

No. 747,613.

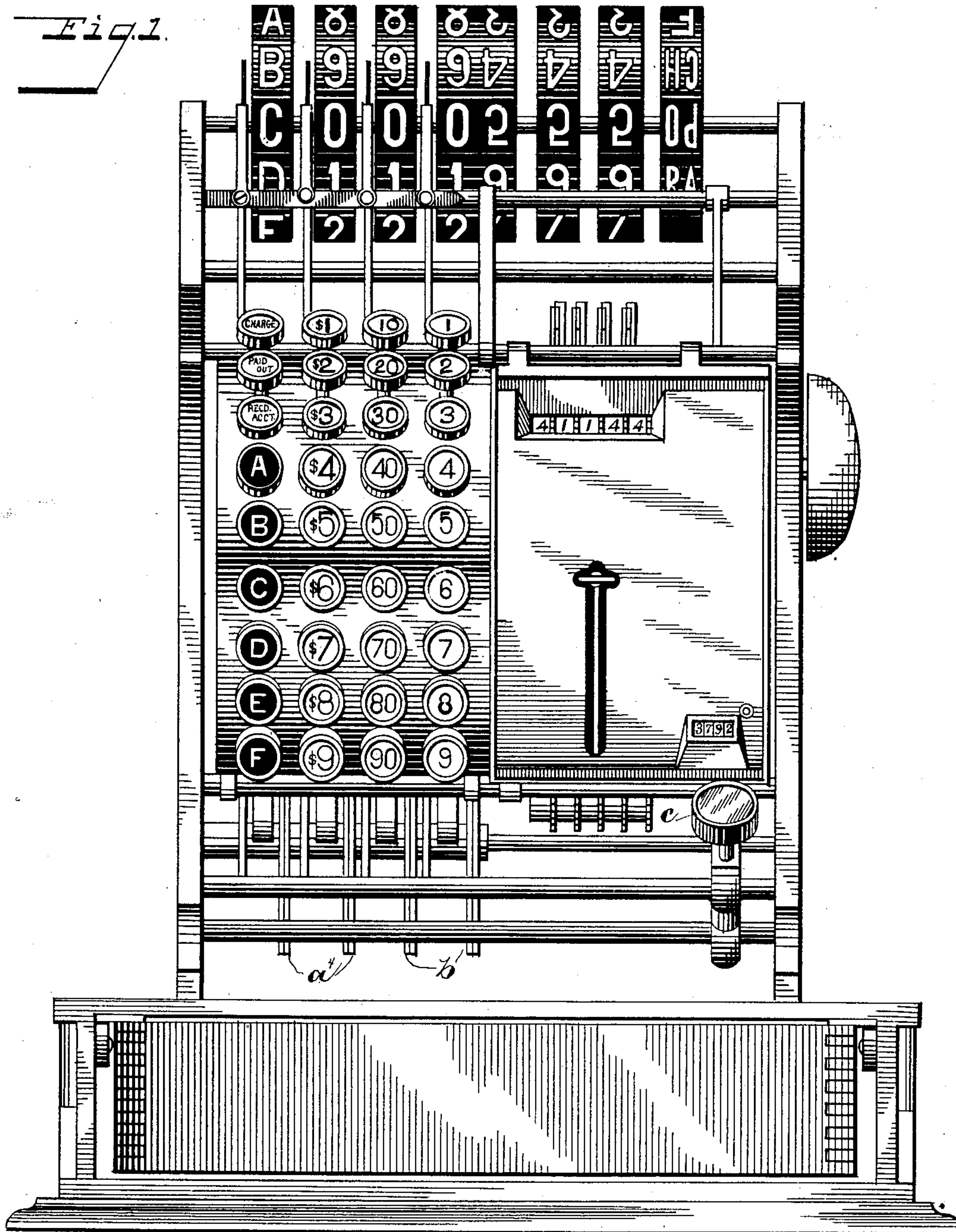
PATENTED DEC. 22, 1903.

J. E. KELLY.
CASH REGISTER AND INDICATOR.

APPLICATION FILED DEC. 15, 1902.

NO MODEL.

4 SHEETS—SHEET 1.



WITNESSES:

J. Jewelllyn Walker
Chas. J. Welch

INVENTOR

John E. Kelly
BY
Staley and Bowman
ATTORNEYS

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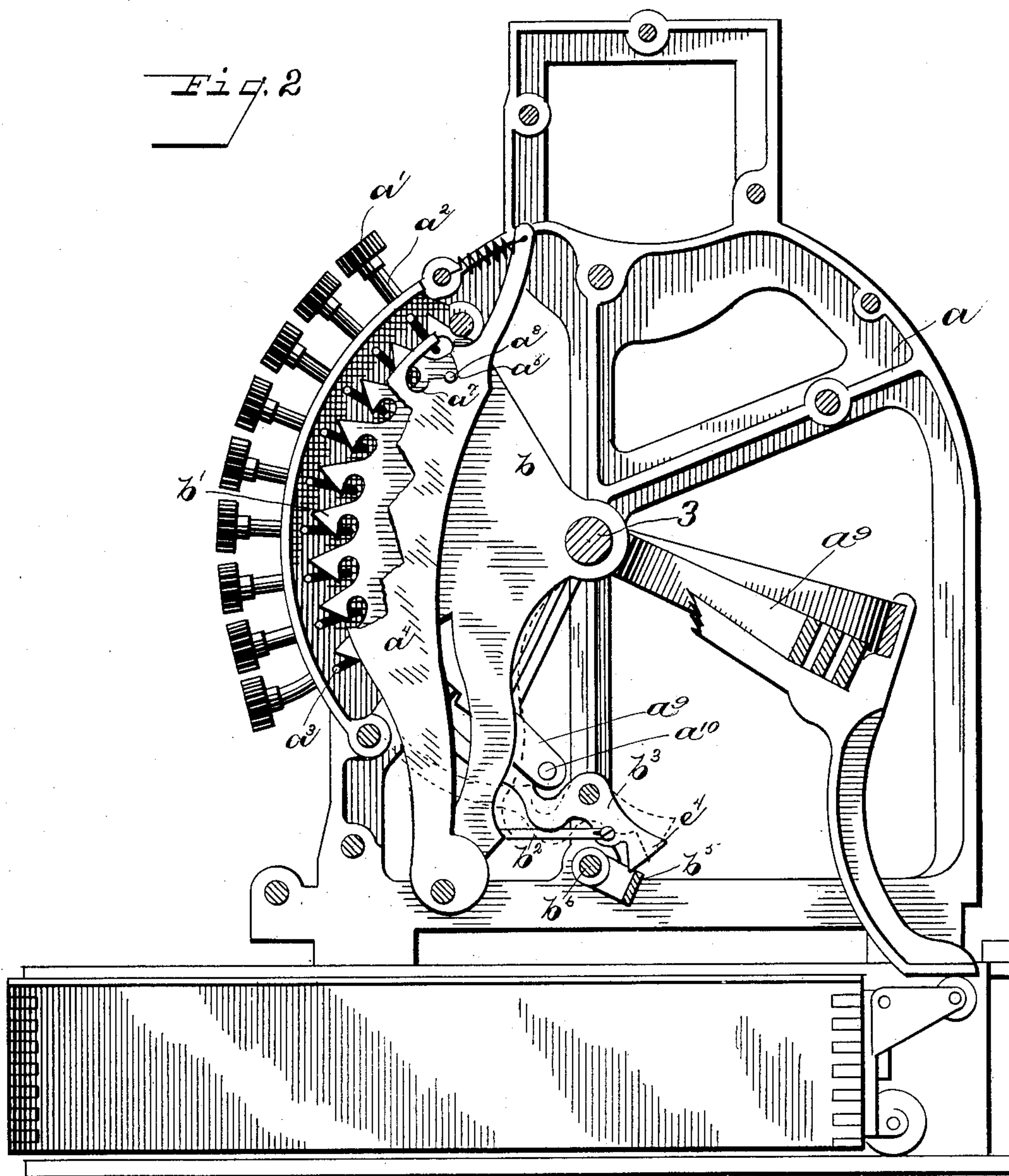
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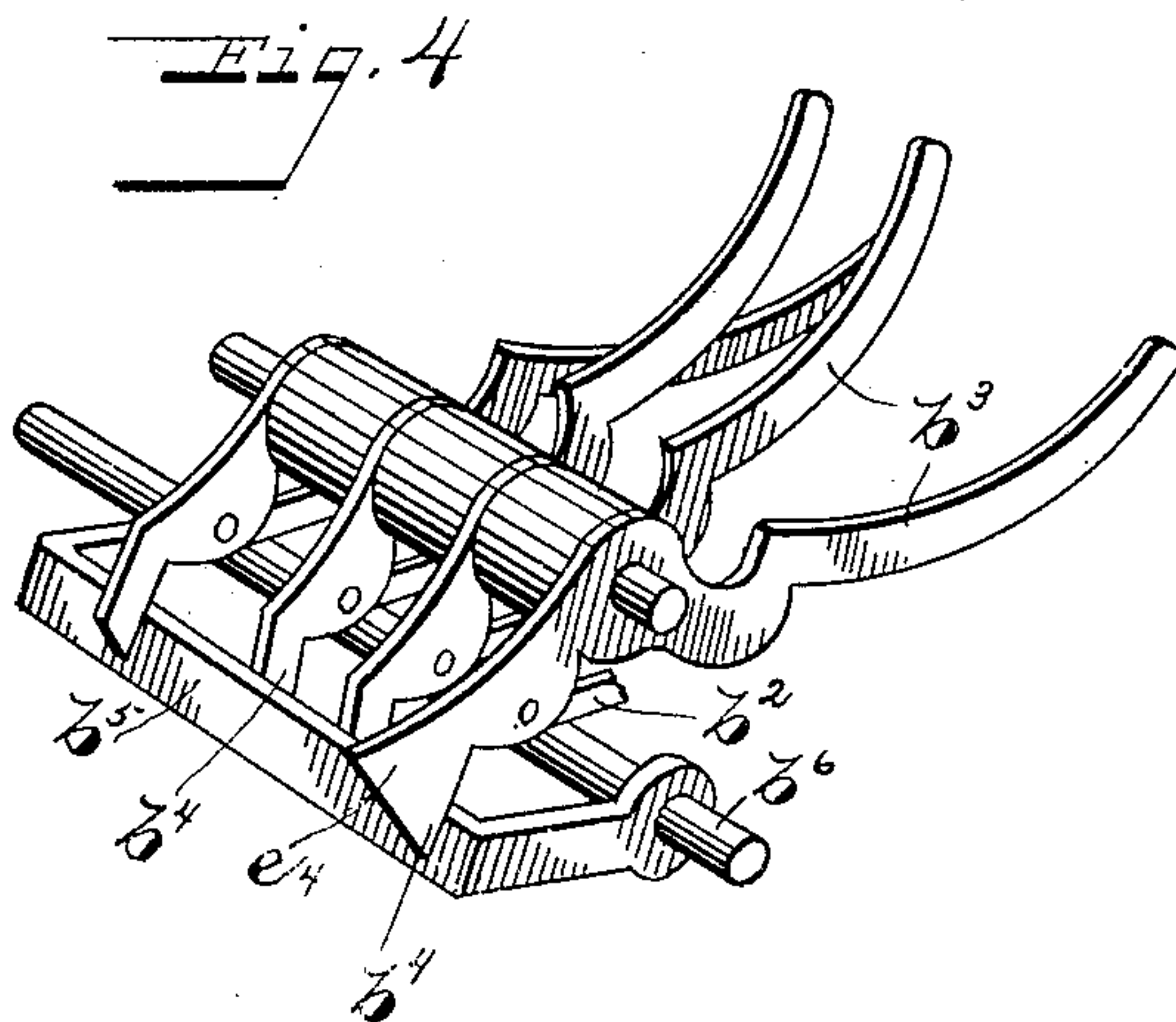
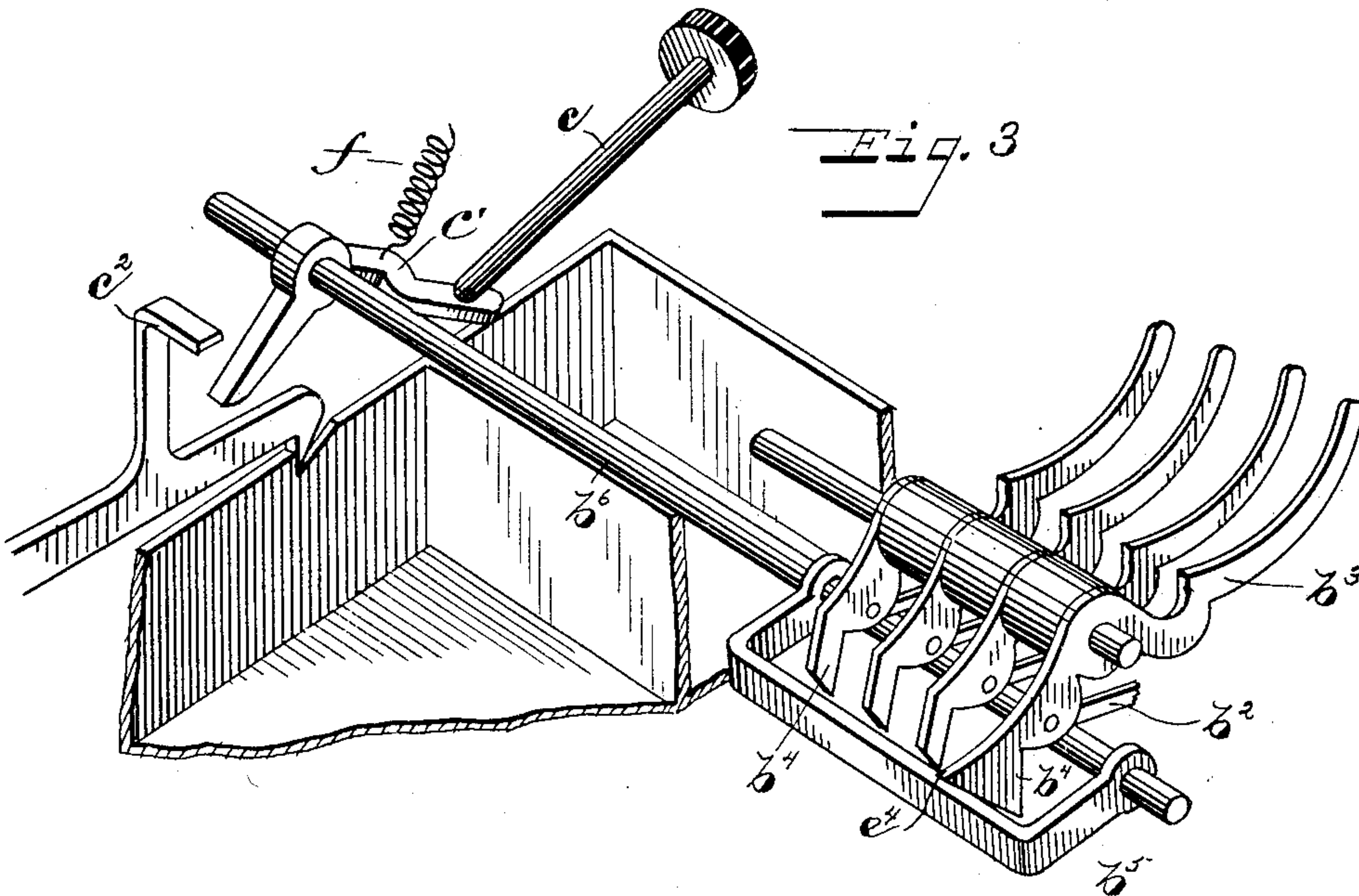
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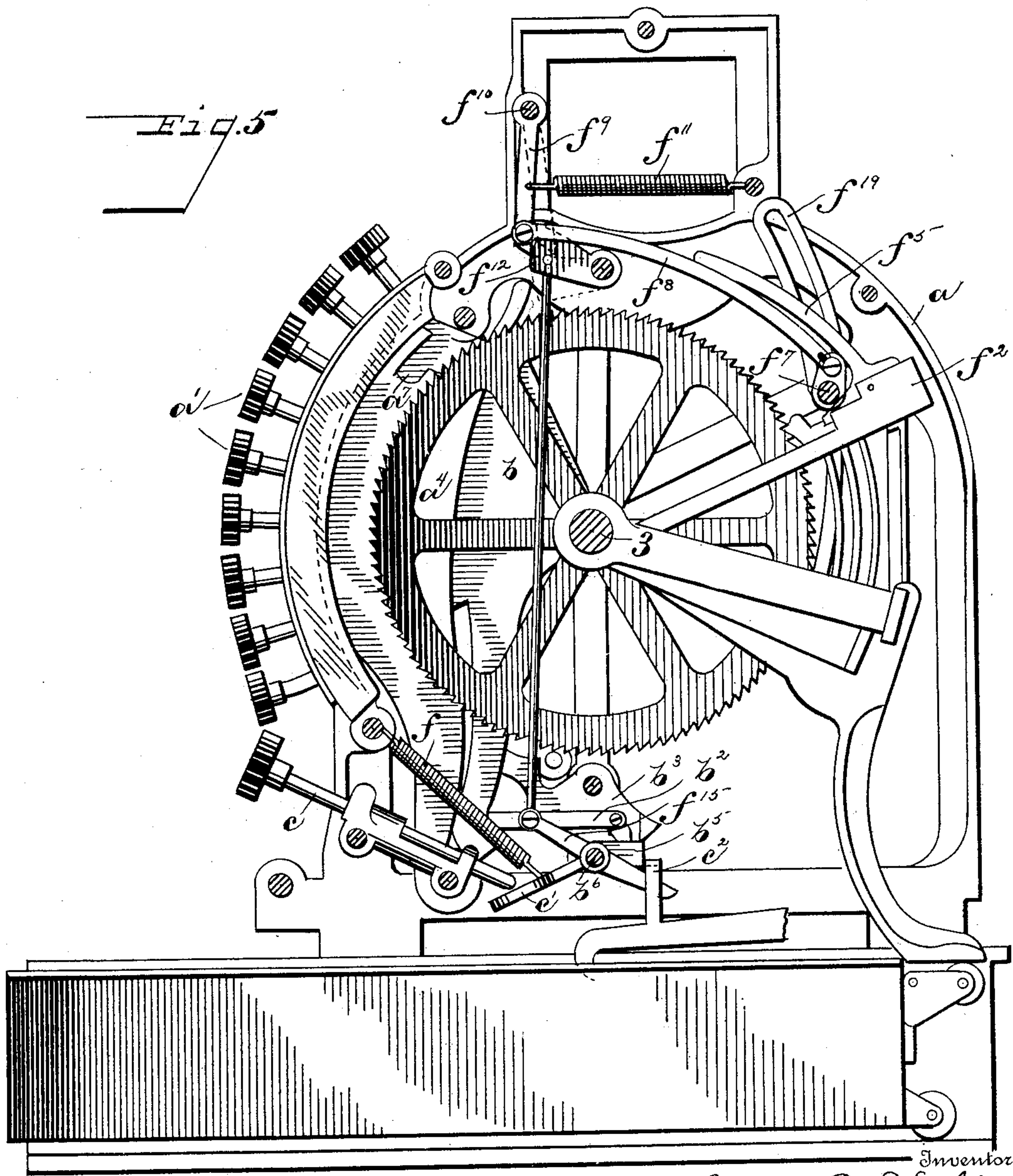
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4 SHEETS—SHEET 4.



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UNITED STATES PATENT OFFICE.

JOHN E. KELLY, OF BUFFALO, NEW YORK, ASSIGNOR TO HALLWOOD CASH REGISTER COMPANY, OF JERSEY CITY, NEW JERSEY, A CORPORATION OF NEW JERSEY.

CASH REGISTER AND INDICATOR.

SPECIFICATION forming part of Letters Patent No. 747,613, dated December 22, 1903.

Application filed December 15, 1902. Serial No. 135,200½. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. KELLY, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Cash Registers and Indicators, of which the following is a specification.

My invention relates to improvements in cash-registers, consisting of devices for registering cash transactions and similar transactions.

It relates more particularly to machines employing series of registering devices, having a bank of keys, consisting of value and department keys and corresponding registering devices for each series.

My invention consists of the constructions and combinations of parts hereinafter described, and set forth in the claims.

In the accompanying drawings, Figure 1 is a front elevation of the machine. Fig. 2 is a transverse sectional view thereof. Figs. 3 and 4 are detail views of the locking mechanism. Fig. 5 is a side elevation of the machine, taken at the right side thereof.

In the drawings I have shown a machine having three series of value-keys for cents, dimes, and dollars. The fourth series of keys contains special keys, which are initial and department keys, and the former are marked "A," "B," "C," &c. I have also shown a separate key for opening the drawer.

Like parts are represented by similar characters of reference in the several views.

The frame of the machine is lettered a . Keys a' have stems a^2 , which extend within the keyboard and are constructed in the same manner as shown in patents to J. H. McCormick, Nos. 610,365, 610,366, and 610,492. Pins a^3 , projecting from the stems of said keys, contact with the curved or convex outer edge of a pivoted latch-plate a^4 when said keys are depressed inwardly. There is a separate plate a^4 for each series of keys, and the same extends into the path of movement of the pins a^3 in the stems, so that when any key is depressed the plate a^4 is pushed inwardly toward a shaft 3. Said plate is normally spring-pressed toward the front of the machine, as

shown in Fig. 2. There is formed in the plate a^4 upper and lower rear and forward offsets or pin-seats a^6 and a^7 , as shown in Fig. 2. A pin a^8 , which extends from segment-plate b , normally rests in the upper rear seat a^6 ; but when said plate a^4 is moved inwardly by any one of the keys of that particular series said pin a^8 drops from the upper into the lower seat a^7 . The segment-plate b thereby drops down and the leg of the plate drops, so that beveled hooks b' of said segment-plate lock the depressed key in its depressed position and also lock the remaining keys against movement from their normal positions as heretofore explained in the prior patents referred to. In this application I have shown in Fig. 2 the swinging frame a^9 with a pin a^{10} on the lower frame thereof. (See Fig. 2.) This swinging frame a^9 operates precisely as the swinging frame in the patents to J. H. McCormick, heretofore referred to, and coöperates with the keys to give the necessary movement to the adding and indicating wheels shown in Fig. 1. A link b^2 connects the lower end of the segment-plate b with a finger-plate b^3 , the end of said link being fastened to the leg of the segment-plate. The finger-plate b^3 is weighted, so that when the segment-plate drops down after a key of any series has been depressed the inner end b^4 of said plate b^3 is raised above the locking-bar b^5 , which has perforated arms journaled on a shaft b^6 , which extends through the machine. When the inner end b^4 is prevented from being raised by the bar b^5 holding down the end b^4 , the other end of said finger-plate will be held in upward position, so that the groove in said finger-plate will engage the pin a^{10} and hold the actuating parts for the registering devices against movement and act as a lock for same. The locking-bar is located on the left side of the machine immediately below the bank of keys. The key for operating the drawer (marked c) I have shown at the opposite side of the machine, and when said key is depressed it rotates the shaft b^6 through a stop-plate c' , which plate also operates a drawer-lock c^2 . So long as the end e^4 of the finger-plate b^3 corresponding to the

department series of keys is held in its extreme downward position by the link b^2 the drawer-operating key cannot be operated, for the locking-bar b^5 will be held against movement by the toe b^4 of the end e^4 . I have shown in Fig. 3 the drawer-operating key locked against movement, and in Fig. 4 I have shown the lock-bar b^5 operated so as to lock the segment-plates corresponding to two of the series of keys.

In my machine I have shown a series of keys, known as the "department" and "initial" keys, at the extreme left of the bank, and I have constructed the machine so that it is necessary for the operator to depress one of these department or initial keys before he can operate the key for unlocking the drawer shown at the right of the machine and at the lower part thereof. Any one of the series of value-keys may be operated, and when said key is depressed the finger-plate b^3 corresponding to that series will move until the toe b^4 is raised upwardly, and when the lock-bar b^5 is operated same will pass below the end of said finger-plate and will then lock same against any return movement. At the same time the lock-bar b^5 will rest above the end of each of the other finger-plates corresponding to series of unoperated value-keys and hold said finger-plates against movement. The toe b^4 of the end e^4 of the finger-plate b^3 which coöperates with the swinging frame for the department and initial keys normally rests above the locking-bar b^5 , which will lock the lock-bar b^5 , and said lock-bar cannot be operated until one of the bank of keys at the extreme left is operated and the end e^4 of the finger-plate b^3 raised, so as to permit the lock-bar to be operated. Whenever the segment-plate b drops, the same will remain in its depressed position until raised therefrom by devices contacting with the lower end of the segment-plate and positively raising same by parts connected with the drawer shown in said prior patents. The plate a^4 is normally spring-pressed in the position shown in Fig. 2 by a spring connecting the upper end of said plate with the frame of the machine, so that whenever the segment-plate b is raised by the parts connected with the drawer the plate a^4 is at once moved by the spring until the pin a^8 again drops into the notch a^6 . The locking-bar b^5 is returned to normal position by the spring f .

In Fig. 5 I have shown the registering-wheel corresponding to the first bank of keys and same as indicated by the reference-letter b . The actuating devices for the registering-wheels are in all respects the same as those described in application, Serial No. 134,049, of J. P. Emory, and these actuating devices are shown in Fig. 5.

Having thus described my invention, I claim—

1. In a registering-machine, the combination of a series of banks of keys with a lock-

ing device for each bank of keys for locking said keys normally in unlocking position, means for moving said locking device to locking position, and a stop device controlled by all the keys of one bank for holding said locking device against movement until a key of that bank is depressed, for the purpose specified.

2. In a registering-machine, a series of banks of keys with a locking device for each bank of keys adapted when operated to lock the keys, means for operating said locking device, a stop device for holding said locking device against movement, and means for withdrawing said stop by the operation of a key of said bank, and means for locking said stop against movement by the operation of the locking device.

3. In a registering-machine, the combination of a series of banks of keys, registering devices for each bank of keys, a locking device adapted when operated to lock the keys both in depressed and undepressed position, means for operating said locking device and means controlled by all the keys of one bank for holding said locking device against movement until a key of that bank is depressed, for the purpose specified.

4. In a registering-machine, the combination of a series of banks of keys, registering devices for each bank of keys, a locking device, means for operating said locking device and means controlled by one bank of keys for holding said locking device against movement until a key of that bank is depressed, means for simultaneously locking the keys of all the banks and the actuating devices corresponding to banks of undepressed keys by the movement of said locking device.

5. In a registering-machine, the combination of a series of banks of keys, and a registering-wheel for each bank of keys, a drawer with a drawer-operating key, a locking device for preventing the operation of the drawer-key until certain of the special bank of keys is depressed, and adapted when moved by the drawer-key to lock the banks of undepressed keys against movement, for the purpose specified.

6. In a registering-machine, the combination of a series of banks of value and special keys, a locking-bar for all the keys of the special and value banks, a cash-drawer and a drawer-releasing key, said key being adapted to operate said locking-bar, means for holding said locking device against movement and thereby lock said drawer-key until a key of the bank of special keys is depressed, for the purpose specified.

7. In a registering-machine, a series of banks of value-keys, a bank of special keys, and a registering-wheel for each bank of keys, a drawer-key and a drawer unlocked thereby, a single locking device for both said drawer-key and the banks of keys, means for holding said locking device against move-

ment until one of the bank of special keys is operated, for the purpose specified.

8. In a registering-machine, a series of banks of value-keys, a bank of special keys, and a registering-wheel for each bank of keys, a drawer-key and a drawer unlocked thereby, a single locking device for both said drawer-key and the banks of keys, means for holding said locking device against movement until one of the bank of special keys is operated, and for locking all the banks of keys after said locking device has been operated by the drawer-key, for the purpose specified.

9. In a registering-machine, a series of banks of value-keys and a bank of special keys, a drawer, a registering-wheel for each bank and actuating devices for operating same, means for unlocking the drawer, locking device for preventing the operation of the drawer-unlocking device until a key of the

special bank is operated, for the purpose specified.

10. In a registering-machine, a series of banks of value-keys and a bank of special keys, a drawer, a registering-wheel for each bank and actuating devices for operating same, means for unlocking the drawer, a locking device for preventing the operation of the drawer-unlocking device until a key of the special bank is operated, and means for locking the banks of keys by the operation of said drawer-unlocking mechanism, for the purpose specified.

In testimony whereof I have hereunto set my hand this 10th day of December, A. D. 1902.

JOHN E. KELLY.

Witnesses:

W. ALBERT HABERSTRO,
E. J. PLUMLEY.