 of Fig. 4.

1 is a suitable casing to form a compartment for the reception of the cash drawer 2, and upon which casing is mounted in any suitable way the autographic register 3. The cash drawer or money till can be of any of the well known constructions, but in the form illustrated, the cash drawer is arranged to slide in and out of the casing and when released is propelled into position by the springs 4, which are arranged in the space at each side of the drawer, one end attached to the inner end of the drawer, and the other end attached to the casing at the front, so that the springs are under tension when the drawer is closed, and locked by the lever 5 pivoted to the top of the casing and provided with a push button 6 at its outer end

and with its inner end 7 arranged to catch behind a lug or partition 8 on the cash drawer to hold the drawer locked, a spring 9 normally holding the locking lever down at its inner end. The under surface of the catch is beveled to allow the partition or lug 8 to raise the catch when the drawer is pushed into the casing.

The autographic register itself can be constructed in any of the well known ways and embodies in its general plan a compartment for holding a plurality of strips or rolls of paper, a writing tablet and feeding mechanism for feeding the strips over the writing surface. In the construction we have illustrated, in the drawings, in order to describe one of the many embodiments of our invention, the register comprises a casing with side walls 10, 10, a front end 11, to which is hinged the cover plate 12 for convenient access to the paper supply compartment, and a rear end 13 which is also hinged to the base for convenient access to the feed mechanism.

14 is the writing tablet supported on the side walls of the casing, the cover plate 12 being cut away at 15 to allow access to the tablet.

In the construction illustrated, the paper strips are mounted on rolls 16, 16, which are journaled in pins or rods 17 passing through the casing from side to side, while to maintain a proper tension on the rolls, we provide the springs 18, one for each roll, one end of each spring is secured to the casing, and the other end is provided with a set screw 19 which is screw threaded through the casing and secured to the spring, so that the tension may be adjusted and regulated from outside of the register. The paper strips from these two rolls are passed over the writing tablet and between the feed rollers 20 and 21 journaled in the casing and thence out through a slot in the rear end of the cover 12.

22 is another roll of paper, the strip from which is passed over the lower end of the writing tablet between the feed rolls 24, 25, and thence on to a storage roll 26. 27 is a receptacle at the side of the casing for holding the carbon paper which is laid between the strips of paper on the writing tablet for making the transfers, the web from the roll 22 being fed only a short distance with each operation of the main feed, as will be herein-



after described, so that this strip is only intended to receive the totals of the sale checks. The feed rollers 20, 21 are mounted on shafts in the casing, and are driven by intermeshing gears 28, 29 mounted on one end of the feed roller shafts just within the casing wall. The shaft of the feed roller 21 also carries the pinion 30, which meshes with the gear 31 loosely mounted on the stub axle 32. Secured to or integral with this gear 31 is the ratchet plate 33 provided with two teeth 34, 34 on opposite sides of the periphery, which teeth are engaged by the pawls 35, 35 carried by the plate 36 to which plate is secured the pinion 37, the pawl carrier and pinion being mounted on the stub axle 32.

39 is a segment gear mounted on a rock shaft 40 journaled in the case and meshing with the pinion 37, and this segment gear carries the arm 41 which passes down through a slot in the top of the money compartment casing and is coupled to a pin 42 in the side of the drawer 2, the pin riding in a slot 43 in the lower end of the arm 41.

It will be evident from this construction that when the drawer 2 is propelled from the case by the springs 4, when the push lever 5 is depressed, that the segment gear 39 will be rocked to drive the pinion 37 and pawl carrier plate 36. The parts are so adjusted that when the drawer is closed the pawls 35 will be in engagement with the teeth of the ratchet plate 33 and the train of gears to the feed rollers are so proportioned that the complete throw of the drawer will actuate the feed rollers to deliver the proper length of sales checks or strips of paper over the writing tablet. It will also be evident that in closing, the drawer, should it accidentally or for any other reason not be pushed in far enough to be locked by the catch 7 and the springs throw the drawer out, that the pawls 35 will not engage the ratchet plate and therefore the feed mechanism of the register will not be actuated. The drawer must be pushed in and locked before the clutch connecting mechanism intermediate the drawer and feeding mechanism of the register can be brought into engagement. It will also be understood that while we have illustrated a pawl and ratchet clutch, other clutch constructions could be readily substituted without departing from the spirit of our invention.

For driving the feed mechanism and storing in the case, the total sales paper strip, we provide as follows: 44 is a pinion on the opposite end of the shaft of feed roller 29 which meshes with an idler 45, which in turn meshes with the gear 46 on the shaft of total sales slip feed roller 25, the gearing being so proportioned that the total throw of the main feed will only advance feed roller 25 a short distance. The storage roll 26 for

this total sales slip has frictionally mounted thereon, so that the roll can slip, a gear 47 which is driven by the intermediate gear 48 in mesh with the feed roller gear 29, so that whatever portion of the total sales slip is fed through the rollers 24, 25 will be wound up and stored on the roll 26 to which convenient access may be had from time to time by opening the end 13 of the casing. It will be evident from what has already been said that it is not our desire to be limited in the novel features of our present invention to the particular kind of total sales slips register which we have illustrated and described and that the novel features to be recited in the claims will be equally applicable to any of the well known constructions of autographic registers.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is:

1. In an autographic register, the combination with paper strips and a writing tablet over which the paper is propelled, with mechanism for feeding the paper, of a money till, and means for opening said till, with connecting mechanism intermediate said till and feeding mechanism for the paper, with means to prevent the operation of said connecting mechanism until the till is completely closed.

2. In an autographic register, the combination with paper strips and a writing tablet over which the paper is propelled, with mechanism for feeding the paper, of a cash drawer, and spring for opening same, with connecting mechanism intermediate said drawer and feeding mechanism for the paper, with means to prevent the operation of said connecting mechanism until the drawer is completely closed.

3. In an autographic register, the combination with paper strips and a writing tablet over which the paper is propelled with mechanism for feeding the paper, of a money till, and means for opening said till, with connecting mechanism intermediate said till and feeding mechanism for the paper, and a clutch for throwing said connecting mechanism into operation disengaged until the till is closed.

4. In an autographic register, the combination with paper strips and a writing tablet over which the paper is propelled with mechanism for feeding the paper, of a money till, and means for opening said till, with connecting mechanism intermediate said till and feeding mechanism for the paper, and a pawl and ratchet clutch for throwing said connecting mechanism into operation disengaged until the till is closed.

5. In an autographic register, feed rollers for the paper strips, gearing for driving same, a clutch for actuating said gearing, with cash drawer, and lever intermediate said

drawer and clutch, and means for throwing said clutch into operation, inoperative until the drawer is closed.

6. In an autographic register, feed rollers for the paper strips, gearing for driving same, a pawl and ratchet clutch for actuating said gearing, with cash drawer, and lever intermediate said drawer and clutch, and means

for throwing said clutch into operation inoperative until the drawer is closed.

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