

A. BONER & J. A. FLEMING.
Vote-Counting Apparatus.

No. 156,975.

Patented Nov. 17, 1874.

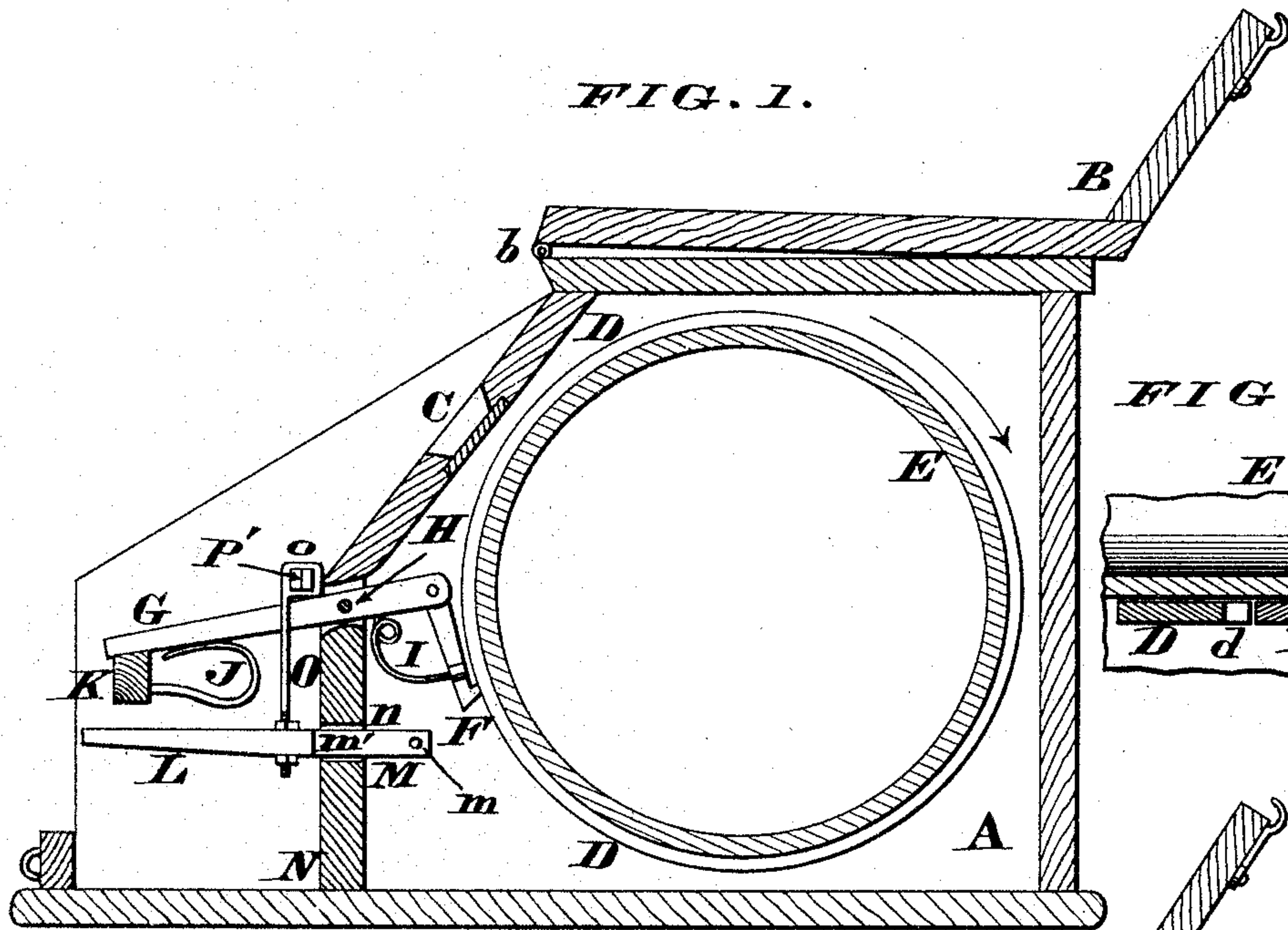


FIG. 4.

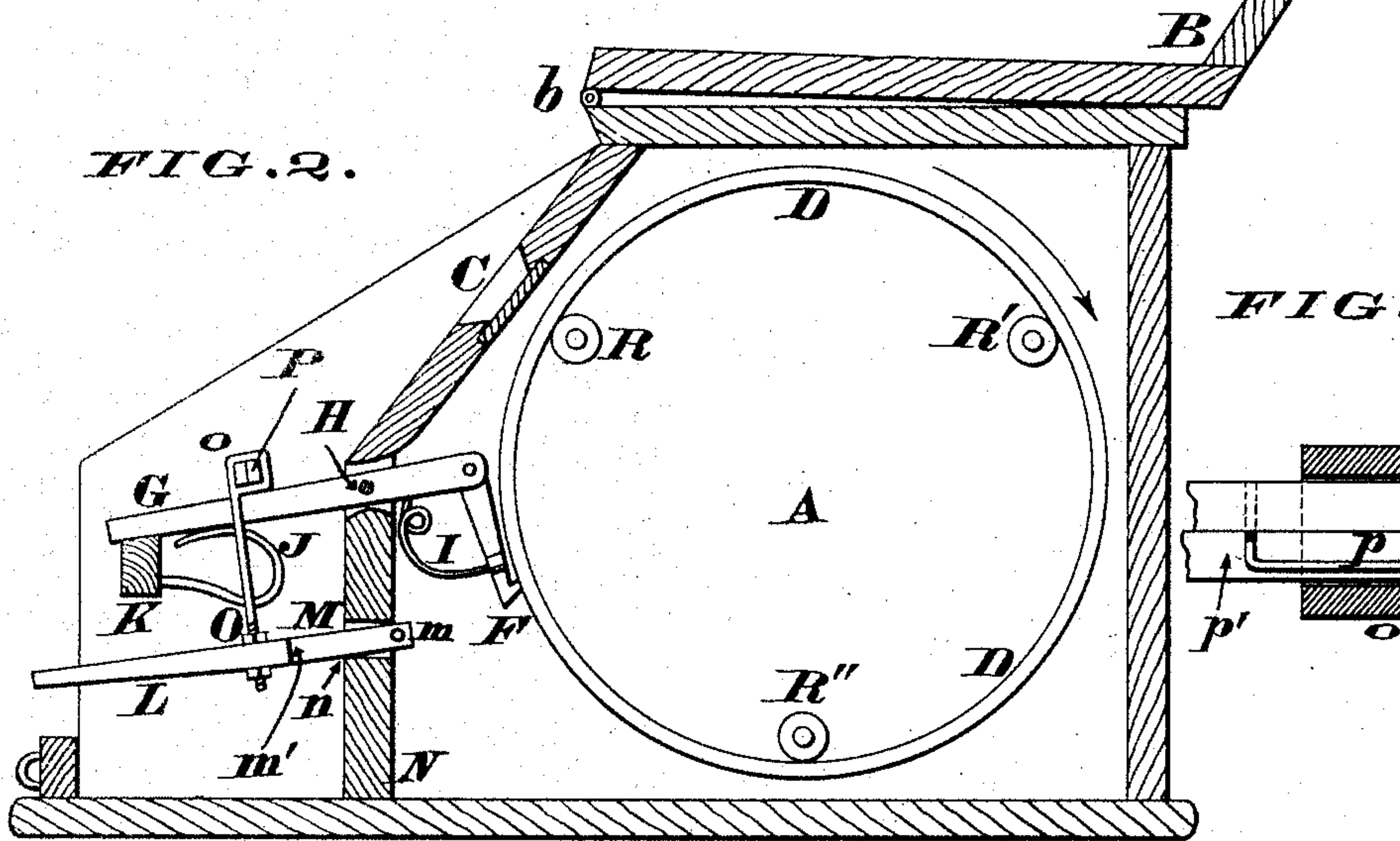
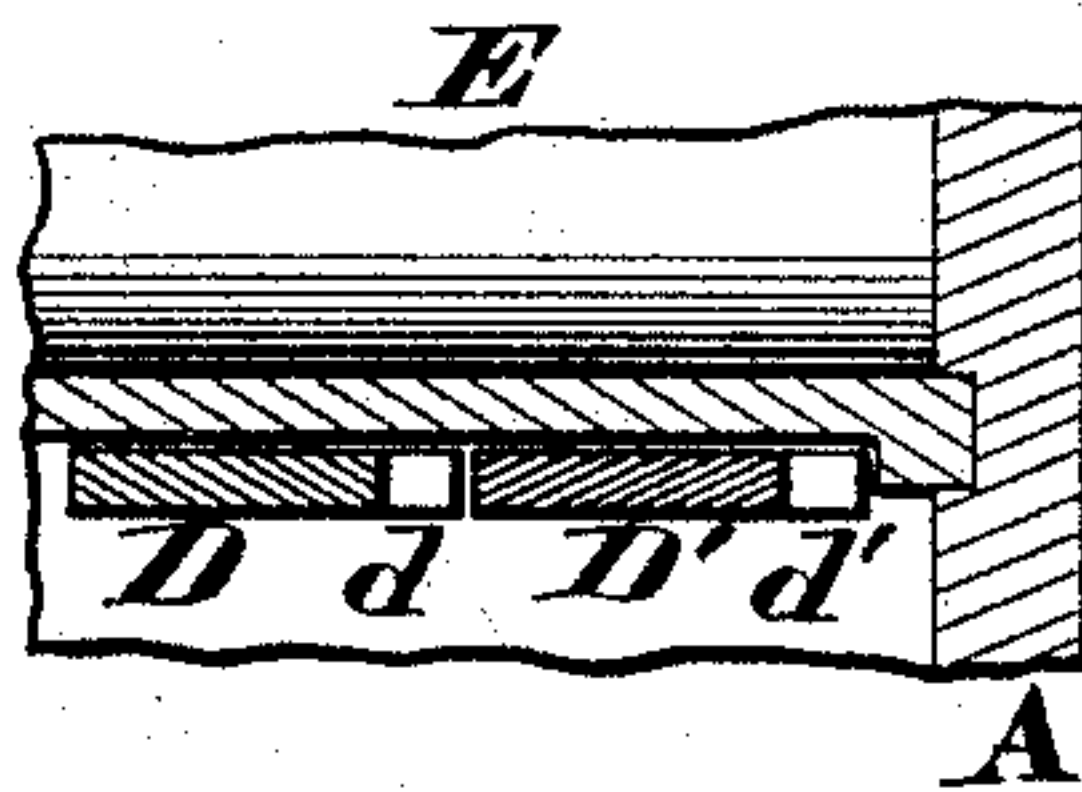


FIG. 5.

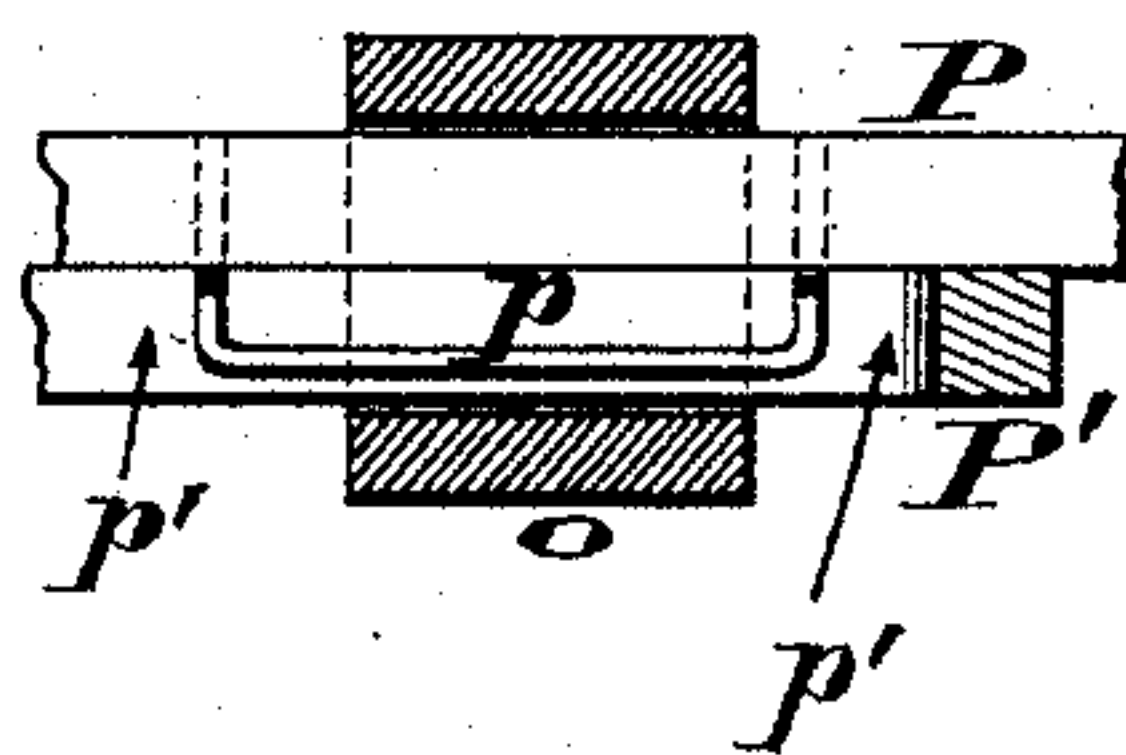
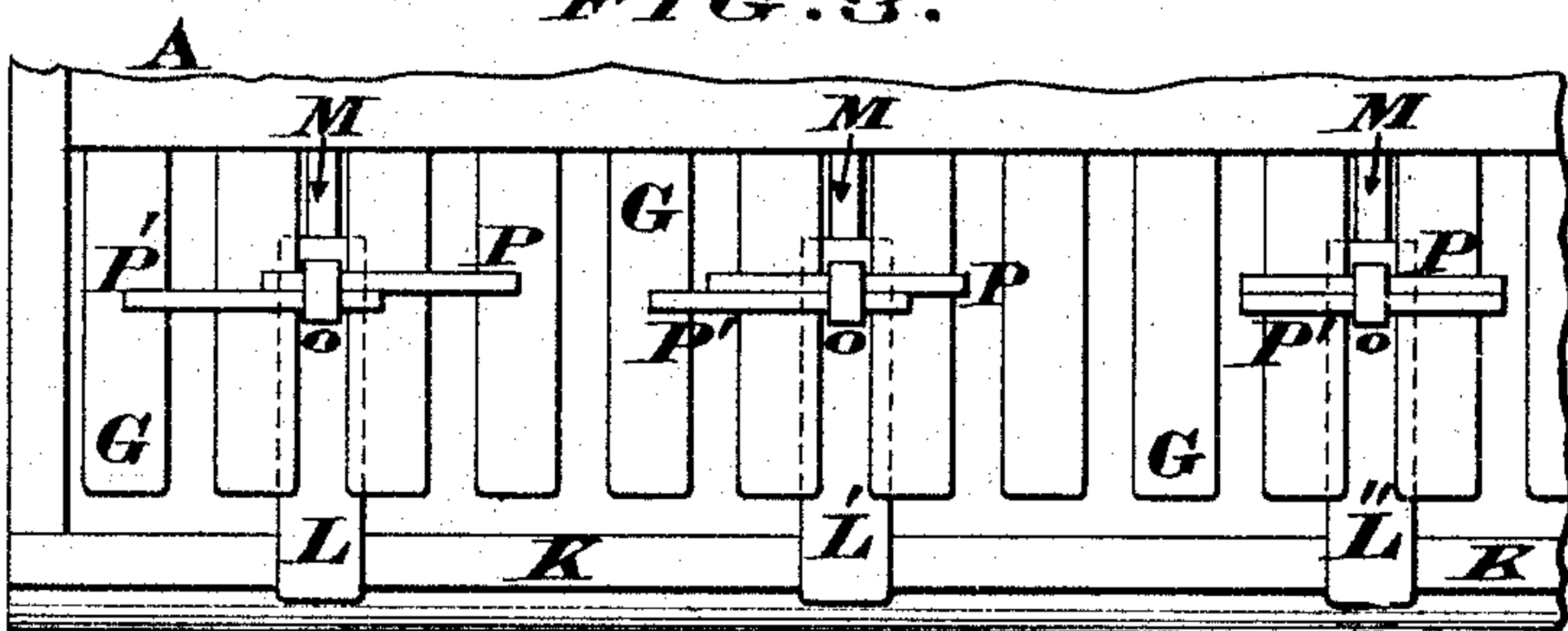


FIG. 3.



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ALBERT BONER AND JOHN A. FLEMING, OF EATON, OHIO.

IMPROVEMENT IN VOTE-COUNTING APPARATUS.

Specification forming part of Letters Patent No. **156,975**, dated November 17, 1874; application filed October 12, 1874.

To all whom it may concern:

Be it known that we, ALBERT BONER and JOHN A. FLEMING, both of Eaton, Preble county, Ohio, have jointly invented a new and useful Vote-Counting Apparatus, of which the following is a specification:

This invention relates to that class of vote-counting apparatus for which Letters Patent were issued to Larsh and Quinn July 28, 1874; and the object of our invention is to simplify the construction of such machines, and at the same time enhance their utility.

Our improvement consists in a switch for operating simultaneously two or more of the keys wherewith the registering-rings are rotated.

In the Larsh and Quinn machine these keys must be either operated singly, or else a certain number must be depressed at the same time; but there is no provision in said machine for setting the switches so as to operate a greater or less number of keys at will.

We overcome this objection by providing the switches of the machine with an upwardly-projecting shaft, having at top a socket or holder containing two longitudinally-shiftable horizontal bars. When these bars are fully retracted they bear only upon two keys; but, by partially withdrawing them from the socket, they may be caused to rest upon three of them. By drawing out these bars as far as possible they will then operate four keys, or even a greater number, if the machine be arranged therefor.

Having thus indicated the principal features of our invention, we will now proceed to give a detailed description of the manner of constructing and operating the apparatus.

In the accompanying drawing, Figure 1 is a vertical section from front to rear of our apparatus, the lid being opened, and one of the registering-rings shown in the act of being rotated by its appropriate key. Fig. 2 is a similar section, the registering-rings being shown mounted upon rotating shafts, and one of the operating-keys being represented depressed by the action of a switch. Fig. 3 is a plan of the finger-board of the apparatus, showing the adjustable bars of the switches set so as to operate, respectively, two, three, and four operating-keys. Fig. 4 is a horizontal section

through two of the registering-rings and a portion of their sustaining-annulus or hollow drum. Fig. 5 is a horizontal section through one of the switch-sockets and its accessories.

Of the above illustration, Figs. 4 and 5 are drawn on an enlarged scale.

The inclosing-box or housing A, hinged lid B b, and window C, being essentially the same as described in the patent alluded to, need no further description in this specification.

Instead of a number of registering-disks, as seen in said patent, we provide a number of light metallic rings, D D', &c., which are adapted to rotate freely around a fixed annulus or hollow drum, E, whose ends are secured to the sides of box A. These registering-rings are notched at *d d'*, and may be numbered and arranged to rotate each other at the proper time, in a manner similar to the disks shown in the aforesaid patent. These notches *d d'* of the registering-rings are intended for the reception of feed-hand or pawls F, that are pivoted to the inner ends of keys G, the latter being fulcrumed upon a bar, H, disposed transversely of the box. The feed-hands F are maintained in contact with the peripheries of their appropriate registering-rings by springs I. J are springs, which act to elevate the outer ends of keys G the moment they are relieved from the pressure of the operator's fingers. These springs are fitted in a rail, K, that serves as a stop to limit the depression of the keys. Located beneath the keys are the switches L L' L'', of which as many may be applied to the apparatus as circumstances may dictate. These switches are furnished with shanks M, which are capable of sliding within openings *n* of the vertical partition N of the box A. *m* is a pin, which limits the withdrawal of switch L, while a shoulder, *m'*, prevents it being shoved over too far. Each switch carries an upwardly-projecting shaft, O, having at top a socket or holder, *o*, that retains within it two parallel and horizontal bars, P P'. Of these bars the one, P, is provided with a staple, *p*, (or guiding-pins,) which traverses a longitudinal slot, *p'*, of the other bar. By this arrangement the bars are capable of being shifted longitudinally within the socket, as occasion may require.

Instead of the annulus E, a number of ro-

tating shafts, R R' R'', may be provided for supporting the rings D.

The operation of depressing a single key and rotating its appropriate ring, being essentially the same as explained in the Larsh and Quinn patent, requires no special description in this specification; but the action of our improved switching device is as follows: When in their normal position, all of the switches are shoved back until their shoulders *m'* strike against the front of partition N, as represented in Fig. 1, thereby rendering them inoperative; but as soon as it is required to use either of said switches, they are accordingly drawn out as far as desired or as the stop *m* will permit. The attendant then adjusts the rods P P' in a proper manner, so as to agree with the number of keys that are to be operated on. In case the names of four candidates are announced, the attendant extends said rods to their full length, as shown at L in Fig. 3; and it is evident the moment the switch is depressed all four of the keys upon which said rods rest will be simultaneously brought into action. As soon as the attendant removes his finger from the switch L the stress of springs J restores the keys to their normal position,

after which the rods P P' are retracted, and the switch shoved back as far as shoulder *m'* will allow. Should three names be announced, the rods P P' are adjusted as shown at L' in Fig. 3, while to operate but two keys said rods are arranged as represented at L'' in the same illustration.

It will thus be seen that with our apparatus two, three, or four keys may be operated as readily as one, and, by simply increasing the length of bars P P', any desired number of keys may be depressed simultaneously.

In the condition of the apparatus shown in Fig. 1, each individual key operates independently of all the others.

We claim as our invention—

In combination with the actuating-keys G of a vote-counting apparatus, the shiftable sliding switches L M *m m'* O o and adjustable rods P P', substantially as set forth, and for the purpose designated.

In testimony of which invention we hereunto set our hands.

ALBERT BONER.

Attest: JOHN A. FLEMING.

GEO. H. KNIGHT,
O. P. CAYLOR.