

(No Model.)

2 Sheets—Sheet 1.

C. WITTENBERG.

TELEPHONE TOLL COLLECTOR AND REGISTER.

No. 355,746.

Patented Jan. 11, 1887.

Fig. 3.

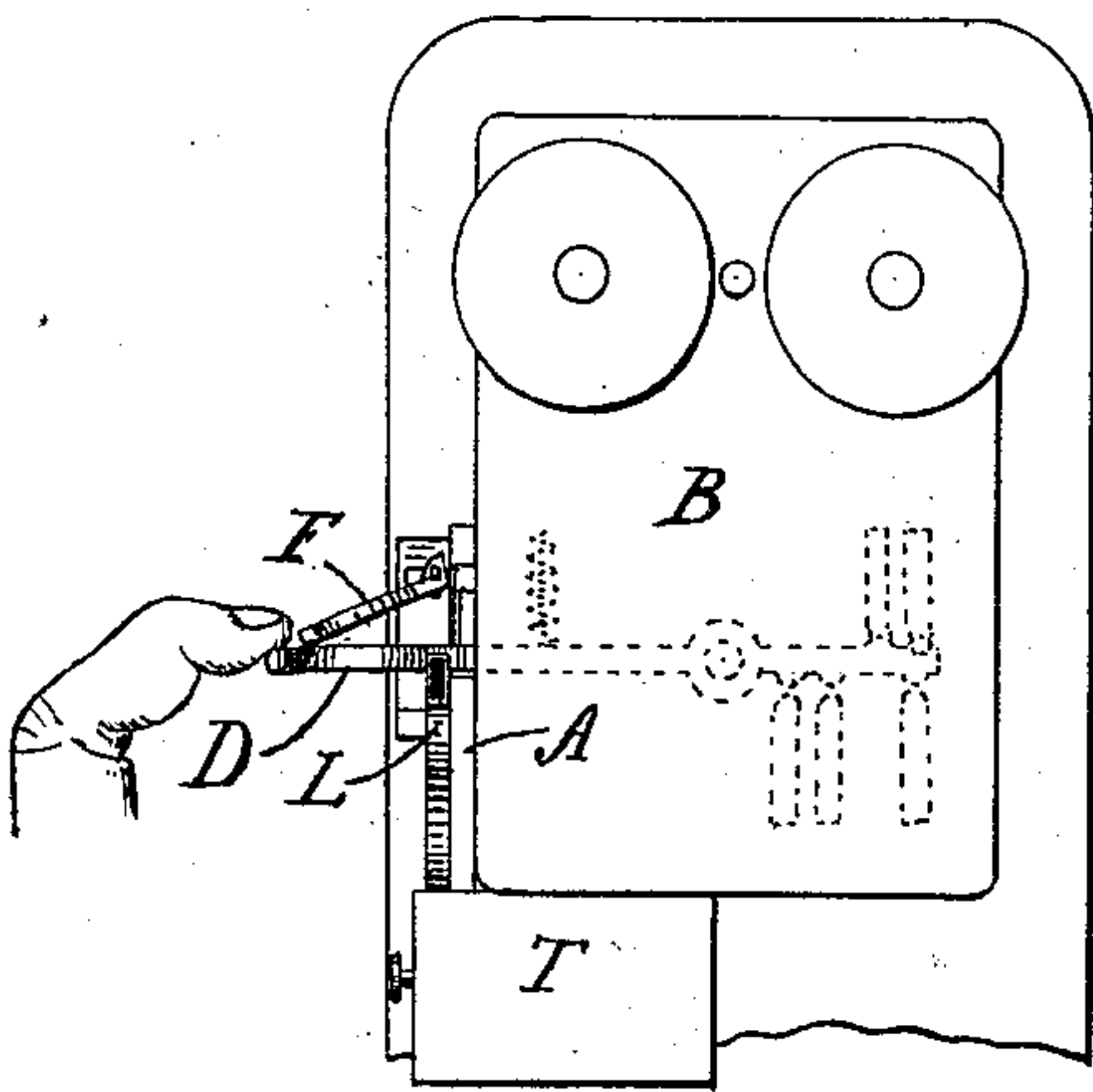


Fig. 1.

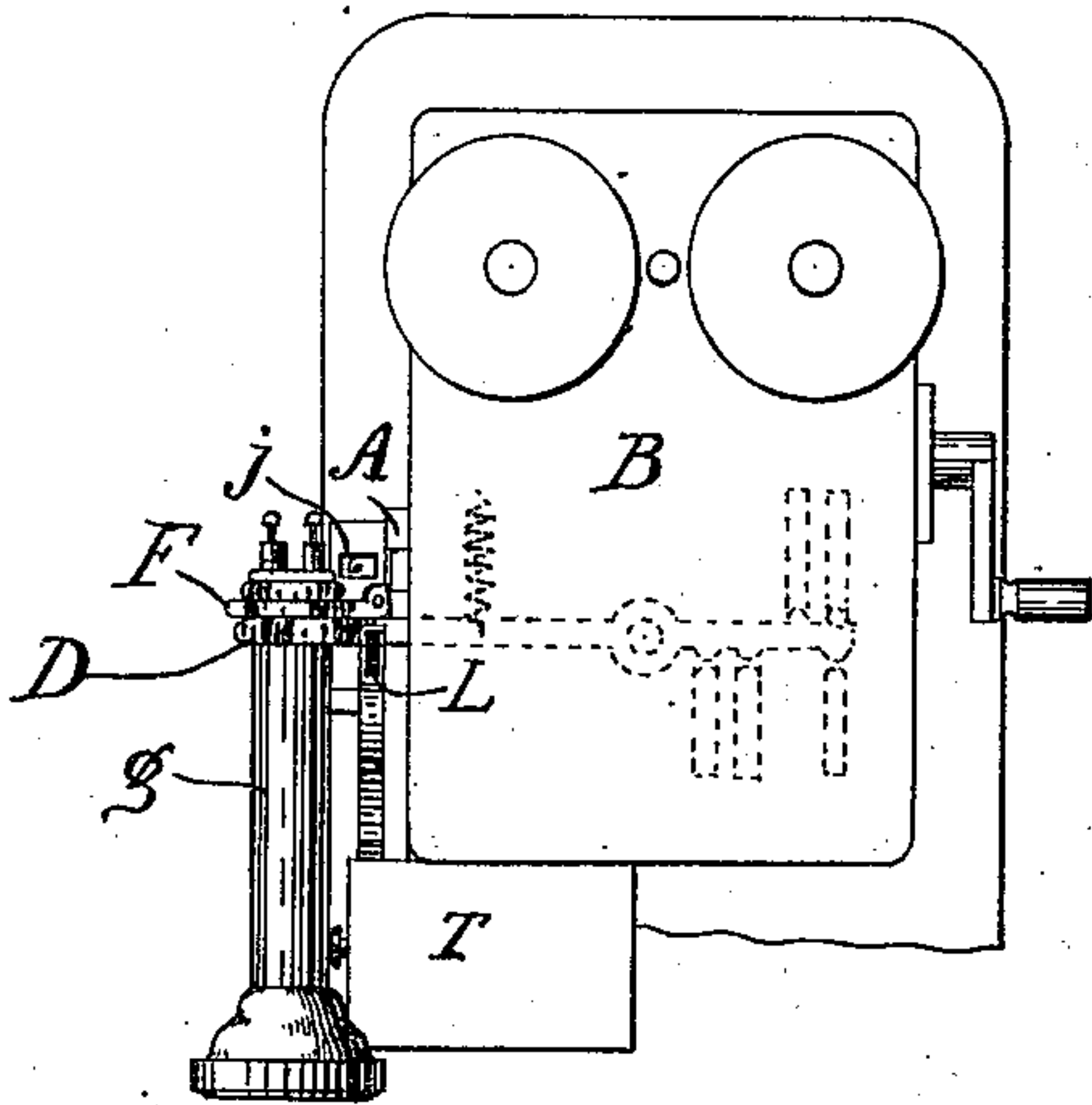
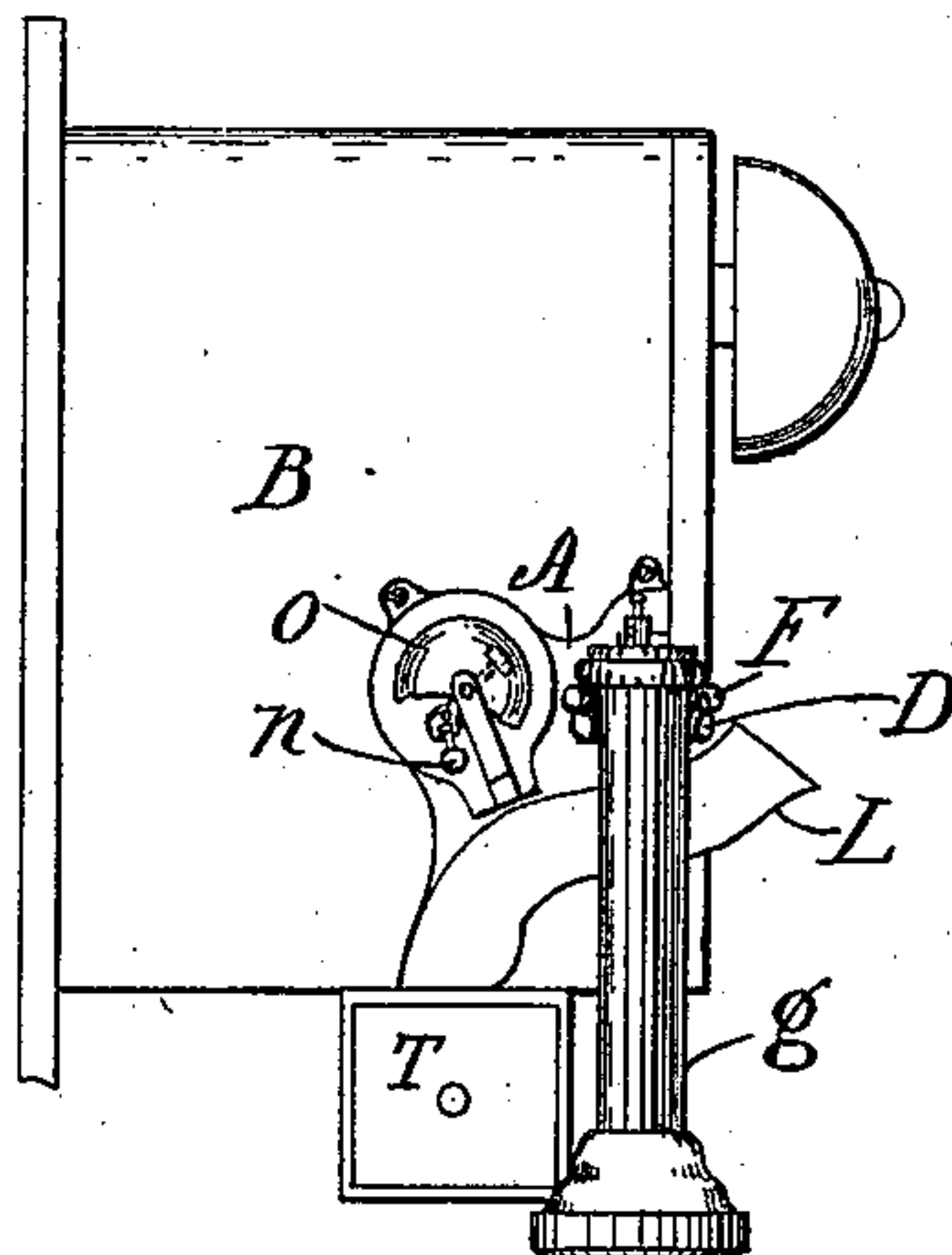


Fig. 2.



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(No Model.)

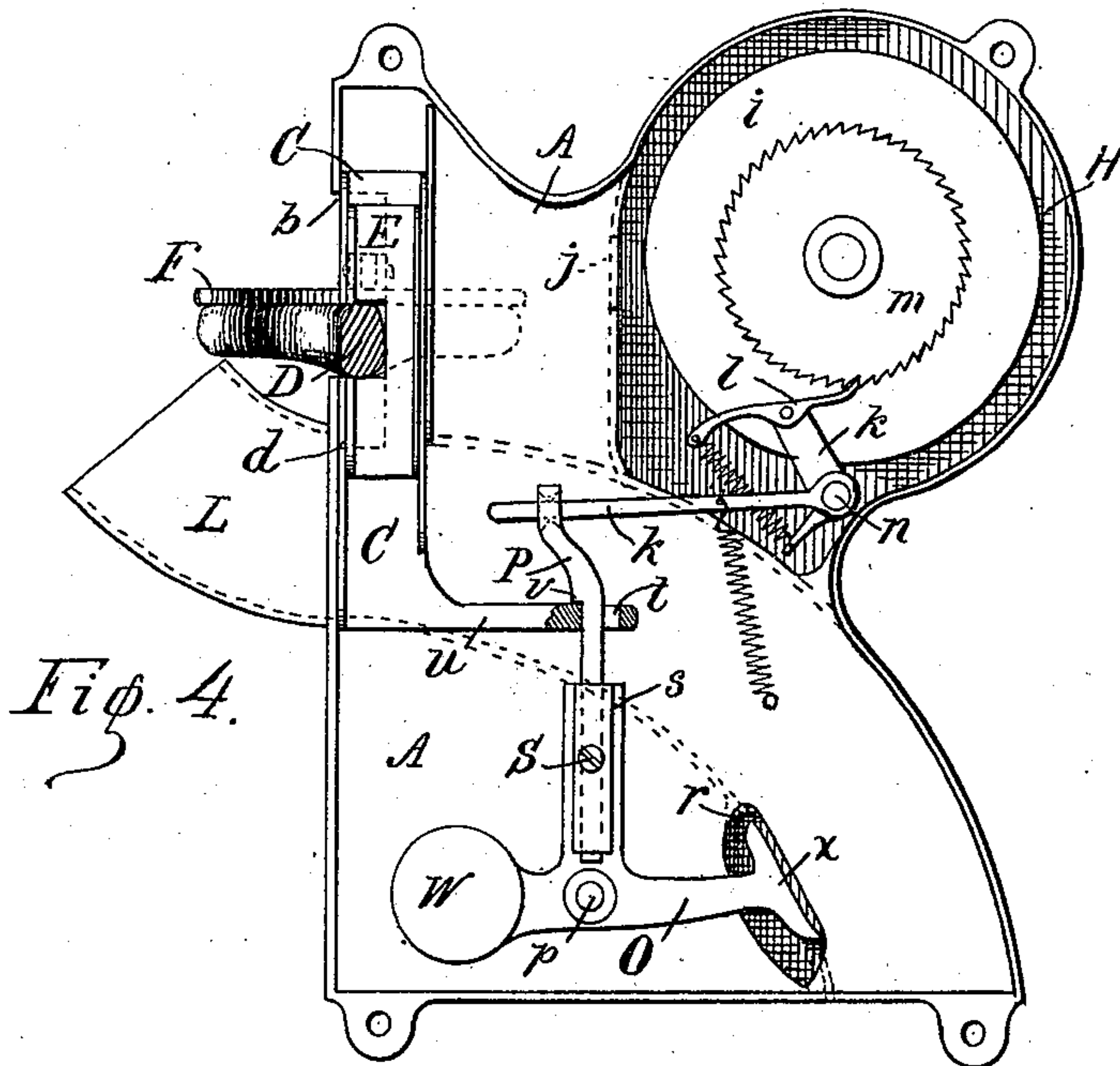
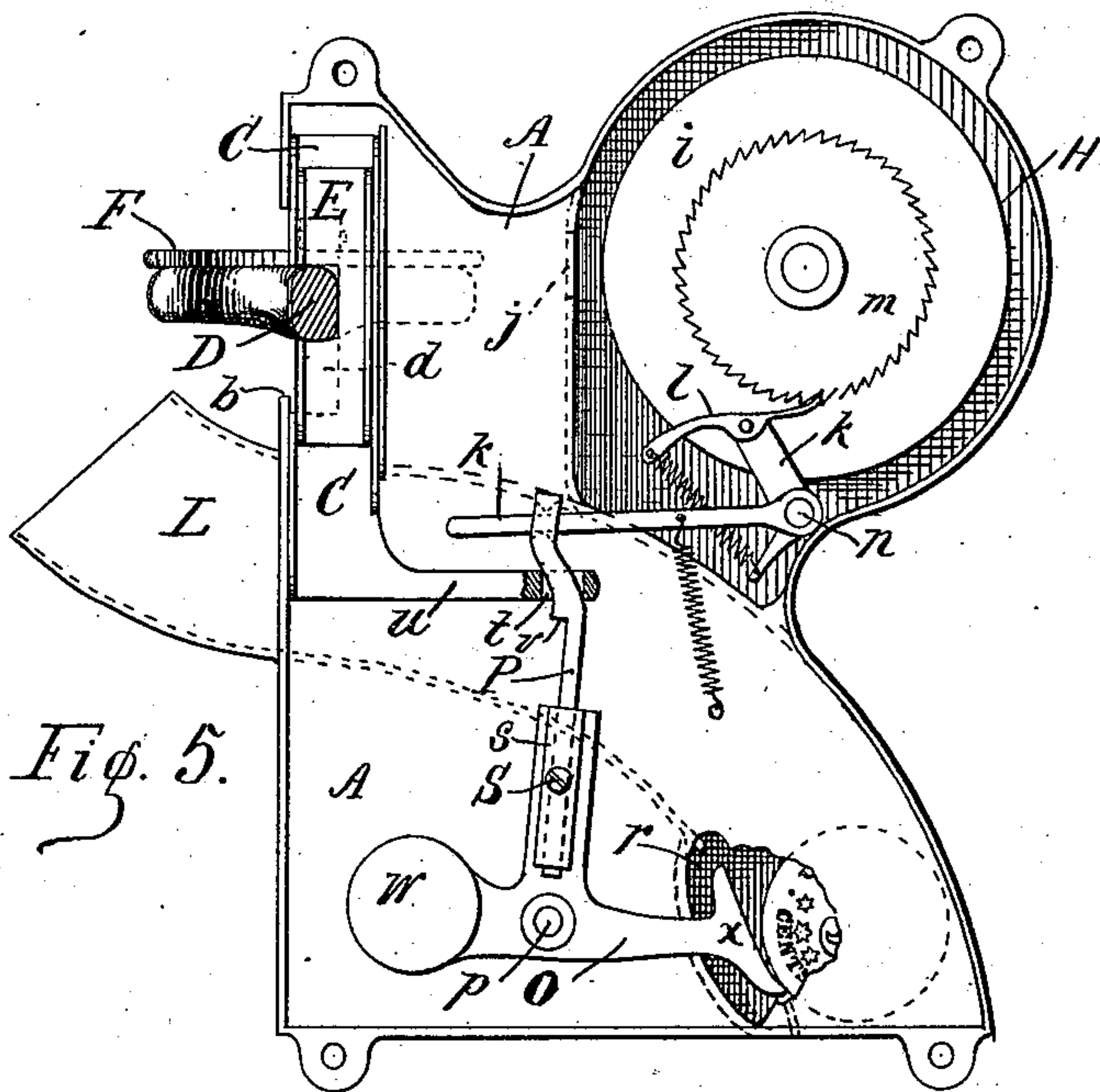
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UNITED STATES PATENT OFFICE.

CHARLES WITTENBERG, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO EDWARD G. CORNELIUS, OF SAME PLACE.

TELEPHONE-TOLL COLLECTOR AND REGISTER.

SPECIFICATION forming part of Letters Patent No. 355,746, dated January 11, 1887.

Application filed June 24, 1886. Serial No. 206,104. (No model.)

To all whom it may concern:

Be it known that I, CHARLES WITTENBERG, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Improvement in Telephone-Toll Collectors and Registers, of which the following is a specification.

My invention relates to an improved attachment for telephones for the purpose of receiving tolls for the use of the telephone or for registering the number of times that the telephone is used.

The objects of my improvement are, first, to combine in one attachment adapted to be applied to the switch-lever of the ordinary telephone apparatus means whereby the movement of said switch-lever to make the required connection to put the telephone in operation shall operate either to set forward one point a registering mechanism or to discharge a coin previously deposited into a suitable drawer or other locked receptacle, the coin when first deposited operating to disengage the registering mechanism.

My object is, further, to provide means for locking the switch-lever so that it shall be immovable until a coin representing the amount of toll required shall have been deposited, all as hereinafter fully described.

The accompanying drawings illustrate my invention.

Figure 1 is a front elevation showing my device attached to a "Bell" telephone apparatus. Fig. 2 is a side elevation of the same. Fig. 3 is a front elevation showing the position of the parts when it becomes necessary to move the switch-lever independently of the attachment, as in repeating the signal to call the exchange-station. Fig. 4 is an elevation, on a larger scale, showing the interior mechanism of my attachment when the switch-lever is depressed, as when supporting the telephone-receiver and in position to operate the register. Fig. 5 is a similar elevation showing the position of the parts when a coin has been deposited and the switch-lever has commenced its movement upward.

A is a flat metallic case adapted to be secured to the side of the telephone-case B, and

cut away at *b*, so as to permit the necessary movement of the switch-lever D.

C is a flat bar arranged to slide within case A, and having a slotted opening at *d*, the upper edge of which rests upon the upper edge of the switch-lever. Said slotted opening is of sufficient length to permit the necessary independent movement of the switch-lever, as hereinafter explained.

E is a thin flat plate arranged to slide along bar C, within case A, and having a notch at *e*, which closely engages the upper and under edges of the switch-lever, the purpose being to cover the opening in bar C.

F is a forked bracket hinged to the exterior of bar C and adapted to embrace the telephone-receiver *g*. Said bracket is arranged to register with and lie along the top of the forked projecting end of the switch-lever, which forms a support for the receiver *g*.

H is a registering mechanism, which may be of any well-known form, that shown consisting of a disk, *i*, having numbers arranged in regular successive order on its periphery and exposed through the case A at *j*. The registering mechanism is actuated by the vibration of a lever, *k*, carrying the pawl *l*, which engages the ratchet-wheel *m*. Lever *k* is mounted on a shaft, *n*, which moves with the lever and actuates the hammer of the bell *o*, mounted on the outside of case A.

L is a chute formed on the outside of case A. Said chute is open at both ends, and is of suitable size to receive a nickel coin.

O is a weighted lever pivoted to case A at *p* and having a projection, *x*, through the side of the case through an opening, *r*, into the chute L.

P is a catch-bar, mounted so as to slide vertically on an arm, *s*, projecting from lever O. Said catch-bar passes through a mortise, *t*, in an arm, *u*, projecting from the lower end of the sliding bar C. A shoulder, *v*, on bar P engages the upper edge of arm *u*, and a mortise in the upper end of said bar receives the end of the register-actuating lever *k*. The mortise in arm *u* is wider than bar P, so that when the bar is thrown to one side, as seen in Fig. 5, shoulder *v* will pass through the mortise without engaging the arm. The upper end of

bar P is bent to one side, as shown, so that as arm *u* moves along the bar lever O is oscillated.

S is a set-screw, by means of which bar P may be rigidly secured to arm *s*, so that it will not slide therein.

W is a weight on lever O, by means of which the lever is held normally in such a position that bar P engages arm *u*.

10 The operation of my device is as follows: When the telephone-receiver is removed from the supporting switch-lever, said lever moves upward, carrying with it bar C, which, engaging the actuating-lever of the register through arm *u* and bar P, carries the register-disk forward one point, bar P sliding in arm *s*. If it is now desired to draw the switch-lever downward again to make the necessary connections to signal the exchange a second
20 time, the lever is drawn down with the finger of the operator, as in Fig. 3. Bar C does not now move, and the lever when released does not operate the register; but when the receiver *g* is hung up it engages the forked bracket F, and bar C is brought down with the switch-lever, and the actuating-lever *k* is set ready to carry the register forward another point. The apparatus as thus operated serves to register the number of times that the telephone
30 is used by a regular subscriber.

If a transient person applies to use the telephone, he is instructed to place a nickel in the chute L. The coin passing down the chute is stopped by contact with the projection *x* on lever O, and the lever is thereby moved sufficiently to disconnect shoulder *v* on bar P from engagement with the arm *u*; but the lever does not move far enough to release the coin. When the switch-lever is now released by the
40 removal of the telephone-receiver, it moves up-

ward the bar C and arm *u*, as before, but bar P is not raised and the register is therefore not operated; but as arm *u* passes along the bent portion of bar P lever O is oscillated and the coin is released and passes to the cash-drawer T. 45

If it is desired to use the attachment for public service entirely, bar P is secured rigidly to arm *s*, so that it cannot slide therein, by the set-screw S. It being now impossible for bar C to be moved until the shoulder *v* of bar P is disengaged from the arm *u*, the switch-lever is thereby locked in the position in which it is normally held by the weight of the receiver, and it cannot be operated to put the telephone transmitter and receiver in connection with the main line until a coin has been deposited in the chute, as above described. 55

I claim as my invention—

1. The above-described combined toll collector and register for telephones, consisting of case A, sliding bar C, having arm *u*, and bracket F, catch-bar P, lever O, having arm *s*, in which bar P is arranged to slide, chute L, a registering device, lever *k*, arranged to actuate said registering device and to engage catch-bar P, all combined and arranged to cooperate with each other and with the switch-lever of a telephone in the manner specified. 60

2. In a toll-collector for telephones, case A, sliding bar C, having arm *u* and bracket F, catch-bar P, lever O, having bar P rigidly secured thereto, and chute L, all combined and arranged to cooperate with each other and with the switch-lever of a telephone in the manner specified. 70

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Witnesses:

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