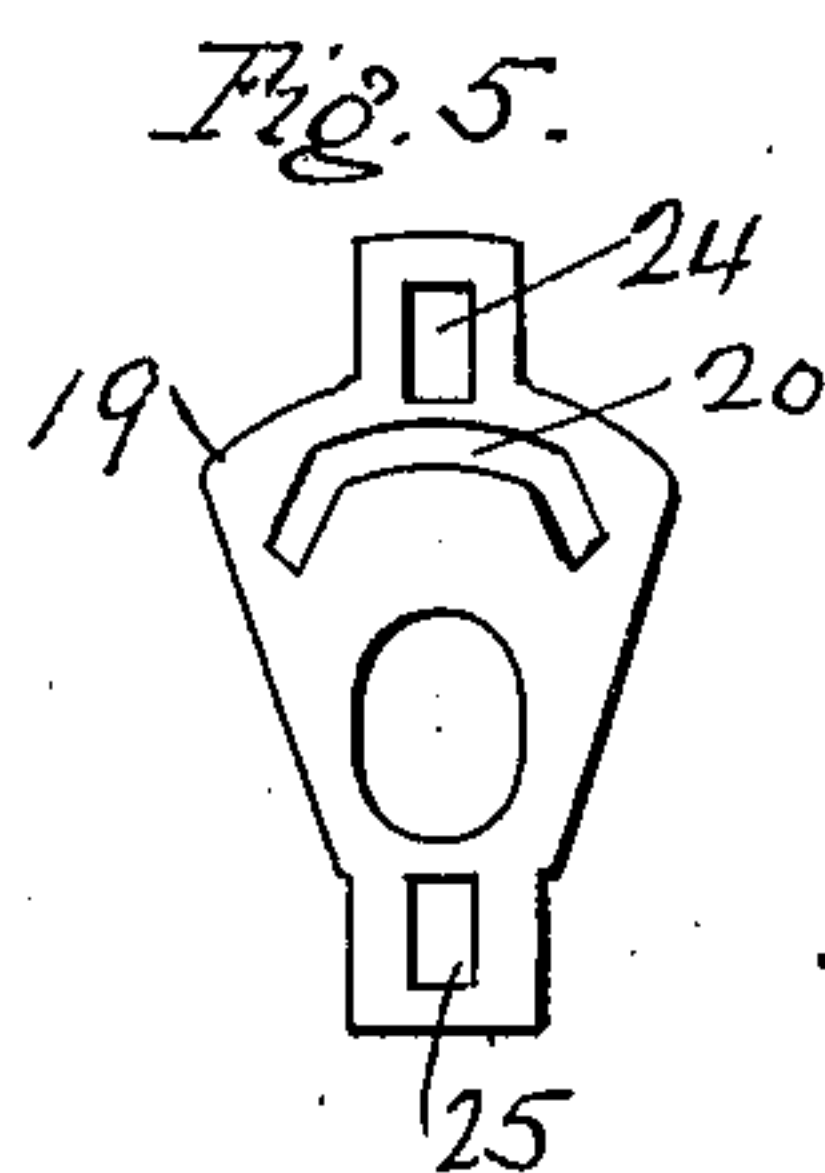
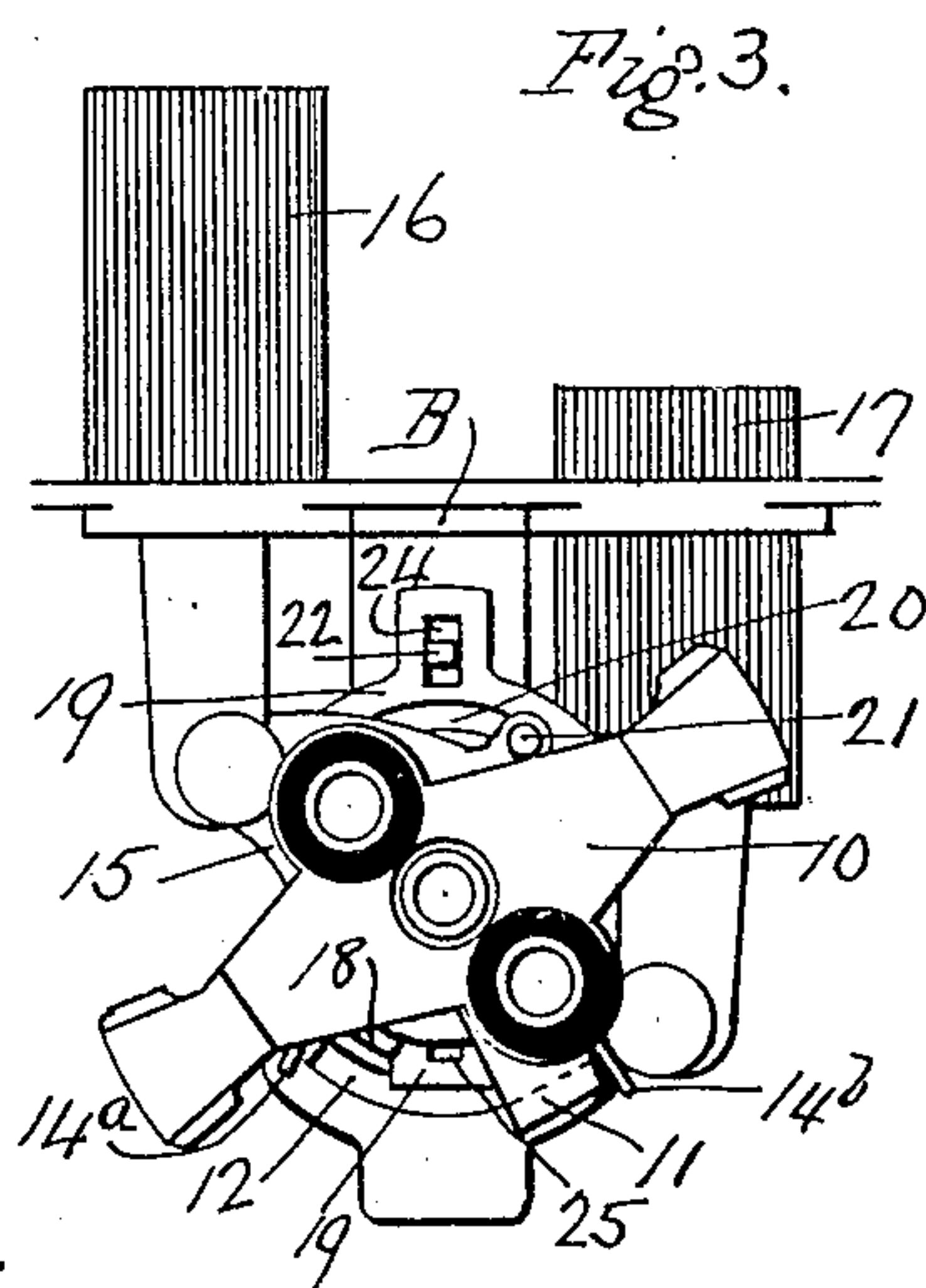
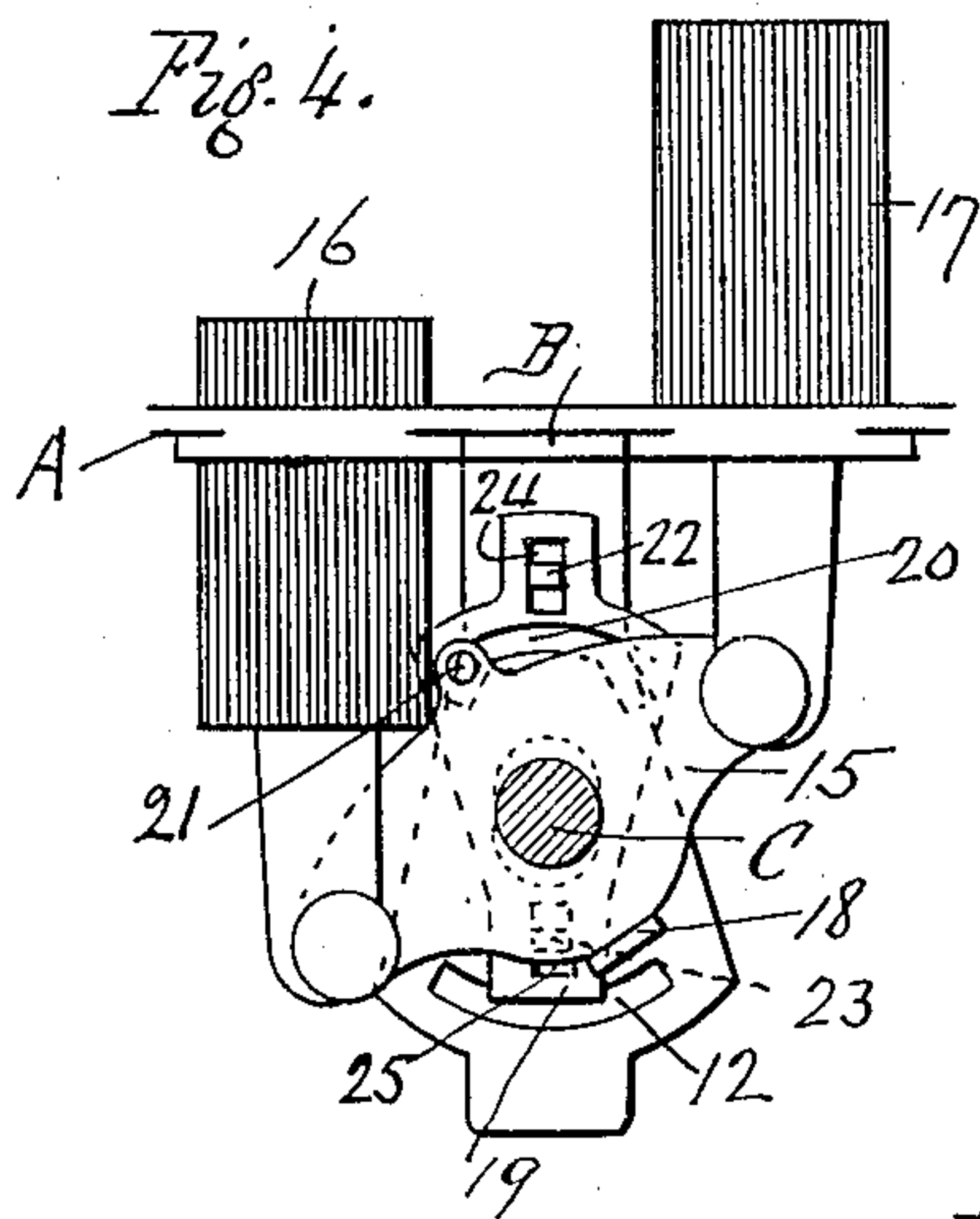
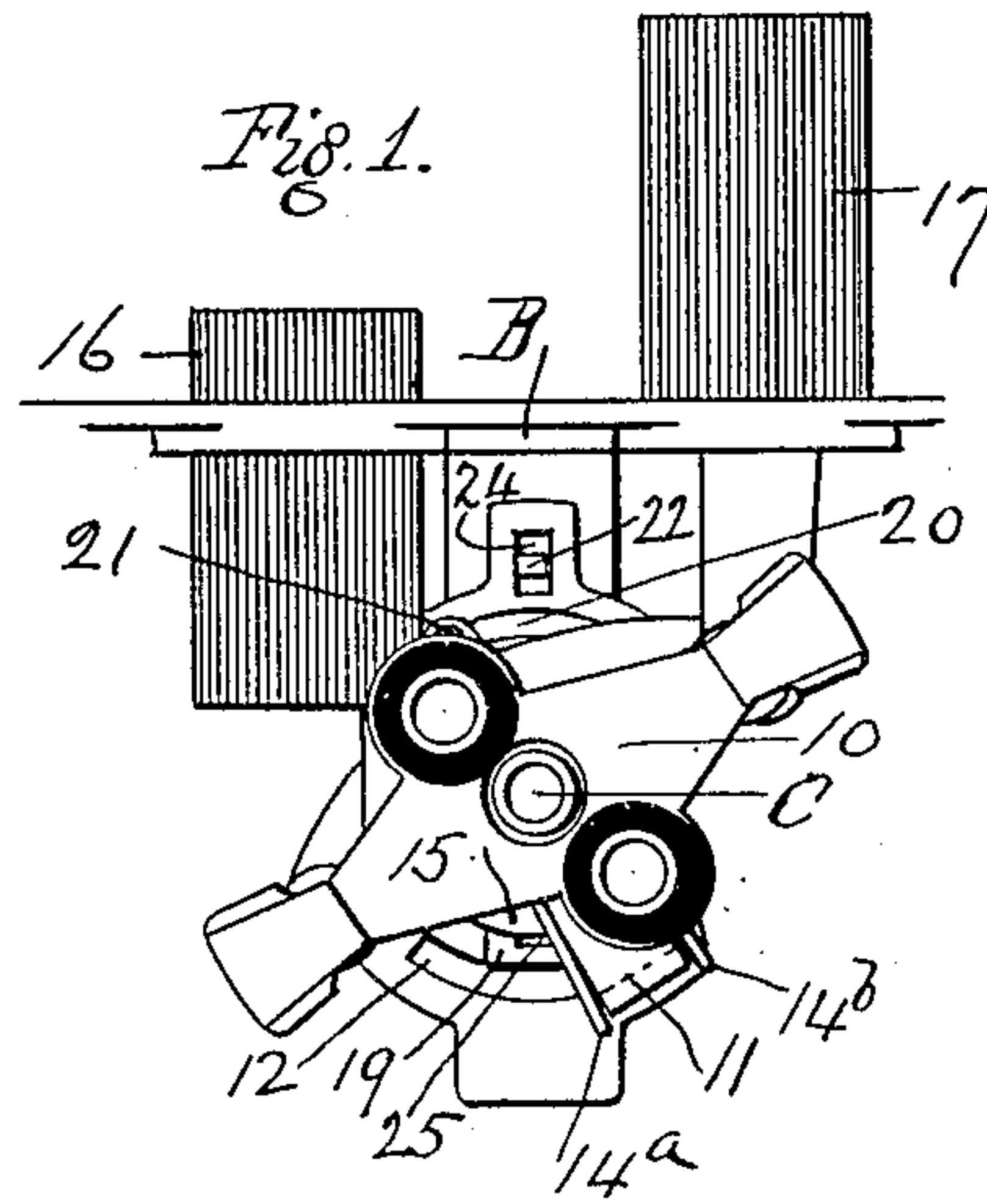


SWITCH.

918,353.



Hatten Abbr
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Lambert H. Moulthrop
BY

Hudson aus Hudson

ATTORNEYS

UNITED STATES PATENT OFFICE.

LEMBERT H. MOULTHROP, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE PERKINS ELECTRIC SWITCH MFG. COMPANY, OF BRIDGEPORT, CONNECTICUT, A CORPORATION OF CONNECTICUT.

SWITCH.

No. 918,353.

Specification of Letters Patent.

Patented April 13, 1909.

Application filed September 10, 1908. Serial No. 452,501.

To all whom it may concern:

Be it known that I, LEMBERT H. MOULTHROP, a citizen of the United States of America, residing in the city of Bridgeport, in the county of Fairfield, in the State of Connecticut, have invented a certain new and Improved Switch, of which the following is a specification.

The object of my invention is to provide a simple and efficient switch mechanism particularly with reference to the escapement of the contact member.

In the accompanying drawings, Figure 1 is a side elevation of the operating mechanism of a switch embodying my invention in one form; Fig. 2 is a side view thereof; Fig. 3 is a side elevation similar to Fig. 1 with the push buttons in another position; Fig. 4 is a section on the line 4-4, Fig. 2, and Fig. 5 is a front elevation of the detent alone.

The present invention will be readily understood by those skilled in the art, without illustrating the usual porcelain case and its common accessories, and I have accordingly shown merely the yoke or cross bar A carrying the standard B on which the switch mechanism is supported through the spindle C. On one end of the latter I mount the oscillating contact member 10, adapted to make and break contact with the terminals (not shown) carried by the porcelain case. A lug 11 extends from the contact piece 10 through the guide slot 12 in the standard B and the latter thus limits the extent of the oscillation of said contact piece. The spring 13 coiled on the spindle C, actuates the contact piece through the depending ends 14^a and 14^b which embrace the lug 11. The rock lever 15 to the opposite ends of which the shanks of the push buttons 16 and 17 are pivoted, is also provided with a lug 18 similarly embraced by the ends 14^a and 14^b of the actuating spring, and the latter thus tends to keep both of said lugs 11 and 18 in the same place. The rock lever and contact piece would consequently move together were no detent provided to temporarily restrain the latter. The snap make and break of the notch is secured by the sliding detent 19, the lower end of which opposes the movement of the lug 11 across the guide slot 12. The detent is actuated by means of a cam slot 20 in the upper end of the same, in which a pin 21 on the rock lever 15 engages. As the out push button is depressed and the

rock lever is oscillated, the pin 21 traveling across the cam slot 20 depresses the detent to a position to oppose the lug 11, in which position it is kept during the major part of the stroke. At the end of the stroke the detent is lifted by the pin 21 so as to free the lug 11 thereby permitting the contact piece to snap into or out of contact (as may be) with the switch terminals. The detent is shown arranged between the standard B and the rock lever, and is guided partially by the spindle C which passes through a slot therein and partially by lugs 22 and 23 on the standard which engage slots 24 and 25 in the detent. But the arrangement may be variously modified to suit the particular switch mechanism to which it is adapted.

I claim as my invention:

1. In a push button switch a stationary standard, an oscillating contact piece carried thereby, a stop lug moving with said contact piece and means in connection therewith for limiting the extent of oscillation of said contact piece, a rock lever, a lug oscillating therewith, a coil spring engaging said lugs between its extended ends whereby said spring is tensioned upon the angular separation of said lugs, in combination with a sliding detent guided against angular movement adapted to engage said stop lug and cam means actuated by said rock lever to control the position of said detent.

2. In a push button switch an oscillating contact piece and a stop lug moving therewith, a standard carrying said contact piece and limiting the travel of said lug, a rock lever, a lug oscillating therewith, a coil spring engaging said lugs between its extended ends whereby said spring is tensioned upon the angular separation of said lugs, in combination with a sliding detent guided against angular movement adapted to engage said stop lug and cam means actuated by said rock lever to control the position of said detent.

3. In a push button switch, a stationary standard slotted to receive a stop lug, an oscillating contact piece and a stop lug moving therewith engaging in the slot of said standard, in combination with a sliding detent guided on said standard and adapted to block the passage of said stop lug across its slot and cam means to move said detent out of engagement with said stop lug, substantially as described.

4. In a push button switch a stationary

standard provided with guide lugs and a spindle, an oscillating contact piece mounted on said spindle, a stop lug moving with said contact piece and engaging in the slot of said standard, in combination with a sliding detent guided against angular movement by said guide lugs and spindle and adapted to block the passage of said stop lug across its slot and cam means to move said detent out

of engagement with said stop lug, substantially as described. 10

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses.

LEMBERT H. MOULTHROP.

Witnesses:

G. W. GOODRIDGE,

H. W. GOLDSBOROUGH.