

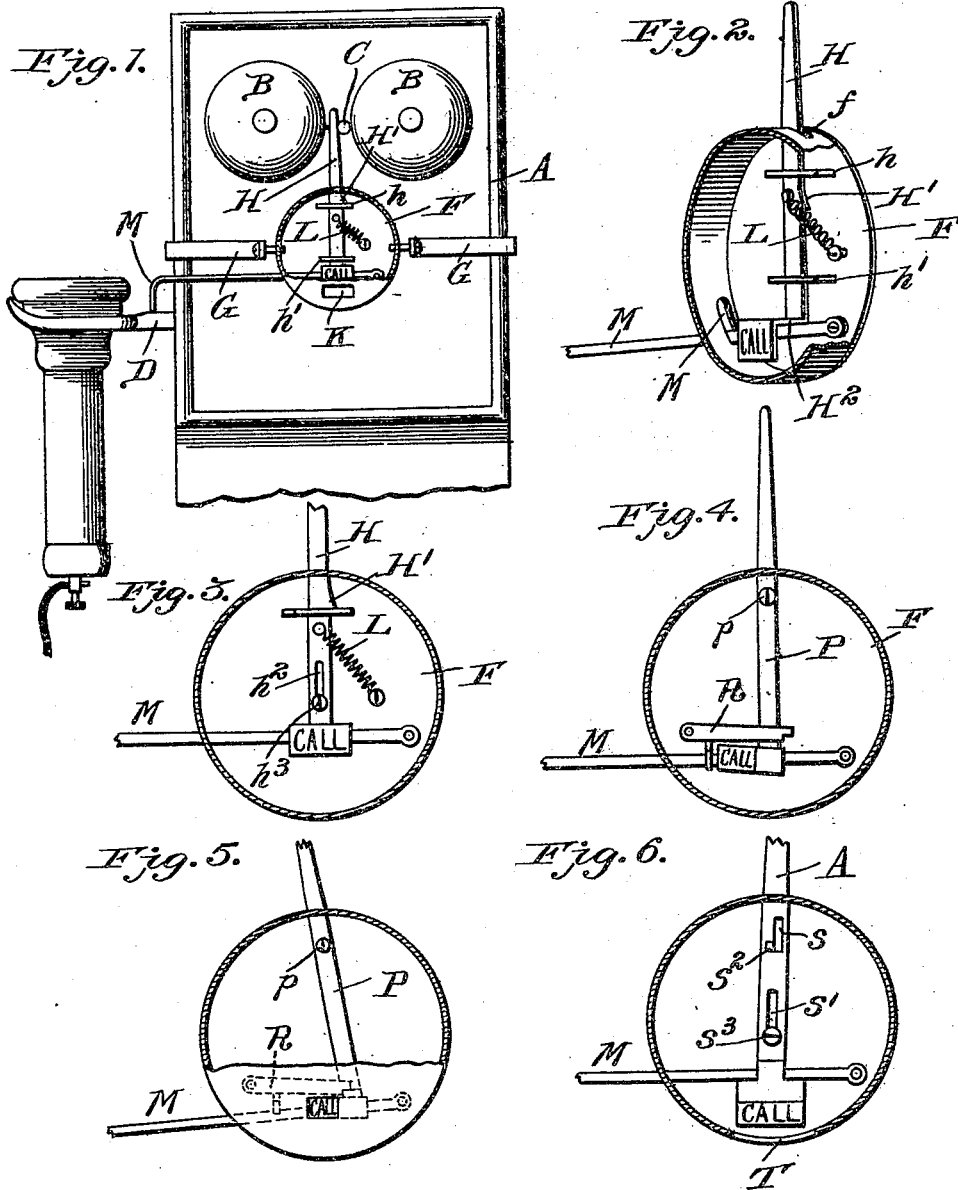
No. 648,895.

Patented May 1, 1900.

C. F. BLACK.  
INDICATOR FOR TELEPHONES.

(Application filed Nov. 16, 1899.)

(No Model.)



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## INDICATOR FOR TELEPHONES.

SPECIFICATION forming part of Letters Patent No. 648,895, dated May 1, 1900.

Application filed November 15, 1899. Serial No. 737,059. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES F. BLACK, a citizen of the United States, and a resident of the city of Goshen, in the county of Elkhart and State of Indiana, have invented certain new and useful Improvements in Indicators for Telephones; and I do 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a front elevation of the invention as applied and partly broken away, the indicator being shown as raised. Fig. 2 is a detail perspective view of the invention partly broken away, the indicator being fallen. Figs. 3, 4, 5, and 6 illustrate modified forms of the invention.

This invention is designed to provide a device of simple and effective character for use in connection with telephones for the purpose of indicating visually when a call has been received or where two phones are used in the same room to indicate which one; and the invention consists in the novel construction and combination of parts, all as hereinafter described, and pointed out in the appended claims.

Referring to the accompanying drawings, the letter A designates an ordinary telephone-case; B, the alarm-bells; C, the bell-hammer, which is actuated in the usual manner when a call is received, and D is the pivoted hook, which projects from the case and supports the receiver E.

F designates a small case, preferably, though not necessarily, of metal, which is designed to be secured to the front portion of the telephone-case A by means of clamps G or by any other suitable device or devices.

H is an arm or lever which projects from within the case F through a peripheral slot *f* and whose free outer end portion extends into position to be engaged by the bell-hammer C when the latter is actuated. This arm or lever may be arranged in different ways, and I will first describe the arrangement shown in Fig. 6. In this figure the portion of the lever within the case is shown as extending

loosely through two aligned guide loops or projections *h h'* of the case F, the guide apertures or openings in which are made sufficiently large to allow of some lateral as well as vertical play of the arm or lever therein. At *H'* said lever is formed with a notch or offset, which in the normal position of the lever engages with the upper guide loop or projection *h*, and thereby holds the lever in raised position. The lower end of the lever is offset, as shown at *H<sup>2</sup>*, and is formed with a plate portion, which bears the word "Call" or other word or sign of similar import. This word or sign when the lever is in normal position is concealed by the front portion of the case F; but when said lever is released from its engagement with the guide *h* and falls, as presently described, this word or sign is exposed to view through a slot K of the casing. A spring L may be connected to the lever for the purpose of aiding its own gravity to cause it to fall when released.

M is a resetting arm or lever, one end portion of which is pivoted within the casing F and passes underneath and in contact with the offset at *H<sup>2</sup>*, thence out through a slot M in the casing F, and across the front of the casing A to one side of the latter, where it is bent, as indicated at *M'*, to form a handle. This handle may be engaged with the hook D, as shown, so that the movement of the latter when the receiver is removed therefrom will operate the said arm or lever M to automatically reset the arm or lever H.

The operation is as follows: When a call is received, the movement of the bell-hammer C and its contact with the arm or lever H moves the said arm laterally a sufficient distance to free the engagement of its notch or offset *H'* with the loop or guide *h*, and said arm or lever by the combined action of gravity and of the spring L falls to expose the word "Call" or other equivalent at the slot K. A person absent from the room at the time the call was received will thus be notified upon his return of the fact of the call and can ring up the central office or other connection. The word "Call" remains exposed until the receiver is removed from the hook D, when the upward movement of said hook will act upon the arm or lever M to raise the arm or lever H and reengage its

notch or offset H' with the guide *h*. It is obvious, however, that, if preferred, the resetting-lever M may be arranged to be operated manually independently of the hook D.

5 In Fig. 3 I have shown a modification wherein in lieu of the lever-guide *h* the arm or lever H is formed with a vertical slot *h*<sup>2</sup>, which is loosely engaged by a pin or stud *h*<sup>3</sup> of the casing F.

10 In Figs. 4 and 5 I have shown another modification wherein in lieu of the arm or lever H, I employ an arm or lever P in the nature of a pendulum, being pivoted in the case F at *p*. This lever is normally held in  
15 perpendicular position by gravity, with its sign concealed, and is actuated to expose said sign by lateral movement caused by the contact of the bell-hammer therewith, as in the form first described. It is held in this position by means of a dog or catch R, and the  
20 latter is released from its engagement by the raising of the resetting arm or lever.

Fig. 6 show a further modification wherein the arm or lever H is guided by slots *s* *s'* and pins or studs *s*<sup>2</sup> *s*<sup>3</sup>. The pin or stud *s*<sup>2</sup> is square and the slot *s* in which it works is L-shaped, its short transverse arm being for the purpose of engaging the studs *s*<sup>2</sup> to hold the lever in raised position. In this form I  
30 have also shown the case as having a peripheral slot T, through which the call-plate falls to expose its sign or signal, this slot being in lieu of the slot *h* shown in the other described forms.

35 The device described can be readily attached to any ordinary telephone instrument and forms a simple and effective device for indicating calls.

40 Other modifications and changes in detail than those described may be made without departing from the spirit and scope of my invention.

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

1. The combination with the casing of a telephone instrument, its alarm-bell, bell-hammer and pivoted receiver-hook, of a movable arm or lever in position to be engaged  
50 by the bell-hammer, a sign or visual signal carried thereby, means for normally concealing such sign or signal and for exposing the same when the lever is operated, and means operated by the removal of the receiver from

said hook for returning said arm or lever to 55 normal position after operation, substantially as specified.

2. A device for the purpose described, comprising a slotted casing, a movable arm or lever partly in said casing and partly projecting 60 therefrom, a sign or visual signal carried by the arm or lever within the casing, and a pivoted resetting arm or lever, substantially as specified.

3. A device for the purpose described, consisting of a slotted case, a laterally-movable 65 arm or lever partly in case and partly projecting therefrom, a visual sign or signal carried by said arm or lever within the case, and a pivoted resetting arm or lever, substantially 70 as specified.

4. A device for the purpose described, consisting of a slotted case, a laterally and vertically movable lever partly in said case and partly projecting therefrom, a sign or visual 75 signal carried by said arm or lever within the case, means for holding said lever in raised position, a spring for operating said lever when released and means for raising said lever to such position after operation, substan- 80 tially as specified.

5. A device for the purpose described, consisting of a slotted case, a laterally and vertically movable lever partly in said case and partly projecting therefrom, a sign or visual 85 signal carried by said arm or lever within the case, means for holding said lever in raised position and a pivoted resetting arm or lever which engages the first-named arm or lever, and projects from said case, substantially as 90 specified.

6. A device for the purpose described, consisting of a slotted case, a laterally and vertically movable lever partly in said case and partly projecting therefrom, a sign or visual 95 signal carried by said arm or lever within the case, means for holding said lever in raised position and a pivoted resetting arm or lever which engages the first-named arm or lever and projects from said case and is bent for 100 engagement with the receiving-hook of a telephone instrument, substantially as specified.

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

CHARLES F. BLACK.

Witnesses:

J. A. CLARK,  
OSCAR JAY.