(No Model.)

G. W. HILL.

INSULATOR FOR SECURING TELEGRAPH AND OTHER WIRES.

No. 324,692. Patented Aug. 18, 1885.

Fig. 1.

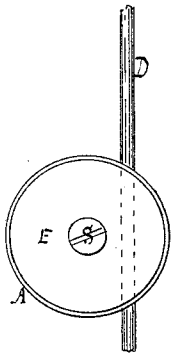


Fig. 2.

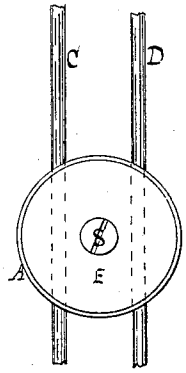
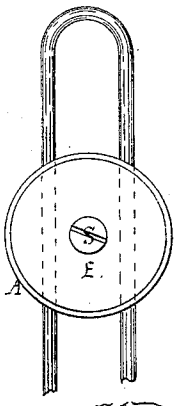


Fig 3.



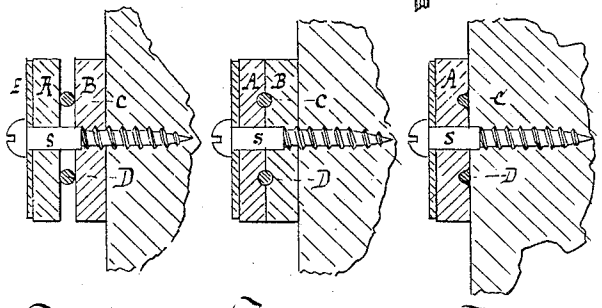
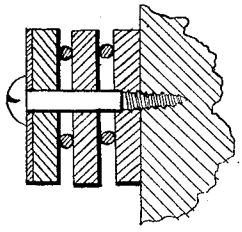


Fig. 4.

Fig. 5.

Fig. 6.

Fig. 7.



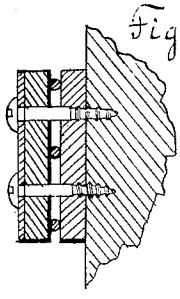


Fig. 8.

Witnesses.
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UNITED STATES PATENT OFFICE.

GEORGE W. HILL, OF QUINCY, MASSACHUSETTS.

INSULATOR FOR SECURING TELEGRAPH AND OTHER WIRES.

SPECIFICATION forming part of Letters Patent No. 324,692, dated August 18, 1885.

Application filed May 21, 1885. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. HILL, a citizen of the United States, residing at Quincy, in the county of Norfolk and State of Massachusetts, have invented a new and useful Attachment for Securing and Insulating Telephone and other Wires, of which the following is a specification.

The object of my invention is to produce a simple, cheap, and effective means of attaching electric or other wires to stationary surfaces, insulating them, if necessary, or otherwise, as the case may be.

In wires, insulated or not, for telephoning at distances where no battery is required, it is desirable that no sound or vibration should be communicated to the wires through the attaching medium. This I provide for.

In uninsulated wires, where a battery is employed, my attachment provides an insulator which keeps them free from all electrical influences communicated by contact with any conducting influence, excepting that of the surrounding atmosphere.

In insulated wires it is still necessary to have a further insulation in the device by which they are attached to the wall or other stationary surface to prevent any possible conduction by accident or otherwise. This I provide for.

It is also desirable to have the attachment for the wire so made that no turns of the wire about the attaching device will be required, thus avoiding any bending or twisting of the wire and allowing it to be readily removed and used in any other place without the necessity of straightening the wire, which in an insulated wire would sometimes destroy the insulation. This I provide for.

It is also obvious that a wire without any turns about an attaching device is a better conductor than one with such turns, a perfectly straight wire having no obstacles to overcome.

It is also desirable that the greatest possible facility should be gained for putting up the lines of wire, and this my attachment provides for.

It is also desirable to make a simple attachment for a circuit-wire for automatic fire-alarms or similar contrivances, and this I provide for.

In the drawings I have shown in Figures 1, 2, and 3 top views of my attaching device, and in Figs. 4, 5, 6, 7, and 8 sections of the same.

I make my attachment with two plates, A and B, of hard rubber or some other insulating material, when it is necessary to keep the rubber away from the wall, and fasten them to the wall by a screw, *s*, passing through the plates and into the stationary surface or wall, the plate B impinging upon the wall. When first put up, the wire or wires should be put in place, as shown in Fig. 4, and then when the screw is turned the plates A and B will be forced together and come into the position shown in Fig. 5, having embedded in them the wires C and D, or either of them, as D in Fig. 1, provided the material composing the plates is sufficiently soft to allow it. I prefer to place upon the outer surface of the plate A a metal or rigid washer, E, to aid in compressing the plates by means of the screw *s*. When the wires are in position, as shown in Fig. 4, a slight turn of the screw will hold them sufficiently firm to enable the person putting up the wire to pull and straighten them, and then further turns of the screw will fasten the wires securely, as shown in Fig. 5.

If the wire is to be secured to the wall, only one plate A, as shown in Fig. 6, is necessary for the purpose.

With my fastener a single wire may be secured to or free from the wall, as shown in Fig. 1, or two wires, as shown in Fig. 2, or a circuit-wire, as shown in Fig. 3; or more wires may be put into the same fastening, if desired; or a series of plates may be superimposed on each other, with wires between, if desired, as shown in section in Fig. 7.

I prefer to make my fastener of round plates, with a single screw passing centrally through them; but other forms may be found useful, and in some cases (for a number of wires, for instance) more than one screw would be desirable, as shown in section in Fig. 8.

My device is especially intended for interior work; but it may be used effectively on outside work or any electric or telephone wires.

I claim as my invention—

1. A device for securing and insulating wires, consisting of an insulating or securing plate made of an insulating material sufficiently soft and yielding to allow the wire to

embed itself into it, a surmounting plate sufficiently rigid to serve as a clamping-plate, and a screw passing through both such plates and entering the support, as set forth.

2. An insulating or clamping device consisting of plates A B, of soft insulating material, rigid plate E, and screw S, passing all these plates and into the support, as set forth.

3. An insulating and securing device, consisting of plates of soft yielding insulating material surmounted by a rigid clamping-plate, such plates having registering-perforations, and a fastening and clamping screw passing through such perforations and into the support, the parts being combined as and for the purpose set forth.

GEO. W. HILL.

Witnesses:
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