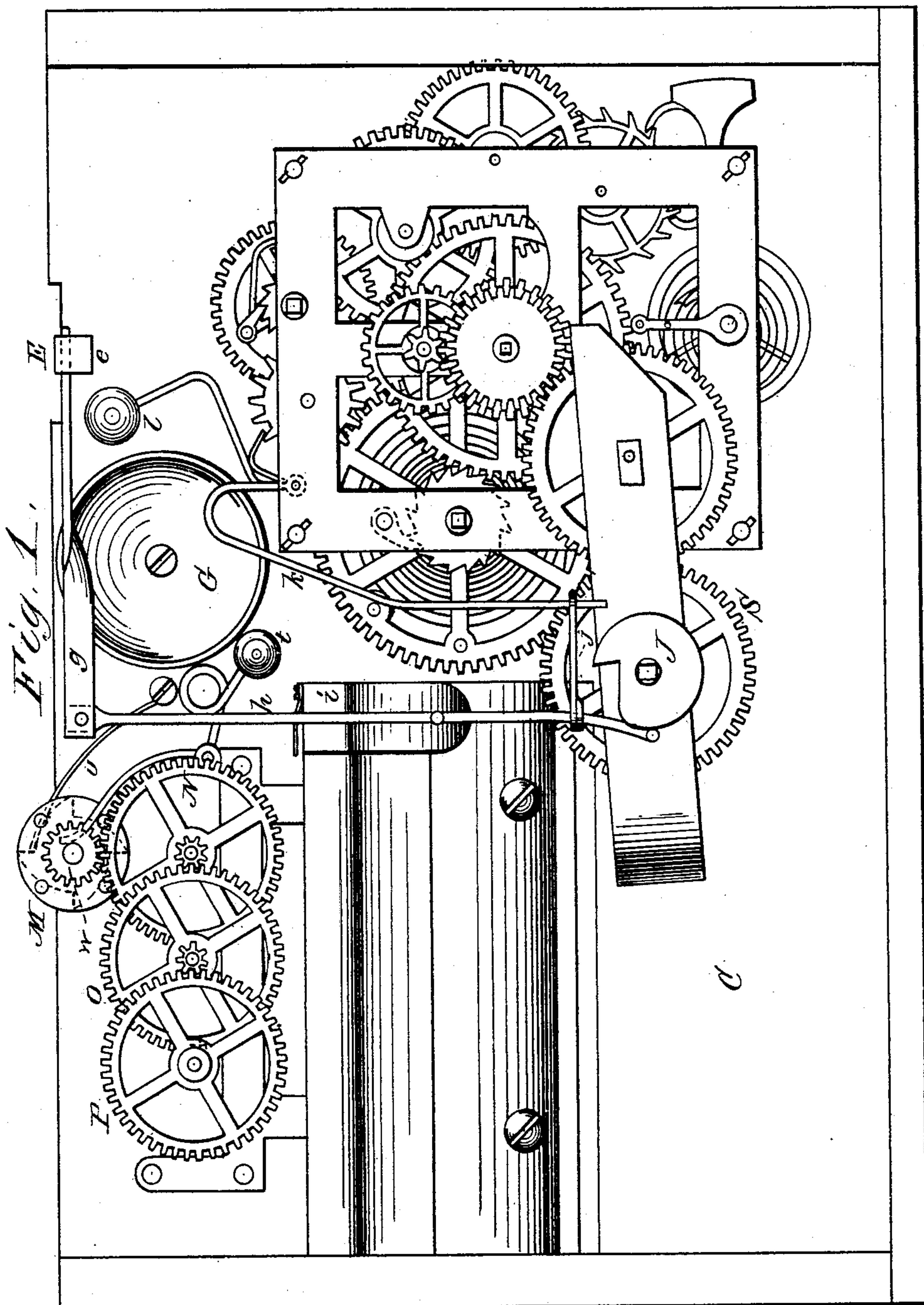


W. CROWE & T. R. HESTER.
Ballot Box.

No. 229,965.

Patented July 13, 1880.



WITNESSES

Nat. E. Oliphant.
Geo. R. Porter

INVENTOR
Willis Crowe,
Thomas R. Hester,
per Cha. H. Fowler,
Attorney.

W. CROWE & T. R. HESTER.

Ballot Box.

No. 229,965.

Patented July 13, 1880.

Fig. 2.

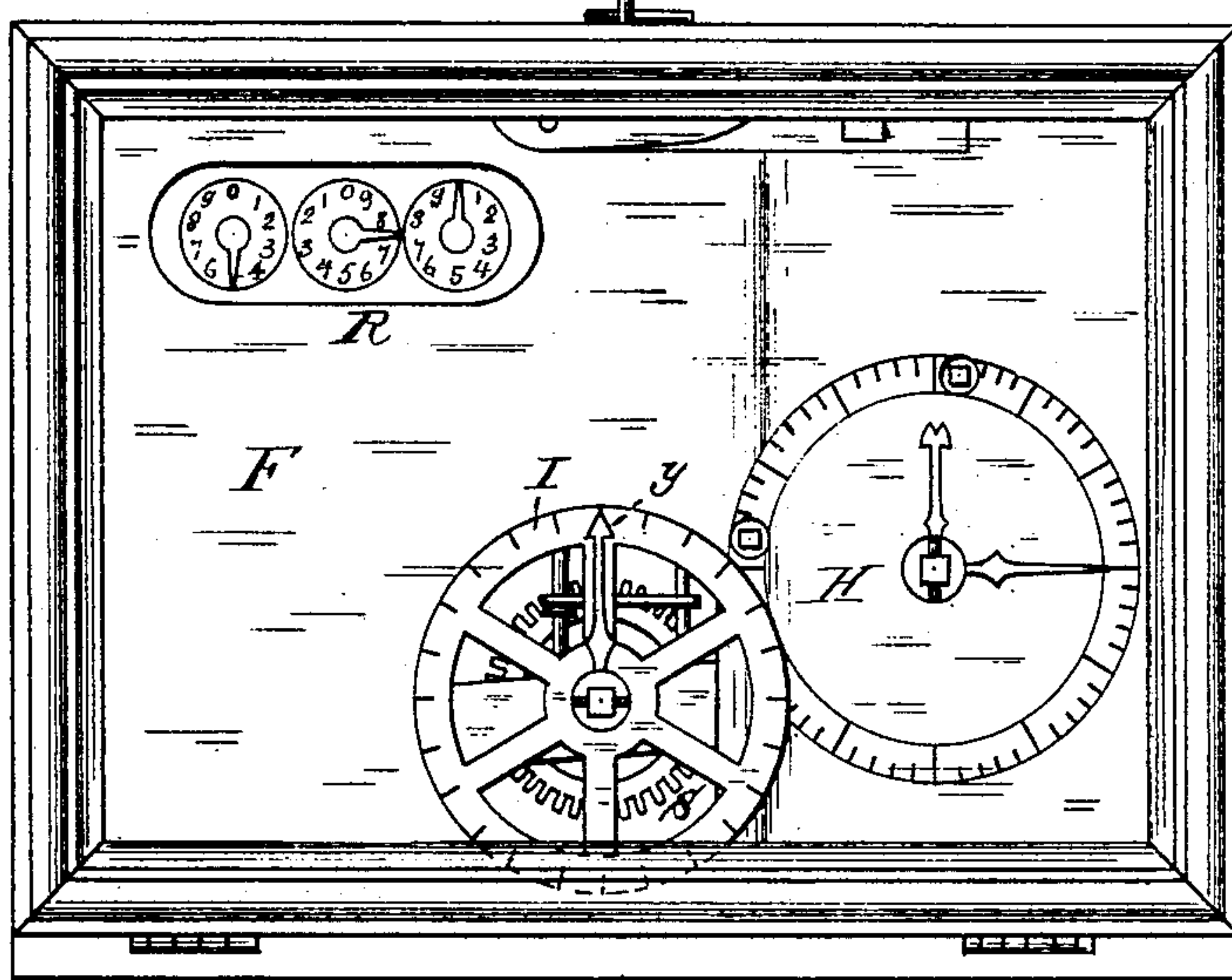
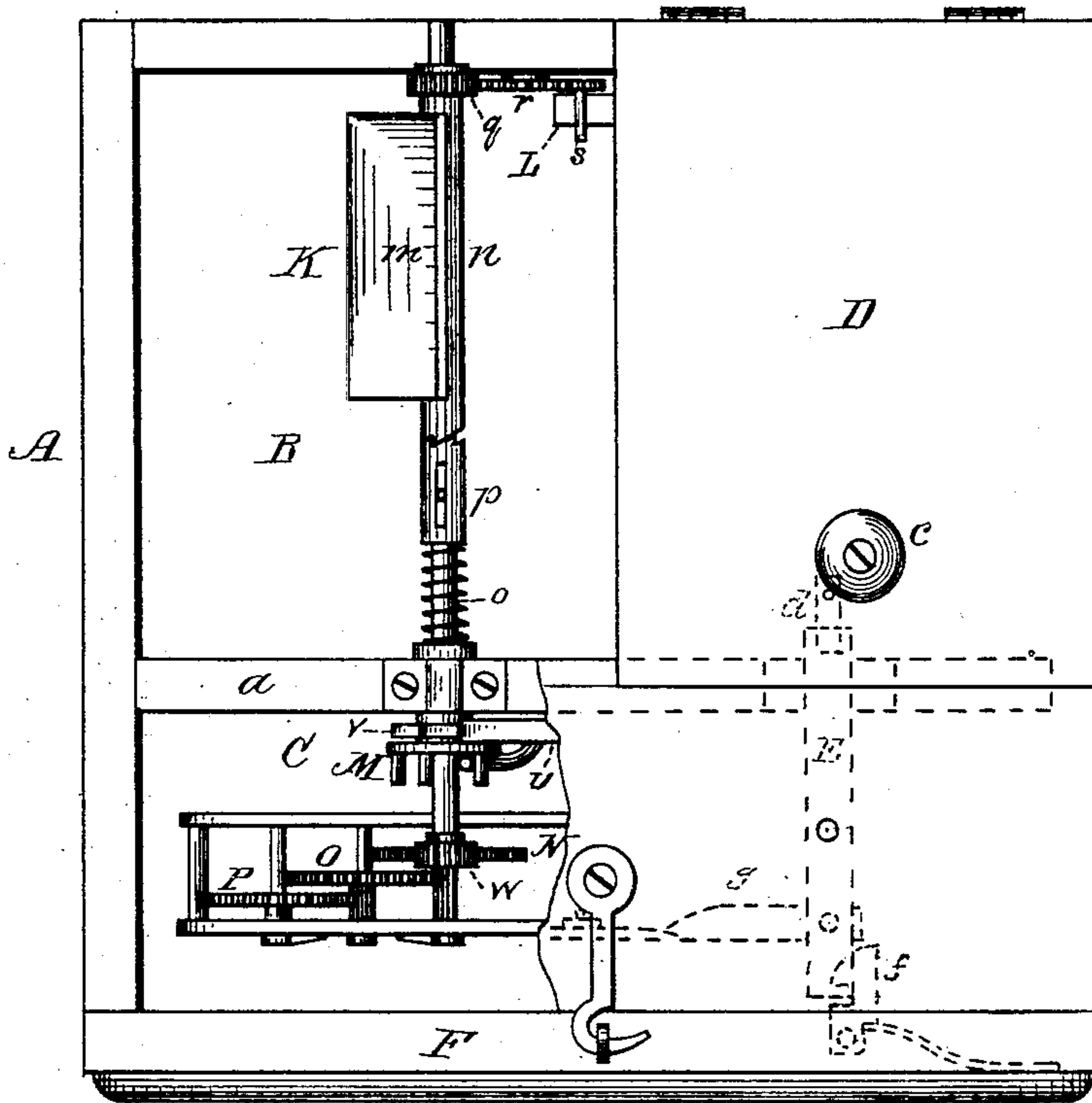


Fig. 3.



Witnesses

Nat. E. Oliphant.

Geo. B. Porter.

Inventor

Willis Crowe.

Thomas R. Hester.

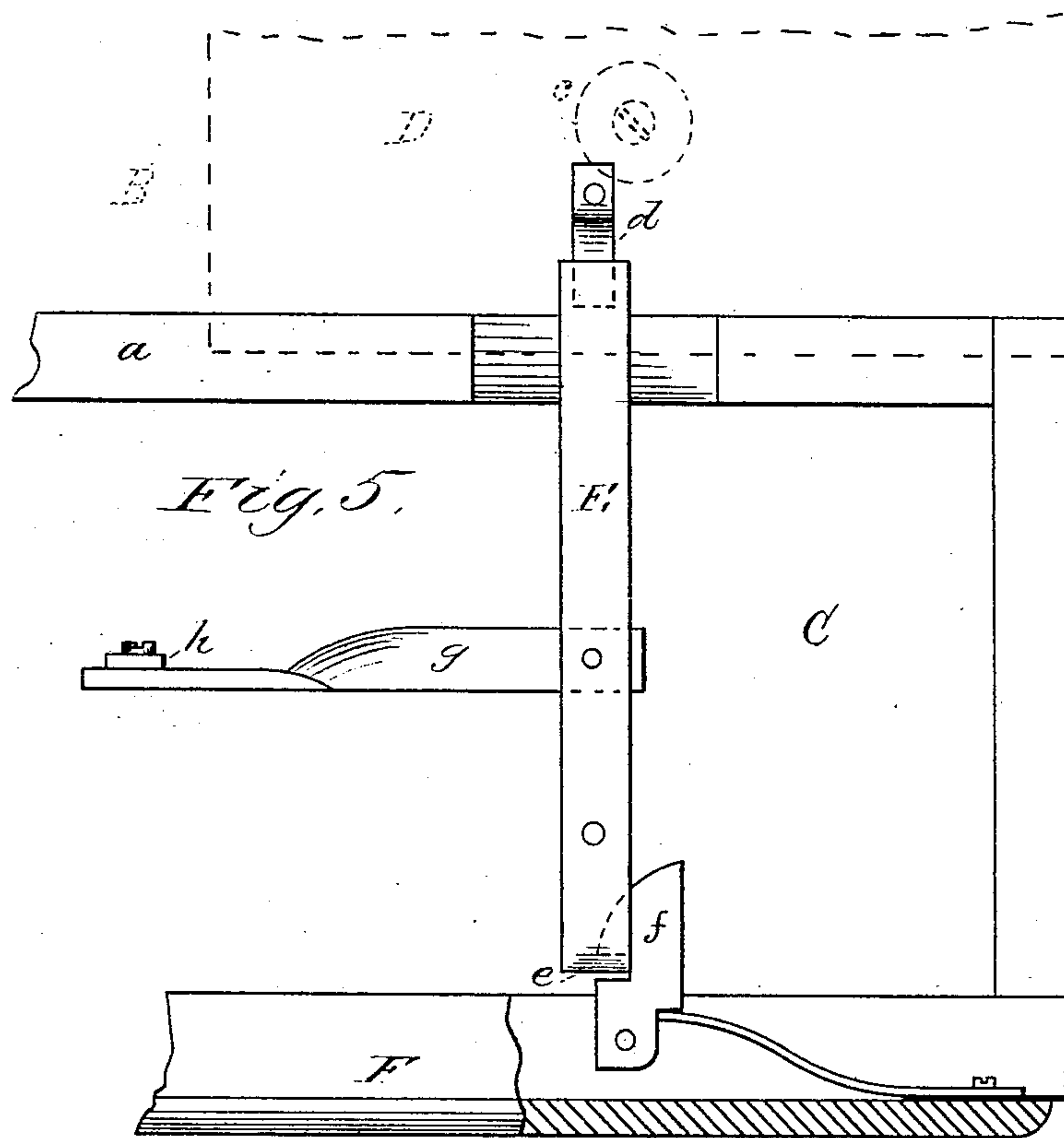
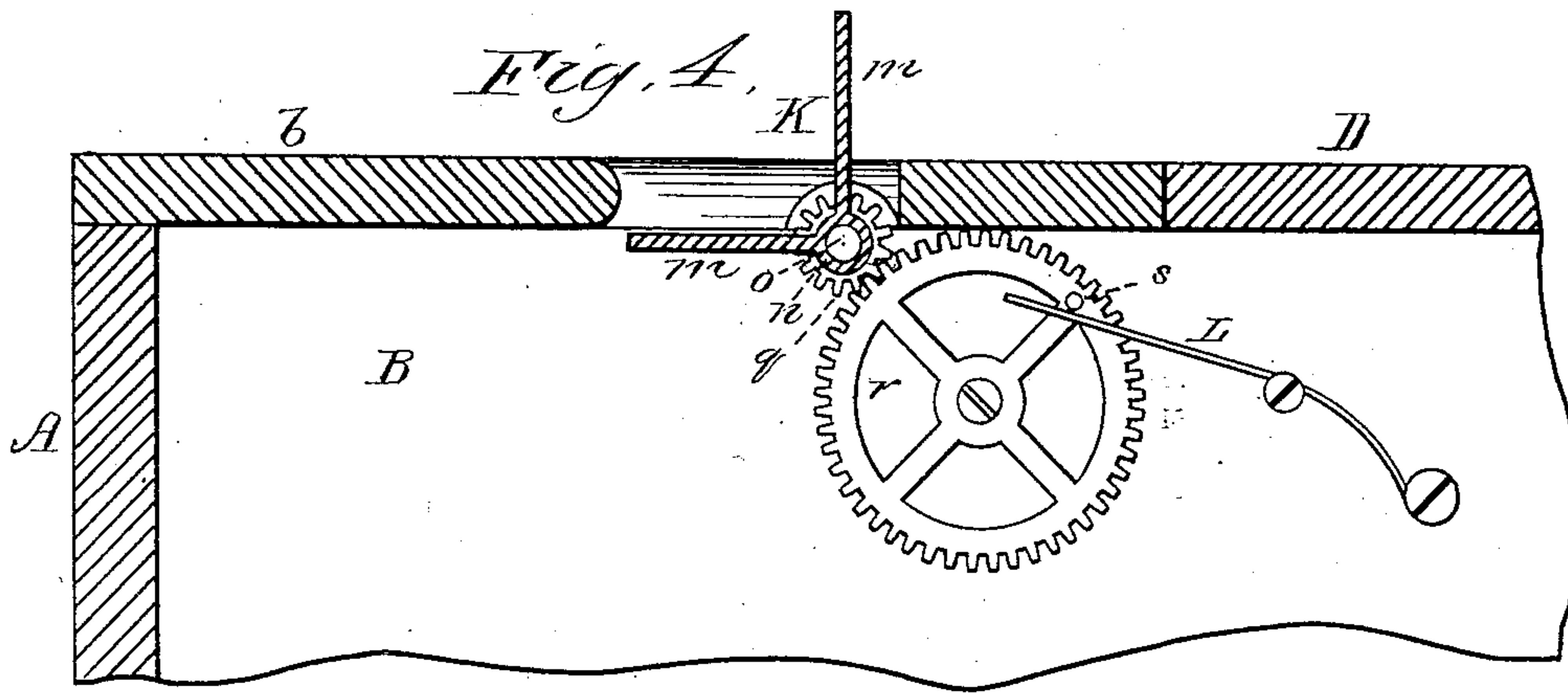
per Chas. H. Fowler.

Attorney.

W. CROWE & T. R. HESTER.
Ballot Box.

No. 229,965.

Patented July 13, 1880.



Witnesses

Nat. E. Oliphant
Geo. R. Porter

Inventor

Willis Crowe,
Thomas R. Hester,
per Chas. H. Fowler,
Attorney.

UNITED STATES PATENT OFFICE.

WILLIS CROWE AND THOMAS R. HESTER, OF NAPA, CALIFORNIA.

BALLOT-BOX.

SPECIFICATION forming part of Letters Patent No. 229,965, dated July 13, 1880.

Application filed January 31, 1880.

To all whom it may concern:

Be it known that we, WILLIS CROWE and THOMAS R. HESTER, citizens of the United States, residing at Napa, in the county of Napa and State of California, have invented certain new and useful Improvements in Time-Lock Registering Ballot-Boxes; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings represents a front view of the compartment containing the alarm-clock and registering mechanism with the dial-plates and glass door removed. Fig. 2 is a front elevation, on a reduced scale, with dial-plates and glass door attached. Fig. 3 is a top-plan view with a portion of the top removed. Fig. 4 is a detail sectional view, showing the trap for receiving and depositing the ballots and the mechanism for automatically throwing the trap back to its original position; and Fig. 5 is a top-plan view of the bolt and the catches upon the doors.

The object of the present invention is to provide a ballot-box that will afford security against fraudulent voting; and the invention consists in so constructing the box that the ballot, when deposited, automatically causes a gong or bell to be struck one blow, thereby giving audible notice to all bystanders of a vote having been cast, and simultaneously with this sounding of the bell a pointer or hand, or several of such devices, indicates the vote upon an exposed dial or face within one of the compartments of the box.

In connection with the above devices, the box is provided with a time-lock to prevent access to the interior of the box until a specified time, when the doors may be opened by the proper authorities and the ballots withdrawn, and at the moment of the unlocking of the doors an alarm attached to the clock mechanism is sounded to notify the officers that the time has arrived for the unlocking of the doors.

The several parts of the ballot-box, its pe-

culiar construction, and arrangement of mechanism by which the above results are accomplished will be hereinafter definitely described, and subsequently pointed out in the claims.

In the accompanying drawings, A represents a box of any suitable material and of any convenient size or shape. This box is divided, by a transverse partition, *a*, into two compartments, B C, the former compartment being designed for the reception of the ballots after being deposited, while the compartment C is to contain the mechanism composing the time-lock and register. The compartment B has a closed top, *b*, as shown in section in Fig. 4 of the drawings, the top *b* covering a portion only of the compartment, while the other portion, uncovered, is provided with a hinged or other form of door, D, having a suitable knob, *c*, whereby access is had to the compartment for the purpose of removing the ballots.

The door D has secured to its under side a catch, *d*, to engage with a bolt, E. The time-lock mechanism, to which the bolt is connected, may be composed of any suitable clock-work, and description of the details of construction and arrangement of the several cog-wheels is deemed unnecessary.

The bolt E, at its end opposite to that end which engages with the catch *d*, is bent down at a right angle to form a hook, *e*, which engages with a spring-catch, *f*, secured to the frame of a glass door, F, which closes the front of the compartment C. The bolt E is pivoted to a horizontal arm, *g*, which, in turn, is pivoted to the upper end of a vertical rod, *h*, said rod being also pivoted to a plate, *i*, or other convenient base or projection within the compartment.

To the rod *h* is rigidly secured or fastened a horizontal loop, *j*, through which passes the lower end of an escapement-wire, *k*, the upper end being connected with the escapement in such manner that when the rod *h* at its lower end is moved to the right an alarm will be sounded upon the bell G by the hammer *l*. The upper end of the rod *h* moves in an opposite direction to the lower end, and at the moment the alarm is sounded the bolt E is dis-

engaged from the catches *d f*, which admits of the doors D F being opened.

The clock-work is provided with the usual dial-plate, H, and minute and hour hands.

5 To the shaft of one of the cog-wheels of the clock-work is secured a lock-dial, I, having upon its inner side a trip-disk, J, of circular form. This trip disk or wheel may be provided with a friction-collar, so it may be turned
10 around on the shaft as desired, yet sufficiently tight to hold it where left, and the lower end of the rod *h* is bent at a right angle, to bear against the periphery of the trip-wheel, as will be hereinafter more fully described.

15 The trap K, which receives the ballot previous to its being deposited in the compartment B, consists of two wings, *m*, of any suitable material, and of sufficient width and length to receive the ballot when folded. The
20 wings *m* are arranged at right angles to each other and rigidly secured to a sleeve, *n*, upon a horizontal shaft, *o*. The sleeve *n* has ratchet-teeth upon one of its ends to engage with a gliding ratchet, *p*, which is feathered to the shaft *o*,
25 to prevent it from rotating thereon, but permitting it to slide or move lengthwise of the shaft. The shaft *o* has its bearings in the top of one wall of the compartment B and the partition *a*, and to one end of the shaft is
30 secured a small cog-wheel, *q*, meshing with the teeth of a larger wheel, *r*, secured to the inner side of the compartment B. This wheel *r* has a pin, *s*, which bears upon a flat spring, L, so that when the vertical wing of the trap
35 K is pressed down into the opening in the top *b*, to deposit the ballot lying on the horizontal wing of the trap, the trap will automatically return to its original position, as illustrated in Fig. 4.

40 A coil-spring upon the shaft *o* keeps the ratchet *p* engaged with the ratchet end of the sleeve *n*, thus acting as a spring-ratchet. To that part of the shaft *o* located within the compartment C is secured a trip-wheel, M, so
45 that when the shaft *o* is thrown forward to deposit the ballot the trip-wheel will release a hammer, *t*, provided with a suitable spring, which signals upon the bell G. The shaft *o* is prevented from rotating backward upon or
50 within its bearing by a suitable spring-pawl and ratchet, *u v*.

To the extreme end of the shaft *o* is secured a small cog-wheel, *w*, the teeth of which mesh with the teeth upon a larger wheel, N. This
55 wheel N, together with two other wheels, O P, gear with each other and operate the hands upon a register, R. The dial I revolves once in twenty-four hours, and is divided into hours from one to twelve, or midday to midnight,
60 and from midnight to midday; and to the axis of the wheel S is rigidly secured a pointer, *y*. The hour-hand of the clock and the pointer *y* on the dial I are set at the same hour, and when it is desired to have the alarm go off at
65 any specified hour, then that hour on the dial is brought around until it stands under the

pointer. The alarm of the clock is now wound up, also the time mechanism, and the hands of the register R adjusted to point to zero. The catch *d* of the door D is adjusted so that
70 it will be under the end of the bolt E, and when all is arranged on the inside the front door, F, is closed, the spring-catch *f* automatically engaging with the bolt, and is securely
75 locked.

The apparatus is now ready for use, and when the ballot has been properly folded it is placed by the party voting upon the horizontal wing of the trap K and the trap pressed
80 down until the vertical wing assumes a horizontal, which deposits the ballot in the compartment B. At the moment the ballot passes off the horizontal wing of the trap K, by the arrangement of devices heretofore described,
85 a signal is sounded upon the bell G, and through the operation of the cog-wheels W and N the hand to the right upon the register is moved one place, and when the hand makes a complete revolution the center hand
90 moves one place upon its own dial, and when it makes a complete revolution one place or point is marked by the hand upon the extreme left. It will thus be seen that a correct account of the votes polled is secured and the
95 number accurately kept on the dials of the register R, in view of the voters and others, through the glass door F, who can see the number of votes polled at all hours of the day, also hear the signal when each vote is deposited.
100

At the hour the doors D F are to be unlocked the trip-disk J is carried around by the wheel S and the bent end of the rod *h* rests in the notch in the disk. This acts upon the
105 escapement-wire *k* and allows the hammer *l* to sound the alarm upon the bell G. The upper end of the rod *h* is thrown to the left by the action of the trip-disk J, which releases the bolt E from the catches *d f* and admits of the doors being opened.
110

To prevent the glass door F from falling down when the bolt is withdrawn from the catches, a hook and staple may be employed, as shown in Fig. 3.

Having now fully described our invention,
115 what we claim as new, and desire to secure by Letters Patent, is—

1. A ballot-box provided with means, substantially as described, for automatically registering the number of votes or ballots and
120 giving a signal as each vote is cast, and a time locking mechanism by which the doors, both to the ballot-compartment and the compartment containing the dial-plates, are fastened, substantially as and for the purpose set forth.
125

2. The trap K, secured to the ratchet-sleeve *n* upon the shaft *o*, in combination with the spring-ratchet *p*, the register R, and the alarm, substantially as and for the purpose described.

3. The ballot-box A, divided into compartments B C, and provided with doors D F, with
130 catch *d* and spring-catch *f*, in combination

with the bolt E, arm *g*, rod *h*, trip-disk J, with a suitable clock mechanism, substantially as and for the purpose described.

5 4. In a ballot-box, the combination, with a suitable time-lock mechanism, of the dial I, having pointer *y*, trip-disk J, rod *h*, loop *j*, and the escapement-wire *k*, substantially as and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIS CROWE.
THOMAS R. HESTER.

Witnesses:

JOS. F. LAMDIN,
A. WARREN ROBINSON.