

(No Model.)

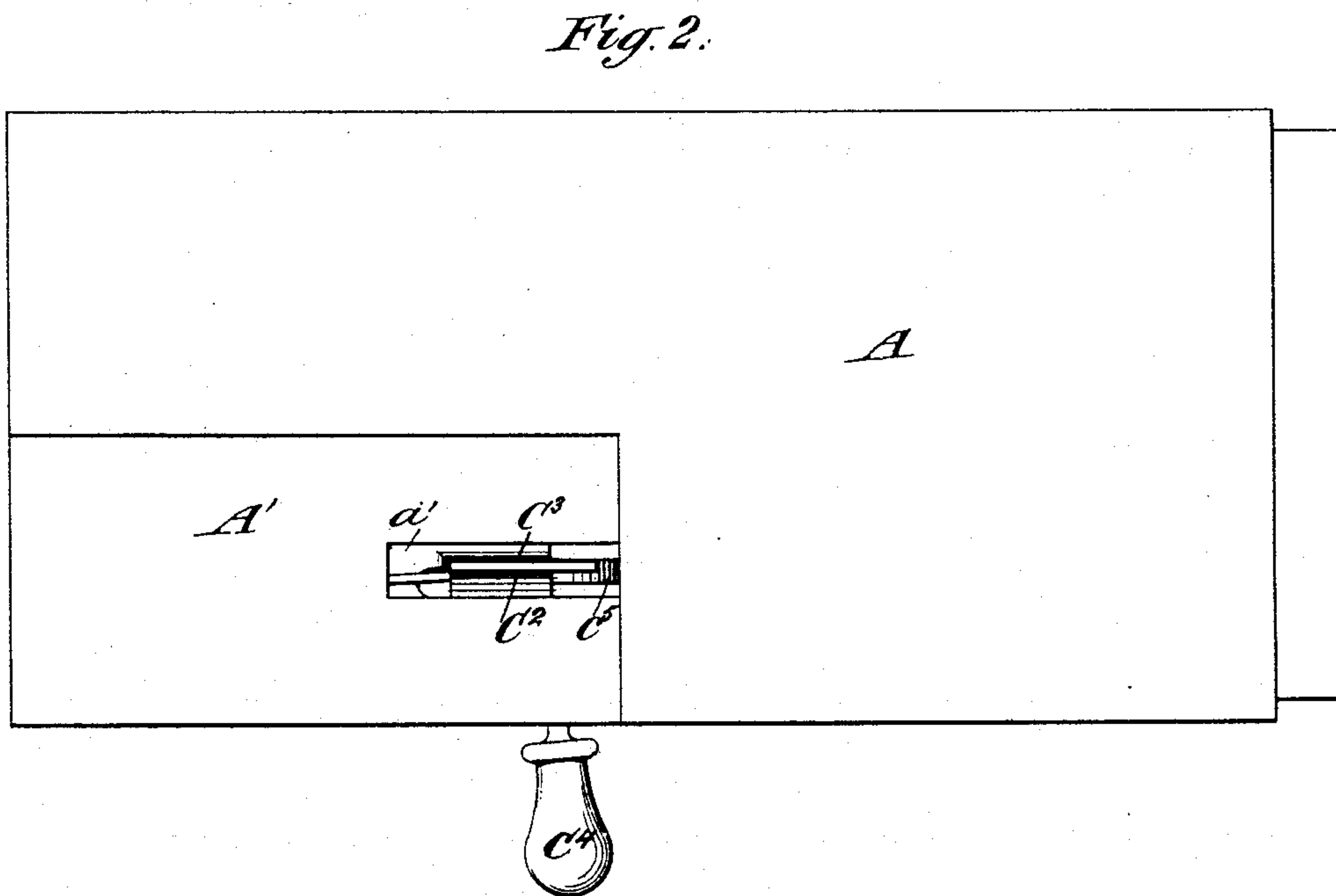
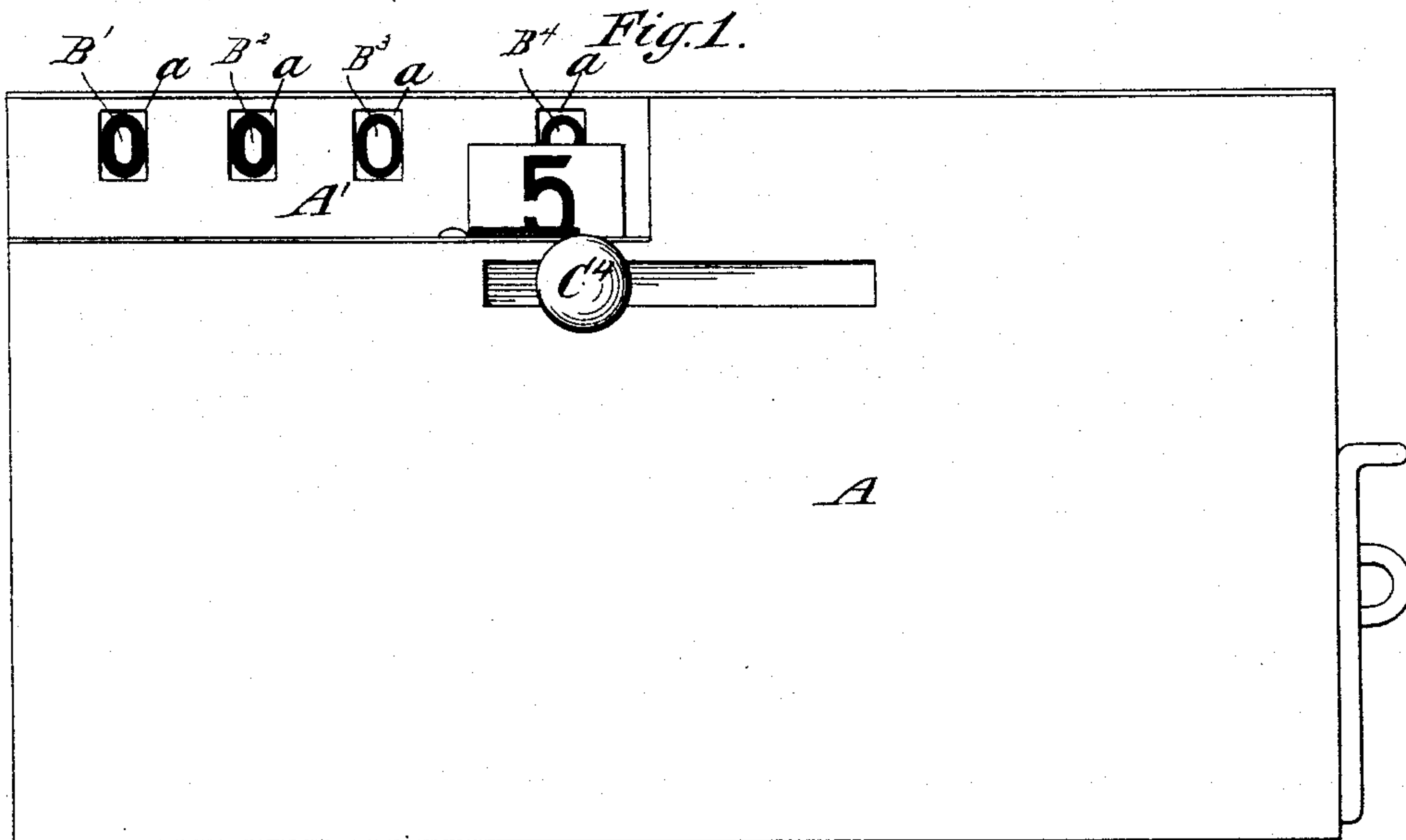
4 Sheets—Sheet 1.

I. PFORZHEIMER.

## REGISTERING RECEPTACLE FOR COINS.

No. 413,206.

Patented Oct. 22, 1889.



Witnesses:  
Arthur H. Hamblin.  
O. Lundgren

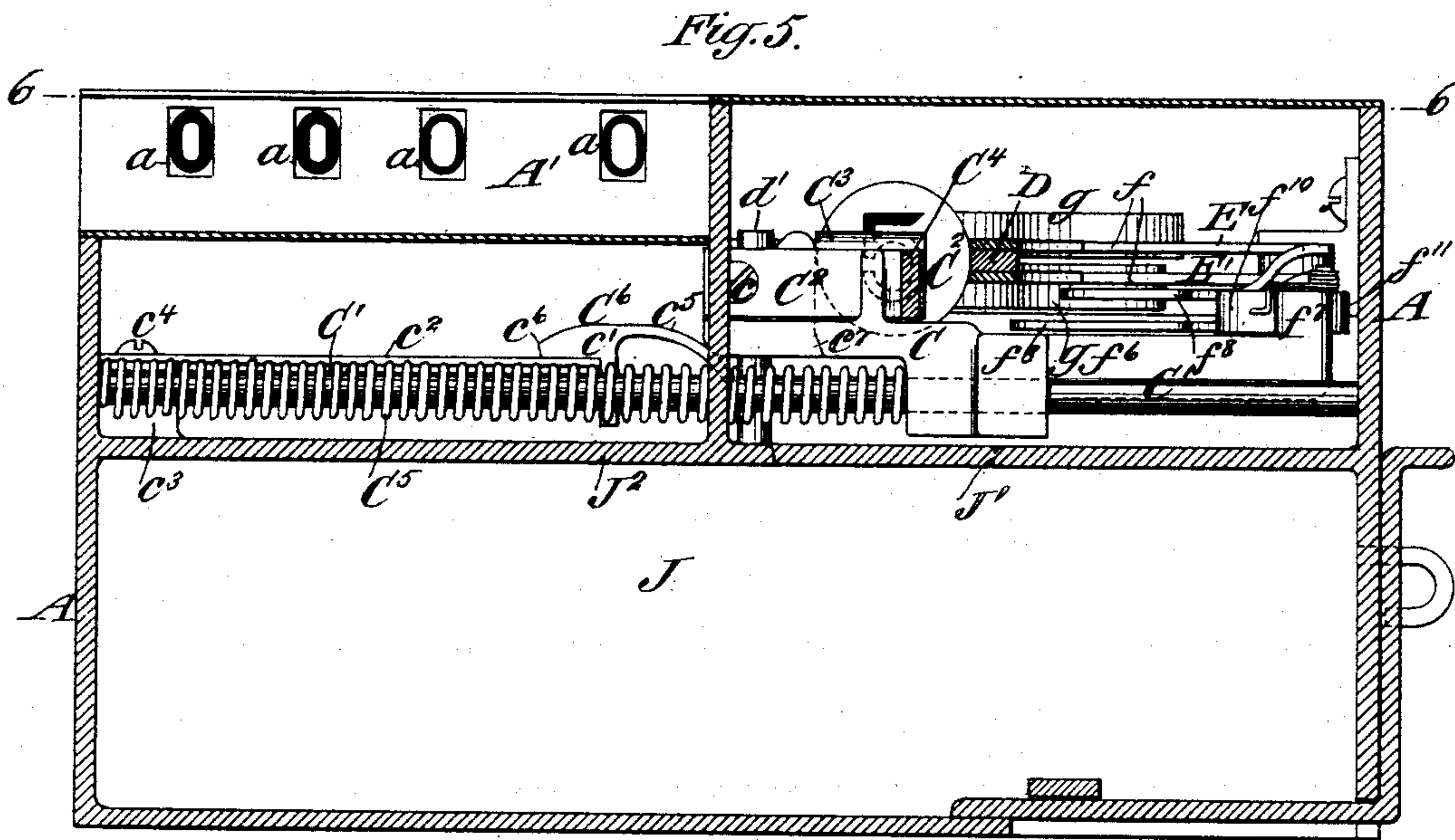
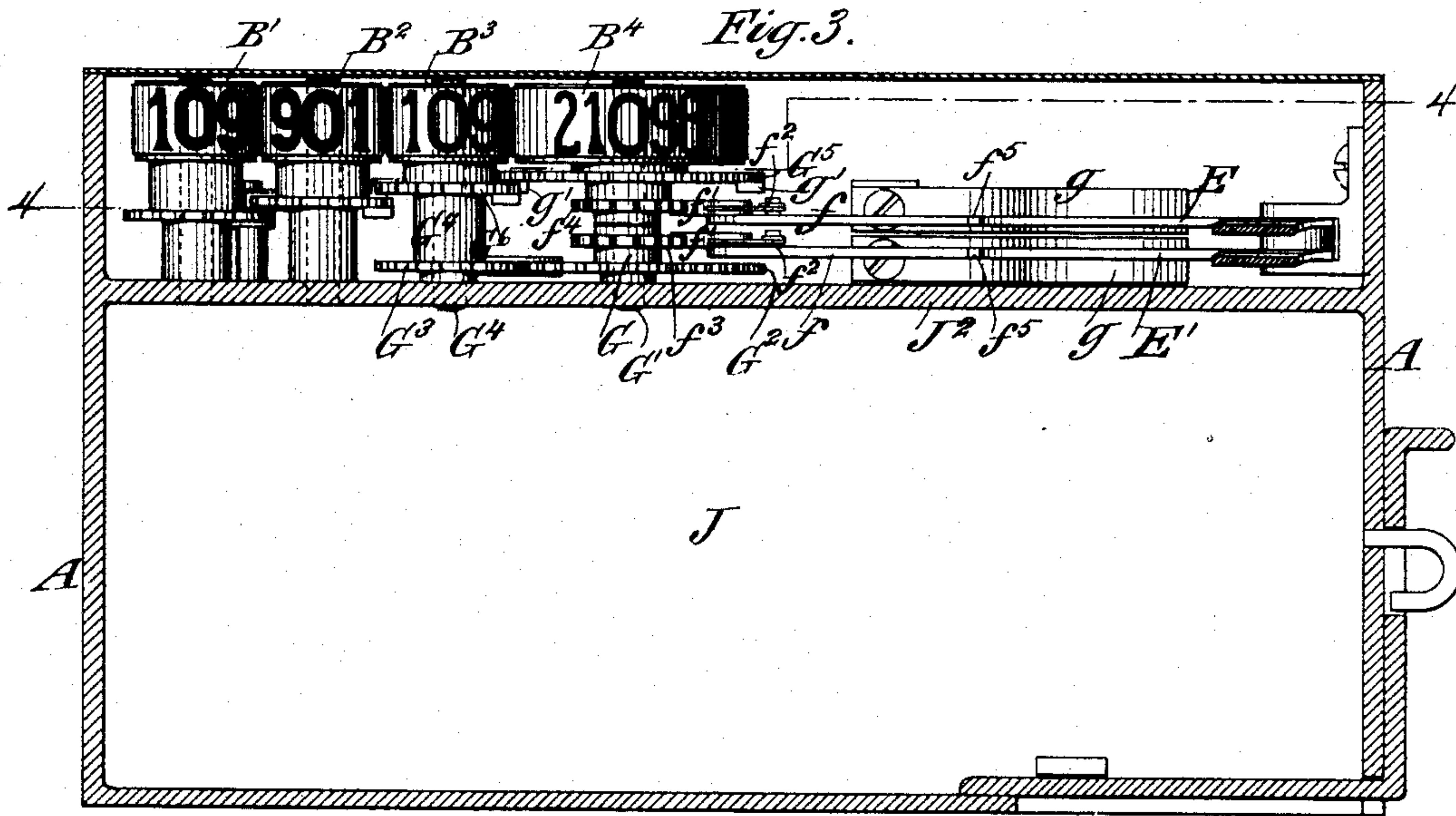
Inventor:  
Isaac Pforzheimer  
by his Attorneys  
Brown & Griswold

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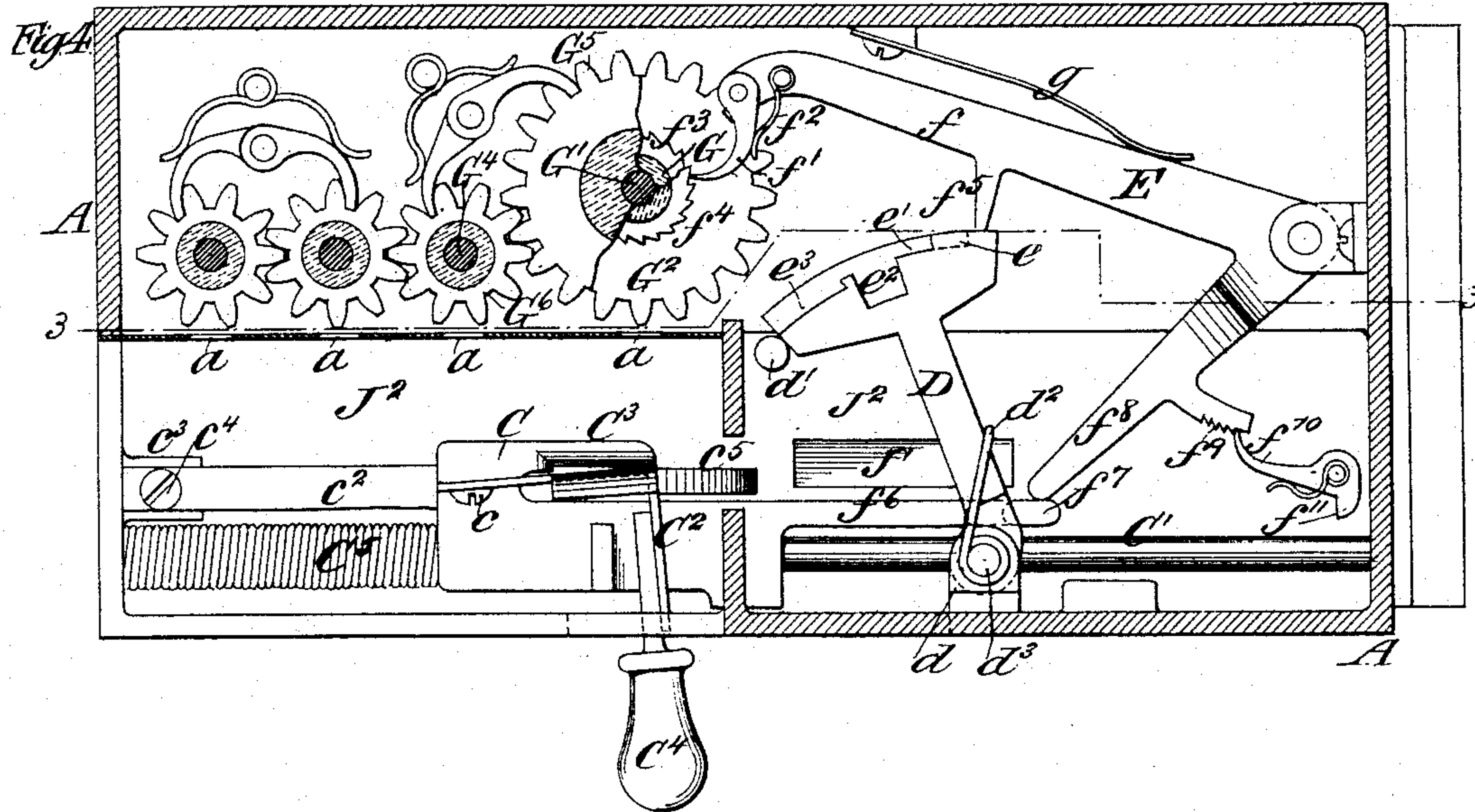


Fig. 6.

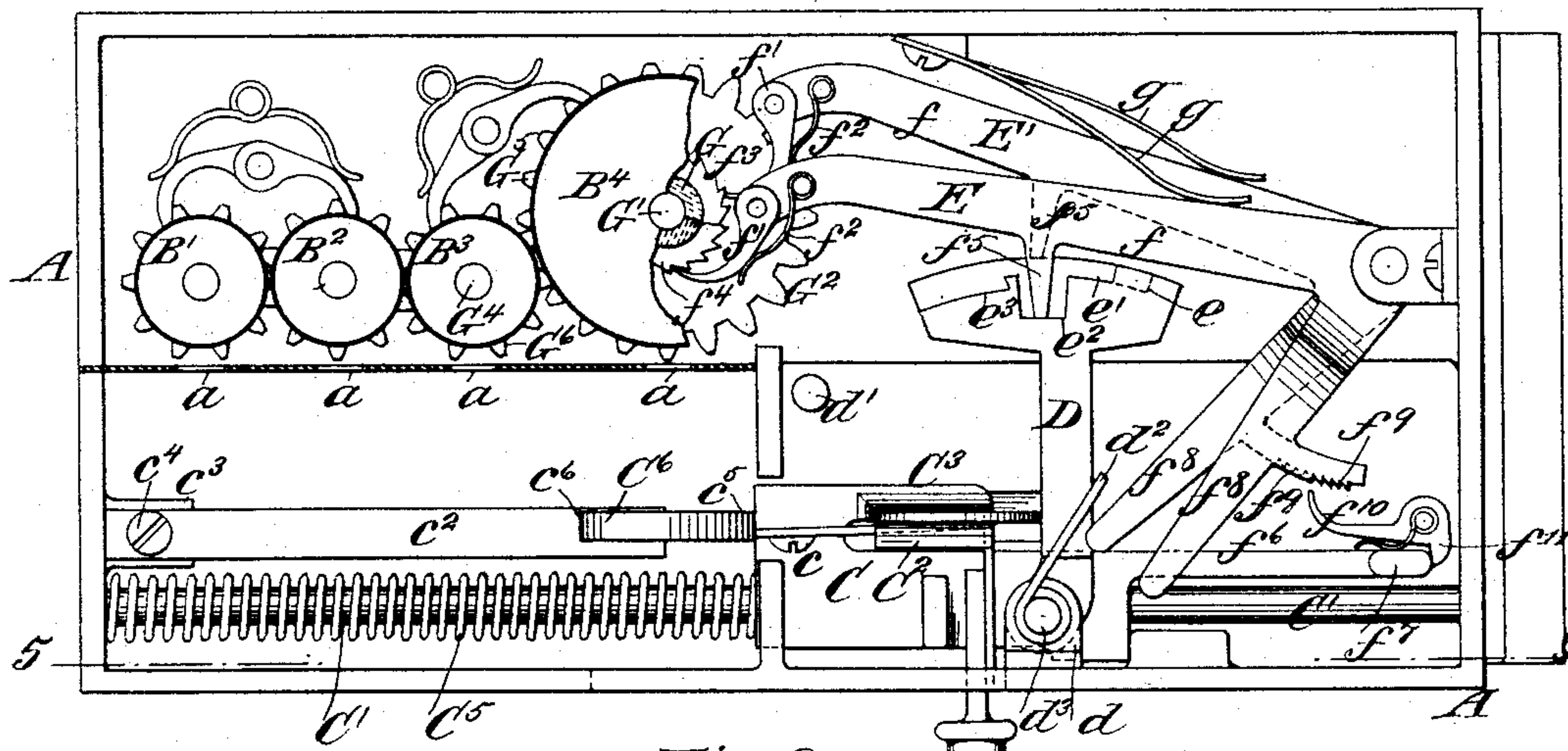
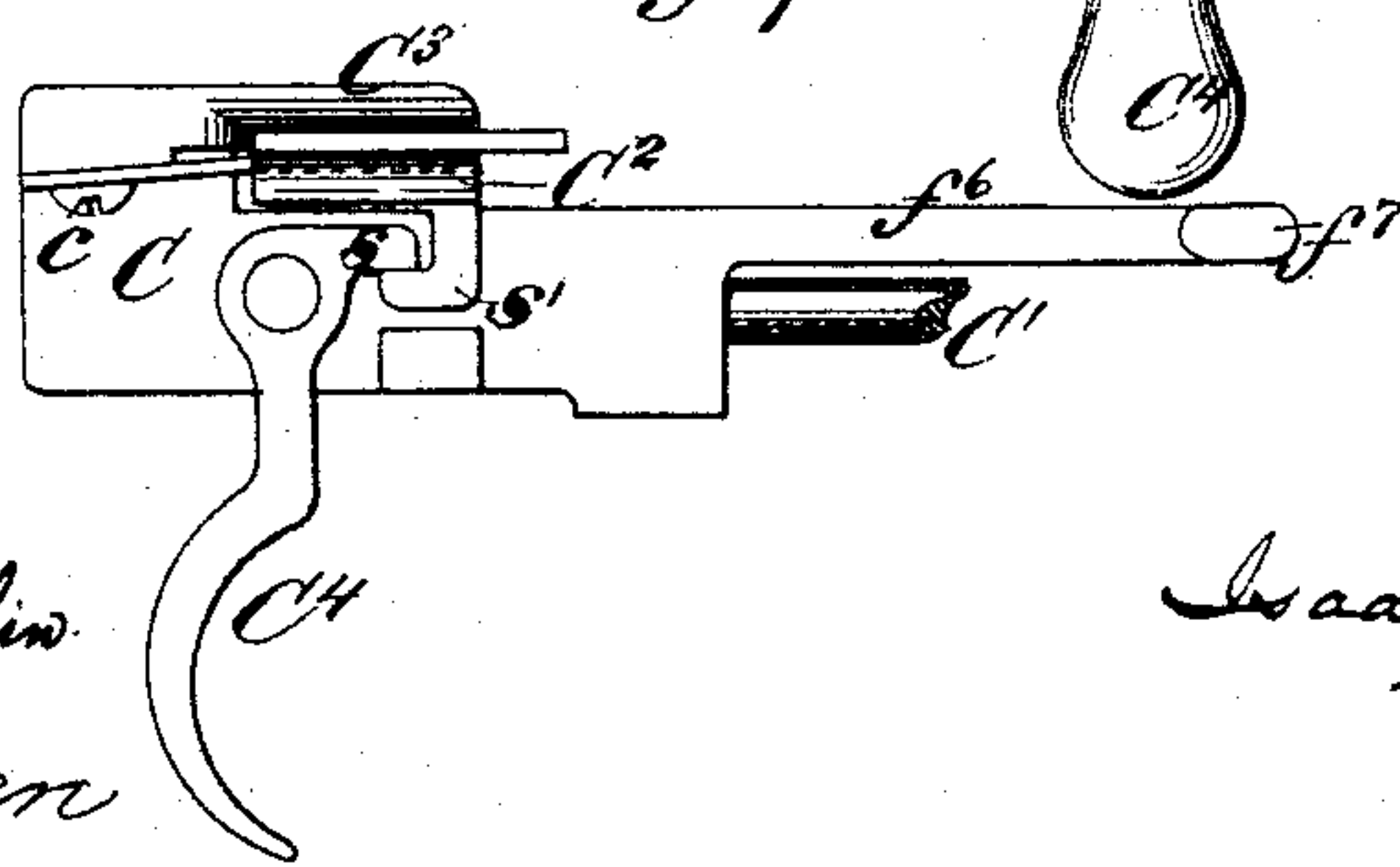


Fig. 9.



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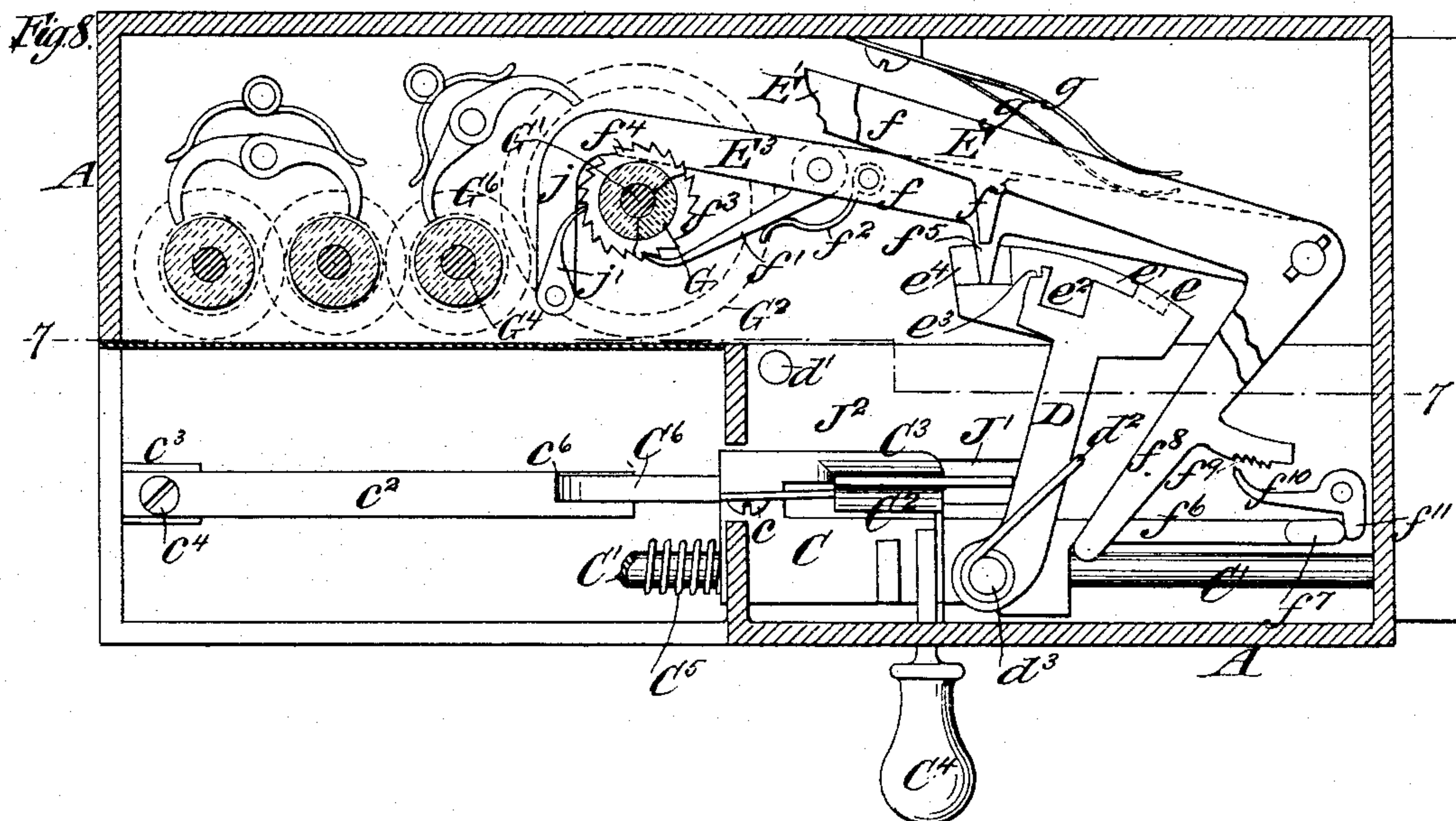
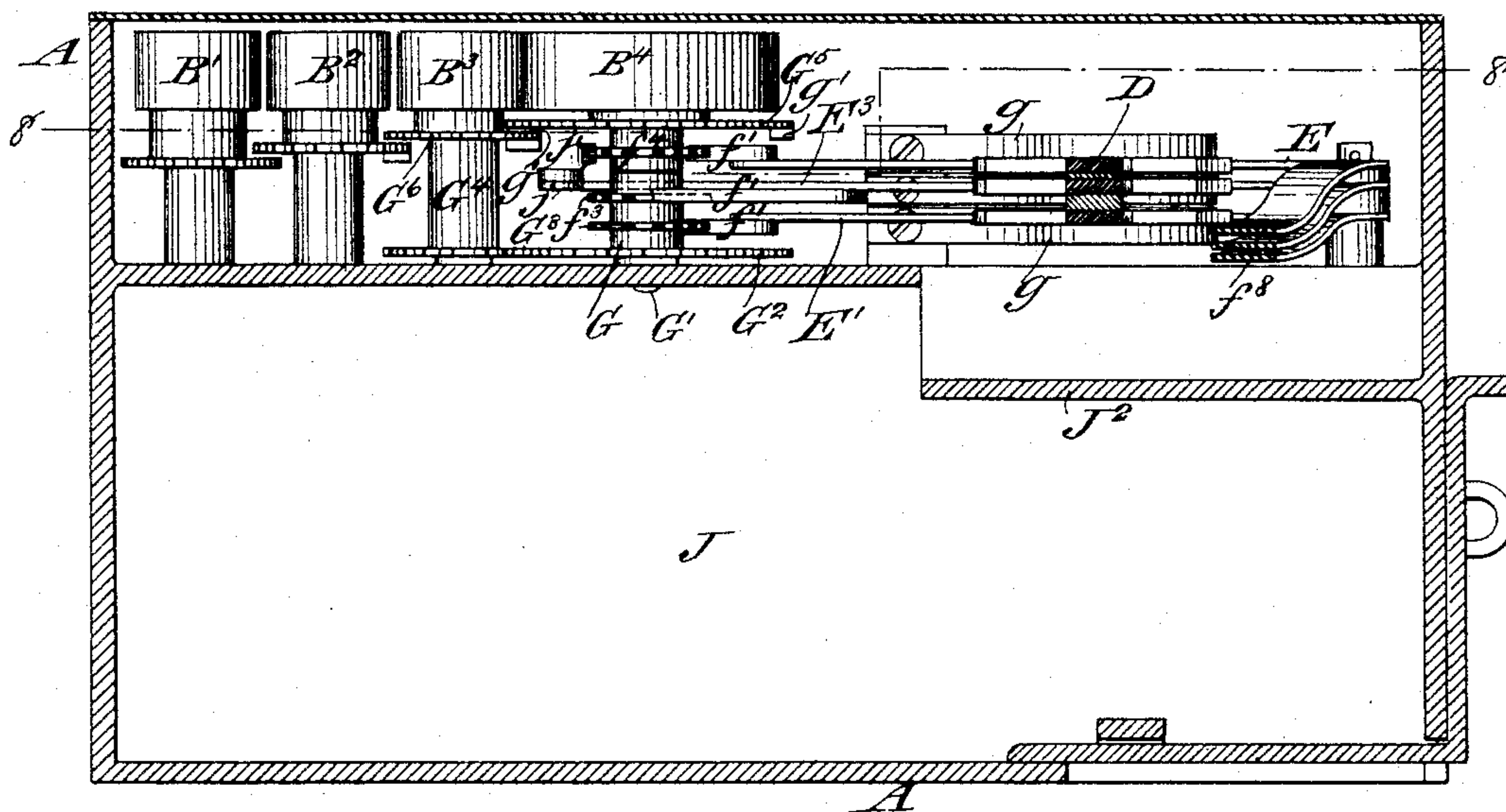


Fig. 7



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# UNITED STATES PATENT OFFICE.

ISAAC PFORZHEIMER, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO  
CARL ZALLUD, OF SAME PLACE.

## REGISTERING-RECEPTACLE FOR COINS.

SPECIFICATION forming part of Letters Patent No. 413,206, dated October 22, 1889.

Application filed October 4, 1888. Serial No. 287,174. (No model.)

*To all whom it may concern:*

Be it known that I, ISAAC PFORZHEIMER, of the city of New York, in the county and State of New York, have invented a certain  
5 new and useful Improvement in Receptacles for Coins, &c., of which the following is a specification.

My improvement is designed to receive and retain coins of various denominations and to  
10 register the value of the coin deposited, as well as to register the total value of all the coins deposited in the receptacle. It may be used as a toy money-bank, or it may be used  
15 to receive money in public places, or for any other purpose wherein it is desired to register the value of coins deposited.

I will describe in detail a coin-receptacle embodying my improvement, and then point out the novel features in claims.

20 Figure 1 is a side elevation of a coin-receptacle embodying my improvement. Fig. 2 is a plan or top view of the same. Fig. 3 is a vertical section taken on the dotted line 3 3, Fig. 4. Fig. 4 is a horizontal section taken  
25 on the dotted line 4 4, Fig. 3. Fig. 5 is a vertical section taken on the line 5 5, Fig. 6. Fig. 6 is a horizontal section taken on the line 6 6, Fig. 5, parts being shown in a similar position to that shown in Fig. 5, but in a different  
30 position from that shown in Fig. 4. Fig. 7 is a vertical section taken on the line 7 7, Fig. 8, and showing a modification. Fig. 8 is a horizontal section taken on the line 8 8, Fig. 7. Fig. 9 is a detail view showing a modification  
35 of the operating-jaws and the mode of operating them.

Similar letters of reference designate corresponding parts in all the figures.

A designates a case for the receptacle.  
40 This case is generally rectangular, but, as will be more clearly seen by reference to Figs. 1 and 2, has an indented or recessed portion A' at one corner upon its upper side, which recessed portion in the example shown has  
45 a rear side which is substantially parallel with the back and front of the receptacle. This rear side is provided with apertures a, (shown as rectangular.) Through these apertures may be displayed figures upon indi-  
50 cator-wheels—B' for thousands, B<sup>2</sup> for hun-

dreds, B<sup>3</sup> for tens, and B<sup>4</sup> for units. These indicator-wheels indicate the total value of the coins deposited in the receptacle. Coins are deposited in the receptacle through an opening a' in the bottom of the recessed portion A' of the receptacle. 55

Referring now more particularly to Fig. 4, C designates a carriage. This carriage is mounted upon a rod C', along which it may be moved to and fro. The rod C' extends 60 from end to end of the receptacle-case and is secured at its ends therein.

C<sup>2</sup> designates a spring-jaw secured upon the upper side of the carriage, as shown, by means of a screw c. This spring-jaw acts in 65 conjunction with a fixed jaw C<sup>3</sup>, forming part of and rigidly secured to the carriage. When the carriage occupies a normal position, or that, for instance, shown in Fig. 4, and a coin is passed downwardly through the opening a' 70 in the bottom of the recessed portion A', it will be passed between the spring-jaw C<sup>2</sup> and the fixed jaw C<sup>3</sup>. The spring-jaw C<sup>2</sup> then operates to grip the coin and hold it. Secured to the spring-jaw C<sup>2</sup>, and extending outwardly 75 through the side of the case, is a handle C<sup>4</sup>.

The coin having been properly deposited between the jaws C<sup>2</sup> and C<sup>3</sup>, the carriage C is moved along upon the rod C' in such manner as to effect the rotation of the indicator- 80 wheels to indicate the value of the coin which has been deposited. The movement of the carriage C in this direction is effected by means of a spring C<sup>5</sup>, which spring is coiled about the rod C', and abuts at one of its ends 85 against the case A and at its other end against the carriage C. As previously stated, the carriage occupies normally the position shown more clearly in Fig. 4. When in such position, the spring C<sup>5</sup> is prevented from exerting 90 its force to move the carriage C by means of a stop C<sup>6</sup>. (Illustrated more clearly in Figs. 5 and 6.) This stop comprises a detent c', which detent is rigidly secured upon a flat spring c<sup>2</sup>. The spring c<sup>2</sup> near its other end is se- 95 cured upon a bracket c<sup>3</sup>, extending from the end of the case A, as shown, by means of a screw c<sup>4</sup>. The portion of the detent c' which is farther from the spring c<sup>2</sup> has a downwardly-curved portion c<sup>5</sup>. The carriage C, when be- 100



ing moved into its normal position, or that shown in Fig. 4, rides up over said downwardly-curved portion  $c^5$  of the detent and forces the said detent downwardly against the resistance of the spring  $c^2$ . The rearward portion of the detent  $c'$ , or that portion which is above the spring  $c^2$ , is provided with a tooth  $c^6$ . The carriage is likewise provided with a tooth  $c^7$ , as shown more clearly in dotted lines in Fig. 5. When the carriage C occupies its normal position, the teeth  $c^6$   $c^7$  will be in engagement, thus preventing the spring  $C^5$  from forcing the carriage out of its normal position. When a coin is forced downward between the jaws  $C^2$   $C^3$ , it forces the detent  $c'$  still farther downward, releasing the tooth  $c^6$  from its engagement with the tooth  $c^7$ . The spring  $C^5$  then operates to shoot the carriage C along upon the rod  $C'$  and into the position shown more clearly in Figs. 5, 6, and 8.

In my device the diameter of the coin which has been inserted determines the degree of rotation of the indicator-wheels. D (see Figs. 4, 6, and 8) designates a swinging arm pivoted upon a lug  $d$ , extending from the side of the case A. When the parts occupy a normal position, as that shown in Fig. 4, the arm D has been swung forward into such position that it is in contact with a stop  $d'$ , extending from the case. It is forced into such position and maintained there by means of a spring  $d^2$ , which spring has a portion coiled about the pivot  $d^3$  of the arm and another portion bearing against the arm. When the arm D is rocked out of the position shown in Fig. 4, it is so rocked against the resistance of the spring  $d^2$ . The force of the spring  $C^5$  is sufficient to overcome the resistance of the spring  $d^2$ . When, therefore, the carriage C is shot forward by the spring  $C^5$ , the coin within the jaws  $C^2$   $C^3$  will strike the arm D and rock the latter a distance depending upon the diameter of the coin within the jaws. For instance, a ten-cent piece will cause the rocking of the arm a certain distance, a penny a slightly-increased distance, a nickel five-cent piece a still greater distance, a two-cent piece a still greater distance, and a silver quarter a distance still greater than the two-cent piece. The arm D is provided at its outer end with a T-shaped head. The outer edge of this head I have shown as provided with indentations  $e$   $e'$   $e^2$   $e^3$ . Between the indentations are plane surfaces, shown as arc-shaped.

Referring again to the normal position of the parts, as shown more particularly in Fig. 4, E designates a lever, here shown as a bell-crank lever. This lever is one of two E E' in the example of my improvement illustrated in Figs. 3, 4, 5, and 6, and shown more clearly in Figs. 3 and 6. When in a normal position, the lever E' occupies a position directly below the lever E. The long arm  $f$  of each of these levers is provided at its outer extremity with a dog  $f'$ , actuated by the spring  $f^2$  to engage the teeth on ratchet-wheels  $f^3$   $f^4$ . Extending horizontally from the sides of the le-

vers E E' are projections  $f^5$ . These projections bear normally against the outer edge of the arm D and do not normally extend into any of the notches in said arm. The carriage C is provided with an arm  $f^6$ , extending forwardly from the same and approximately parallel with the rod  $C'$ . The arm  $f^6$  in the example of my improvement shown has extending from one side thereof a projection  $f^7$ . When the parts occupy a normal position, the arms  $f^8$  of the levers E E' are raised up on the projection  $f^7$  from the arm  $f^6$ . They are brought into such position when the carriage C is moved rearwardly or into its normal position, which may be accomplished by the handle  $C^4$ .

When the arms  $f^8$  are brought into the position last indicated, they are maintained there in the example of my improvement shown by means of ratchets  $f^9$ , engaging a spring-actuated pawl  $f^{10}$ , pivoted upon the case. The pawl  $f^{10}$  has a tooth  $f^{11}$ .

The notches in the outer edge of the arm D are intended to receive whichever of the projections  $f^5$  upon the levers E E' shall come opposite the notch appropriate to a given coin when the arm D has been rocked by the coin—as, for instance, assuming that a ten-cent piece is between the jaws and the carriage is shot forward, the arm will be rocked sufficiently far to cause the projection  $f^5$  on the lever E' to drop into the notch  $e$  (shown in dotted outline) upon the releasing of said lever from its engagement with the pawl  $f^{10}$ . If a penny should be between the jaws, the arm D will be rocked into such position that the projection  $f^5$  on the lever E will be opposite the notch  $e'$ . Should a five-cent piece be inserted, the arm will be rocked so that said projection will be opposite the notch  $e^2$ . Should a two-cent piece be inserted, the arm will be rocked so that said projection will be opposite the notch  $e^3$ . In each of these cases the projection  $f^5$  will not drop into its appropriate notch until the lever E or E', as the case may be, has been released from the pawl  $f^{10}$ , and such release will not occur until the arm D has been appropriately rocked by the coin. This is due to the fact that when the carriage C is shot forward the coin strikes the arm D and moves it into its appropriate position before the end of the arm  $f^6$  strikes the tooth  $f^{11}$  on the pawl  $f^{10}$ . It will therefore be apparent that the greater the diameter of the coin the farther will the arm D be rocked before the arm  $f^6$  can come in contact with the tooth  $f^{11}$ , and that the arm D will therefore always be in an appropriate position to receive one of the projections  $f^5$  before the levers are released from the pawl to permit the projections to fall into the notch. The lever E or E', as the case may be, is forcibly rocked so as to throw its projection  $f^5$  into the notch on the arm D by means of the spring  $g$ . When so rocked, the pawl  $f'$  on the lever engaging the ratchet-wheel  $f^3$  or  $f^4$  will cause the rotation of such ratchet-wheel



a distance equivalent to the depth of the notch into which the projection  $f^5$  has been forced.

In the example of my improvement shown 5 the lever  $E'$  is operated for ten-cent pieces only, and the pawl  $f'$  thereon moves the ratchet-wheel  $f^3$  a distance equivalent to the length of one tooth on the wheel. This wheel is mounted upon a sleeve  $G$ , which sleeve is 10 loosely mounted upon a shaft  $G'$ , journaled in portions of the box or case. Upon the sleeve  $G$  is also mounted a gear-wheel  $G^2$ , which gear-wheel meshes with a gear-wheel  $G^3$ , mounted on the shaft  $G^4$ , upon which is 15 also mounted the indicator-wheel  $B^3$ , indicating tens. The rotation of the ratchet-wheel  $f^3$  a distance equal to the length of one tooth causes, through the intermediate gear described, the rotation of the tens indicator-wheel  $B^3$  sufficiently far to show a single additional number at the appropriate opening  $a$ . Of course when the indicator-wheel  $B^3$  has 20 made a complete rotation it rotates the hundreds indicator-wheel  $B^2$  a distance sufficient to exhibit one additional number at its opening  $a$  in the well-known manner, and when the indicator-wheel  $B^2$  has made a complete rotation it operates to rotate the thousands indicator-wheel  $B^1$  a distance sufficient to 30 show one additional figure at its proper opening, as is common in indicator-wheel systems. The lever  $E$ , operating through its pawl  $f'$ , rotates the ratchet-wheel  $f^4$ , which is rigidly mounted upon the shaft  $G'$ . Upon the shaft 35  $G'$  is also rigidly mounted the indicator-wheel  $B^4$ , which is the indicator-wheel for units—in this case cents. When the projection  $f^5$  on the lever  $E$  drops into the notch  $e'$ , it rotates the ratchet-wheel  $f^4$  a distance equivalent to one tooth, and the indicator-wheel  $B^4$  a distance sufficient to show a single additional figure. When it drops into the notch 40  $e^2$ , it rotates the wheel  $f^4$  five teeth and the indicator-wheel five figures. When it drops into the notch  $f^3$ , it rotates the ratchet-wheel two teeth and the indicator-wheel two figures. I have shown upon the shaft  $G'$  a gear-wheel  $G^5$ . This gear-wheel I have shown as provided with twenty teeth. Diametrically opposite and upon the sides of the wheel are 50 projections  $g'$ . When the gear-wheel  $G^4$  has made a half-rotation and the units indicator-wheel  $B^4$  has been moved to exhibit ten figures, one of the projections  $g'$  on the gear-wheel will engage with a gear-wheel  $G^6$  on the shaft  $G^4$ , by which the indicator-wheel indicating tens will be rotated one tooth.

In Figs. 7 and 8 I have shown means for 60 rotating the device to indicate when a silver quarter has been deposited. In this case I employ a third lever  $E^3$ , and the arm  $D$  is provided with a recess  $e^4$ , which is out of line with the recesses  $e' e^2 e^3$ . The pawl  $f'$  on this lever  $E^3$  engages the tens-wheel, or, in 65 other words, the gear-wheel  $f^3$ . When the projection  $f^5$  upon the lever  $E^3$  has been forced into the notch  $e^4$ , the pawl  $f'$  operates

to rotate the ratchet-wheel  $f^3$  a distance equivalent to the length of two teeth on the wheel, consequently indicating twenty on the 70 tens indicator-wheel. The arm  $f$  on the lever  $E^3$  has a curved or bent round portion  $j$  at its outer end. This curved or bent round portion extends about the shaft  $G'$ . It bears at its extremity a pawl  $j'$ , which pawl engages 75 the ratchet-wheel  $f^4$ . When the carriage  $C$  is moved backwardly or into a normal position and the arm  $f^8$  on the lever  $E^3$  is moved up onto the projection  $f^7$  on the arm  $f^6$ , the lever  $E^3$  will be so rocked that the arm  $f$  thereof will 80 be moved sufficiently far to cause the pawl  $j'$  to rotate the ratchet-wheel  $f^4$  a distance equivalent to five teeth, thus indicating five on the unit-wheel.

$J$  designates a receptacle for the coins. 85 When the indicator has been operated and it is desired to return the carriage  $C$  to a normal position, the handle  $C^4$  is grasped to move said carriage rearwardly against the resistance of the spring  $C^5$ . By this operation 90 the jaws  $C^2 C^3$  are separated, and the coin will drop down through the opening  $J'$  in a partition  $J^2$  and into the receptacle  $J$ .

In Fig. 9 I have shown a different form of construction of the spring-jaw  $C^3$ , in which 95 the handle  $C^4$  is separate from the spring-jaw, but has a connection therewith by means of a jaw  $s$  engaging the jaw  $s'$  on the spring-jaw.

Although I have described my apparatus 100 as adapted for use with coins of different diameters, it is obvious that it may be used for tickets of different diameters or widths, which tickets may bear upon them the numbers indicating various denominations. 105

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a receptacle for coins or other articles, the combination, with an indicator, of a movable carriage, jaws upon said carriage for 110 gripping the coin or other article, a lever or levers for operating the indicator, and a notched piece with which the coin or other article will contact when the carriage is moved in one direction to cause a movement of said 115 notched piece, so as to permit the rocking of the lever or levers to operate the indicator, substantially as specified.

2. In a receptacle for coins or other articles, the combination, with an indicator, of a 120 movable carriage, a rocking arm pivoted near one end and provided with notches at its other end, levers for operating the indicator provided with projections bearing upon said rocking arm, said arm being adapted to be 125 struck by the coin or other article during the movement of the carriage in one direction and rocked to permit a projection on the lever to pass into a notch on the arm and rock the lever to cause the operation of the indi- 130 cator, substantially as specified.

3. In a receptacle for coins or other articles, the combination, with an indicator, of a movable carriage, a lever or levers for oper-



ating the indicator, a pawl for maintaining  
said levers in a normal position, a notched  
piece adapted to be struck by the coin or other  
article during the movement of the carriage  
5 in one direction and moved a distance de-  
pending upon the diameter of the coin or  
other article, said carriage operating to re-

lease said pawl after the notched piece has  
been struck by the coin or other article, sub-  
stantially as specified.

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