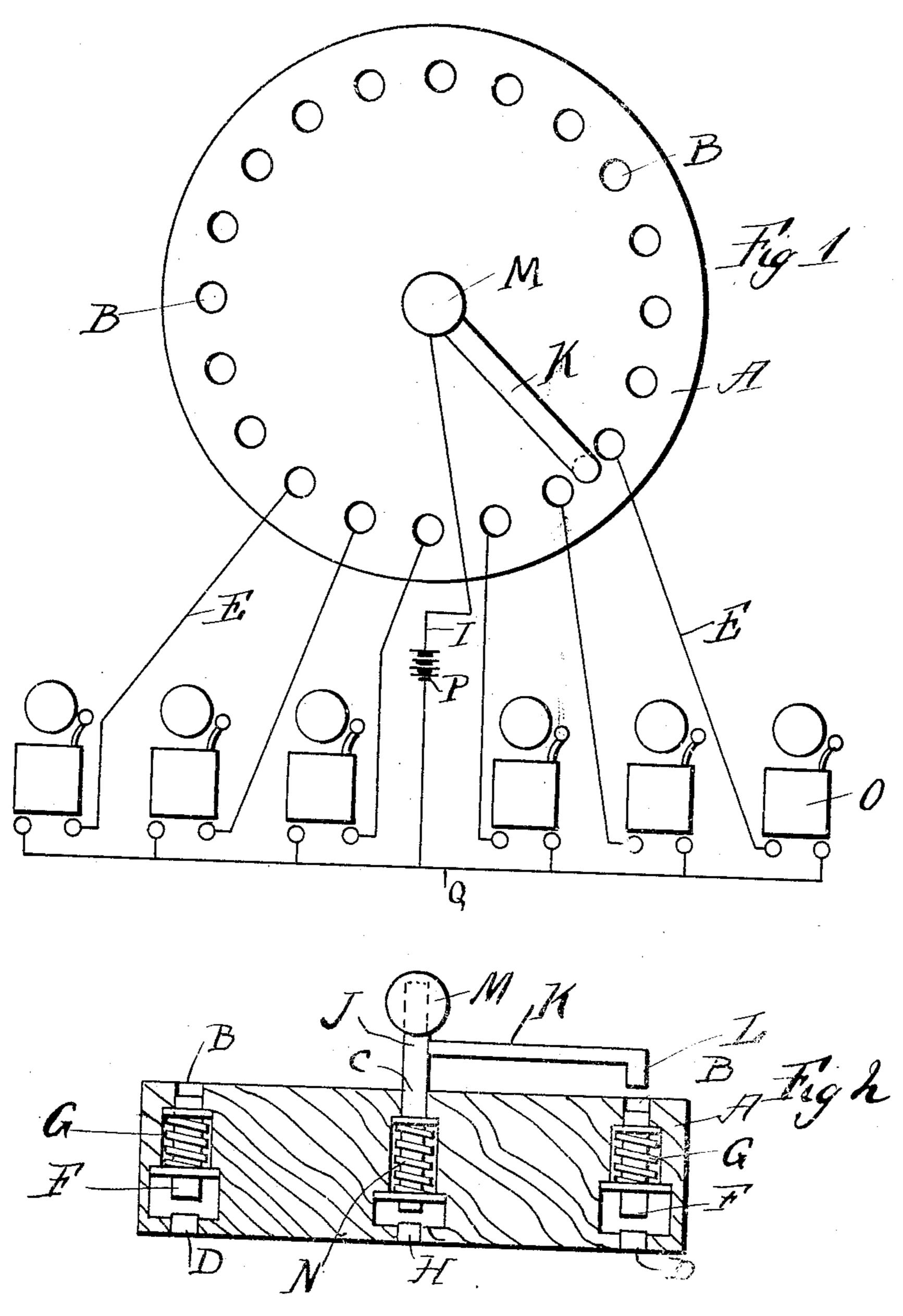
LE ROY I. FREAS. MULTIPLE CALL BELL SWITCH. APPLICATION FILED MAY 11, 1908.

911,968.

Patented Feb. 9, 1909.



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LE ROY I. FREAS, OF CHALFONT, PENNSYLVANIA.

MULTIPLE-CALL-BELL SWITCH.

No. 911,968.

Specification of Letters Patent.

Patented Feb. 9, 1909.

Application filed May 11, 1908. Serial No. 432,058.

To all whom it may concern:

Be it known that I, Le Roy I. Freas, a citizen of the United States, residing at Chalfont, county of Bucks, and State of Pennsylvania, have invented a certain new and useful Improvement in Multiple-Call-Bell Switches, of which the following is a specification.

My invention relates to a new and useful improvement in multiple call bell switches, and has for its object to provide an exceedingly simple and effective device of this character by means of which any number of bells may be rung one at a time.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same I will describe its construction in detail referring by letter to the accompanying drawing forming a part of this specification in which—

Figure 1, is a plan view of my improved multiple call bell switch showing a number of bells connected thereto. Fig. 2, is a sec-

tional view thereof.

In carrying out my invention as here embodied, A represents a block of wood or other
suitable material having the openings B
formed therein in proximity to its circumference and the openings C in the center thereof.
In the lower portions of the openings B are
placed the metallic plugs D which hold the
wires E in position and help to form the connection hereinafter described. Above these
plugs D are placed the plungers F around
which and fastened thereto are the spiral
springs G, thus normally holding the plunger
F from engagement with the plugs D.

H indicates a plug which is placed in the lower portion of the openings C holding the wire I in place and assisting in forming the circuit which will be hereinafter described.

Extending into the openings C is a plunger J having the arm K formed therewith the outer end of which is bent downward to form the extension L. The upper ends of the plunger rod J has a thread formed thereon on which is threaded the insulated knob M. About the lower portion and secured to the plunger rod is the coil spring N, which normally holds said plunger rod out of engagement with the plug H and the extension L on

the arm K out of engagement with the plungers F.

O represents a number of bells which may be placed in different parts of a building, such as in the rooms of a hotel, these are con- 60 nected to the switch by the wires E.

P indicates a battery which is connected to the switch by the wire I and the bells are connected with the battery by the wire Q.

Thus it will be seen from the foregoing 65 description that should the extension L formed on the arm K be placed above one of the openings B and the plunger rod J be pressed down, this will cause the plunger rod J to form a connection with the plug 70 H and the extension L and form a contact with one of the plungers F, pressing it down until it forms a contact with one of the plugs D which will cause a current of electricity to flow from the battery through 75 the wires to one of the bells thus causing that bell to ring.

Of course I do not wish to be limited to the exact details of construction here shown as these may be varied within 80 certain limits without departing from the

spirit of my invention.

Having thus fully described my invention what I claim as new and useful is—

1. In combination, a block of wood, of 85 any suitable material, having openings formed therein, in proximity to its circumference, and an opening in the center thereof, metallic plugs, placed in the lower ends of these openings, plungers placed in 90 the openings which are in proximity to the circumference, spiral springs coiled about said plungers one end of which is secured thereto for normally holding said plunger out of engagement with the plugs, a plunger 95. rod extending into the opening formed in the center of the block, an arm formed therewith, in proximity to this opening and an extension formed in the outer end of said arm, adapted to press the plunger 100 downward into contact with the plugs, a coil spring placed about the inner end of the plunger rod, for normally holding the plunger rod out of engagement with the plug placed in the lower portion of the 105 opening in which said plunger rod is placed, an insulated knob threaded on the upper end of the plunger rod, bells, wires connecting one of the posts of said bells with the plugs placed in the opening formed in 110

proximity to the circumference of the block, a battery, a wire for connecting said battery with the plug placed in the central opening of the block and other wires connecting the 5 bells with the battery so that when the plunger rod is placed downward it will cause a current of electricity to pass through these wires ringing any bell desired, as shown and described.

2. In combination, a block of wood or other suitable material, having openings formed therein in proximity to its circumference and one in the center thereof, plugs placed in the lower portion of the openings 15 which are formed in proximity to the circumference, plungers placed in said openings, means for normally holding them out of engagement with the plugs, a plug placed

in the lower portion of the opening formed

20 in the center of said block, a plunger rod

also placed in said opening means for normally holding it out of engagement with said plug, an arm, having an extension formed in its outer end fastened to the plunger rod, bells, wires for connecting said 25 bells with the plugs placed in the opening formed in proximity to the circumference of the block, a battery, a wire for connecting said battery with the plug placed in the opening formed in the center of the block 30 and means for connecting the battery with the bell as shown and described.

In testimony whereof, I have hereunto affixed my signature in the presence of two

subscribing witnesses.

LE ROY I. FREAS.

Witnesses:

nesses:
Theresa Yost,
Elisa N. Murphy. ELISA N. MURPHY.