No. 720,103. PATENTED FEB. 10, 1903.

G. R. BONHAM.

TELEPHONE PROTECTING DEVICE.

APPLICATION FILED MAY 6, 1902.

NO MODEL.

Fig. 1.

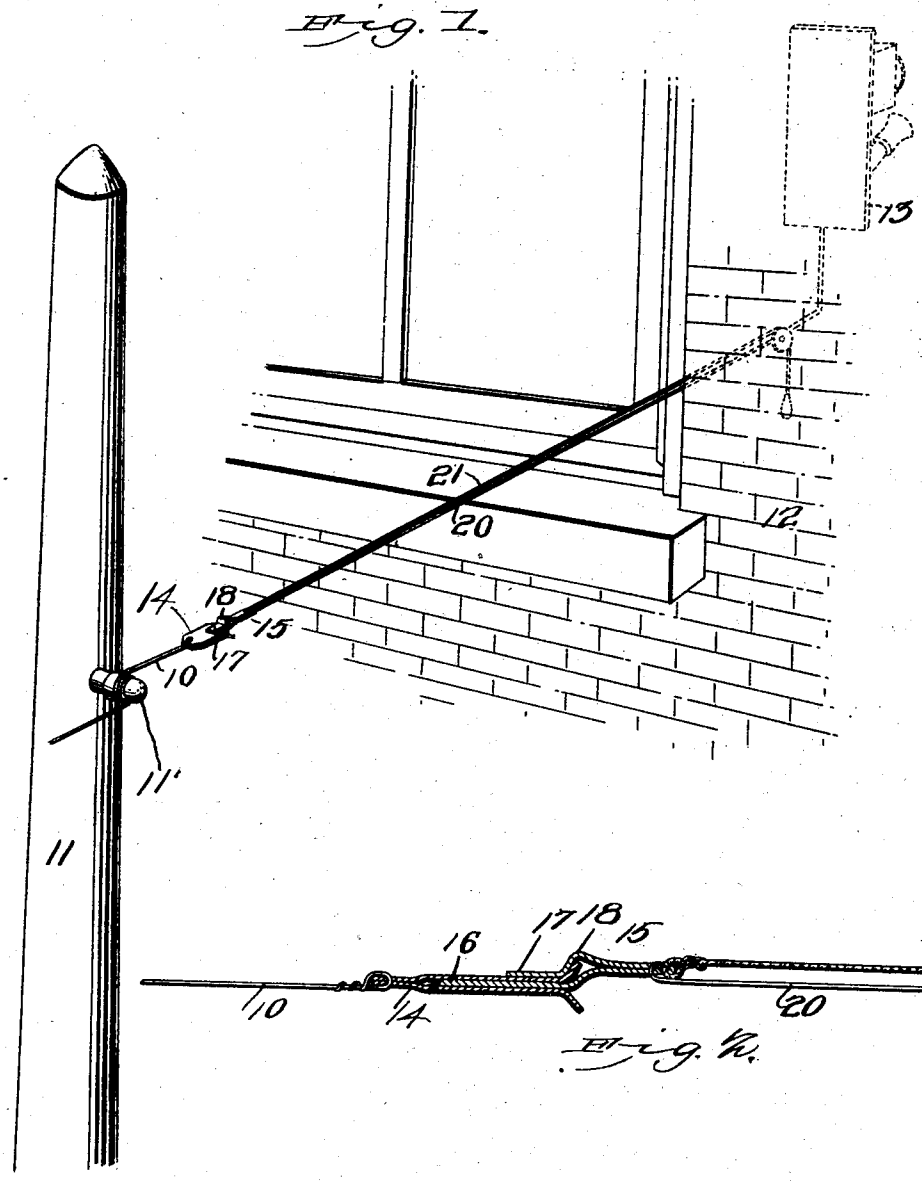


Fig. 2.

Witnesses
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GEORGE ROBBERT BONHAM, OF EMPIRE PRAIRIE, MISSOURI.

TELEPHONE-PROTECTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 720,103, dated February 10, 1903.

Application filed May 6, 1902. Serial No. 106,184. (No model.)

To all whom it may concern:

Be it known that I, GEORGE ROBBERT BONHAM, a citizen of the United States, residing at Empire Prairie, in the county of Andrew and State of Missouri, have invented a new and useful Telephone-Protecting Device, of which the following is a specification.

The object of the present invention is to provide an improved protective device for telephone systems, and is designed as a means for readily disconnecting a local telephone or other electrical instrument, such as a telegraph key or sounder, from the main-line wire during the progress of an electrical storm with a view of preventing the burning out of the instrument or switchboard and to avoid the danger of fire from a current of high intensity, such as is likely to be conveyed by the wire during the storm.

With this and other objects in view the invention consists in the novel construction and arrangement of parts hereinafter described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims.

In the drawings, Figure 1 is a view illustrating a portion of a telephone system including a main-line wire and a local telephone and illustrating a circuit-breaker constructed and arranged in accordance with my invention. Fig. 2 is a detail sectional view of the circuit-breaker.

In the drawings, 10 designates the main-line wire strung along on the series of poles in the usual manner, 11 designating one of the supporting-poles, provided with the usual glass insulator 11′ for the reception of the wire. This pole is preferably placed within reaching distance of the window or other portion of the building 12 in which is situated a telephone 13 or other electrical instrument which it is desired to protect.

To the main-line wire is secured both electrically and mechanically a metallic socket 14, preferably formed of a sheet of metal bent in the manner shown and having its meeting edges united by brazing or soldering. At the outer open end of the socket the metal of which the clip is formed is bent outwardly in opposite directions to form a flaring mouth for the reception of a portion of the second member of the circuit-breaker. The outwardly-turned edges of the socket also serve as a means for holding the two members of the circuit-breaker together under ordinary circumstances against any slight strain to which they may be subjected.

The clip member 15 is formed of a strip of metal bent upon itself to form two arms 16 and 17, the longer arm 16 being adapted to enter the mouth of the socket, while the shorter arm 17 is bent to form an engaging shoulder 18, adapted to pass over the flaring edge or mouth of the socket member, and thus firmly hold the clip and socket together, while at the same time the clip and socket are held in close contact with each other to afford a good conductor for the current.

To the outer end of the clip member is secured by soldering or otherwise the local wire 20, leading to the telephone or other instrument, the end of the wire being grounded in the usual manner after connection with the telephone. The clip is further provided with an opening through which is passed one end of a line or cord 21, leading to a convenient point within the building in which the telephone is situated, so that it may be readily grasped by the operator and the clip separated from the socket member by a pulling strain.

The device is so arranged that the local wire is disconnected from the main line at a safe distance from the building, and thus avoids the necessity of the use of the usual lightning-arrester and ground, while at the same time it avoids all danger of fire or injury to the instrument from the passage of a current of high intensity. In some cases the local wire may be employed as the means for transmitting a pulling strain to the members of the circuit-breaker; but it is preferred to employ a non-conducting cord or the like in order to avoid all danger of receiving a shock when an attempt is made to separate the clip and socket.

The device is preferably arranged within convenient reaching distance of a window or the like, so that the members of the circuit-breaker may be connected without difficulty when desired.

While the construction herein described, and illustrated in the accompanying drawings, is the preferred form of the device, it is

obvious that various changes in the form, proportions, size, and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described my invention, what I claim is—

1. A telephone-protecting device comprising a socket member secured to and supported by the main-line wire, a local wire connected to the telephone or other instrument within the building, a spring-clip secured to said local wire and adapted to engage in the socket, and a flexible cord secured at one end to the clip and extending within the building, substantially as specified.

2. A telephone-protector comprising a socket member formed of a sheet of metal bent to form a socket, the outer edges of the sheet being oppositely bent to form a flaring mouth, a line-wire to which said socket member is secured, a local wire connected to the telephone or other instrument within the building, a clip secured to the opposite end of the local wire and comprising a strip of metal bent to form two tongues of which one is adapted to enter a socket and the other to pass over one or other of the flaring edges of the socket-mouth to thereby assist in holding the clip and socket connected, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GEORGE ROBBERT BONHAM.

Witnesses:

JAMES MCKENNY,

RODRICK F. BONHAM.