

No. 637,737.

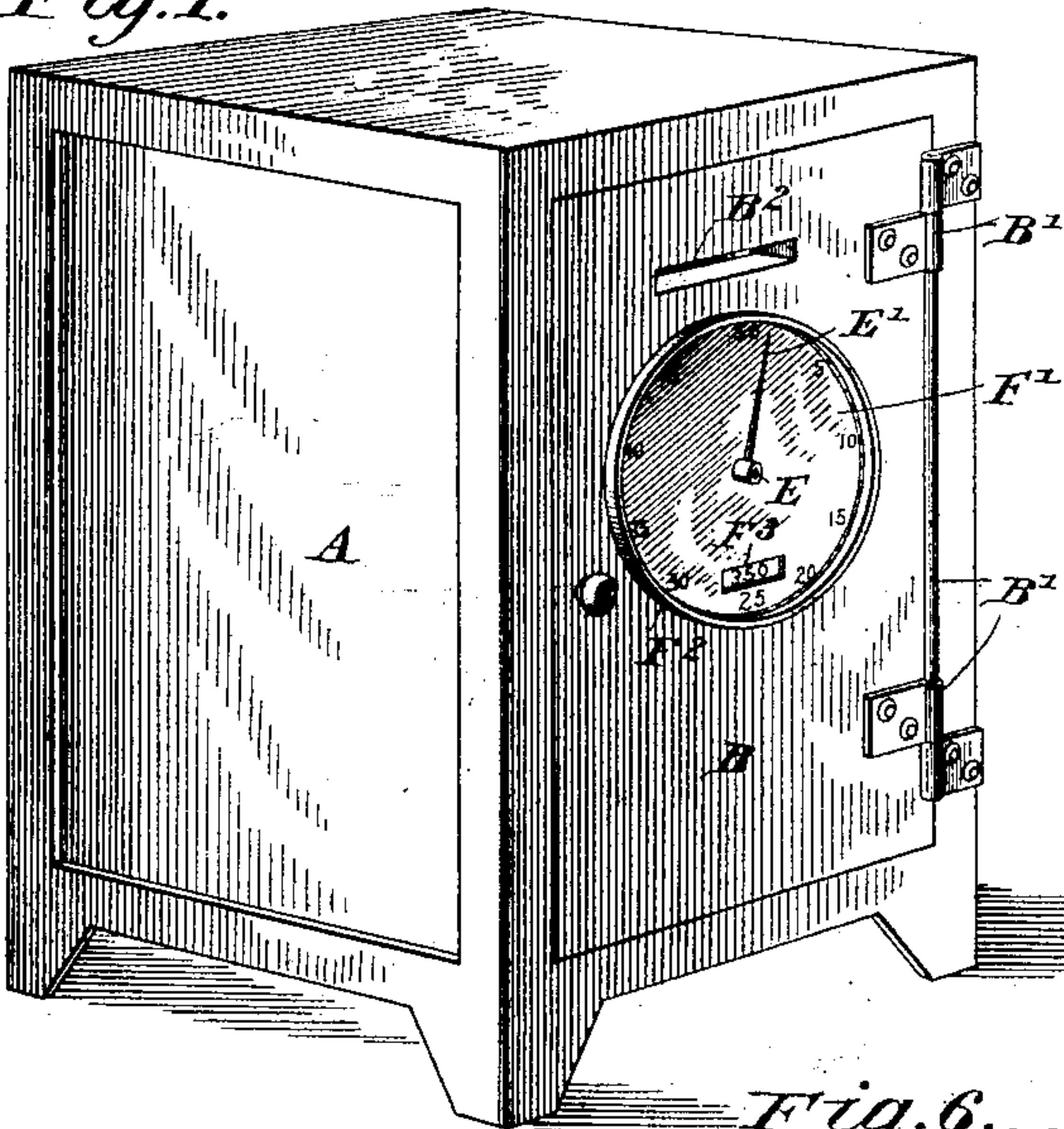
Patented Nov. 21, 1899.

**P. HOWELL.**  
**REGISTERING TOY BANK.**

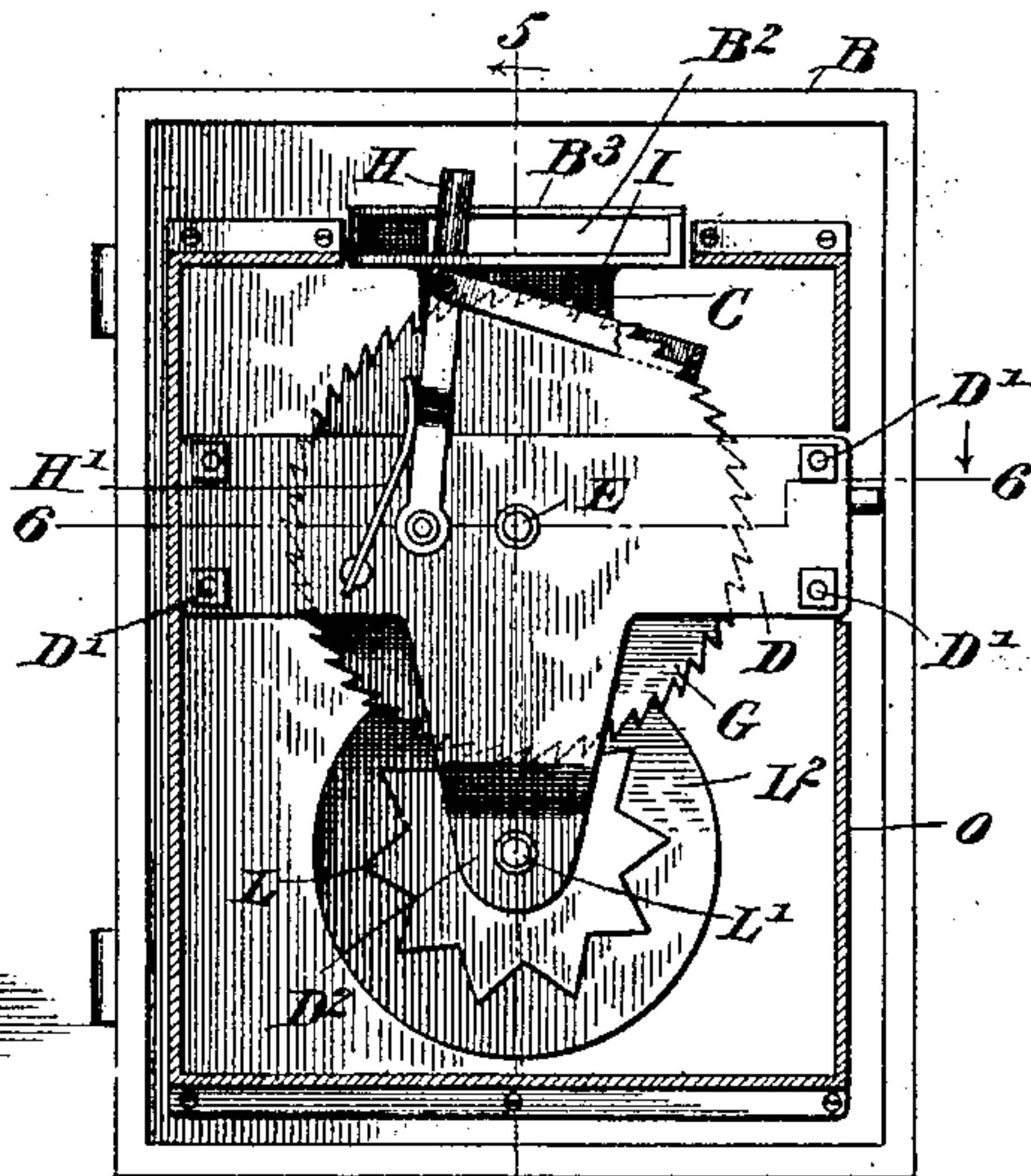
(Application filed Sept. 15, 1898.)

(No Model.)

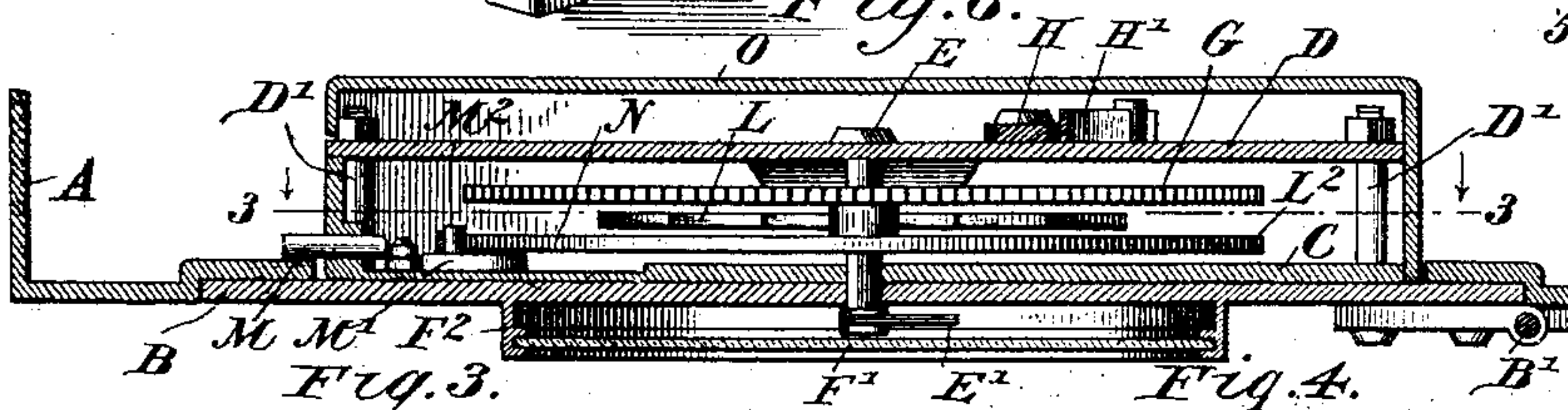
*Fig. 1.*



*Fig. 2.*



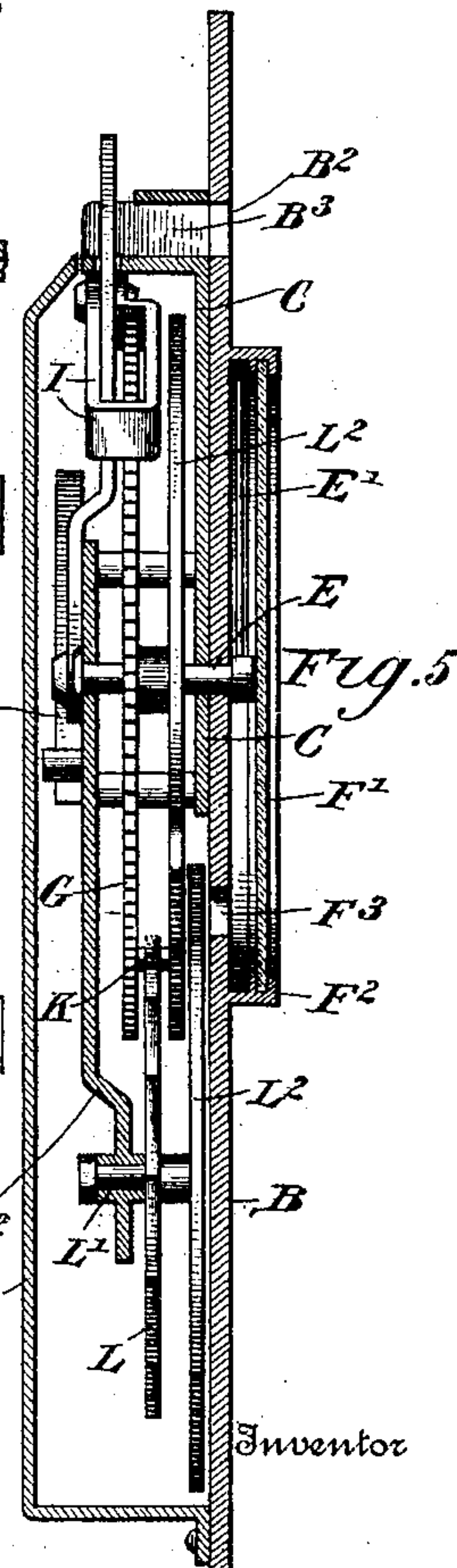
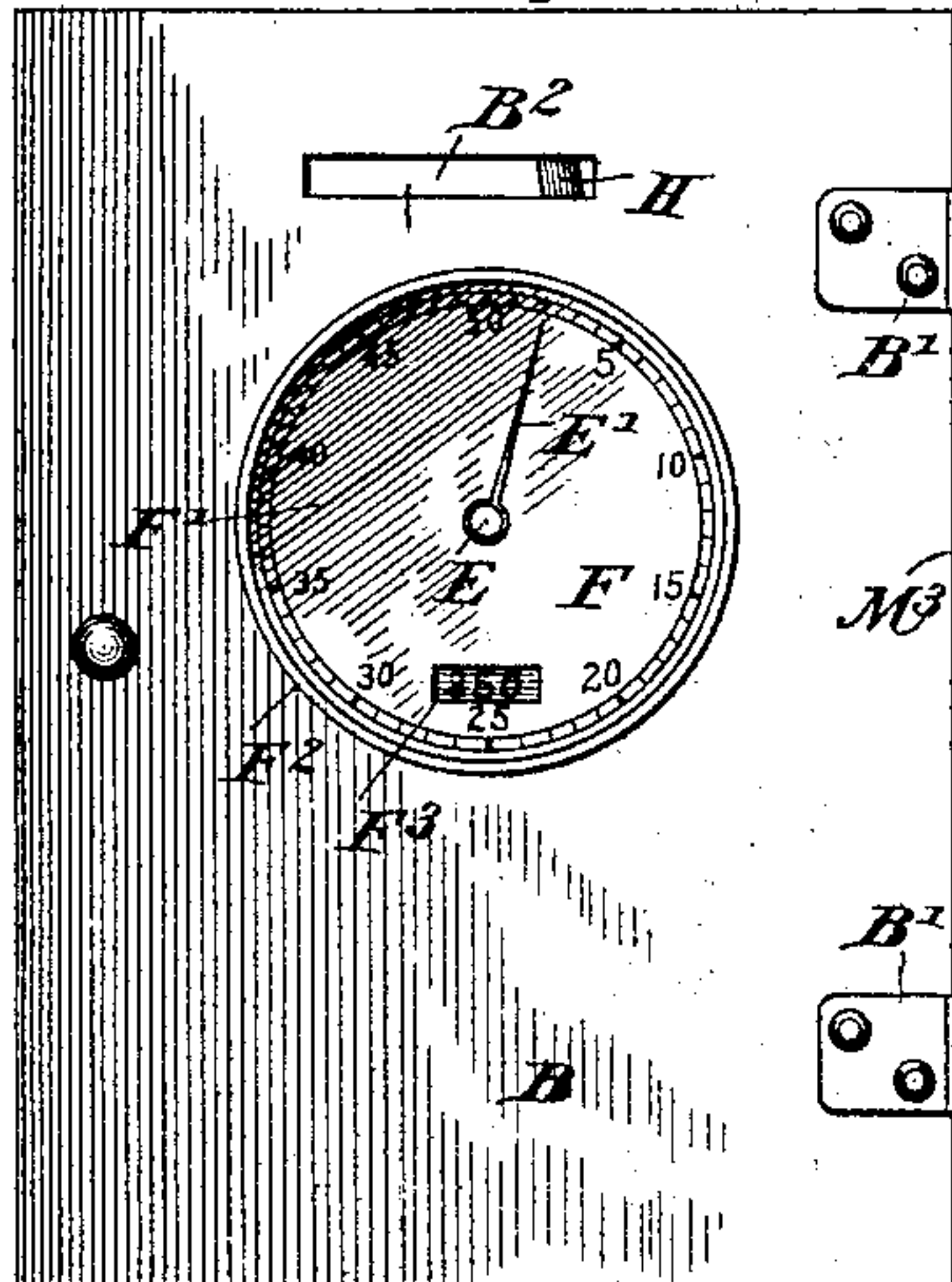
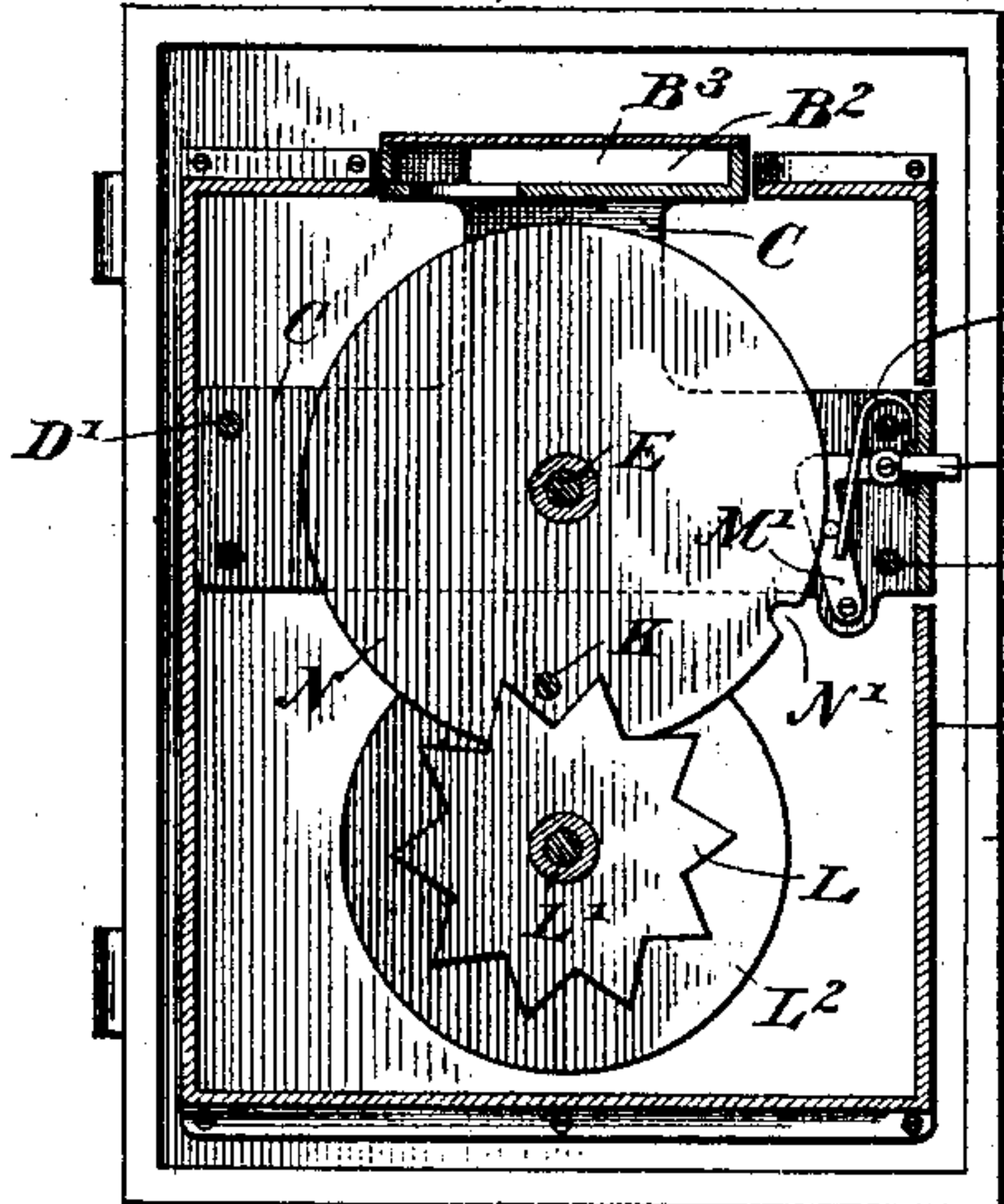
*Fig. 3.*



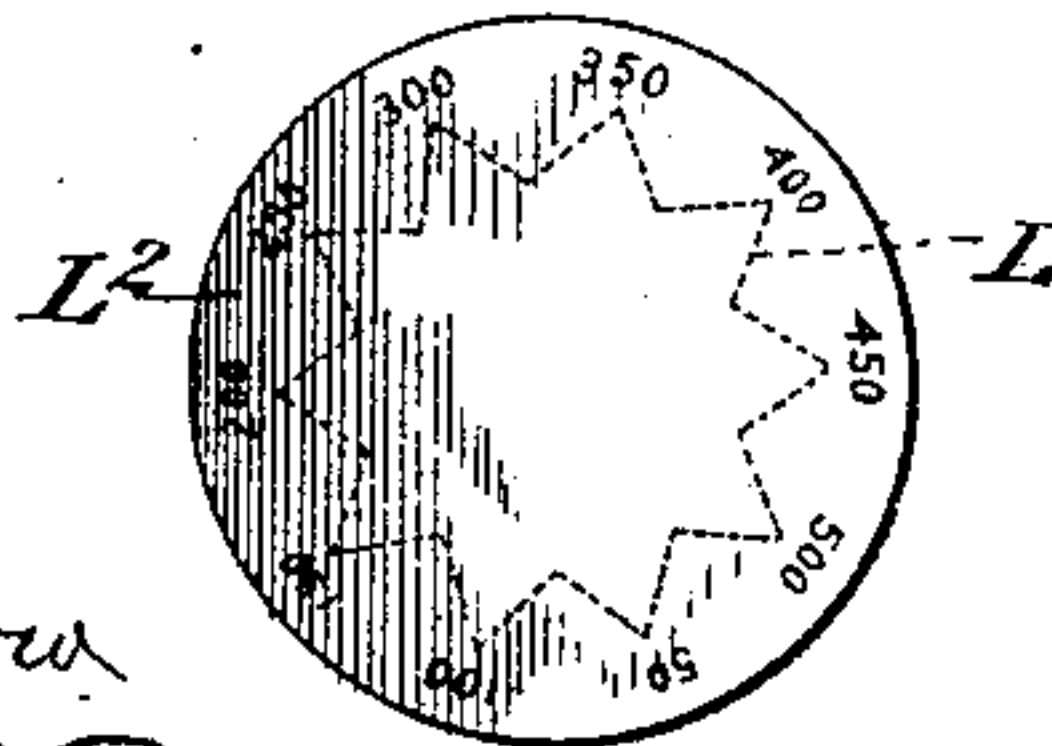
*Fig. 4.*

*Fig. 5.*

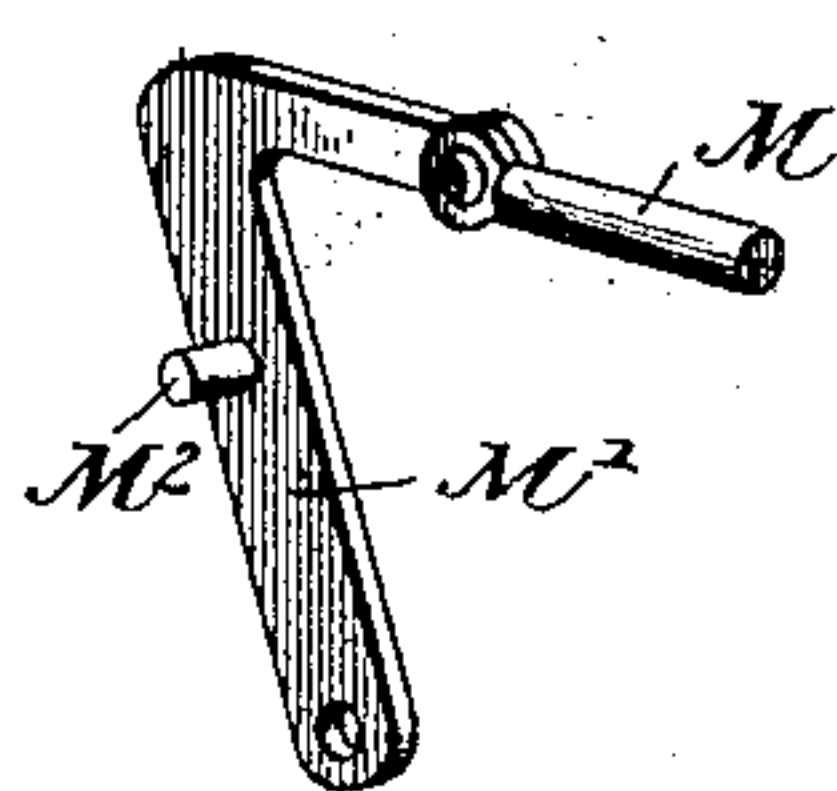
*Fig. 6.*



*Fig. 7.*



*Fig. 8.*



Witnesses

*M. Witherow*  
*Chas. E. Brock*

*Philip Howell,*

*by J. M. ... Attorneys*



# UNITED STATES PATENT OFFICE.

PHILIP HOWELL, OF FRANK, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO  
A. M. PATTERSON AND M. J. THOMPSON, OF SAME PLACE.

## REGISTERING TOY BANK.

SPECIFICATION forming part of Letters Patent No. 637,737, dated November 21, 1899.

Application filed September 15, 1898. Serial No. 691,022. (No model.)

*To all whom it may concern:*

Be it known that I, PHILIP HOWELL, a citizen of the United States, residing at Frank, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Registering Toy Bank, of which the following is a specification.

This invention relates generally to money-banks, and particularly to a novelty or toy bank.

One object of the invention is to provide a registering toy bank which will indicate the amount of money deposited; and another object is to provide a locking mechanism, in connection with the registering mechanism, whereby the lock will be opened at definite intervals after definite amounts have been deposited, but cannot be opened at any other time.

Another object is to provide a bank and mechanism which can be constructed almost entirely of sheet metal, thereby effecting ease and economy in its manufacture.

With these various objects in view my invention consists, essentially, in arranging a registering mechanism upon the inner face of the door and operating said mechanism by means of a lever which projects into the coin-passage, so that as each coin is inserted the mechanism will be operated to effect the registration.

The invention consists also in the employment of a spring-lock the bolt of which is normally held closed by means connected with and operated by the registering mechanism and which releases the bolt at definite intervals, so that the spring can release the same and the door be opened.

The invention consists also in certain details of construction and novelties of combination, all of which will be fully described hereinafter and particularly pointed out in the appended claims.

In the drawings, forming part of this specification, Figure 1 is a perspective view of a bank constructed in accordance with my invention. Fig. 2 is an inner face view of the door, the case being shown in section in order to show the mechanism in elevation. Fig. 3 is a section on the line 3 3 of Fig. 6. Fig. 4 is a face view of the door, showing the le-

ver in the slotway. Fig. 5 is a section on the line 5 5 of Fig. 2. Fig. 6 is a section on the line 6 6 of Fig. 2. Fig. 7 is a detail view of the registering-dial, and Fig. 8 is a detail view of the bolt.

In constructing a bank in accordance with my invention I make the box or body portion A substantially in the form of a cube, supported upon short legs, and I prefer to stamp this box or body from sheet metal, providing the usual opening for the door B, hinged at B' to the box or body and arranged to swing outwardly. A slot B<sup>2</sup> is cut in the door, near the upper end, through which coins pass into the bank, and a coin chute or way B<sup>3</sup> is arranged upon the inner face of the door, said coin-chute being preferably made integral with a plate C, attached to the inner face of the door and forming the base or front plate of the registering mechanism. A back plate D is arranged parallel with the front plate and is connected therewith by means of short posts or studs D', and all of the indicating, registering, and locking devices are arranged between and carried by these two plates, which constitute the frame of the mechanism. A shaft E is journaled in the frame and passes through the door, carrying a pointer E' upon its forward end, and a dial-plate F is arranged upon the front face of the door, the pointer and dial being protected by a suitable glass or crystal F', mounted in the usual form of bezel F<sup>2</sup>, attached to the face of the door. The dial is marked off with fifty subdivisions, each fifth division being indicated by a figure—such as “5,” “10,” “15,” and so on—as clearly shown in Figs. 1 and 4. A toothed wheel G is mounted upon the shaft E adjacent to the rear plate and turns with the shaft, said wheel having as many teeth as the dial has subdivisions—namely, fifty. A lever H is pivoted to the back plate D and extends upwardly through a slot in the coin-chute, said lever being normally held in the path of the coin by means of a spring H', attached to the frame and bearing against the lever. This lever is preferably made with a forward offset in order to throw the upper end as far forward as possible, so that it will work in the coin-chute near the entrance and also work adjacent to the toothed wheel. A pawl I, in the



form of a link, hook, or loop, is pivoted to the lever H near the upper end, the hooked end of said pawl engaging the teeth of the wheel G, and as a coin is introduced into and passed through the chute the lever is pushed back, drawing with it the pawl, which moves the wheel the distance of one tooth, and consequently moves the pointer one point on the dial, and each time a coin is introduced the lever, pawl, wheel, and pointer are operated, thus showing at a glance the number of coins that have been deposited. When the pointer has made a complete revolution, the wheel G has also made one, and a pin K, attached to said wheel, operates upon a spur-wheel L, mounted upon a shaft L', journaled in the pendent end D<sup>2</sup> of the plate D, and this shaft L' also carries a registering-disk L<sup>2</sup> upon its forward end, which disk has a series of numerals upon its front face, which show through an opening F<sup>3</sup> in the dial, the common-multiple numerals being the highest number on the dial—in the present instance "50," so that the disk in the present case is shown with numerals "50," "100," and so on up to "500;" and it will be clearly understood that at each revolution of the pointer and toothed wheel the registering-disk is moved one space, so that the total number of coins deposited will be shown by the number displayed by the disk plus the number indicated by the pointer, and by referring to Figs. 1 and 4 it will be seen that the register and pointers show that three hundred and fifty-two coins have been deposited.

In order to keep the door closed and fastened and to provide for its releasement at definite intervals, I provide a bolt M, which works through the side of the frame and projects beyond the side of the opening in the box or body and thereby holds the door closed. This bolt is pivotally connected at its rear end to an elbow-lever M', which lever is pivoted to the plate C and carries a pin M<sup>2</sup>, against which a circular tumbler-disk N bears and holds the lever and bolt in a locked position during the entire revolution of said tumbler-disk, which is provided with a notch or recess N' in its periphery, into which the pin M<sup>2</sup> can move when the disk is brought into alinement with said pin, and in this manner the lever and bolt are released and the door unlocked, the lever being thrown back by means of a spring M<sup>3</sup>, which is fastened to the frame and bears against the pin M<sup>2</sup>, so that the moment the notch or recess is moved into the proper position the door will be unlocked.

In the construction herein shown and described the notch is so arranged that the bolt is released at the same time the registering-disk is operated—that is, at each fiftieth deposit—but it will be understood that the notch or recess can be arranged at any other point,

and, if desired, more than one may be made. I have also shown a casing O to cover and protect the mechanism; but this can be omitted, if desired, or it can be made in a different form.

The body is made of one piece and the top and bottom securely fastened thereto. The sides of the body are also paneled by pressing, and the top can be pressed for the same purpose.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a bank, the combination with the body and door, of the coin-chute, of a spring-pressed operating-lever provided with an offset and extending through a slot in the coin-chute near the entrance thereof, a pawl pivotally secured to the said lever and adapted to engage a toothed wheel mounted concentrically with a pointer or dial, a disk mounted on the same shaft with the pointer and provided with a lug or pin to engage the spurs of the spur-wheel located beneath said toothed wheel to operate the lower registering-dial mounted beneath said disk, and the pivoted locking-bolt adapted to be thrown out of engagement with the door-frame by the insertion of a coin or coins, substantially as described.

2. In a bank, the combination with the coin-chute, of an operating-lever provided with a forward offset and working in said chute near the entrance thereof, a link-pawl pivoted to the lever, the hooked end of which is adapted to engage a toothed wheel mounted concentrically with a pointer or dial, a disk mounted on the same shaft with the pointer and provided with a lug or pin to engage the spurs of the spur-wheel mounted beneath said toothed wheel to operate the lower registering-dial and the pivoted locking-bolt normally held in a locked position by the disk and adapted to be released at intervals substantially as described.

3. In a bank the combination with the coin-chute, of an operating-lever, working in the chute at the entrance thereof, said lever being normally held in the path of the coin by suitable means, a pawl pivoted to the lever near its upper end and designed to engage a toothed registering-wheel and move with the lever upon the insertion of a coin in the chute, a locking-bolt pivotally connected to an elbow-lever, a pin or projection on said lever, a circular tumbler-disk bearing against said pin to normally hold the bolt in a locked position, said disk having a notch in its periphery to be engaged at intervals substantially as described.

PHILIP HOWELL.

Witnesses:

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JOHN ARTHUR.