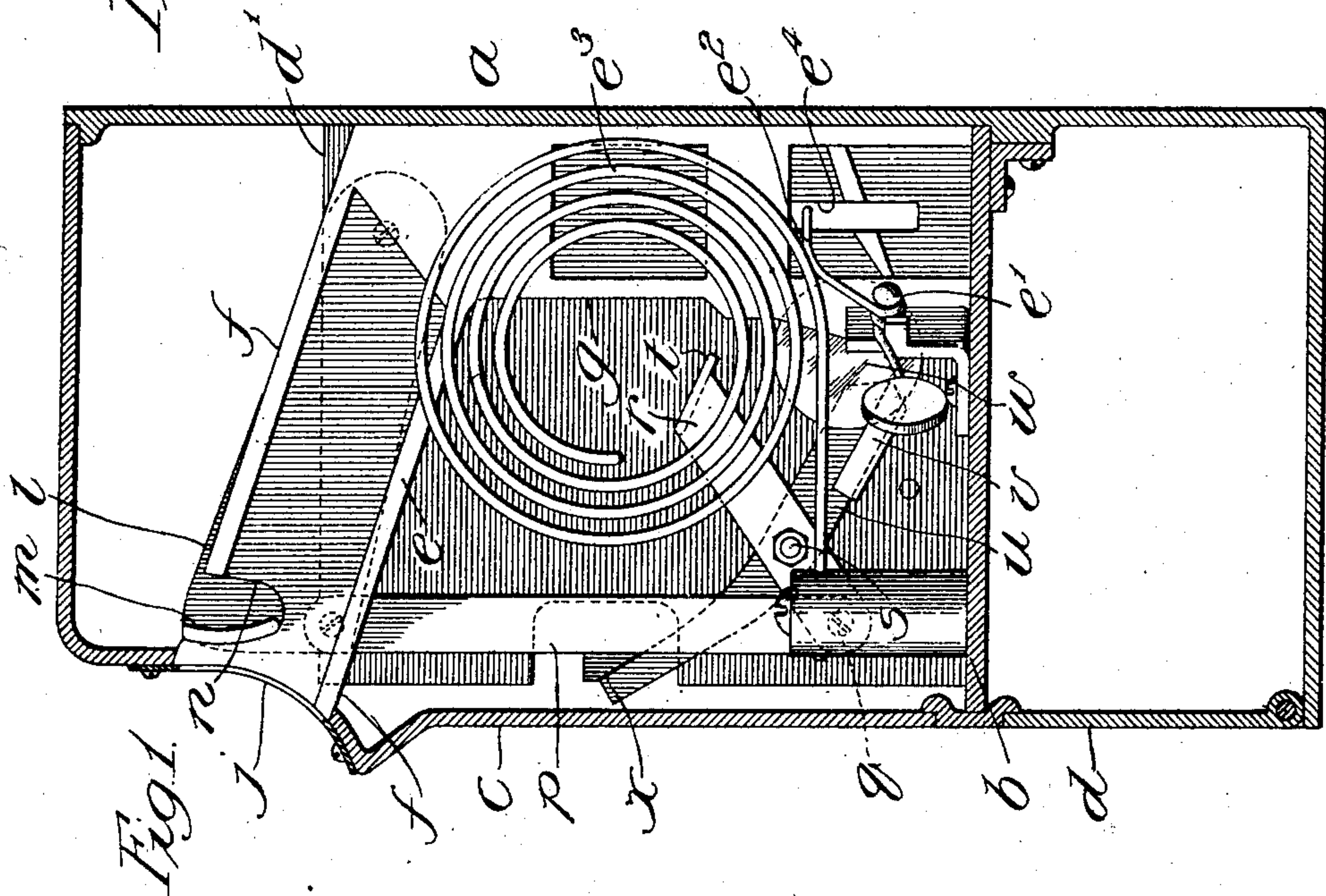
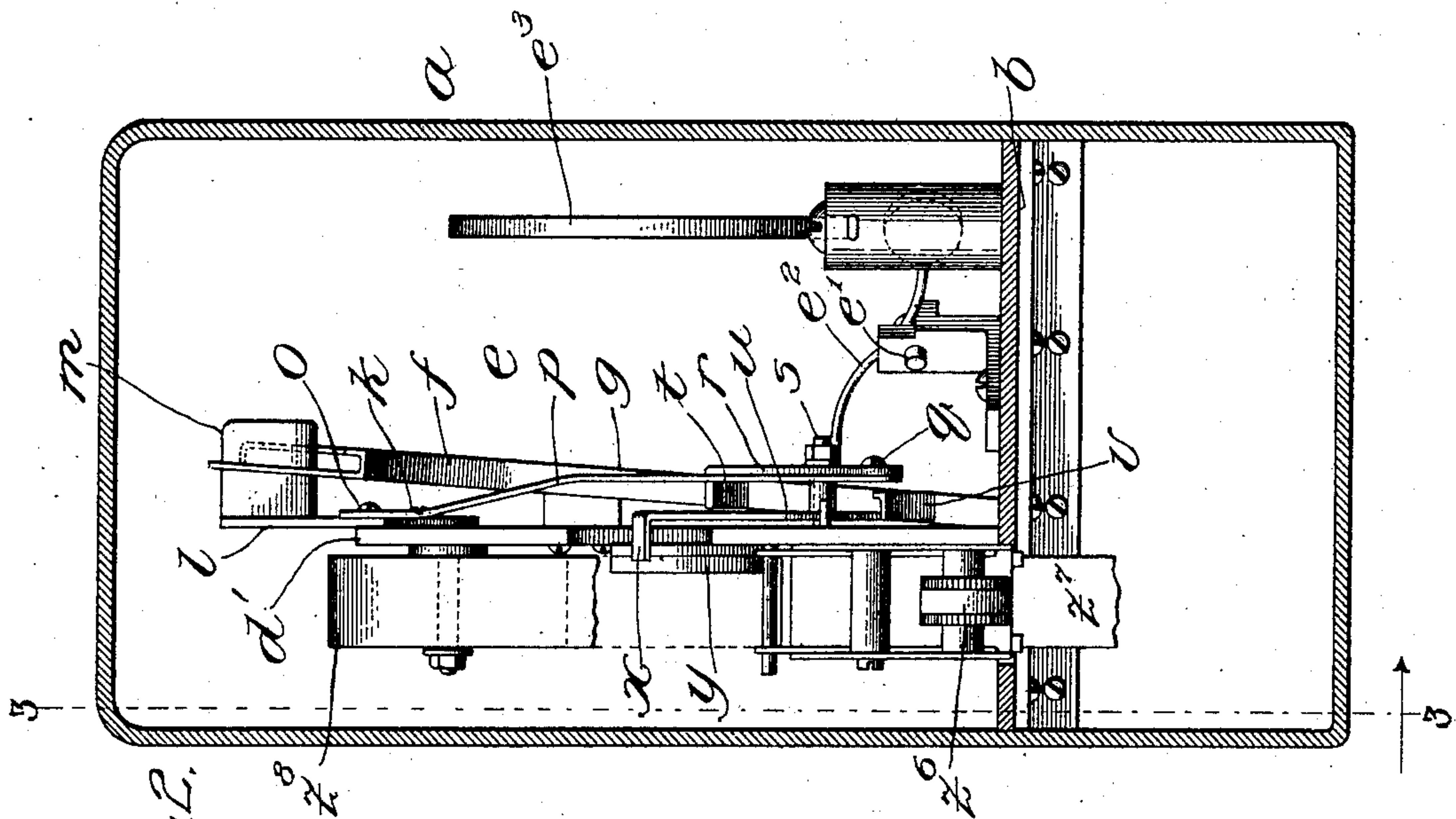


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 COIN BOX FOR TELEPHONES.  
 APPLICATION FILED NOV. 18, 1908.

929,629.

Patented July 27, 1909.  
 2 SHEETS—SHEET 1.



Witnesses:  
 John Enders  
 Chas. H. Quill

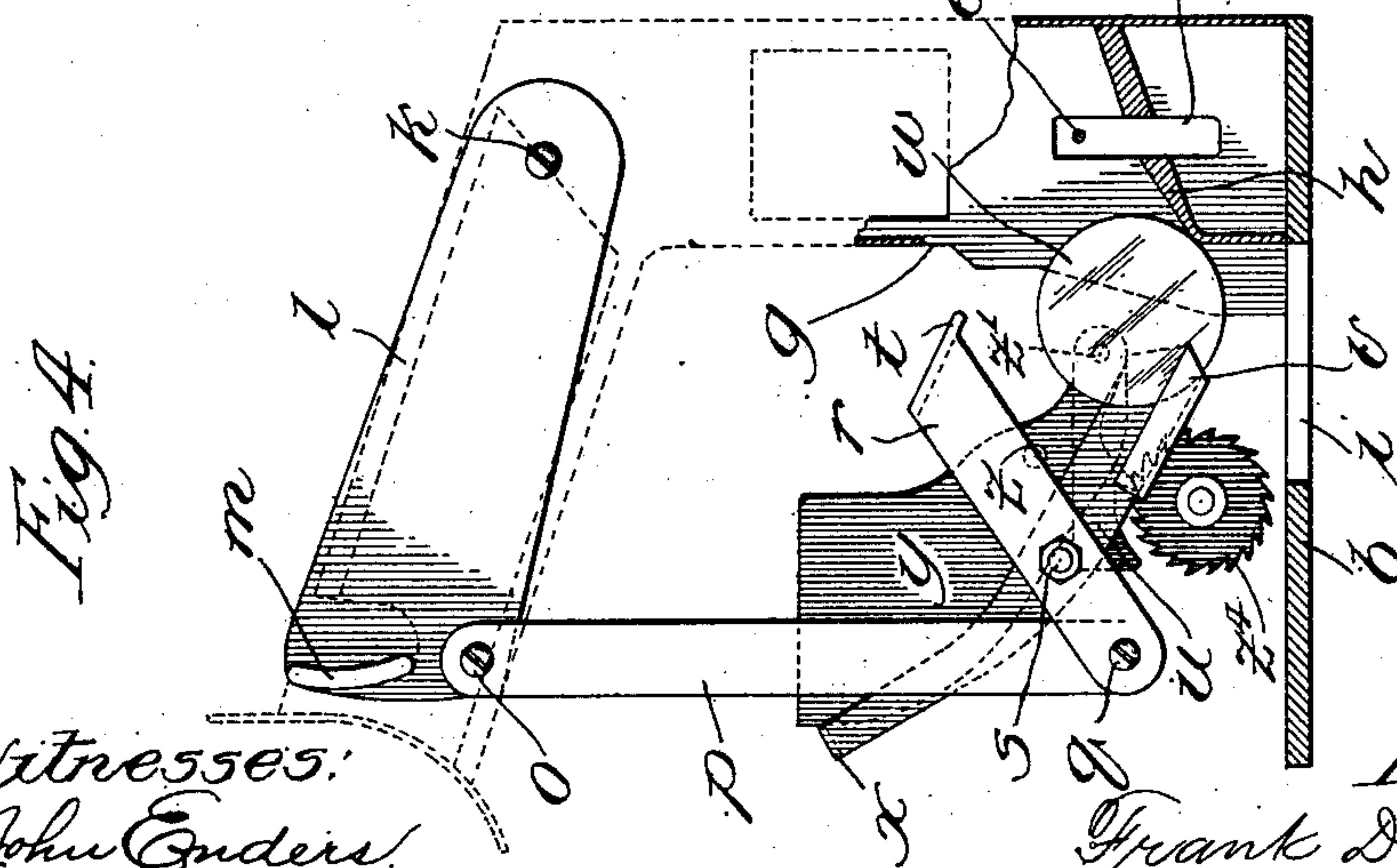
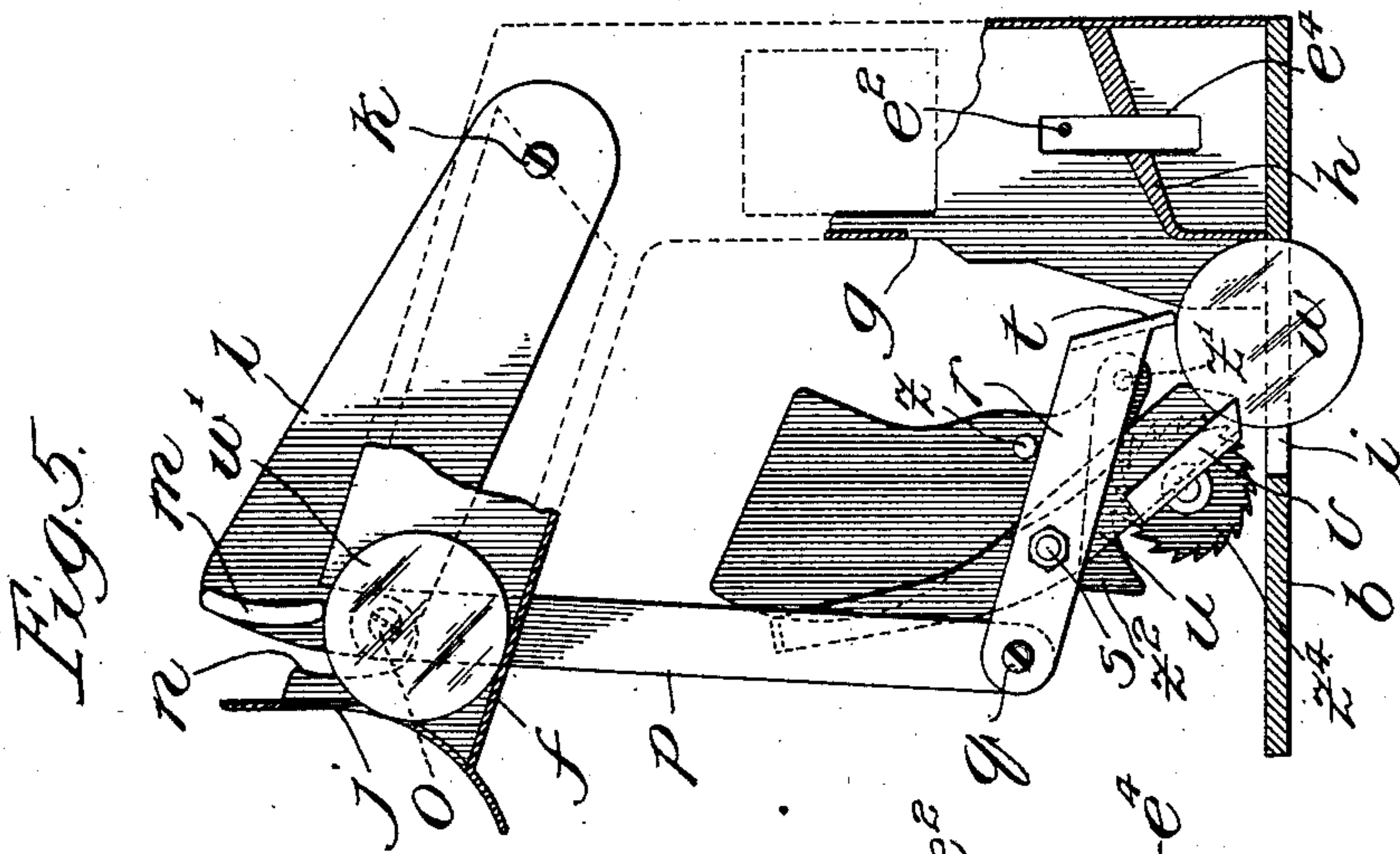
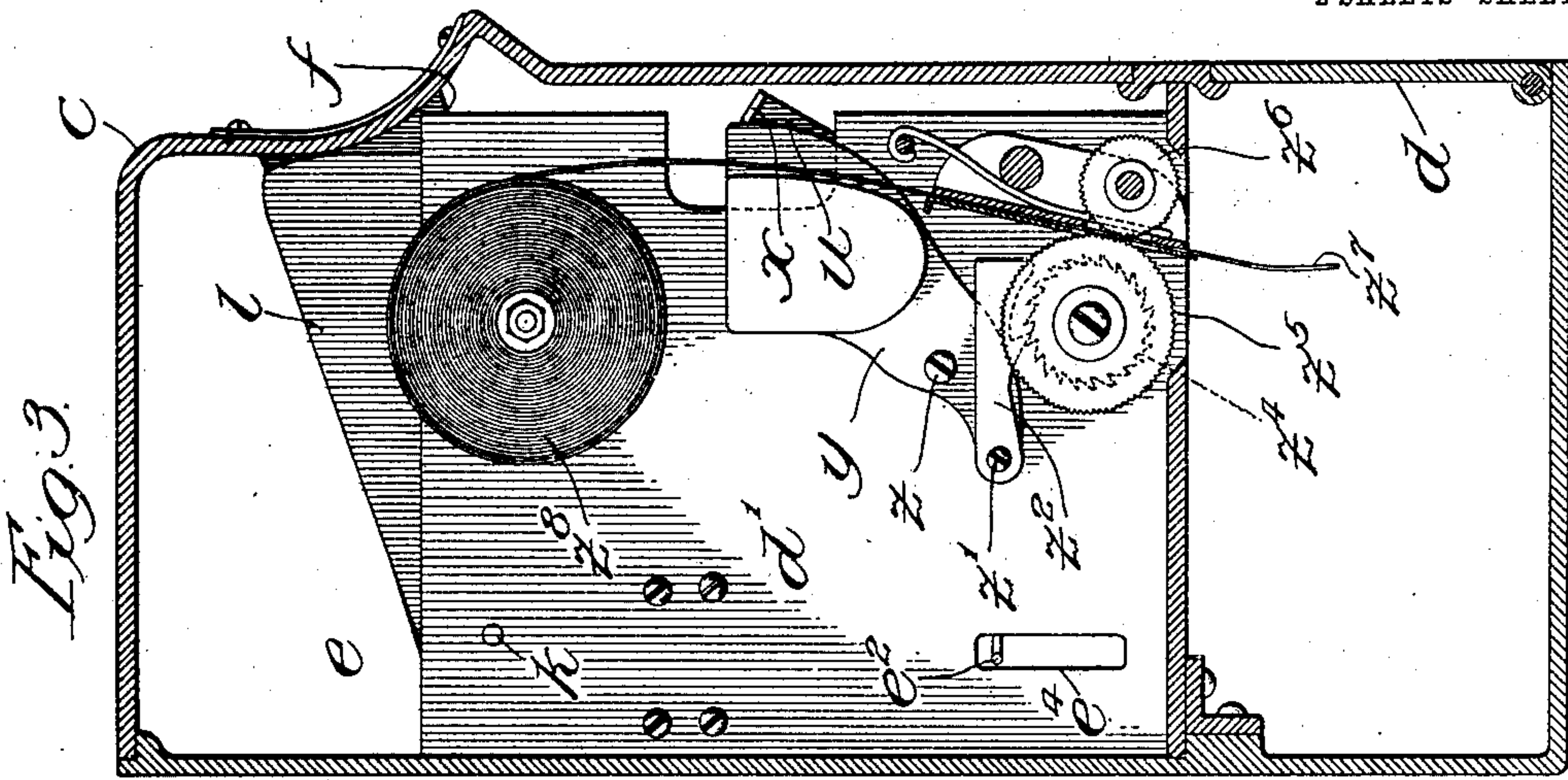
Inventor:  
 Frank D. Powell  
 By David W. Fletcher,  
 Atty.

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# UNITED STATES PATENT OFFICE.

FRANK D. POWELL, OF CHICAGO, ILLINOIS, ASSIGNOR TO AMERICAN COIN REGISTER COMPANY, A CORPORATION OF ILLINOIS.

## COIN-BOX FOR TELEPHONES.

No. 929,629.

Specification of Letters Patent.

Patented July 27, 1909.

Application filed November 18, 1908. Serial No. 463,255.

*To all whom it may concern:*

Be it known that I, FRANK D. POWELL, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Coin-Boxes for Telephones, of which the following is a description, reference being had to the accompanying drawings, forming a part of this specification, in which corresponding letters of reference in the different figures indicate like parts.

The object of my invention is to provide a simple and cheap registering coin-box for telephones and analogous uses, which shall be so constructed that the insertion of a given coin may serve to cause one previously deposited to be transmitted to a receptacle separate from that inclosing the registering mechanism in which the coin is primarily introduced.

To these ends my invention consists in the combination of elements hereinafter more particularly described and definitely pointed out in the claims.

In the drawings, Figure 1 is a transverse vertical sectional view of a coin-box showing a side view of the mechanism contained therein, Fig. 2 is a front view taken at right angles to that shown in Fig. 1, the case being in vertical section, Fig. 3 is a view taken upon the line 3—, Fig. 2, viewed in the direction of the arrow there shown, Fig. 4 is a view showing the operative parts in their respective positions as they would appear after the insertion of the first coin, a portion of the coin chute being broken away while the lower part is sectioned, and Fig. 5 is a like view showing the parts in the relative positions which they would assume upon the deposit of a second coin.

Referring to the drawings, *a* represents a metallic case of any well known construction, divided into upper and lower compartments by means of a horizontal partition *b* rigidly secured therein. The front *c*, which is arranged to cover the operative mechanism, is made removable to permit access thereto, while a closure *d* is provided for the final coin receptacle, which closure is intended to be secured independently of the other, to guard against access thereto by unauthorized persons.

Extending upwardly from the part *b* is a frame-plate *d*<sup>1</sup>, to which is rigidly secured a coin-chute, generally designated by *e*, hav-

ing a downwardly and rearwardly inclined portion *f* and a vertical portion *g*, in the lower part of which is a downwardly and forwardly inclined ledge *h* arranged to direct a coin toward a slot *i* in communication with the coin receptacle. The part *f* of the coin-chute is inclined laterally, as shown in Fig. 2, and is open at the side so as to cause coins of less than a given diameter to fall therefrom before entering the vertical portion *g*. The upper part *f* of the coin chute is in communication with the usual coin-slot *j*, Figs. 1 and 5, of the case, into which the coins are to be inserted. Pivoted at *k* to the frame-plate *d*, is an arm *l*, provided with a laterally extended downwardly and rearwardly inclined lug *m* arranged to lie across and to bar or obstruct the coin opening *j*. The lug *m* is extended across the coin chute and is arranged to rest loosely in a notch *n* formed therein. The arm *l* acts by gravity and the lug *m* is intended to rest normally in the position shown in Figs. 1, 2 and 4. Jointedly connected at *o* to the forward end of the gravity arm *l*, is a link *p*, the lower end of which is connected in like manner at *q* with a lever *r*, which is fulcrumed upon a stud. The inward end of the lever is bent laterally as shown at *t*, said bent portion standing normally above and in a plane transverse to that of the coin-chute exit, as more clearly indicated in Figs. 2, 4 and 5. Pivotally mounted upon the stud *s* is a bent lever, generally designated by *u*, the lower portion of which is trough-shaped as shown at *v*. Said trough-shaped portion is inclined downwardly toward the part *h* and slot *i* and lies in the same vertical plane, so that a coin as *w*, when inserted, will fall to the position shown in Fig. 4, and rest partly upon the inclined part *h* and partly within the trough portion *v* of the lever *u*. Said lever is provided with a laterally bent portion *x* which extends to the opposite side of the frame-plate and engages with the edge of the lever *y* pivoted at *z* to the frame-plate, which lever is preferably weighted at its forward end, the rear end thereof being jointedly connected, as shown at *z*<sup>1</sup>, Fig. 3, to a gravity pawl *z*<sup>2</sup>, which is arranged to engage a ratchet wheel *z*<sup>4</sup>, Figs. 3, 4 and 5, rigidly connected with a feed-roller *z*<sup>5</sup>, which operates in conjunction with a spring-pressed



feed roller  $z^6$  arranged to feed a numbered registering tape  $z^7$  from a roll  $z^8$  upon the frame. My improved device is applicable to any form of registering mechanism and I  
5 make no claim to that shown.

Inasmuch as it is desirable to use a signaling device to indicate to the central operator that a coin has been deposited, I have indicated a simple form adapted to be directly operated by contact with the coin.  
10 Pivoted at  $e^1$  to a suitable support is a bell lever  $e^2$ , Figs. 1 and 2, one end of which is provided with the usual hammer in proximity to a bell  $e^3$  while the other is projected through a slot  $e^4$ , also shown in the remaining figures, in the pathway of the coin.

The operation of my improved device is as follows: Upon inserting a coin in the slot  $j$  it is brought into contact with the part  $m$   
20 in such a way as to lift the latter and permit the coin to enter. It then rolls downwardly through the coin channel and is arrested and held temporarily in the position shown in Fig. 4. During the passage in the vertical part of the coin chute, it strikes against the arm of the bell lever  $e^2$ , thereby causing the hammer to strike the bell. Until a second  
25 coin is introduced the coin  $w$  remains in the position indicated. Upon inserting a second coin  $w^1$ , as shown in Fig. 5, the part  $m$  is again lifted, thereby through the action of the link  $p$  tilting the lever  $r$  and forcing the part  $t$  downwardly against the coin  $w$ . This action serves to depress the lower end of the  
30 lever  $u$ , thereby permitting the coin to fall through the slot  $i$  into the coin receptacle, while at the same time the lever  $y$  is actuated through the part  $x$ , thus moving the pawl  $z^2$  to move the registering mechanism and register the coin. It is obvious that the part  $m$   
40 and its connecting mechanism may be actuated without the intervention of a coin by inserting any suitable instrument through the slot  $j$  to lift said part. This, however,  
45 will merely result in registering the coin previously deposited; after which, a similar action will produce no result inasmuch as the registering mechanism cannot be operated in the absence of a coin to form an intervening element between the levers  $r$  and  $u$ .  
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Having thus described my invention, I claim:

1. In a device of the class described, the combination with a coin registering mechanism protected against unauthorized manipulation, of a coin receptacle, a coin chute, coin arresting means interposed in the path of the coin to temporarily arrest its passage to the coin receptacle, said arresting means  
55 being in operative connection with said registering mechanism, and means controlled by the introduction of a second coin for applying force to a previously inserted coin to press it against said arresting means to move  
60 the latter and thereby actuate said register-

ing mechanism and move the coin past said arresting means into the coin receptacle.

2. The combination with a closed receptacle of a coin chute, a coin registering mechanism having an actuating element interposed in the path of the coin to temporarily arrest its passage, and means in position to be moved by the coin when the latter is introduced to the coin-chute for engaging and actuating a previously inserted coin to move  
70 it past said arresting means and actuate the latter.

3. The combination with a closed receptacle of a coin chute, a primary movable obstruction located at the entrance of said coin-chute in position to be actuated by the insertion of a coin in said chute, a secondary movable obstruction in the pathway of the coin for temporarily arresting the passage of the latter, a registering mechanism in operative connection with said secondary obstruction, and forcing means in operative connection with said primary obstruction for engaging and moving a previously deposited coin by the action of a subsequent coin upon  
80 said primary obstruction.

4. The combination with a closed receptacle, of a coin registering mechanism, a coin-chute, an actuating lever in operative connection with said registering mechanism, means for normally maintaining one arm of said lever in position to arrest the passage of a coin from said chute, a secondary lever having one arm in engaging proximity to an arrested coin, a movable obstruction at the entrance of said coin-chute arranged to be moved by the introduction of a coin, and means for connecting said secondary lever to said obstruction to actuate said lever when a coin is introduced to the chute.  
105

5. The combination with a primary receptacle of a coin registering mechanism contained therein, a coin receptacle in communication with said primary receptacle, a coin-chute leading through said primary receptacle to said coin-receptacle, a movable coin-arresting element interposed in the path of a coin to normally arrest its passage to said coin-receptacle, means for connecting said arresting element to said coin-registering mechanism, coin forcing means for actuating a deposited coin to overcome the resistance of said arresting mechanism to free the coin therefrom while actuating said registering mechanism, a movable element interposed in  
110 said coin-chute at the entrance thereof, and means for connecting the same with said forcing means whereby the insertion of one coin may serve to register another previously deposited and permit it to pass to the coin  
115 receptacle.

6. The combination with a closed receptacle for the reception of coin, of a coin chute, a coin registering mechanism protected against unauthorized manipulation,  
120



said registering mechanism having an actuating element interposed in the path of the coin to temporarily arrest its passage, and means in position to be moved by the coin 5 when the latter is introduced to the coin-chute for engaging and actuating a previously inserted coin to move it past said arresting means and actuate the latter.

7. The combination with a closed receptacle for the reception of a coin of a coin-chute, a primary movable obstruction located at the entrance of said coin-chute in position to be actuated by the insertion of a coin in said chute, a secondary movable obstruction in the pathway of the coin for temporarily arresting the passage of the latter, a registering mechanism protected against unauthorized manipulation in connection with said secondary obstruction, and means in 15 connection with said primary obstruction for engaging and moving a previously deposited coin by the action of a subsequent coin upon said primary obstruction.

8. The combination with a receptacle for the reception of coin, of a coin-chute, a coin 25 registering mechanism protected against unauthorized manipulation, a movable retaining element interposed in the coin-chute for actuating said registering mechanism by means of a positively controlled coin de- 30 posited within the coin-chute, a coin controlled obstruction preceding said retaining element, and means for connecting said obstruction with said retaining element whereby the insertion of one coin in the chute may 35 serve to register and release another previously inserted therein to permit the latter to enter said receptacle.

In testimony whereof, I have signed this specification in the presence of two subscrib- 40 ing witnesses, this 16th day of November 1908.

FRANK D. POWELL.

Witnesses:

D. H. FLETCHER,  
CARRIE E. JORDAN.