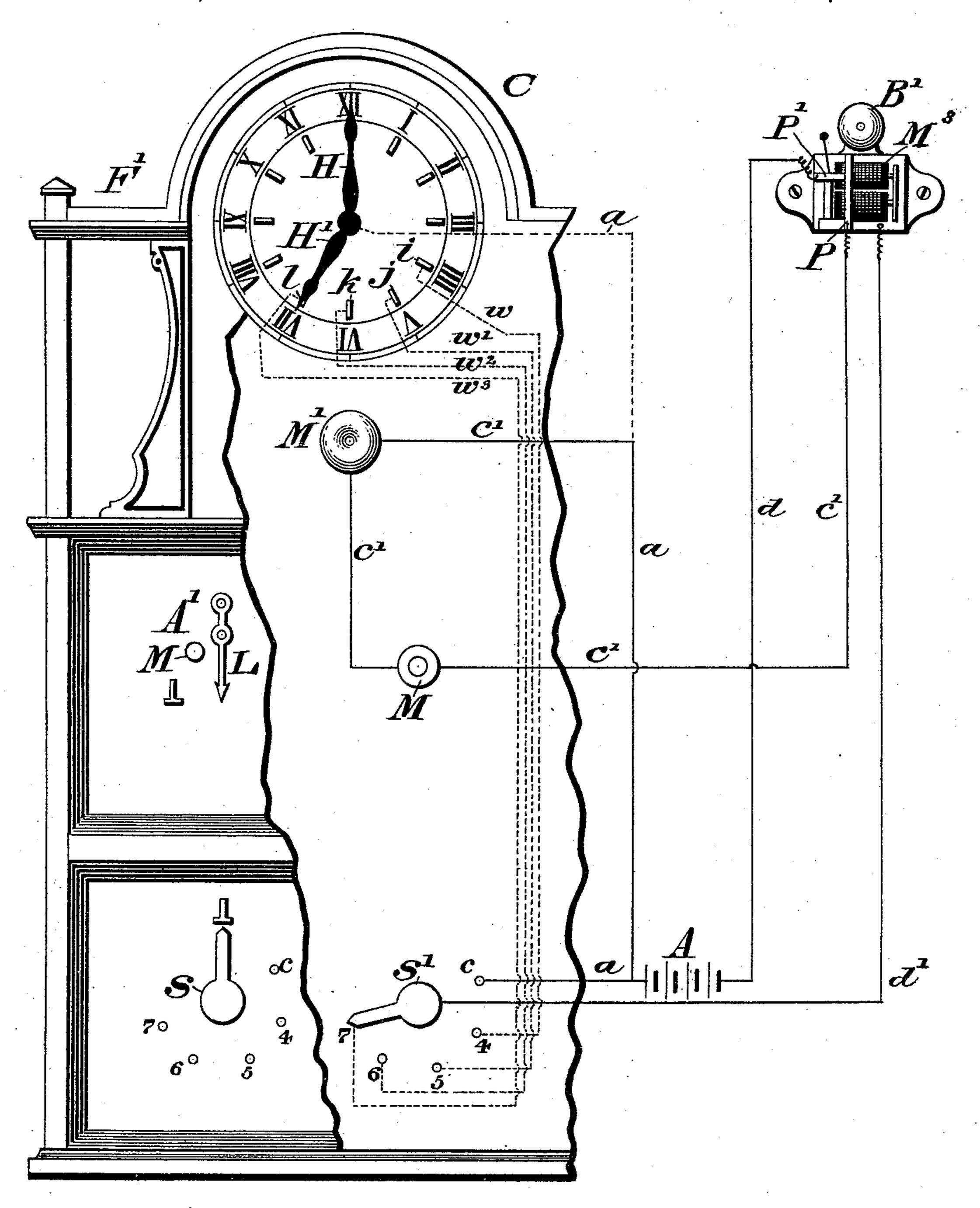
(No Model.)

## F. S. CARTER. HOTEL TIME ANNUNCIATOR.

No. 493,067.

Patented Mar. 7, 1893.



WITNESSES:

P. Fr. Angle. L. Douville.

Franklin S. Barter By Affinan. S. ATTORNEY.

## United States Patent Office.

FRANKLIN S. CARTER, OF BURLINGTON, NEW JERSEY.

## HOTEL TIME-ANNUNCIATOR.

SPECIFICATION forming part of Letters Patent No. 493,067, dated March 7, 1893.

Application filed August 15, 1892. Serial No. 443,080. (No model.)

To all whom it may concern:

Be it known that I, Franklin S. Carter, a citizen of the United States, residing at Burlington, in the county of Burlington, State of New Jersey, have invented a new and useful Improvement in Hotel Guest Time Calls or Annunciators, which improvement is fully set forth in the following specification and accompanying drawing.

My invention relates to improvements in hotel annunciators or call apparatus, and to this end it consists of an improved form of apparatus hereinafter described, whereby any guest may be called at any predetermined time, through the agency of electrical circuits, and mechanism with connections, and a time mechanism, whereby such result is accomplished automatically.

It also consists of the combination of such an apparatus with means in the room, whereby the guest may announce to the office, that he has heard the call, or may indicate to the clerk that some want should be attended to.

It also consists of special details of construc-25 tion hereinafter fully set forth and particularly claimed.

Prior to my invention, it was old in the art to so connect a time mechanism with electrical circuits running to the various rooms of a 30 hotel, as to automatically call any guest or guests at any predermined hour. It was also old to arrange the circuits in such way that after the guest was called, he could announce the fact to the clerk in the office, or could in-35 dicate that he desired attendance. The system by which those results were accomplished consisted of a time mechanism having a contact arm which closed circuits to the several rooms at predetermined hours through a 40 switch-board located in the base of the time mechanism, or at some point accessible to the clerk, and circuits running to the various rooms with the usual call bells, annunciator drops and push buttons. These systems ne-45 cessitated a switch-board with plugs or with sliding switches, independent of the time-call switching mechanism, which are liable to get out of order, or to be misplaced.

It is the especial feature of my invention to simplify this apparatus, in such a manner that the results sought may be attained with a minimum amount of trouble and of liability

to make mistakes, while the apparatus itself is compact, simple and less liable to get out of order, the same switch answering for both 55 time and individual call, and operated by simply turning the switch arms to the right or left to the desired points.

The figure represents a diagrammatic view of the circuits and circuit connections of my 60 improved apparatus for a single guest room, showing also the time annunciator mechanism with its sustaining frame partly broken away.

I show the circuits and connections only for one guest chamber, but it will be understood 55 of course, that the wiring will be from the time mechanism, and the battery shown for as many circuits as there are guests or other chambers, where it is desired to use the apparatus.

Referring to the drawing: A designates a battery, and C designates a time mechanism located in the case F', with an annunciator A' of usual form, and having bell magnet M' with switches S S', &c., one for each guest 75 chamber. Each annunciator has the usual indicator needle L, and magnet M for controlling its position.

H, H' are the hands of the time mechanism, the hand H' being adapted to be carsonied into electrical contact with the strips i, j, k, l, as the hour hand advances. These strips are connected respectively by wires w, w',  $w^2$ ,  $w^3$ , to the contact buttons 7, 6, 5, 4, arranged in a circle in the path of the 85 arms of said switches S, or S', one for each room. The switches are adapted to be turned by knobs so as to contact with any one of the points 4, 5, 6, 7, corresponding to those hours on the clock dial, and also with a guest call 90 contact or stud c, for closing the circuit to its respective bell at any time.

d designates the return wire or circuit from the battery A, while d' is the advance circuit running from the switch to the call bell in the 95 guest chamber. This circuit includes only the switch, the contact arm and the bell in the room.

c', c', c', c', designate the return or call circuit from the guest room to the office, and incocludes the battery A, annunciator magnet M, annunciator bell magnet M', and push button or metal contact strips P, P', in the room. The contact strips i, j, k, l, are located in

the face of the clock at any desired interval, usually one for each half hour, but shown here one for each hour.

The batteries are located at any preferred

5 place, usually near the annunciator box. The operation is as follows: Suppose the guest in the room, where bell B' is located, has specified a desire to be called at seven o'clock, the clerk turns the switch of the room, indiro cated usually by numbers below said switch, on the point 7. When the hour of seven arrives, a circuit is made from battery A as follows: by wire a to the hour hand shaft, and thence by hand H' to the contact strips l wire  $w^3$ , 15 point 7, switch S', wire d', bell magnet M<sup>3</sup>, wire d to the said battery. This will cause the trembler bell in the room to ring in a manner well understood, until the arm H' passes off the strip l. The occupant of the 20 room being awakened, rises and placing his finger on the push button in his bell box, closes the circuit c', annunciator magnet M, bell magnet M' and wire c'. This announces to the clerk that the alarm has been heard 25 and the guest is up. The clerk now turns the switch in such a position that no circuit

is made from the battery. Should he desire!

to call the guest, he simply turns the switch to the right to contact with c when circuit is made through wires a and d, battery A and 30 bell in the guest room. It will be observed also that this call may be made at any time, while the time call is on in the same manner, without disturbing other guests.

Having thus described my invention, what 35 I claim as new, and desire to secure by Let-

ters Patent, is—

In a hotel guest call, the combination of an electrical circuit, including a call bell located in a guest's room, a circuit-closing arm 40 attached to the hour hand shaft of a time mechanism, a series of short sections of conductors, each normally open at two points under the control of the contact arm, and a rotary switch respectively, with a return call 45 circuit normally open in the guest's room and including a battery, an annunciator, an annunciator bell at the office and a point or stud for closing the circuit to its respective bell at any time, substantially as described. 50 FRANKLIN S. CARTER.

Witnesses:
JOHN A. WIEDERSHEIM,
A. P. JENNINGS.