

A. C. MELLINGER.  
 AUTOMATIC CALL BELL.  
 APPLICATION FILED AUG. 10, 1908.

917,635.

Patented Apr. 6, 1909.

2 SHEETS—SHEET 1.

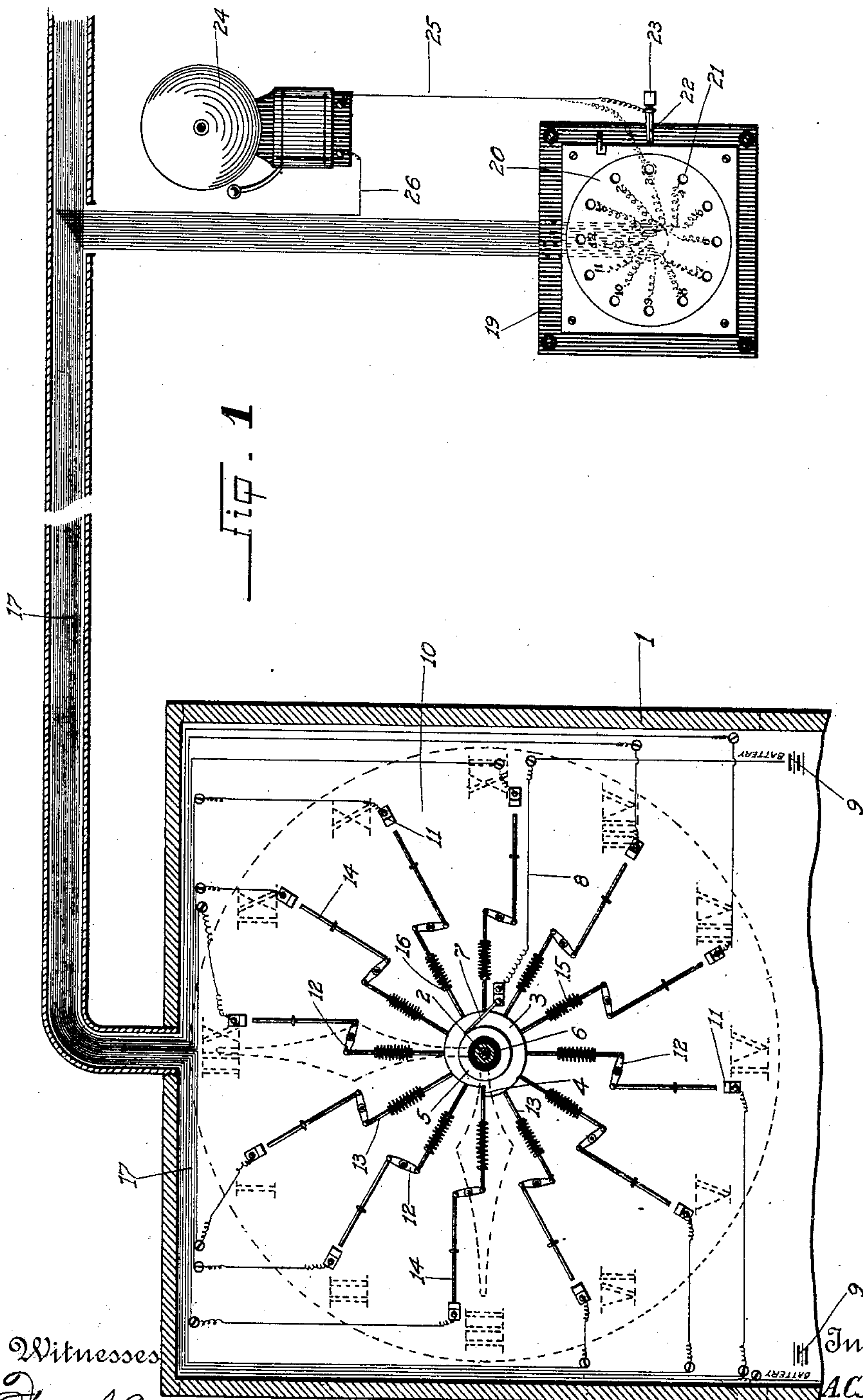


Fig. 1

Witnesses  
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 Attorney

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 2 SHEETS—SHEET 2.

Fig. 2

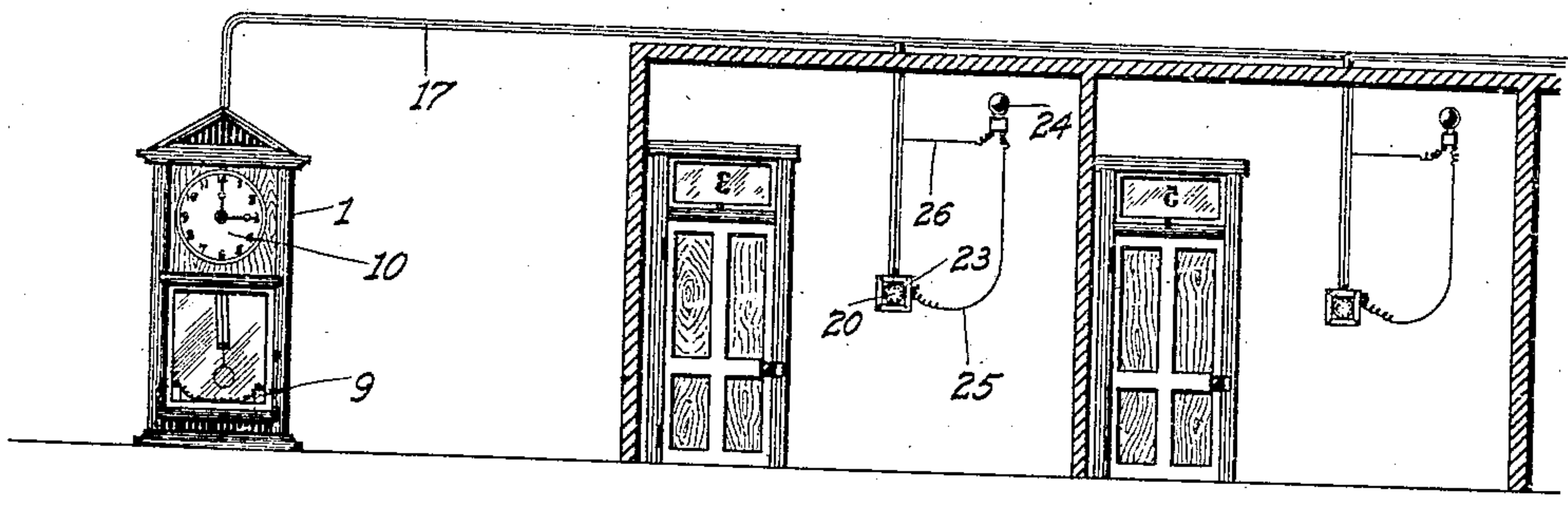


Fig. 3

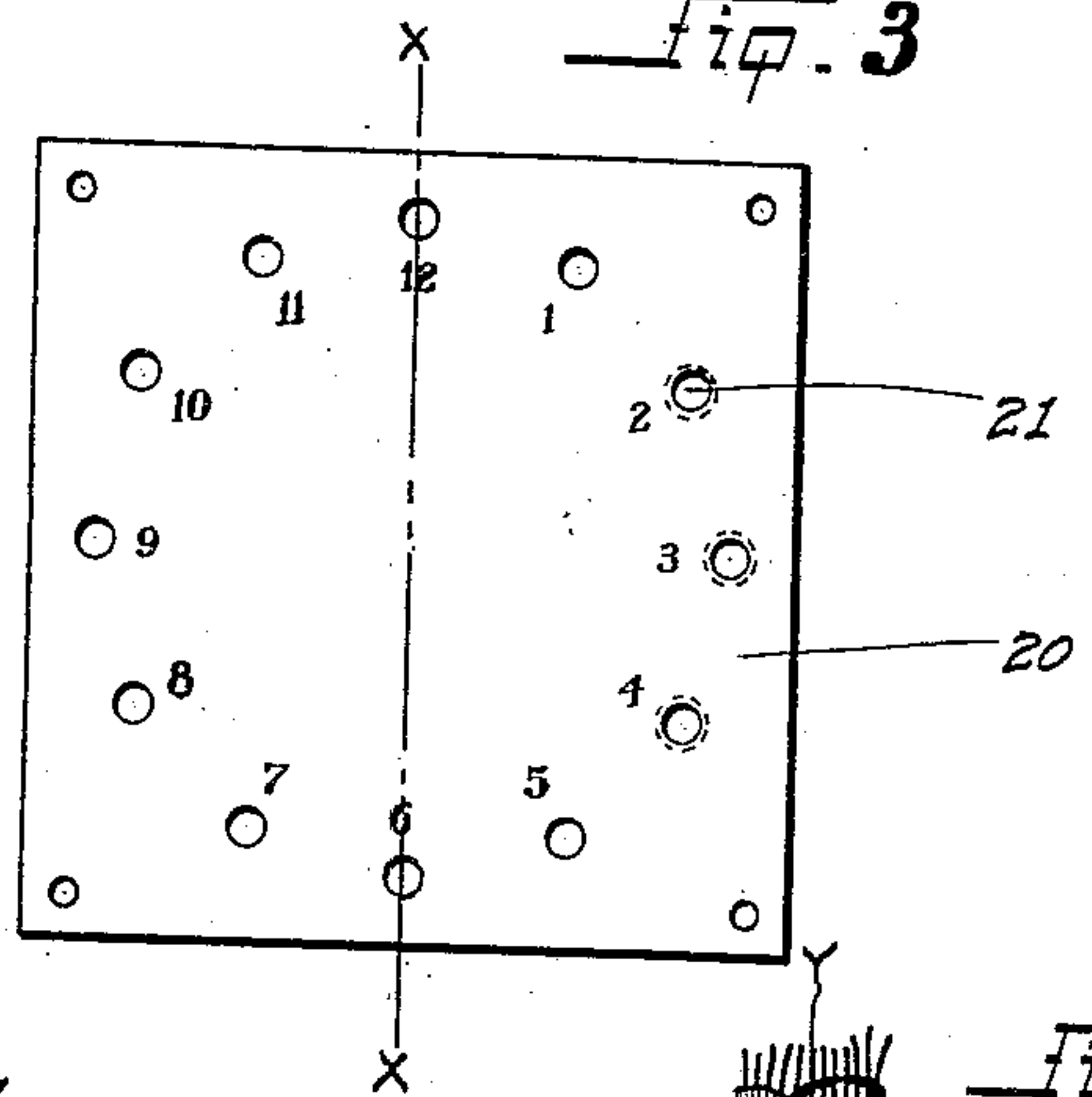


Fig. 4

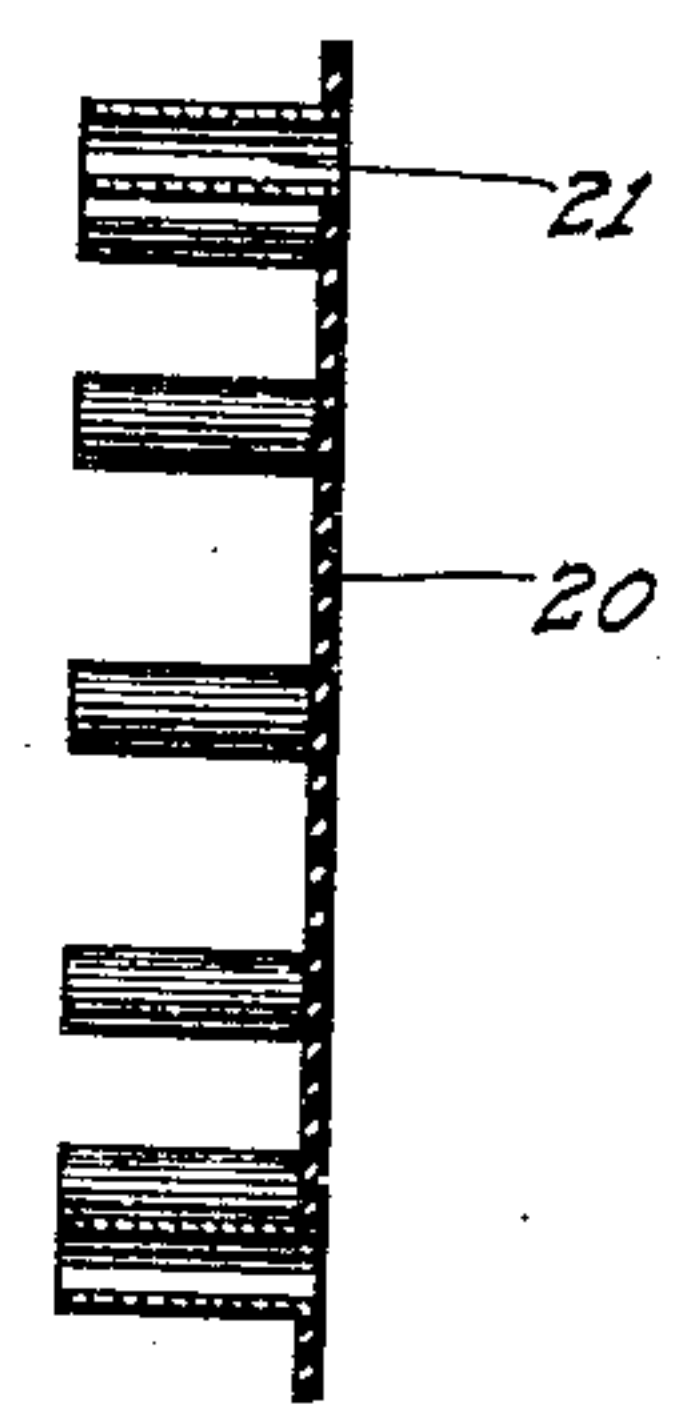


Fig. 6

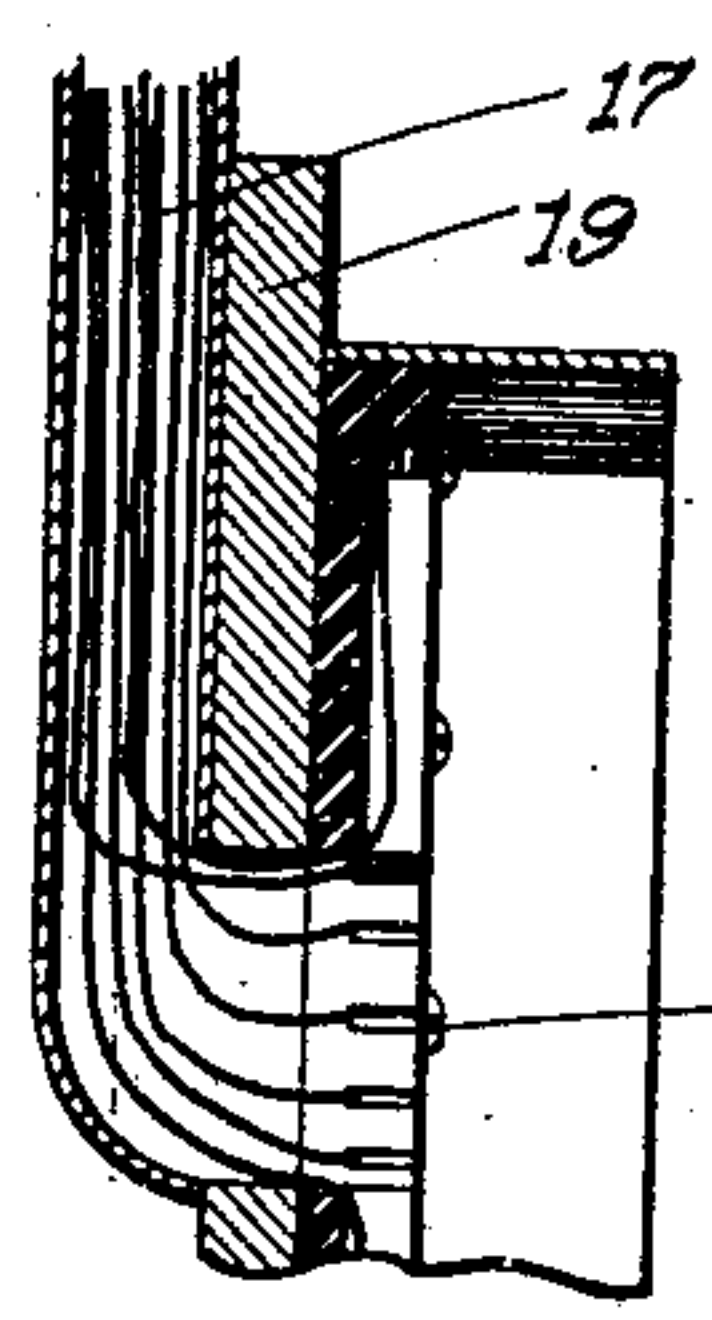


Fig. 5

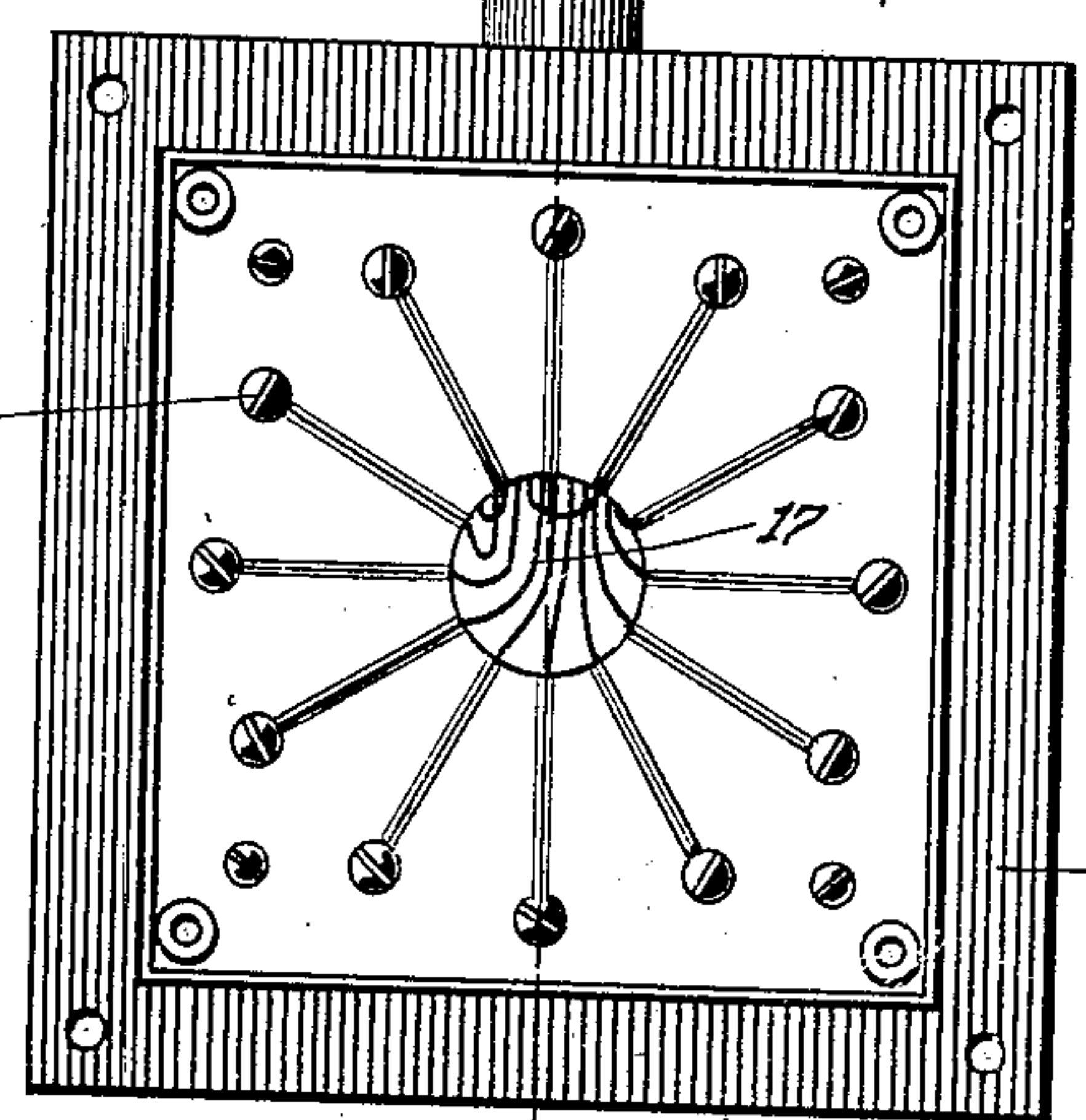
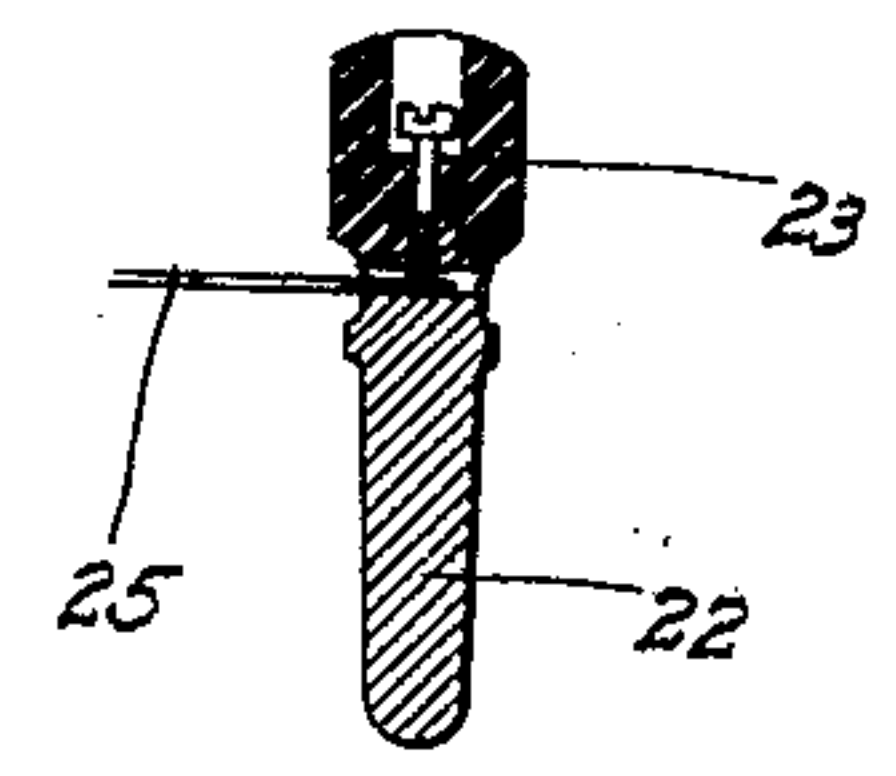


Fig. 7



Witnesses  
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# UNITED STATES PATENT OFFICE.

ARTHUR C. MELLINGER, OF HANFORD, CALIFORNIA, ASSIGNOR OF ONE-HALF TO WESLEY E. MILLER, OF OAKDALE, CALIFORNIA.

## AUTOMATIC CALL-BELL.

No. 917,635.

Specification of Letters Patent.

Patented April 6, 1909.

Application filed August 10, 1908. Serial No. 447,681.

*To all whom it may concern:*

Be it known that I, ARTHUR C. MELLINGER, a citizen of the United States, residing at Hanford, in the county of Kings, State of California, have invented certain new and useful Improvements in Automatic Call-Bells; and I do declare the following to be a full, clear, and exact description of the same, 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 the characters of reference marked thereon, which form a part of this application.

This invention relates to improvements in electrical appliances and particularly to call bells and call bell appliances, the object of the invention being to produce an automatic call bell system for hotels, inns and similar places whereby the guests may be provided with an appliance whereby they may set an electric alarm call bell to give the alarm at any predetermined hour in an accurate and automatic manner, without the necessity of having any person or persons attend to or do the same; also to produce a simple, inexpensive and accurate device for the purpose. This object I accomplish by means of a clock having a projected stem from its main or hour shaft on which stem is a disk provided with cams adapted to engage electrical contact points at every half or quarter hour as may be desired, such contact points having wire connections with call bells and electric switch boards, having holes for switch plugs, whereby the plugs may be inserted into one hole indicating a predetermined hour at which the alarm bell will sound; also by such other and further construction and relative arrangement of parts as will appear by a perusal of the following specification and claims.

In the drawings similar characters of reference indicate corresponding parts in the several views.

Figure 1 is a sectional view showing the entire system which is connected with the clock. Fig. 2 is a view showing the device as installed in a hotel or similar place. Fig. 3 is a front elevation of a switch board. Fig. 4 is a sectional view showing switch plug holes. Fig. 5 is an interior view of a switch board showing the contact points.

Fig. 6 is a fragmentary sectional view of a switch board. Fig. 7 is a sectional view of a switch plug.

Referring now more particularly to the characters of reference on the drawings 1 designates a clock having the usual hour stem 2, on which stem is disposed an eccentric disk 3 having a notch 4 in its periphery and a projecting hub 5 on its face, such disk and hub being insulated from the stem 2 by insulation 6. A contact brush or band 7 engages the hub 5 and is suitably connected by wires 8 to a battery cell 9.

10 is a switch board disposed around the stem 2 on which are electric contact points 11, one for each hour, half hour or quarter hour dependent on whether the alarm is capable of operation for each hour, half hour or quarter. In the drawings in this case there are shown the points 11, one for each hour. Disposed on the board 10 between each of the points 11 and the disk 3 is a small lever 12, each having pins 13 normally engaging the disk 3 and pins 14 adapted to engage one of the points 11 when the corresponding hour on the clock is reached, which contact is occasioned when the corresponding pins 13 reaches and drops into the notch 4, when the hour is reached, such pins being actuated by spiral springs 15 disposed around the pins 13 and secured to the board 10 and bearing against collars 16 on the pins 13.

Each of the contacts 11 have wire connections 17 connecting them with corresponding contact points 18 on switch boards 20 disposed in each room of the building over which boards 19 are disposed insulating plates 20 having contact plug holes 21 one for each point 18, each hole 21 being designated for a certain hour. Contact plugs 22 having insulated handles 23 are adapted to be inserted into the holes 21 to complete the circuit between the batteries 9 through contact 7 on disk 3 thence through points 11 and 18 and thence to alarm bells 24 by wire 25 and then back to the batteries 9 through wire 26. Hence when a lodger desires to arise at a predetermined hour, say six o'clock, he places the plug 22 in the hole 21 marked "6". This makes the complete circuit described when the corresponding pin 13 engages the notch 4 at six o'clock thus ring-



ing the bell 24 automatically and arousing the lodger. For any other hour the plug 22 is inserted in the corresponding hole 21.

The contact brush 7 may of course be connected in any general manner desired to form the necessary contact between the battery 9 and cam 3, hence I do not desire to confine myself to the construction shown for that feature.

10 From the foregoing description it will be readily seen that I have produced a simple and effective call bell mechanism which substantially fulfils the objects of the invention, as set forth herein.

15 While this specification sets forth in detail the present and preferred construction of the device still in practice, such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention.

20 Having thus described my invention what I claim as new and useful and desire to secure by Letters Patent is:—

1. The combination of a clock, an hour

stem thereon, a disk on said stem provided with a notch, means for supplying electrical current to said disk, a plurality of pins engaging said disk, and means for sounding an alarm when one of said pins engage said notch, as set forth. 25

2. A clock, a stem thereon, a disk on said stem provided with a notch, a hub on said disk, an electrical contact on said hub, and means engaging said disk whereby an alarm will be sounded when such means engages said notch, as described. 30

3. The combination of a rotating stem, a disk on said stem, a plurality of pins movable radially outward from said disk and contacting therewith, an alarm, and means on said disk for causing said pins to sound said alarm at a predetermined time, as described. 40

In testimony whereof I affix my signature in presence of two witnesses.

ARTHUR C. MELLINGER.

Witnesses:

W. J. WILSON,  
NOLA OWENS.