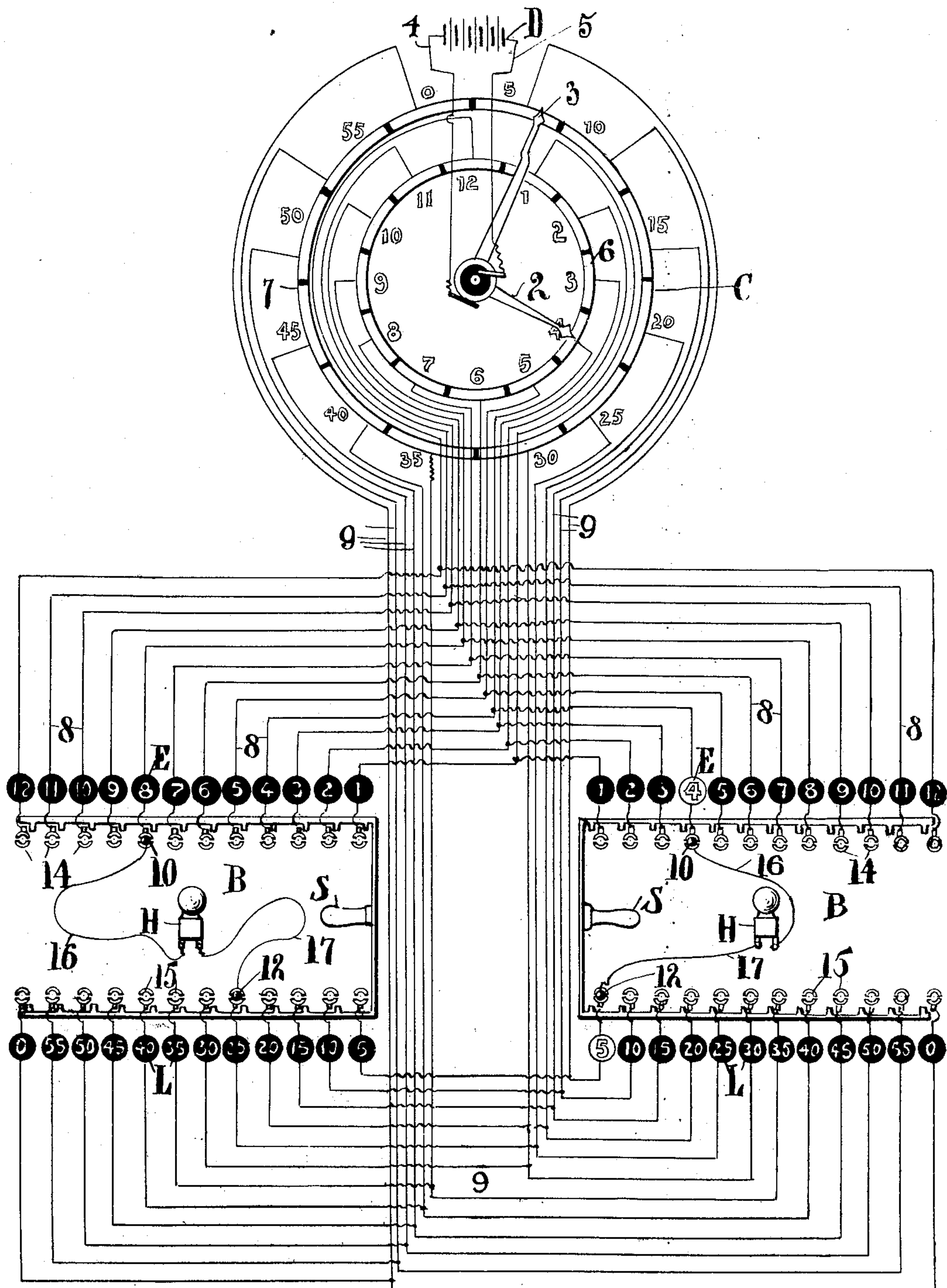


No. 889,533.

PATENTED JUNE 2, 1908.

G. B. MAAS.  
ILLUMINATING ELECTRIC CLOCK AND CALL SYSTEM.  
APPLICATION FILED DEC. 9, 1907.



**ATTEST**  
*E. M. Fisher.*  
*J. C. Muesel.*

**INVENTOR**  
George Bernhard Maas.  
**BY** *Fisher & Muesel* **ATTYS.**



# UNITED STATES PATENT OFFICE.

GEORGE BERNHARD MAAS, OF CLEVELAND, OHIO.

## ILLUMINATING ELECTRIC CLOCK AND CALL SYSTEM.

No. 889,533.

Specification of Letters Patent.

Patented June 2, 1908.

Application filed December 9, 1907. Serial No. 405,704.

*To all whom it may concern:*

Be it known that I, GEORGE BERNHARD MAAS, a citizen of Germany, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Illuminating Electric Clock and Call Systems, and do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an illuminating electric clock and call system for use in hotels for the convenience of guests and for other purposes, all substantially as shown and described and particularly pointed out in the claims.

In the accompanying drawings, the invention is illustrated in a single diagrammatic view, showing a complete and operative system or installation comprising a clock C and an electric time board B. The clock presumably is the official clock of the hotel in the hotel office, and the time boards B are in the rooms of the guests, two such boards being shown in the drawings and boards for all rooms are alike. The clock is provided with the usual hour and minute hands, 2 and 3, respectively, and each hand is connected by a wire, 4 and 5 respectively, with a battery or equivalent source of electric current, D. Each hand also contacts with segments 6 and 7 respectively, on the clock face, the segments 6 running between hours and the segments 7 between the half hour marks on the dial but covering full hours in their length or duration.

The hour segments 6 are connected by wires 8 to the respective hour indicating glow lamps E, numbered from 1 to 12 consecutively and arranged along the top of the boards B, and the several minute segments 7 are connected by wires 9 with the minute glow lamps L along the bottom of boards B. Plugs 10 and 12 respectively, in contact making sockets 14 and 15 for the hour and minute lamps, E and L, respectively, determine the illumination of the lamps, which occurs when the time for which said plugs are set shall be reached by the clock. Again, my system makes provision for an alarm or call to be sounded when the hour previously determined on by the guest shall be reached, as we shall presently see, and to this end I have connected up a call or alarm bell H with the respective lamps, the said plugs be-

ing provided with wires 16 and 17 respectively which are coupled up with the bell and throw it in to the illuminating circuit with the lamps E and L.

Now the operation is as follows: Assuming that a guest in any room within the system desires to be called at a predetermined time fixed by himself, say five minutes after four, he places the hour plug in the socket for lamp indicated by the figure 4 in the hour column, and the minute plug in the socket for the lamp bearing the figure 5 in the minute column. Then as clock C reaches this time by its hands the circuit will be closed on the lamps 4 and 5 thus plugged and on bell H in the circuit, and the lamps will glow and the bell ring until the circuit is broken by withdrawal of plug or the clock moves off the local circuit which was established by the plugs. A guest can in this way both fix the hour of waking by a time indicator in his room which is made to glow and reveal the hour to his vision and have a bell or alarm call to arouse him from sleep. Furthermore, in case a guest awakens at any hour of the night and desires to know the time, he can at once ascertain the time by operating switch S, which will cause those lamps in the hour and minute columns which correspond to the time on the clock to glow and tell the hour and minute while the other lamps remain dark. This will not ring the bell because the plugs are not used in this operation, and though they be set for a particular hour or fraction thereof, they are not rendered effective until the "plugged" time has been reached.

Now obviously, several modifications of the system are suggested; thus, if the lights be not used the connections will be through the plug sockets only to the bell; or the bell can be omitted and only the lights be used. Various uses of either or both these indicators could readily be suggested, and the system may be employed for various purposes as it may be found useful or practicable without departing from the spirit or scope of the invention. Again, the particular manner of utilizing the clock to make and break circuits by the hands and segments may be more or less modified and remain within the invention, the essential thing in this operation being to communicate the hour and part thereof in minutes electrically from the clock to the time boards, or the lamps thereon.

The several boards B have been referred to



herein as being located in rooms, but this is not necessarily the case unless they be used as in hotels, but they may be located in any room or station near to or remote from the clock, and the numbers or characters representing the several lamps in each series may be directly upon the lamp or in such relation thereto as will leave no doubt about their designations.

10 What I claim is:—

1. A system substantially as described comprising a time board and separate sets of lamps thereon representing hours and parts of hours respectively, a sounding device in circuit with both said sets of lamps, and a clock and electrical connections therefrom with said lamps and through said sounding device.

20 2. The combination of an electrically equipped clock adapted to report hours and fractions thereof, with a time board having two series of glow lamps corresponding to the

hours and fractions on the clock, a sounding device with said board and electrical connections between said clock and lamps and sounding device, and a separate plug for each series of lamps. 25

3. A board and two series of glow lamps thereon representing divisions of time, as hours and parts thereof, a socket for each lamp in said board and a plug for each series of sockets, an electrically furnished clock having two series of contacts for the hands thereof and connections therefrom to said lamps respectively, whereby both the hour and a fraction thereof may be ascertained at a station distant from said clock. 30 35

In testimony whereof I sign this specification in the presence of two witnesses.

GEORGE BERNHARD MAAS.

Witnesses:

E. M. FISHER,  
R. B. MOSER.