

No. 693,647.

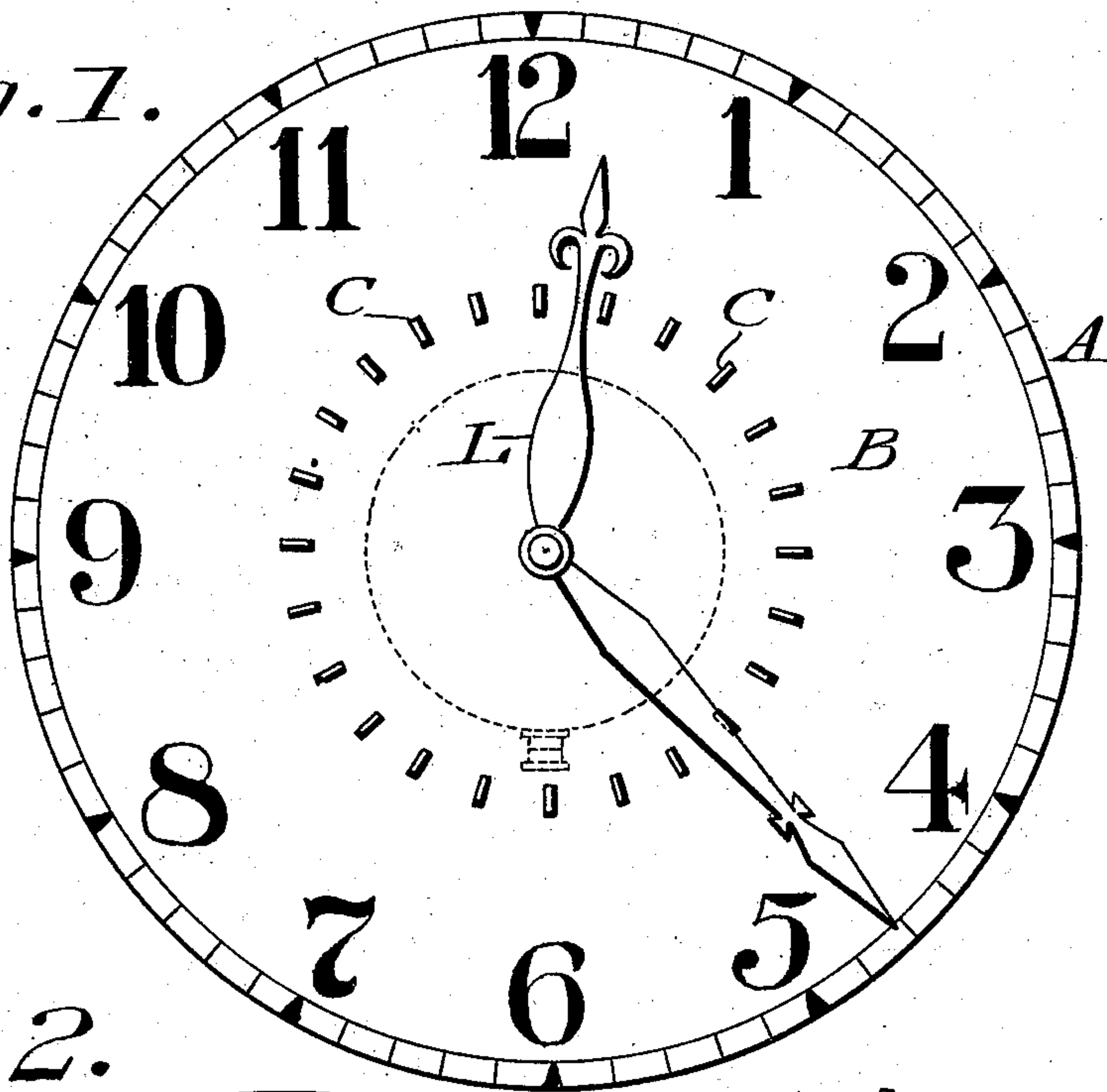
Patented Feb. 18, 1902.

W. A. HIRSCHFIELD.  
AUTOMATIC CALL BELL CLOCK.

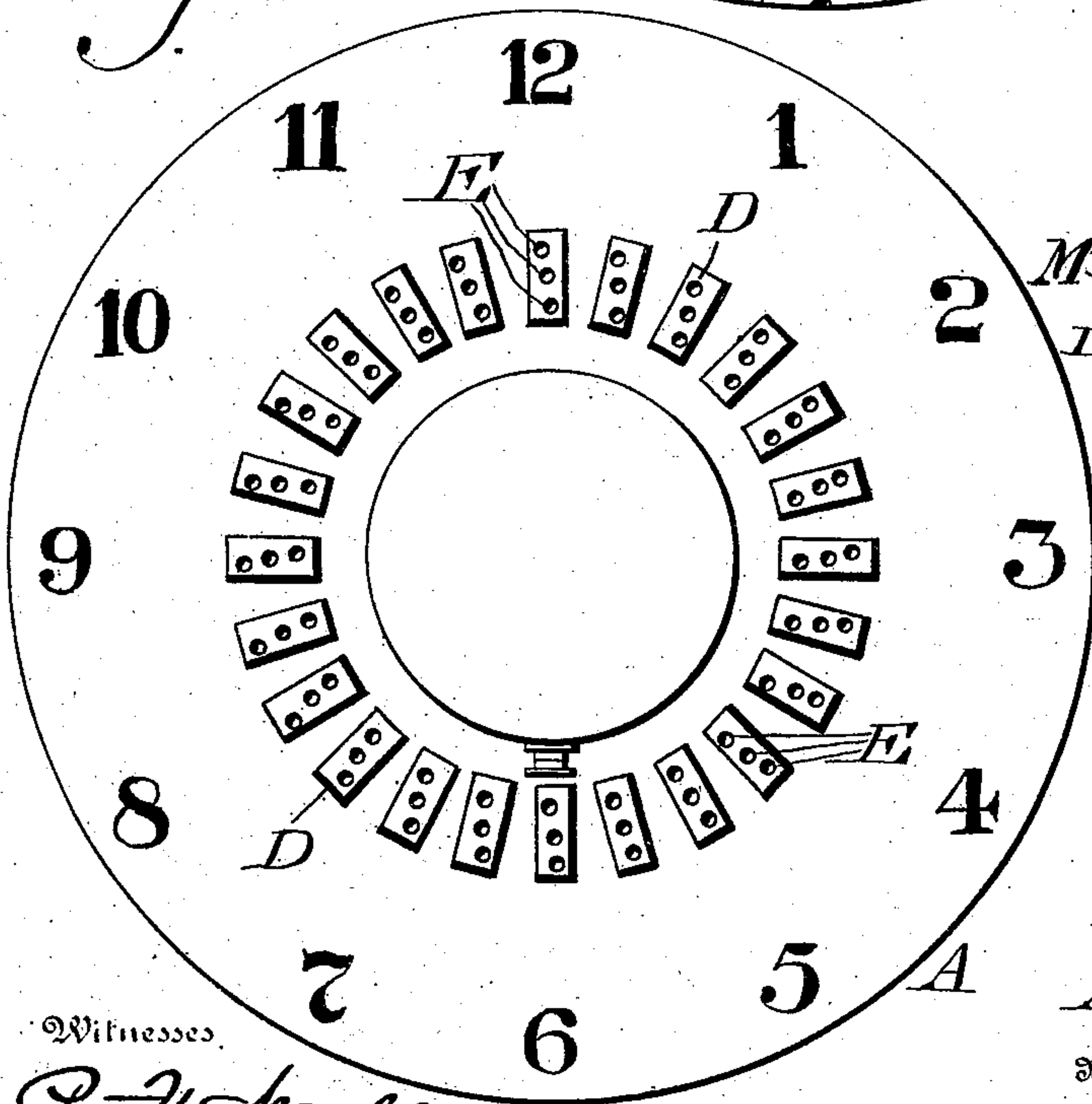
(Application filed Sept. 5, 1901.)

(No Model.)

*Fig. 1.*



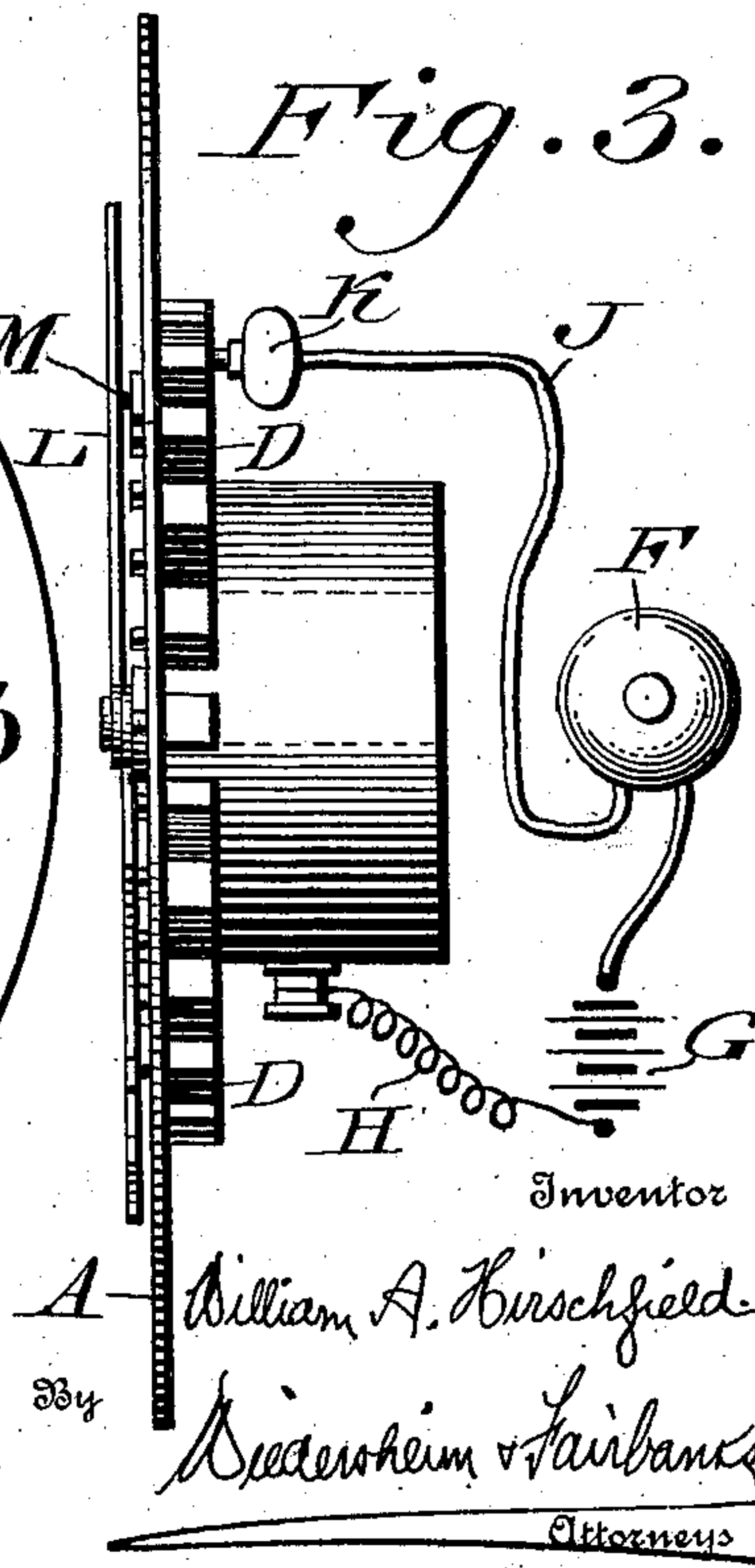
*Fig. 2.*



Witnesses.

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*Fig. 3.*



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# UNITED STATES PATENT OFFICE.

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## AUTOMATIC CALL-BELL CLOCK.

SPECIFICATION forming part of Letters Patent No. 693,647, dated February 18, 1902.

Application filed September 5, 1901. Serial No. 74,351. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM A. HIRSCHFIELD, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Automatic Call-Bell Clocks, of which the following is a specification.

My invention consists of an improvement in automatic call-bell clocks, whereby a bell or alarm at a remote place may be caused to be rung or sounded, as will be hereinafter described, the novel features of the same being pointed out in the claims.

It further consists of novel details of construction, all as will be hereinafter fully set forth, and particularly pointed out in the claims.

Figure 1 represents a front elevation of the clock device embodying my invention. Fig. 2 represents a rear view thereof. Fig. 3 represents a side elevation showing a clock in connection with a bell and battery.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a clock which may have the usual operating mechanism, and B designates the dial or face thereof.

C designates the contact-points, which project forwardly from said dial between the center and periphery and are in communication with plates D on the rear of the dial, said plates having openings E therein.

F designates a bell, which is situated at any suitable point and which is in communication with the battery G, which is connected with the clock A by the wire or electric conductor H.

J designates a conductor, which is connected with the bell F and has secured thereto the plug K, which is adapted to be inserted in an opening in either of the plates D.

The hour-hand L has the point or brush M directly connected therewith, the same being adapted to contact with either of the points C in order to form or close an electric circuit, as will be hereinafter more fully explained.

The operation is as follows: The device is applicable for use in hotels for calling occupants of rooms, or for class-rooms in schools, or for announcing a particular time, and, for

example, if it is desired to call an occupant of a room at twelve o'clock the plug K is inserted in one of the openings E in the plate D beneath the figure "12." When now the hour-hand L comes in contact with the point C beneath the figure "12" a circuit is formed, which causes the ringing of the bell in said room, thus notifying the occupant thereof. It is evident that any number of bells may be operated in this manner and that the number of openings in the plates may be increased or reduced, as desired, in order to cause the ringing of a single bell or the ringing of several bells at the same hour or time.

The points C and M constitute electrodes, it being noticed that the points C occupy openings in the face of an ordinary clock-dial between the center and circumference thereof. The point M is directly on an ordinary hand of the clock and is adapted to ride easily on and past either of the points C.

It will of course be evident that various changes may be made by those skilled in the art which will come within the scope of my invention, and I do not therefore desire to be limited in every instance to the exact construction herein shown and described.

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

1. In an automatic call-bell clock, a dial, an alarm, a plug, a connection for said plug and alarm, electrodes on the front of said dial between the center and circumference, plates on the rear of said dial continuous of said electrodes, each plate being provided with an opening for the insertion of said plug, said clock, alarm and plug being in an electric circuit, and an electrode on the hand of said clock directly carried by the same.

2. In an automatic call-bell clock, a dial, an alarm, a plug, a connection for said plug and alarm, electrodes on the front of said dial, an electrode directly on the hand of the clock, and plates on the rear of said dial connected with said electrodes, each of said plates having an opening for the insertion of said plug, said clock, alarm and plug being in an electric circuit.

3. In an automatic call-bell clock, a dial, an alarm, a plug, a connection for said plug and alarm, electrodes on the front of said dial be-

tween the center and circumference, plates on the rear of said dial connected with said electrodes, each of said plates having an opening for the insertion of said plug, said clock,  
5 alarm and plug being in an electric circuit, and an electrode carried directly by the minute-hand of the clock.

4. In an automatic call-bell clock, a dial, an alarm, a plug, a connection for said plug and  
10 alarm, an electrode directly carried by the hand of the clock, and electrodes on the front

of the dial between the center and circumference thereof, and plates on the back of the dial having openings, said plates being connected with said electrodes, and said plug being adapted to be placed in either of said  
15 openings the clock, alarm and plug being in an electric circuit.

WILLIAM A. HIRSCHFIELD.

Witnesses:

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