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TOY BANK.

(Application filed Apr. 13, 1901.)

(No Model.)

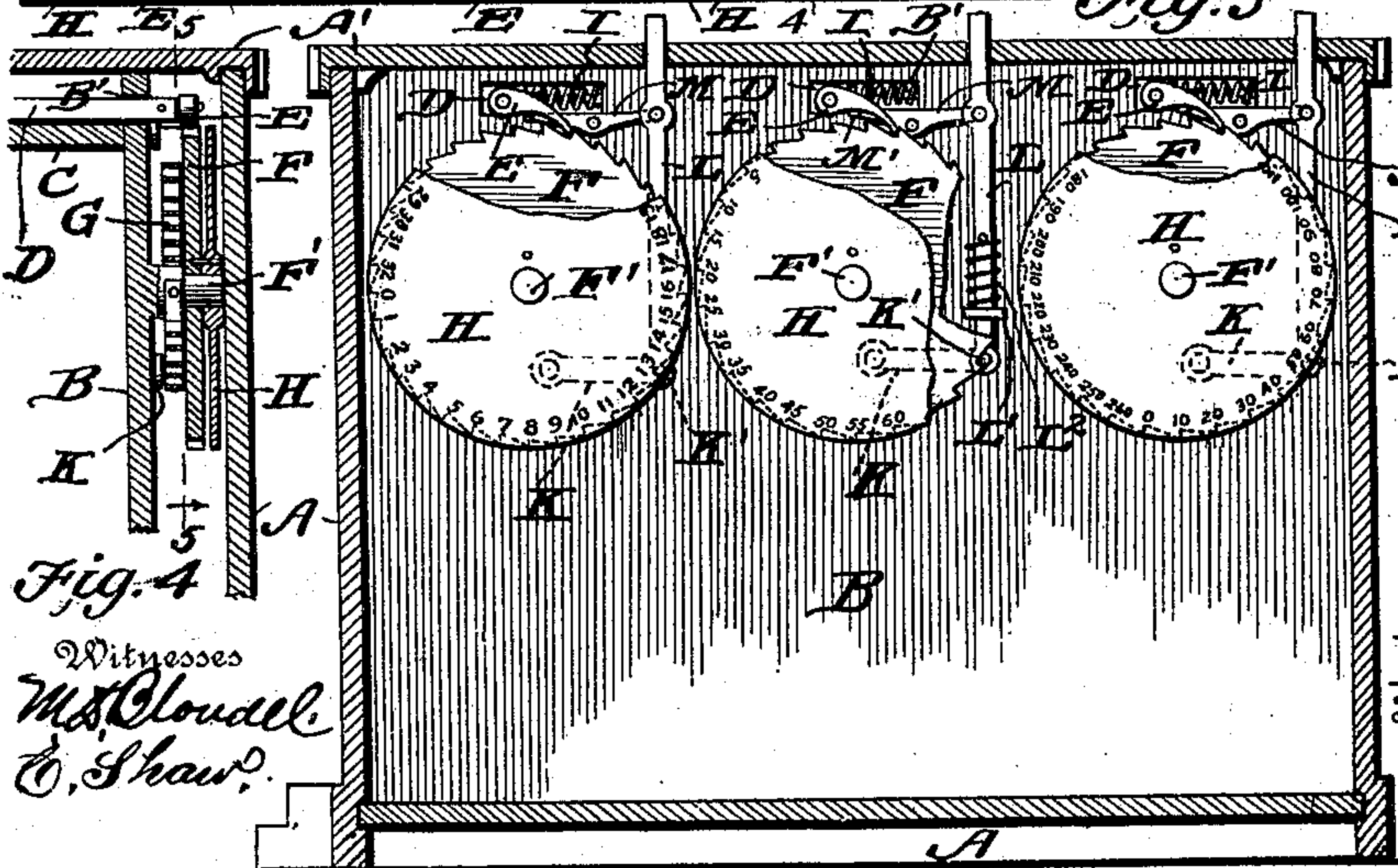
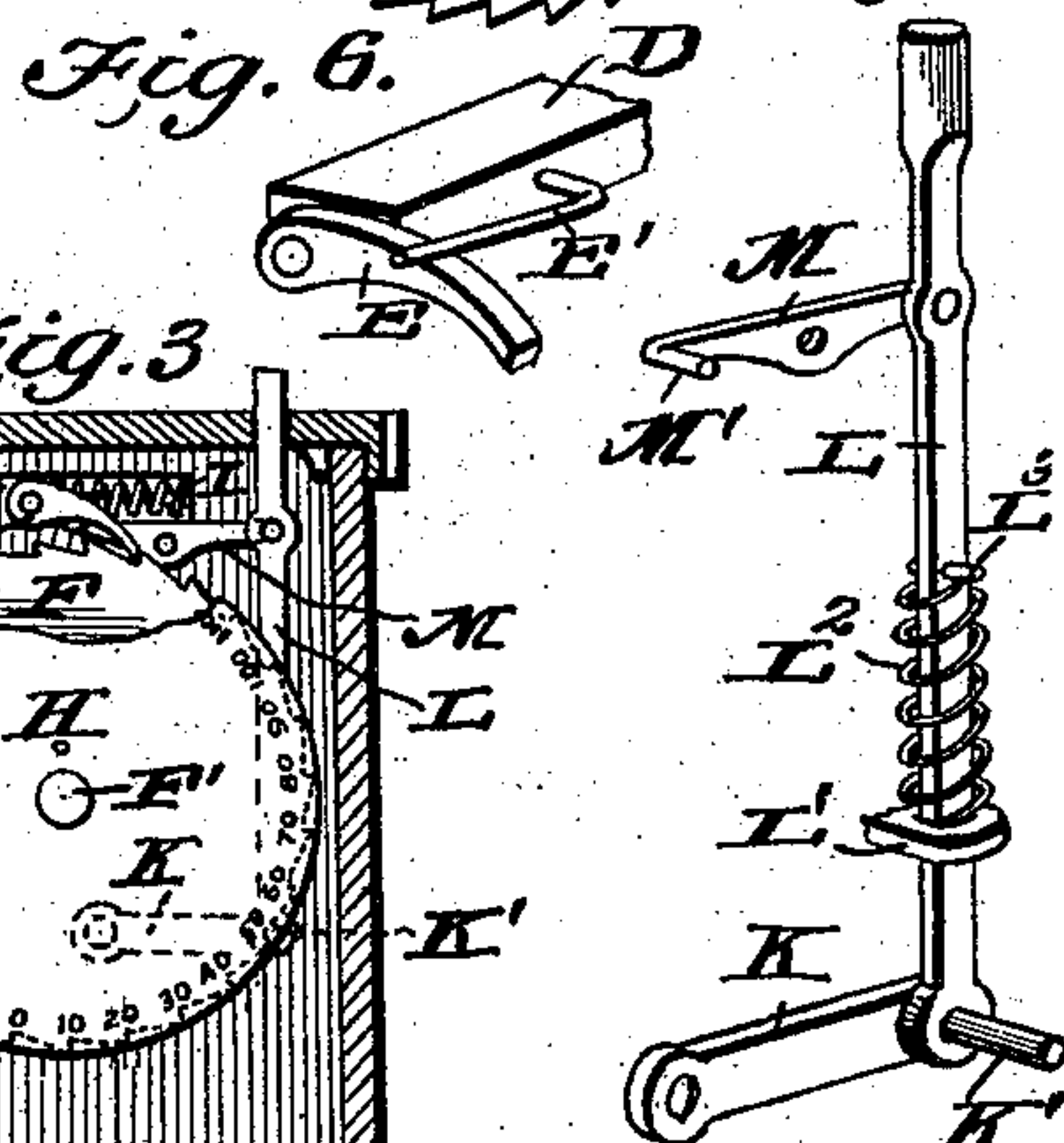
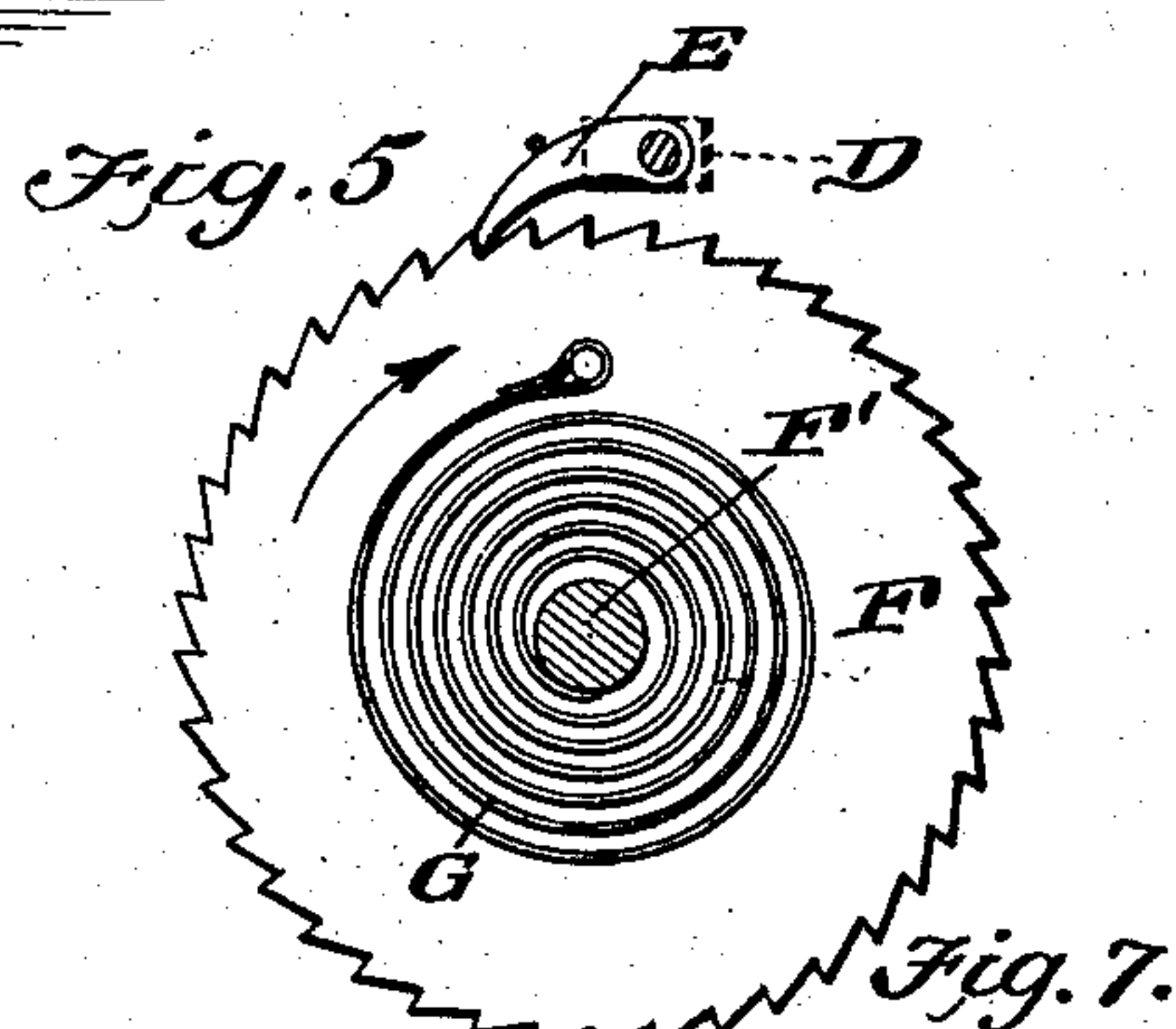
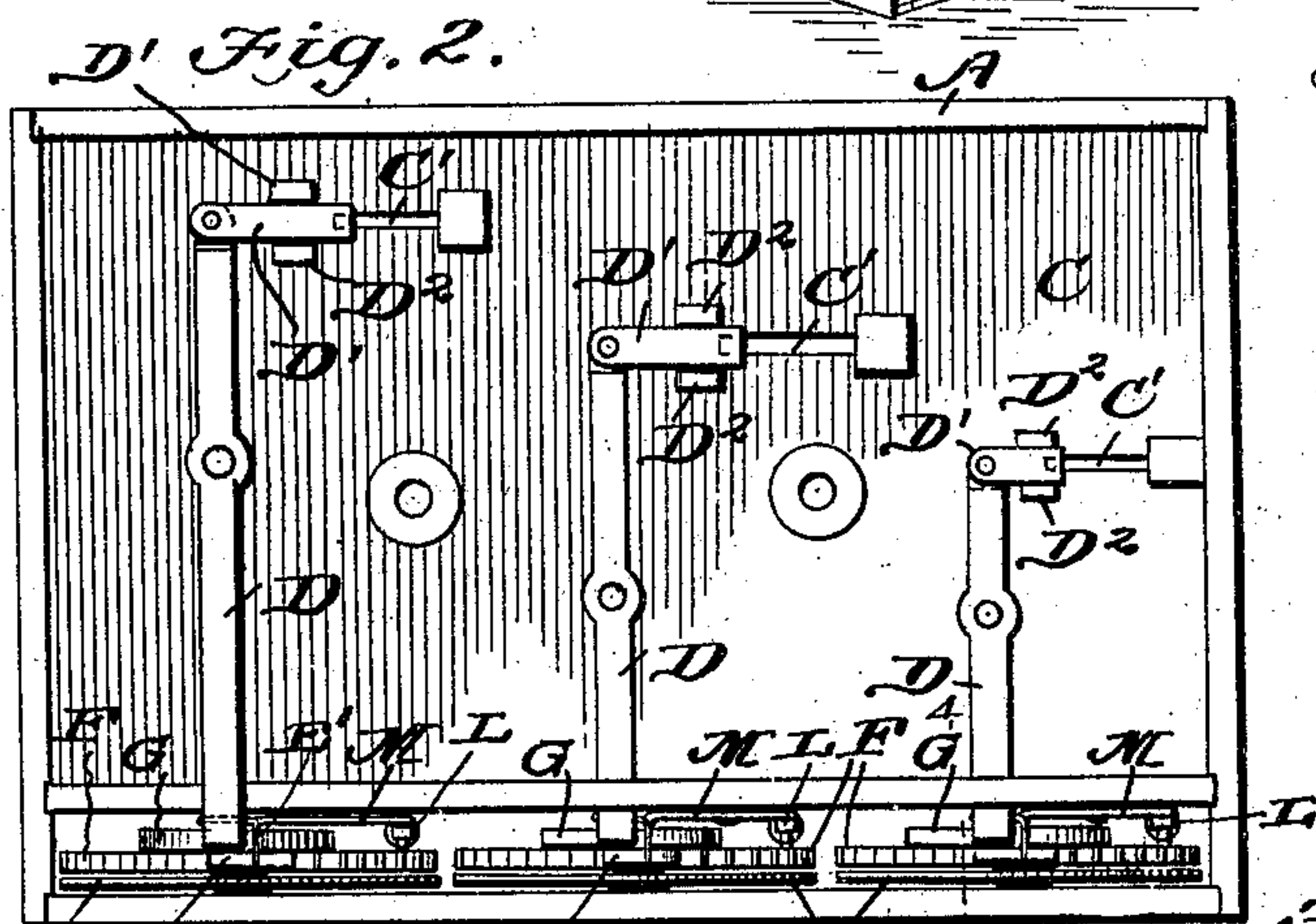
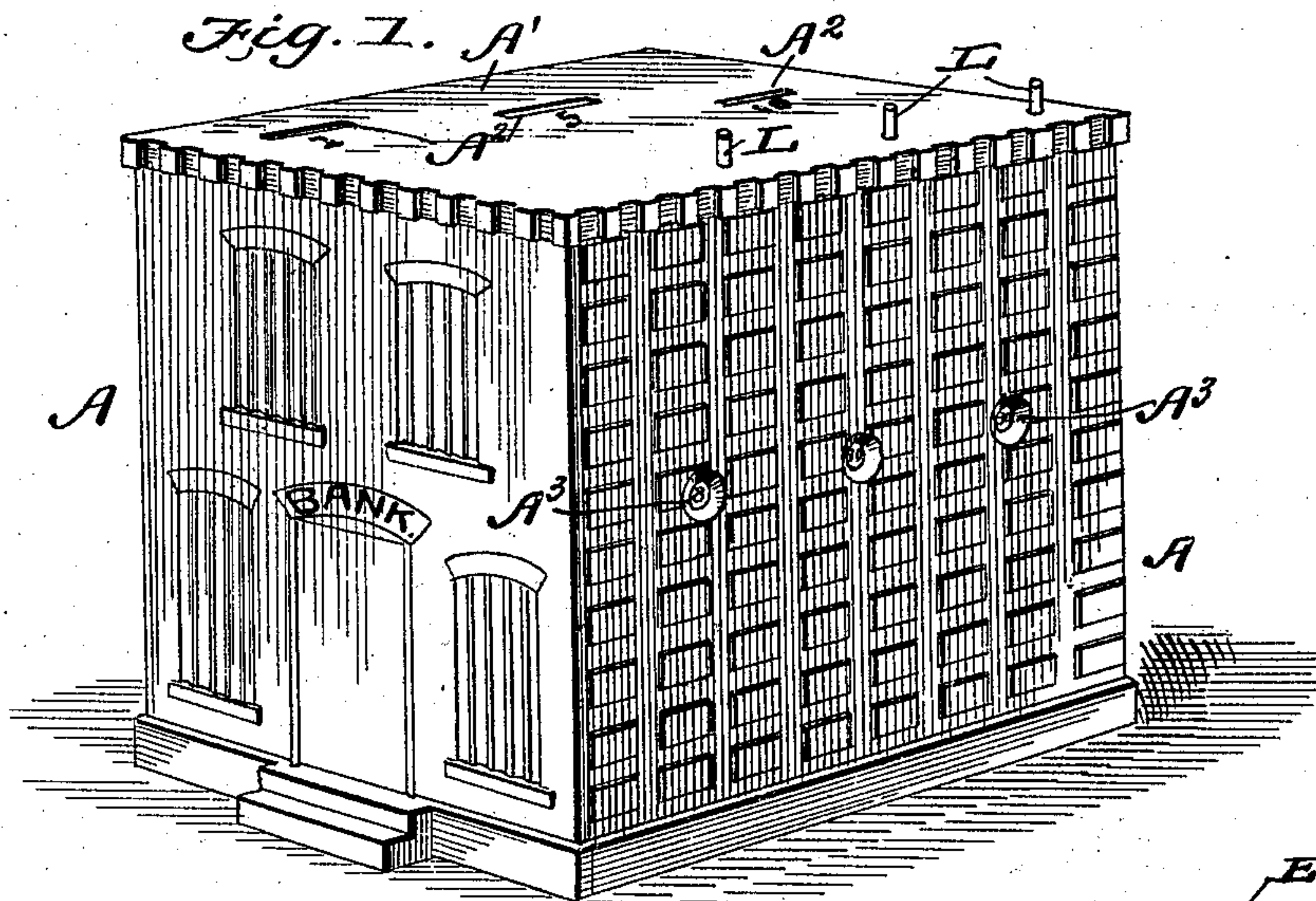


Fig. 4.
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UNITED STATES PATENT OFFICE.

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TOY BANK.

SPECIFICATION forming part of Letters Patent No. 693,528, dated February 18, 1902.

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To all whom it may concern:

Be it known that we, JOHN G. MAYES, HARVEY F. KING, and FRED S. MAYES, citizens of the United States, residing at Hazen, in the county of Jefferson and State of Pennsylvania, have invented a new and useful Registering Toy Bank, of which the following is a specification.

This invention is a registering money-bank, the object being to provide a simple, efficient, and cheap construction of bank in which coins of different denominations can be deposited, each deposit registered, and the aggregate amount of each denomination indicated upon the exterior, so that the total amount on deposit can be told at a glance.

Another object of the invention is to provide means whereby the registering-dials can be released and returned to their normal positions without taking the bank to pieces.

With these various objects in view the invention consists, essentially, in providing a box or other receptacle with suitable inlet openings or slots and arranging lever-operating devices in connection with said slots, whereby as the coin is forced through the slots the levers will be worked to operate a registering-disk; and the invention consists also in providing means to prevent the backward movement of said disks and also in providing the necessary means for releasing said disks and permitting them to be automatically returned whenever it is so desired.

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

In the drawings forming a part of this specification, Figure 1 is a perspective view showing a toy money-bank constructed in accordance with our invention. Fig. 2 is a view showing the top removed and illustrating the operating-levers and registering devices. Fig. 3 is a view showing one side of the casing removed and illustrating the registering-disks and means for operating, locking, and releasing them. Fig. 4 is a detail sectional view on the line 4 4 of Fig. 2. Fig. 5 is a detail view of the ratchet-wheel carrying the registering-dial, the view being taken on the line 5 5 of Fig. 4. Fig. 6 is a detail view of the op-

erating-pawl, and Fig. 7 is a detail view of the means for operating the mechanism against backward movement and also the means for releasing the said parts when it is desired to permit them to return to their initial positions.

In carrying out our invention we employ a suitable box, case, or receptacle A, which in the present instance is made to represent a bank-building in miniature. A vertical partition B is arranged adjacent to one of the vertical sides of the box or case, and a horizontal partition C is arranged adjacent to the top of said box or case. The top A' has a series of slots or openings A² produced therein to permit the coins to be deposited in the bank, and the partition C has slots C' registering with the slots A², so that the coins will pass into the body proper of the box or receptacle A. The slots are of course marked to indicate the denomination of the coin to be deposited therein.

Inasmuch as each slot has the same operating means arranged in connection therewith for the purpose of registering and indicating each deposit, a description of the mechanism used in connection with one slot will suffice for a description of all, and by referring especially to Figs. 2 and 3 it will be noted that a lever D is pivoted upon the top of the partition C and carries an arm D' upon its inner end, which works between guides D², the free end of said arm projecting a slight distance across one end of the slot C'. The outer or opposite end of the lever D works through a horizontal slot B' and has a pawl E pivoted upon the extreme end of the lever D, said pawl engaging a ratchet-disk F, mounted upon an arbor F', projecting from the partition B, said disk having a convolute spring G connected to the inner face thereof, the opposite end of said spring being connected to the arbor F', the purpose of said spring being to move the disk in a direction indicated by the arrow or contrary to the movement caused by the operation of the lever D and pawl E. The ratchet-disk F has a dial-plate H rigidly connected therewith, said dial-plate having numerals arranged upon the outer face thereof, each numeral being arranged opposite each ratchet-tooth or notch,

so that each movement of the lever and pawl will cause a succeeding numeral to be brought opposite the opening A^3 produced in the box, case, or receptacle A, thereby indicating the total number of coins of a given denomination deposited in the bank, each denomination having its respective opening for the purpose of exposing the total amount deposited. As each coin is deposited through the slots A^2 and C' it will come in contact with the arm D' , sliding said arm between the guides D^2 and turning the lever D upon its pivot. The pawl E being normally held in engagement with the ratchet-disk F by means of the presser-finger E' , the said disk will be moved toward the right the distance of one tooth, and the moment the coin passes through the slot C' the lever and pawl will be returned to their normal positions by means of the coil-springs I, arranged within the slots B' and bearing upon the end of the lever D. Thus it will be understood that if one or more coins of a given denomination are deposited through the proper slot the disk and dial will be moved one or more notches, registering the number of coins deposited and indicating the total number of such coins, which number can be readily seen from the outside through the openings A^3 .

In order to prevent the backward movement of the disk F, we employ an arm K, which is pivoted to the partition B and carries a pin or stud K' at its distal end, which pin or stud is adapted to engage the ratchet-teeth of the disk F and prevent its return movement, which the spring G is constantly tending to produce, it being understood that the registering movement of the disk F creates or stores up tension in the spring G.

Whenever it is desired to release the registering mechanism and permit it to return to its initial position, we accomplish such purpose through the medium of a pusher-rod L, the upper end projecting through the top of the box or case, while the lower end is connected to the arm K through the medium of the pin or stud K' , the intermediate portion of the rod L working through a guide L' , and surrounding the pusher-rod above the said guide is a coil-spring L^2 , the upper end of which bears upon a pin L^3 , carried by the rod, the purpose of said spring being to normally hold the rod in an elevated position, and consequently keep the stud or pin K' in engagement with the ratchet-disk F.

A tilting lever M is pivoted to the partition B adjacent to the slot B' and is provided with a finger M' , which projects beneath the pawl E, the opposite end of said lever being pivotally connected to the pusher-rod L adjacent to its upper end, and by means of this construction it will be seen that when the

pusher-rod L is pressed down the lever M is tilted, causing the finger M' to lift the pawl E out of engagement with the ratchet-disk F, and at the same time the pin or stud K' is thrown out of engagement with the ratchet-disk and the spring G will immediately return the disk to its initial position of zero.

It will thus be seen that we not only provide means for registering and indicating the amounts deposited, but also provide simple and efficient means for returning all of the parts to their initial positions, and it will also be noted that the parts can be so returned at any time without taking the bank apart.

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

1. In a registering-bank the combination with the receptacle slotted as described, of the pivoted lever having a sliding arm connected therewith adapted to be operated by the passage of the coin, a pawl carried upon the free end of the lever and normally held in engagement with the ratchet-disk suitably journaled within the receptacle and carrying an indicating-dial, said ratchet-disk having a spring for returning it to its initial position, a locking pin or stud for holding said disk against reverse movement, a pusher-rod for releasing the said pin or stud, and the tripping-lever for releasing the pawl, said tripping-lever being operatively connected to the pusher-rod, and means for normally holding the pusher-rod in an elevated position, substantially as and for the purpose described.

2. In a device of the kind described, the combination with a registering-disk and pawl for operating the same, of the arm K carrying the locking pin or stud, the spring-actuated pusher-rod connected to the arm K and the tripping-lever also connected to the pusher-rod and adapted to release the pawl, substantially as shown and described.

3. In a device of the kind described, the combination with the registering-disk having a convolute spring connected therewith and operated by means of a pawl and ratchet, the arm K carrying the locking pin or stud K' , a spring-actuated pusher-rod L connected to the arm K and normally held in an elevated position, the lever M pivotally connected to the pusher-rod adjacent to its upper end and having a finger at its free end adapted to engage and release the pawl from engagement with the ratchet-disk, substantially as and for the purpose described.

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