(No Model.)

E. A. STOUT, Jr.

ELECTRIC SIGNALING DEVICE.

No. 598,033. Patented Jan. 25, 1898.

Fig. 1.

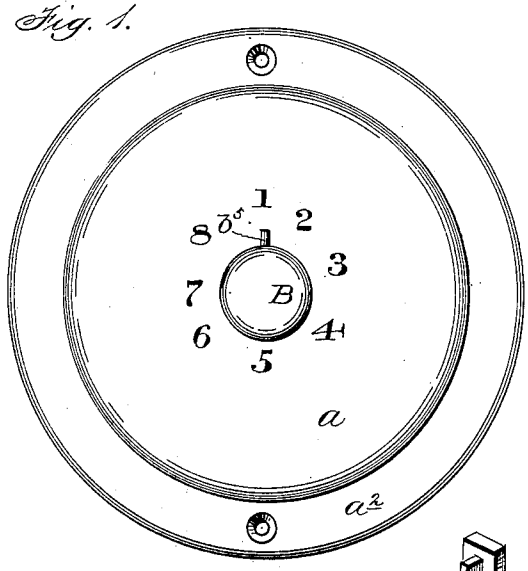


Fig. 2.

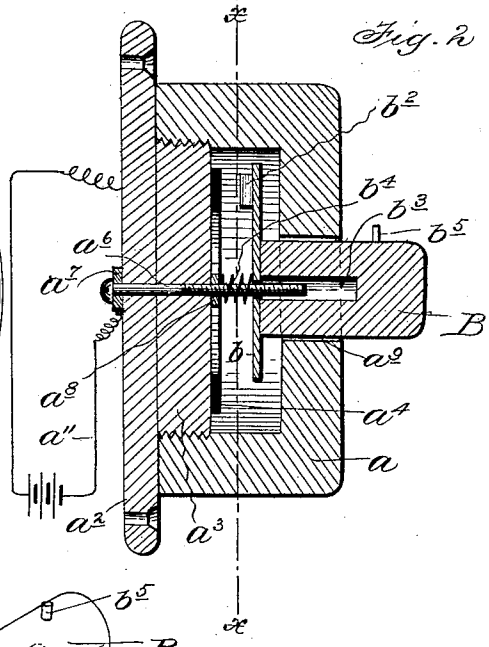


Fig. 5.

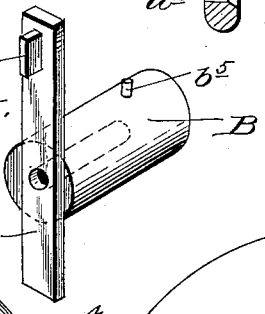


Fig. 3

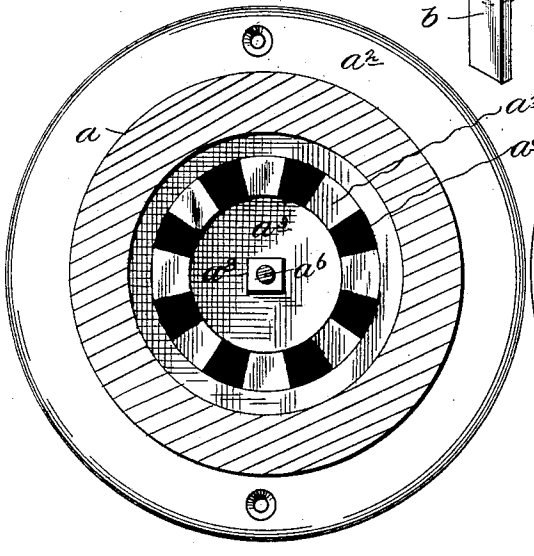
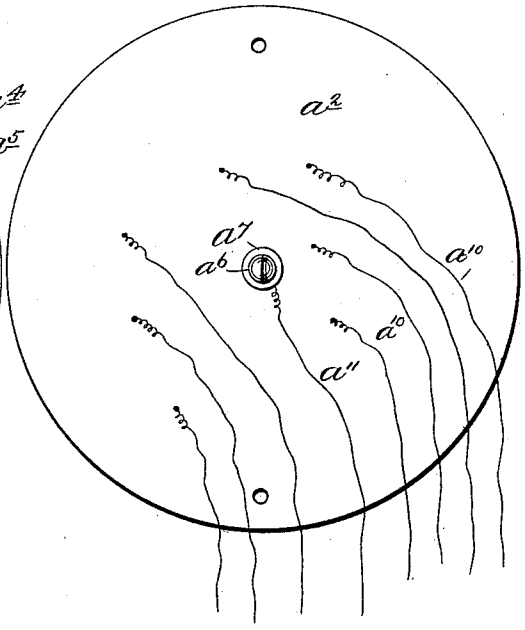


Fig. 4



Witnesses:
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UNITED STATES PATENT OFFICE.

EUGENE A. STOUT, JR., OF PHILADELPHIA, PENNSYLVANIA.

ELECTRIC SIGNALING DEVICE.

SPECIFICATION forming part of Letters Patent No. 598,033, dated January 25, 1898.

Application filed March 23, 1897. Serial No. 628,912. (No model.)

To all whom it may concern:

Be it known that I, EUGENE A. STOUT, Jr., a citizen of the United States, residing at Philadelphia, (Germantown,) in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Electric Signaling Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to electric signaling devices.

The object is to provide a device which will in a ready and efficient manner transmit signals to any desired number of points, as to the different rooms of a hotel or a dwelling, which will be exceedingly compact in structure, simple of construction and easy of operation, and in which the different parts will be so arranged as to be readily exposed for the purpose of inspection or of repair.

In a signaling device characterized by my invention I employ a plurality of contact plates or points insulated from each other and arranged in this instance in a circle, a combined push-button and indicator, and a contact-arm carried by the button and adapted to be moved into engagement with any one of the contact-plates of the series, whereby to complete the circuit and sound an alarm included in the line or lines connecting with the different contact-plates. In order to reduce the number of parts to a minimum and also to provide certain and effective means for completing the circuit, I employ a spring the initial function of which is to hold the contact-arm carried by the push-button out of engagement with the contact-plates, this spring also subserving the further function of a conductor for completing the circuit from the main through the contact-arm, a contact-plate, and to the bell.

As a matter of specific improvement I provide the push-button with a stud or projection constituting an indicator or pointer, which upon being moved to any number on the face of the device will show that the parts are in position to transmit a signal to the room corresponding to the number opposite which the pointer rests.

Further and more specific details of construction will be hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings, forming a part of this specification, and in which like letters of reference indicate corresponding parts, I have illustrated one form of embodiment of my invention, although it is to be understood that other forms of embodiment thereof may be employed without departing from the spirit of the same, and in the drawings—

Figure 1 is a view in front elevation. Fig. 2 is a view in vertical transverse section. Fig. 3 is a view in vertical section taken on the line X X, Fig. 2, showing more clearly the arrangement of the contact-plates. Fig. 4 is a view in rear elevation, showing more particularly the wires connecting with the contact-plates and also the main conducting-wire; and Fig. 5 is a detached detail view in perspective, showing the construction of the push-button and the contact-arm carried thereby.

Referring to the drawings, A designates the casing of the device, consisting of a cap a and a back plate a^2, having secured thereto a centrally-disposed boss a^3, exteriorly threaded and engaged by threads on the inside of the cap a. As the cap and back plate may be of any suitable material a detailed description of them is deemed unnecessary. Secured on the inner face of the boss a^3 are a plurality of contact-plates a^4, which may be of any suitable material, such as brass or copper, and are separated by insulating material a^5. As shown in Fig. 3, these contact-plates are arranged in a circle and correspond in number to the numbers indicated on the front of the cap, as shown in Fig. 1, wherein eight numbers are displayed, although it is to be understood that a greater or less number may be employed, as may be found necessary. The boss a^3 is held in position on the back plate by means of a screw or bolt a^6, the inner end of which projects some distance beyond the face of the boss and is held rigidly in place by means of nuts a^7 a^8, bearing, respectively, against the face-plates and the boss, as shown in Fig. 2.

The cap is provided with a centrally-disposed opening a^9, wherein is arranged a push-button B, the inner end of which carries a contact-arm b, provided with a contact-point

b^2, adapted to be moved into contact with any one of the contact-plates a^4 that may be desired. The button is provided with a bore b^3, in which works the inner end of the bolt a^6, and between the contact-arm B and the nut a^8 is interposed a spring b^4, which serves to hold the button in the position shown in Fig. 3, with the contact-point out of engagement with the plates. The outer portion of the button carries a stud or projection b^5, constituting a pointer, which, as shown in Fig. 1, will indicate the number corresponding to the room to which the signal is to be sent and will also show that the contact-point of the arm is opposite one of the contact-plates.

To each of the contact-plates a^4 is secured a wire a^{10}, (shown in Fig. 4,) and to the bolt a^6 is secured one end of the main wire a^{11}, leading to a battery included in the circuit in which the bells in the different rooms are located.

The operation of the device will be apparent. When a signal is to be transmitted, the button is turned until the pointer is opposite the number corresponding to the room to which the alarm is to be sent. The button is then pushed in, thereby completing the circuit and sounding the alarm.

It is to be understood that I do not limit myself to the precise construction of the casing, as other forms than that shown may be employed, and in some instances I may employ a casing provided with a plurality of these indicating devices without departing from the spirit of my invention.

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

1. A signaling device, comprising a plurality of contact-plates, and conducting-wires connecting therewith, a rotatable push-button having an arm adapted to be brought into engagement with any one of the plates, a bolt having one end projected into a bore in the button, and a spring mounted upon the bolt and performing the double function of holding the contact-arm normally out of engagement with the plates, and forming an electric conductor between the main and the contact-arm, substantially as described.

2. An electric signaling device, comprising a cap, a back plate having a boss carrying a plurality of contact-plates arranged in a circle, a rotatable push-button carrying a contact-arm adapted to be pushed into engagement with any one of the contact-plates, a bolt for securing the boss in position upon the back plate and having its inner end projected into a bore in the button, and a conducting operating-spring arranged upon the bolt between the contact-arm and the boss, substantially as described.

3. An electric signaling device, comprising a cap, a back plate having secured thereto a boss carrying a plurality of contact-plates arranged in a circle, a rotatable push-button carrying a contact-arm adapted to be pushed into engagement with any one of the contact-plates, a bolt for securing the boss in position upon the back plate and having its inner end projected into a bore in the button, a conducting operating-spring arranged upon the bolt between the contact-arm and the boss, and a pointer and indicator on the button adapted to be brought to register with indicating-numbers on the face of the casing, substantially as described.

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

EUGENE A. STOUT, JR.

Witnesses:
WM. D. NEES,
EUGENE A. STOUT.