

No. 859,909.

PATENTED JULY 16, 1907.

A. H. BERG.
TELEPHONE ATTACHMENT.
APPLICATION FILED APR. 23, 1907.

Fig. 1.

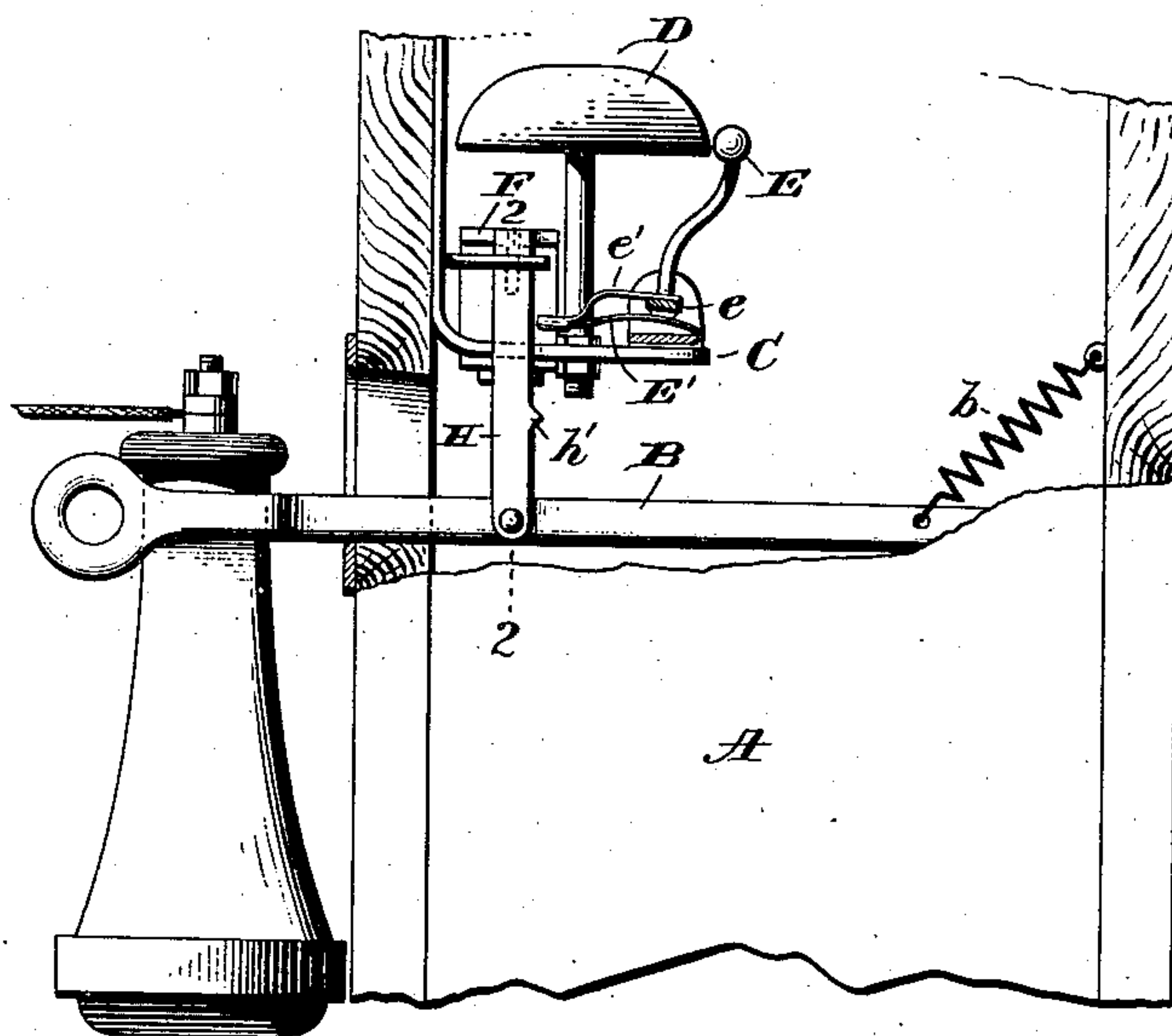
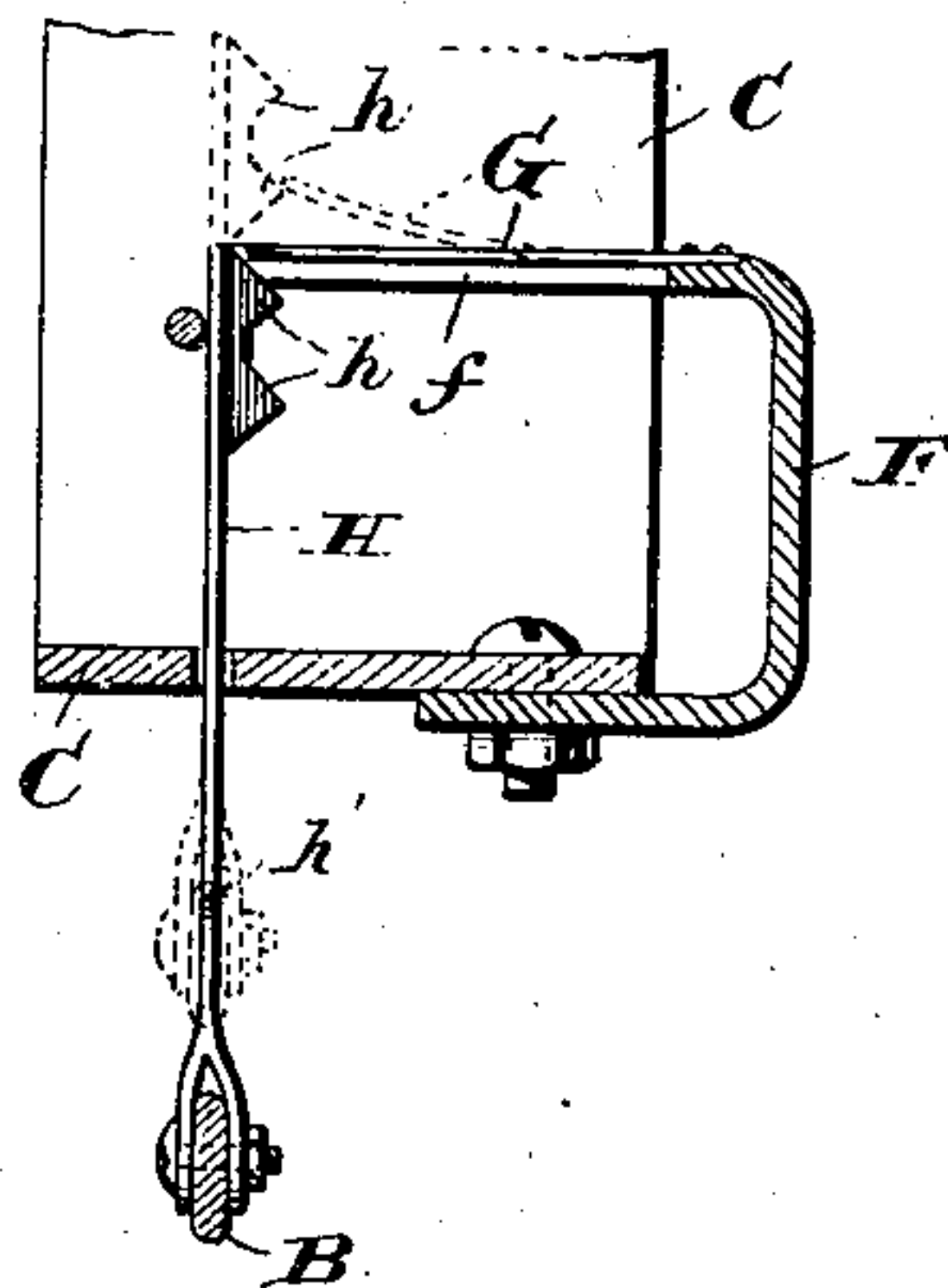


Fig. 2.



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TELEPHONE ATTACHMENT.

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To all whom it may concern:

Be it known that I, ARNE H. BERG, a citizen of the United States, residing at Clarkfield, in the county of Yellow Medicine and State of Minnesota, have invented certain new and useful Improvements in Telephone Attachments, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to an improvement in telephone attachments, and more particularly to an attachment for telephones designed for use on party lines.

Trouble has heretofore been experienced by subscribers using party lines, owing to their inability to determine whether the particular party called has been obtained and also owing to the fact that even if the proper party has in the first instance been obtained any other subscriber might by merely removing his receiver, listen to the party talking without his knowledge.

The object of the present invention is the provision of an attachment which will overcome this difficulty by causing a particular signal to be given whenever the receiver of any phone in the line is taken off its hook, which signal is peculiar to that particular phone and may be heard by any other party using the line, thereby notifying such party that that particular phone is on the line.

A further object of the invention is the provision of a signal of this character which is mechanically operated by the receiver hook when the receiver is lifted therefrom.

A further object of the invention is the provision of a signal of this character in which signaling means of two distinct characters are employed, whereby the same may be readily heard by any of the subscribers to the line, and whereby the signal may be adapted for a number of telephones on the same line by varying the order of-sounding the distinct signaling mechanism.

Other objects of the invention will be apparent from the detailed description hereinafter when read in connection with the accompanying drawings forming a part hereof, wherein a preferable embodiment of my invention is shown and wherein like numerals of reference refer to similar parts in the several views.

In the drawings: Figure 1 is an elevation of the telephone casing the front thereof being removed. Fig. 2 is a sectional view of the attachment.

Referring now more particularly to the drawing A designates the telephone casing, which is of the usual construction, and in which is pivotally mounted the receiver hook B, which is, as is usual in this class of devices, normally maintained in its uppermost position by a spring b. Secured within the telephone casing above the receiver hook B is a support C upon which is mounted a bell or gong D. Pivotaly mounted upon the support C is a hammer or clapper E, which

is designed to cooperate with the gong D. Positioned above the support C and rigidly secured thereto is a plate or support F, which is provided with an elongated slot extending inwardly from the front edge thereof. The slot *f* in the plate F is occupied by a thin metallic tongue G which is rigidly secured in any suitable manner at its rear end only and which is designed when vibrated to give forth a sound. The clapper E which is designed so cooperate with the gong G is preferably rigidly secured to a shaft *e* which is journaled in suitable bearings mounted upon the support C and from which shaft extends an arm *e'*, which is provided at its forward end with guides in which works the free end of a leaf spring E', which is secured to the support C and normally serves to hold the clapper in close proximity to the gong.

H designates an arm which is pivotally connected to the receiver hook B and extends upwardly therefrom through a suitable guide opening in the support C. The arm H is provided with a plurality of inclined projections *h* extending from the rear face thereof which project into the entrance of the slot *f* in the plate F and are designed to successively engage the free end of the metallic tongue G when the arm H is elevated by reason of the receiver being removed from the receiver hook. The arm H is also provided along one edge thereof with a projection *h'* which is designed during the upward movement of said arm to engage with free end of the leaf spring E' and elevate the same for a slight distance. As the spring E is connected with the arm *e'* which extends from the shaft of the clapper E it will be apparent that said arm will also be elevated slightly until the projection *h'* passes the free end of the spring E', which will permit said spring to quickly return to its normal position and through its connection with the arm *e'* will cause the gong to sound the bell.

In the form of my invention illustrated in the drawing, the rod H is provided with two projections *h* which successively engage the metallic tongue G and with a single projection which subsequently engages the leaf spring E', so that when the receiver is removed from the receiver hook, two distinct sounds of the thin metallic tongue G will be produced and one ring. It is obvious that by the arrangement of the projections *h* and *h'* on the arm H and by the addition of bells and metallic tongues, the signals may be so varied that each telephone on the line may be provided with a distinctive and characteristic signal which may be heard and recognized by any of the other parties on the line whenever the receiver of that particular telephone is removed from its hook.

I do not desire to limit myself to the precise form and construction shown in the drawings, as it is obvious that many minor changes might be made thereto without departing from the spirit of the invention.

Having thus described the invention, what is claimed is:—

1. In a device of the character described, a telephone hook, and a mechanically operated signal, adapted to be actuated when the receiver is removed from said hook. 5
 2. In a device of the character described, a receiver hook, a plurality of distinctive mechanically operated signals adapted to be actuated when the receiver is removed from its hook.
 3. In a device of the character described, a receiver hook, a plurality of audibly distinctive signals, and means for successively actuating said signals when the receiver is removed from said hook. 10
 4. In a device of the character described, a pivoted receiver hook, a spring for normally elevating said hook, a mechanically-operated signal, and means for actuating said signal upon the elevation of said receiver hook. 15
 5. In a device of the character described, a receiver hook, an arm secured to said receiver hook and movable therewith, said arm being provided with a projection thereon, and a signal having an actuating portion designed to be engaged by the projection on said arm during the upward movement of the receiver hook. 20
 6. In a device of the character described, a receiver hook, an arm secured thereto, and provided with a plurality of projections thereon, and a plurality of signaling devices provided with actuating portions adapted to be engaged by the projections on said arm during the upward movement of the receiver hook. 25
 7. In a device of the character described, a receiver hook, an arm secured thereto and provided with a plurality of projections thereon, and a plurality of audibly distinctive signals provided with actuating portions designed to be engaged by the projections on said arm during the upward movement of the receiver hook. 30
 8. In a device of the character described, a telephone hook, and a mechanically operated signal, and means for intermittently actuating said signal when the receiver is removed from said hook. 35
 9. In a device of the character described, a receiver hook, an arm secured thereto and provided with a plurality of projections thereon, and a signal having an actuating portion designed to be successively engaged by the projections on said arm when the receiver is removed from its hook. 40
 10. In combination with a telephone casing, a spring actuated receiver hook pivoted therein, a support within the casing, a plurality of mechanically operated signals of different characters mounted on said support, each of said signals being provided with an actuating portion, and a member carried by the receiver hook and provided with projections adapted to engage the actuating portions of the different signals upon movement of the receiver hook. 45
- In testimony whereof I affix my signature in presence of two witnesses. 50

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