

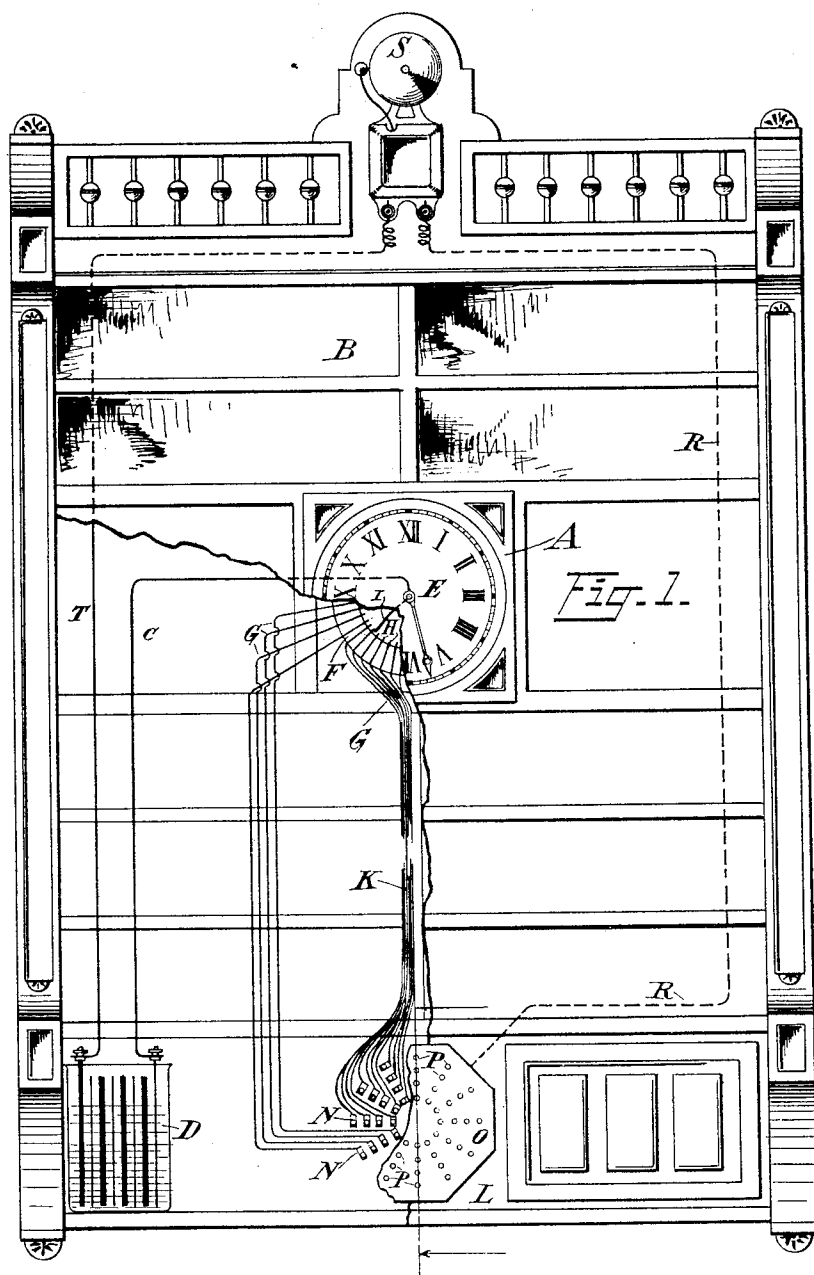
(No Model.)

2 Sheets—Sheet 1.

F. O. SMITH.
ELECTRIC GUEST CALL.

No. 537,860.

Patented Apr. 23, 1895.



Witnesses:

H. Hubbard

Clara L. Roesch

Inventor:

Frank O. Smith

By Erwin, Wheeler & Wheeler
Attorneys.

F. O. SMITH.
ELECTRIC GUEST CALL.

No. 537,860.

Patented Apr. 23, 1895.

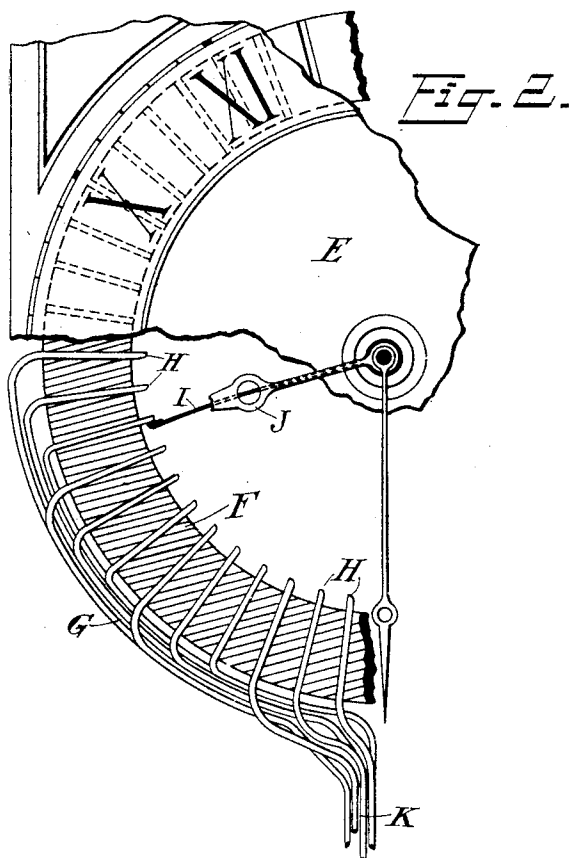
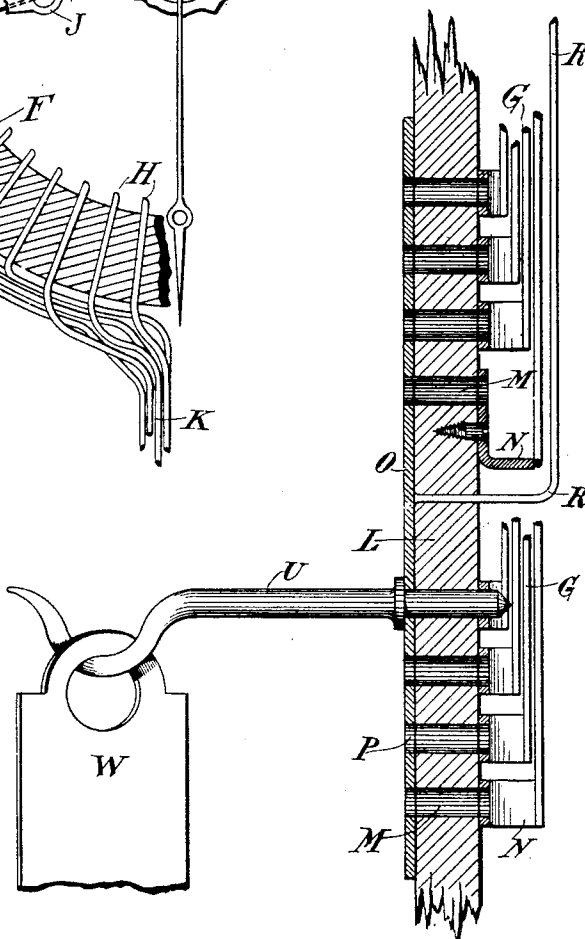


Fig. 3.



Witnesses:

H. Hubbard
Clara L. Rouch

Inventor.

Frank O. Smith
By *Erwin Wheeler & Wheeler*
Attorneys.

UNITED STATES PATENT OFFICE.

FRANK O. SMITH, OF LA CROSSE, WISCONSIN.

ELECTRIC GUEST-CALL.

SPECIFICATION forming part of Letters Patent No. 537,860, dated April 23, 1895.

Application filed June 2, 1894. Serial No. 513,260. (No model.)

To all whom it may concern:

Be it known that I, FRANK O. SMITH, a citizen of the United States, residing at La Crosse, in the county of La Crosse and State of Wisconsin, have invented new and useful Improvements in Electric Guest-Call Alarms, of which the following is a specification.

My invention relates to improvements in electric guest call alarms, for use in hotels, lodging houses, &c.

The object of my invention is to provide means whereby hotel or lodging house keepers and clerks may be automatically reminded of the time when their guests are to be called.

In the following description, reference is had to the accompanying drawings, in which—

Figure I is a front view with a portion of the exterior broken away to show the interior construction. Fig. II is a detail view of the clock enlarged, and with the dial plate broken away to show the exposed points of the connecting wires and the revolving circuit, closing finger. Fig. III is an enlarged sectional view of the key-board, drawn on the line *xx* of Fig. I, showing one of the contact keys in place.

Like parts are referred to throughout by means of the same reference letters.

A clock A is located at or near the center of a supporting frame B, and is connected by the wire C, with the positive pole of an electric call battery D. Around the front of the clock, underneath the dial plate E, is a ring of insulating material F, through which a series of wires G project, presenting exposed contact points H in the interior of the ring, separated at equal distances from each other. I have provided forty-eight (48) of these wires, presenting forty-eight (48) points H, in the interior of the ring, one of which will be passed by the hour hand of the clock every fifteen minutes. An elastic circuit closing finger I is attached to the shaft of the hour hand J, and projects underneath the hour hand in such a manner as to strike the points H in succession with the movement of the clock. The wires G, exterior to the ring F, are insulated and collected in a bundle K, which extends downward to the rear side of the key-board L, at the foot of the frame.

The key-board is provided with holes M, forty-eight in number to correspond with the

number of the wires G. These holes are arranged in twelve radial lines of four each to correspond with the dial plate of the clock, each outer hole representing one of the twelve hours, and occupying the same position in the circle that its corresponding hour mark occupies upon the clock dial and the three inner holes representing the intermediate quarter hours respectively. Surrounding each hole at the rear side of the key-board, is a small independent metallic plate N. Each wire is connected to a plate N, corresponding in its location on the key-board to the location of the contact point H at the other end of the wire, with reference to the dial plate of the clock. On the front side of the key-board L, is a metallic facing O, having openings P communicating through it to the holes M of the key-board. This facing is connected by the return circuit wire R to an electric alarm bell S, which is also connected by the wire T with the negative pole of the battery D.

Keys U, when inserted through the facing O and key-board L, electrically connect the clock wires G with the return circuit wire R, by means of the metallic connection thus formed between one of the plates N and the facing O. When the elastic finger I strikes the contact point of a wire G, which is connected by a key to the facing O and wire R, the circuit is closed and the alarm bell rings. Room checks W, hung upon the projecting end of the inserted key, indicate the numbers of the rooms to be called at that time. Keys are provided for all the openings and may be kept in any convenient place near the frame, or hung on hooks attached to the frame near the facing O. The space in the frame, not occupied by the operative mechanism, may be divided into panels and used for advertising purposes.

This device is designed to be placed near the clerk's desk and is operated as follows: When a guest desires to be called at a certain time, a key is inserted through the key-board at the point which represents that time, according to the reading of the board as above described. The room checks W, for all guests to be called at that time, are then hung upon the projecting end of the key. When the movement of the clock closes the circuit by means of the elastic finger I, the ringing of

the bell warns the clerk that a call must be made. An inspection of the checks shows what rooms are to be called. These checks, when not in use, may be hung upon hooks on the frame so as to be convenient at all times to the user.

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

10 An electric guest call alarm, consisting of the combination of a clock, an electric bell and a battery having its poles electrically connected with said clock bell respectively, a ring of insulating material F surrounding the clock
15 mechanism, a series of insulated wires G with exposed ends projecting through said ring to form a series of contact points H around the clock mechanism, a circuit closing finger at-

tached to the hour arbor of the clock and adapted to form electrical contacts successively 20 with said contact points, together with an insulating keyboard L provided with the contact plates N attached severally to the wires G, the dial plate O connected to the bell by a single wire R and removable switch key U for 25 connecting said dial plates severally with the contact plates, with removable room indicating checks adapted to be hung upon said keys, substantially as described.

In testimony whereof I affix my signature 30 in the presence of two witnesses.

FRANK O. SMITH.

Witnesses:

MILLS TOURTELLOTTE,
E. G. BOYNTON.