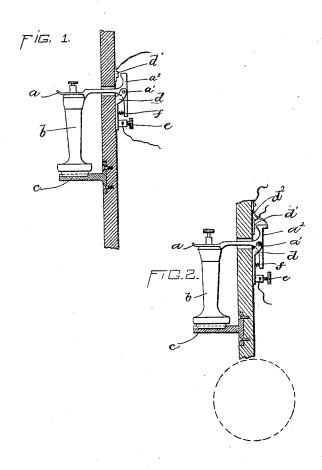
(No Model.)

## J. H. HOWARD.

HOOK OR CROTCH FOR TELEPHONE RECEIVERS.

No. 459,213.

Patented Sept. 8, 1891.



WITNESSES! A. S. Harrison. Ewngw Hamlen Gright Brown Horaly

## United States Patent Office.

JAMES H. HOWARD, OF MEDFORD, MASSACHUSETTS.

## HOOK OR CROTCH FOR TELEPHONE-RECEIVERS.

SPECIFICATION forming part of Letters Patent No. 459,213, dated September 8, 1891.

Application filed March 3, 1891. Serial No. 383,629. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. HOWARD, of Medford, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Hooks or Crotches for Telephone-Receivers, of which the following is a specification.

This invention has for its object to provide an improved support for the receiver of a to telephone when the same is not in use; and it consists in the improved hook adapted to break the circuit and prevent the current traveling through the receiver when the same is placed at rest, which I will now proceed to describe and claim.

In the accompanying drawings, forming a part of this specification, Figure 1 represents a side view of my improved support, and Fig. 2 is a similar view showing an additional contact.

The same letters of reference indicate the same parts in both the figures.

In the drawings, a represents a hook or crotch of the usual form. When the tele-25 phone-receiver b is not in use, it is placed upon the shelf c, its upper end being introduced under the hook and forcing the same slightly upward. The hook is pivoted at a'to a fixed support d within the box, provided 30 with a terminal e for the attachment of one of the circuit-wires. The inner end of the hook is provided with the cross-piece  $a^2$ , one end of which projects over a fixed contact-piece d', to which the other circuit-wire is 35 suitably connected, the other end of said crosspiece extending over the fixed bracket d. A spring f is introduced between the lower end of the cross-piece  $a^2$  and the bracket d, said spring acting to hold the forward ends of the

hook-arms a a in their depressed position and 40 to hold the outer end of the cross-piece  $a^2$  in contact with the piece d', thus completing the circuit. When the receiver b is not in use, its upper end is inserted under the arms a aof the hook, and the same are moved upwardly 45 until the lower end of the receiver rests upon the shelf c, as shown in Fig. 1, thus moving the upper end of the cross-piece a2 away from the contact-piece  $d^{\prime}$  and breaking the circuit at that point. When the receiver is again re- 50 moved from its shelf c, the spring f again presses the cross-bar  $a^2$  against the contact-piece d', thus completing the circuit. As shown in Fig. 2, a second contact may be arranged behind the upper end of the lever or 55 the cross-piece  $a^2$ , as at  $d^2$ , to which may be connected a wire of a second circuit, which would be cut out when the receiver is removed.

I claim—

In a telephone-receiver hook or crotch, the combination of the main arm a, having the cross-piece  $a^2$ , the bracket d, to which said main arm a is pivoted, the contact-piece d', the spring f, normally holding the said crosspiece in electrical connection with said contact-piece d', and the shelf c, upon which the receiver is supported when displacing the cross-piece  $a^2$  from contact with the contact-piece d', as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 14th day of February, A. D. 1891.

JAMES H. HOWARD.

Witnesses:

EWING W. HAMLEN, C. F. BROWN.