

A. G. WILSON.
ELECTRICALLY OPERATED BELL.
APPLICATION FILED APR. 3, 1908.

956,250.

Patented Apr. 26, 1910.

Fig. 1.

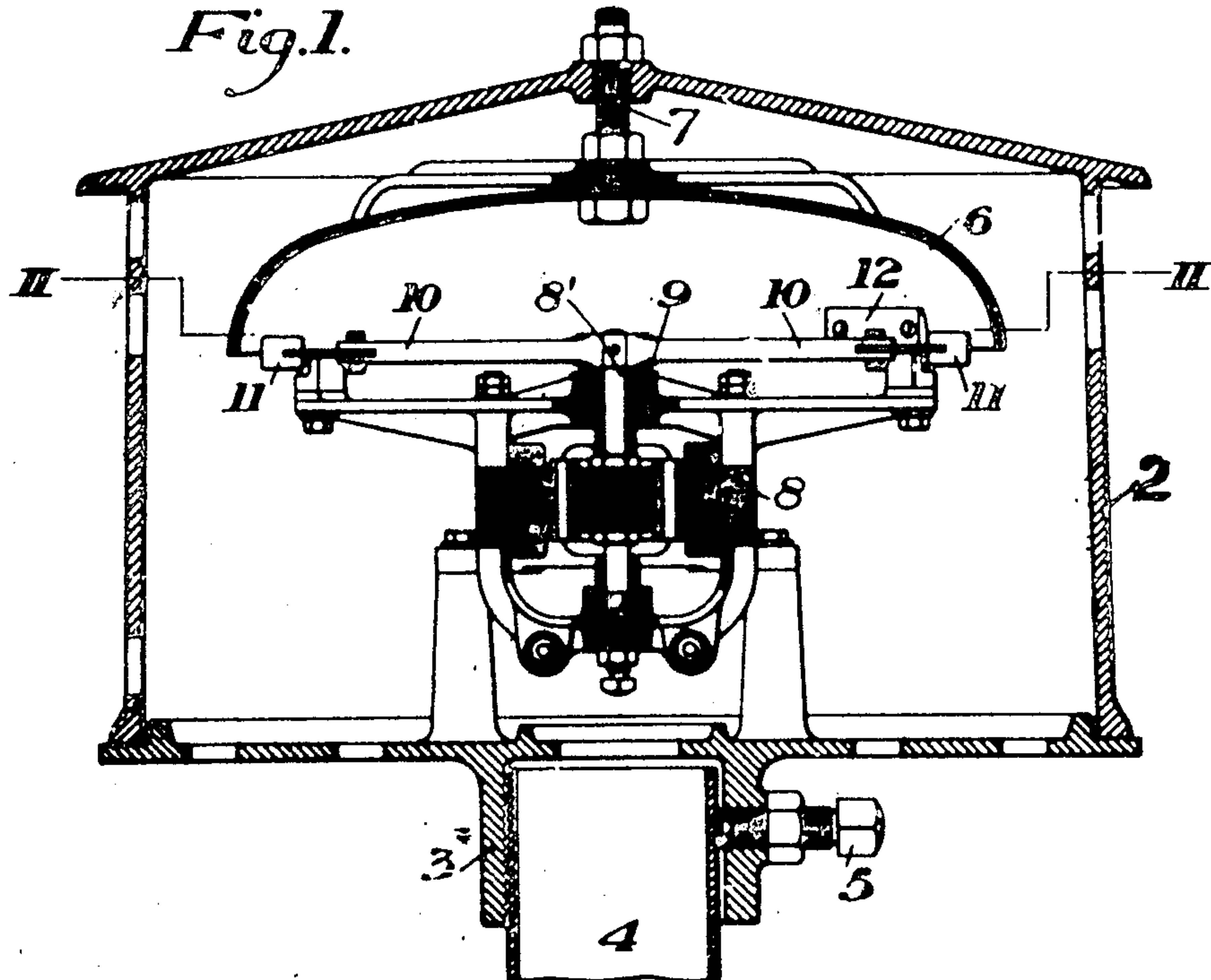
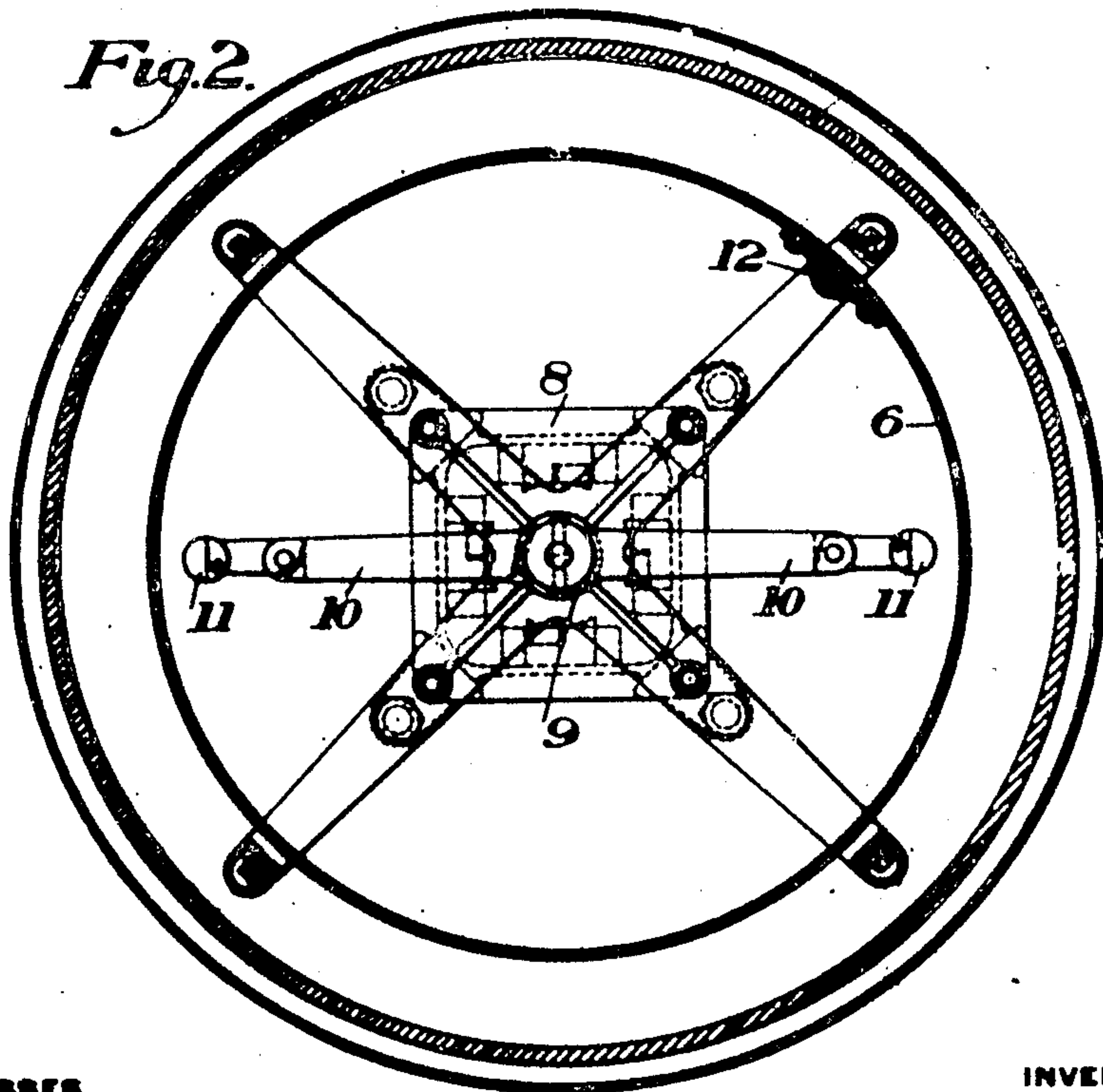


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

ASBURY G. WILSON, OF WILKINSBURG, PENNSYLVANIA, ASSIGNOR TO THE UNION SWITCH & SIGNAL COMPANY, OF SWISSVALE, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

ELECTRICALLY-OPERATED BELL.

956,250.

Specification of Letters Patent.

Patented Apr. 26, 1910.

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To all whom it may concern:

Be it known that I, ASBURY G. WILSON, of Wilkesburg, Allegheny county, State of Pennsylvania, have invented a new and useful Improvement in Electrically-Operated Bells, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a vertical section of one form of bell embodying my invention; and Fig. 2 is a horizontal section on the line II—II of Fig. 1.

My invention has relation to the class of electrically operated bells, and has been more particularly designed to provide a bell for use at the railroad crossings and other similar points where a bell is continuously operated as a warning signal so long as a train is within a certain distance of the crossing.

The object of my invention is to provide a simple form of bell which can be continuously rotated by an electric motor as long as the current supply for the motor is maintained.

The precise nature of my invention will be best understood by reference to the accompanying drawings, in which I have shown one embodiment thereof, and which will now be described, it being premised, however, that various changes may be made therein by those skilled in the art without departing from my invention as defined in the appended claims.

In these drawings, the numeral 2 designates a casing or housing which, in the particular form shown, is provided with a socket 3 at its lower portion by means of which it can be secured to the upper end portion of a supporting post 4 by set screws 5, or other suitable means.

6 designates a bell or gong, which is supported within the upper portion of the casing or housing by means of a bolt 7 secured in the roof or cover portion of the housing.

8 designates an electric motor which is preferably of the induction type. This motor is set with its armature extending vertically, and the armature shaft 8' is extended above its upper bearing 9 and has secured thereto the radial arms 10, to the outer end portion of each of which is pivoted a hammer 11. These hammers are

comparatively light, and their arrangement is such that as the motor gains speed, they are thrown outwardly by centrifugal force until their centers of gravity are at a maximum distance from the axis of rotation, at which time they strike a lug 12 secured to the inner side of the bell and thus sound the alarm. The hammers being pivoted, they can retract after the lug on the bell is struck to enable them to pass such lug, thereby admitting of a continuous rotation of the motor shaft, and a continuous sounding of the alarm until the supply of power has been cut off.

The advantages of my invention will be apparent since it provides an extremely simple bell capable of giving a continuous alarm as long as the operating current is provided. It will be apparent that various changes may be made in the details of the construction and arrangement. Thus, the armature shaft may be provided with a single hammer-carrying arm, or with more than two of such arms, and the pivoted hammers carried by these arms may be of any suitable form.

What I claim is—

1. A signal bell comprising a casing, a bell suspended from the top of the casing, an electric motor supported in the casing below the bell, an arm secured to the motor shaft to rotate within the bell, and a hammer movably connected to the arm to yield after each contact with the bell; substantially as described.

2. A signal bell comprising a casing, a bell suspended within the casing, an electric motor supported in the casing, an arm secured to the motor shaft to rotate within the bell, a lug secured to the inner surface of the bell, and a hammer pivoted to the rotating arm to engage with said lug; substantially as described.

3. A signal bell comprising a casing, a bell suspended within the casing, an electric motor supported in the casing, an arm secured to the motor shaft to rotate within the bell, a lug secured to the inner surface of the bell, and a hammer pivotally mounted at the outer end of the rotating arm and arranged to be thrown into contact with the lug on the bell by the centrifugal action of rotation and to yield to pass said lug after having struck it; substantially as described.

4. A signal bell comprising a casing, a

bell suspended from the top of said casing,
an electric motor supported in the casing be-
low the bell, an arm secured to the motor
shaft to rotate within the bell, a lug secured
5 to the inner surface of the bell, and a ham-
mer pivotally mounted at the other end of
the rotating arm and arranged to be thrown
into contact with the lug on the bell by the
centrifugal action of rotation and to yield

to pass said lug after having struck it; sub- 10
stantially as described.

In testimony whereof, I have hereunto set
my hand.

ASBURY G. WILSON.

Witnesses:

JNO. D. TAYLOR,
C. C. WHITE.