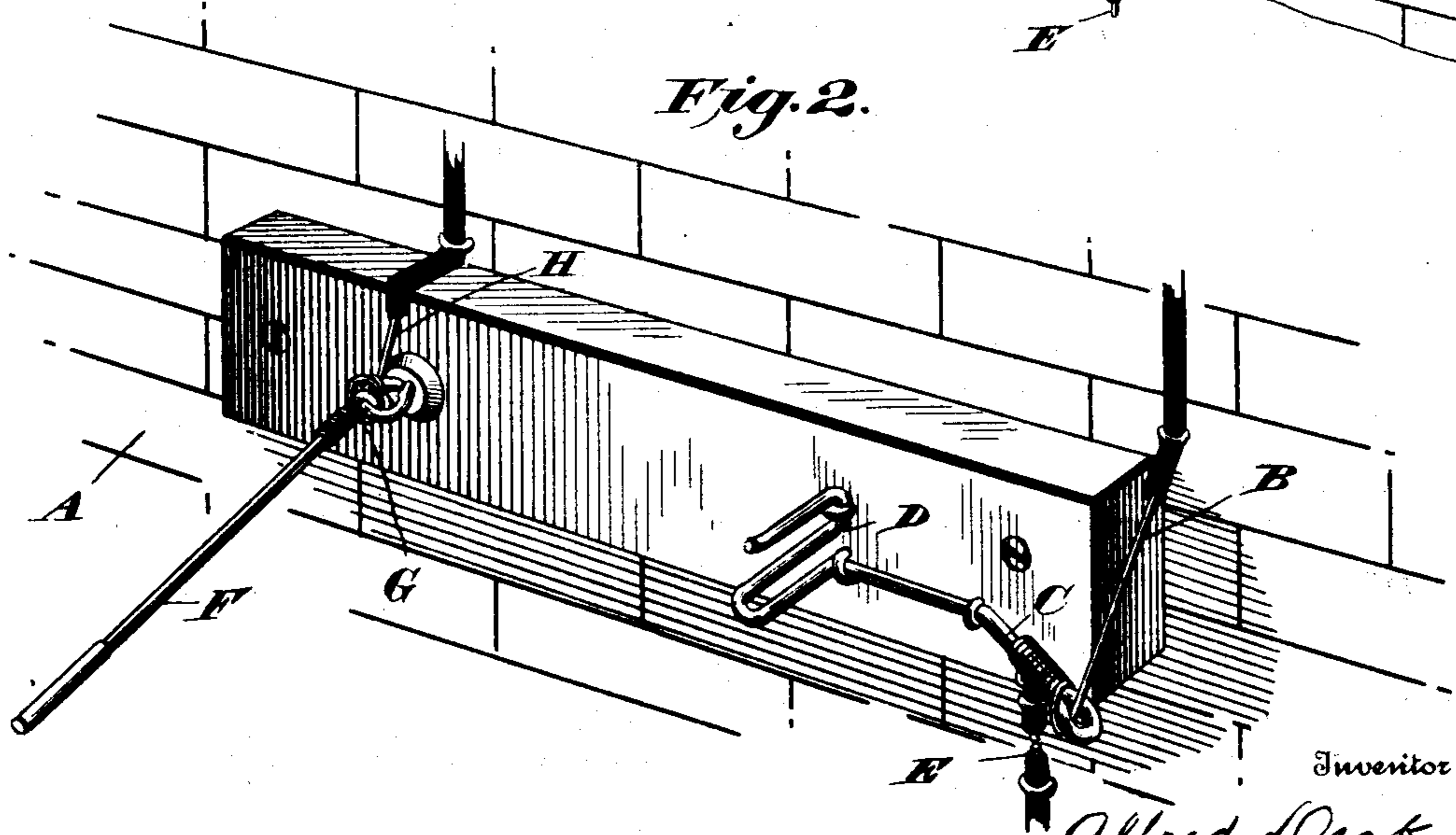
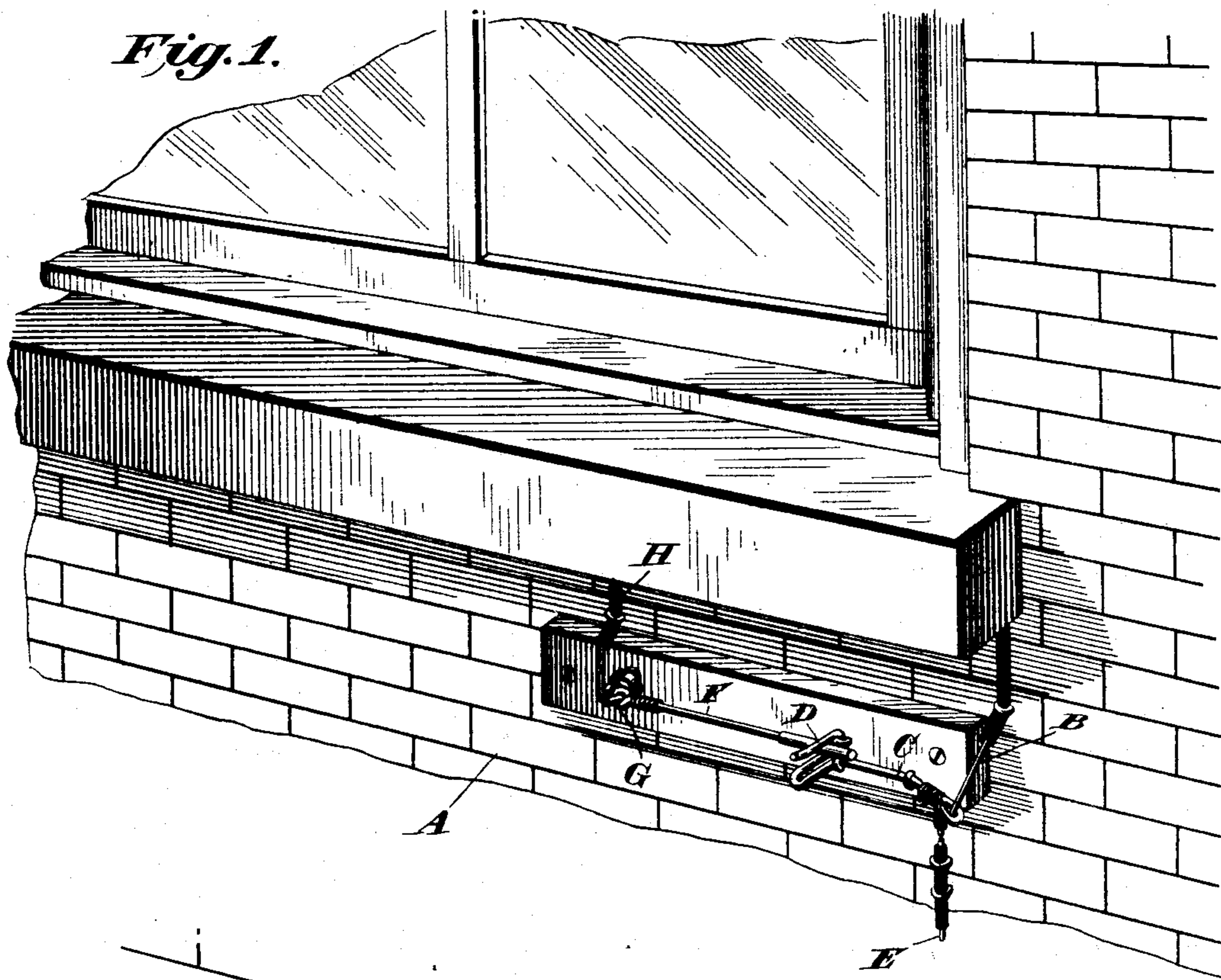


No. 682,458.

Patented Sept. 10, 1901.

A. DECK.
TELEPHONE PROTECTOR.
(Application filed June 12, 1901.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

ALFRED DECK, OF FRANKLIN TOWNSHIP, MONTGOMERY COUNTY, INDIANA.

TELEPHONE-PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 682,458, dated September 10, 1901.

Application filed June 12, 1901. Serial No. 64,247. (No model.)

To all whom it may concern:

Be it known that I, ALFRED DECK, a citizen of the United States of America, residing in Franklin township, in the county of Montgomery and State of Indiana, have invented certain new and useful Improvements in Telephone-Protectors, of which the following is such a full, clear, and exact description 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, forming a part hereof.

This invention relates to improvements in devices for protecting telephones from the effects of lightning; and it consists in certain novel features hereinafter first fully described and then particularly pointed out in the claims.

In the accompanying drawings, which fully illustrate my invention, Figure 1 is a perspective of the device, showing it in the position assumed when the telephone is in use; and Fig. 2 is a similar view showing the parts as they appear when the telephone is cut out.

Referring to the drawings, particularly by letter, A designates the wall of a building, and B the line-wire of the telephone. The line-wire is led down the side of the building and is wrapped around one end of a connector C, having its opposite end doubled on itself to form a U-shaped contact, as shown at D. The line-wire and the connector are secured to the wall of the building by insulators, as will be readily understood. The line-wire does not terminate at the connector, but passes below the same and has its end arranged adjacent to the end of a ground-wire E, which is secured on the building and passes to the ground. The U-shaped contact D projects horizontally from the building, and its bends are arranged in a vertical plane, so that it serves to support the free end of a switch or coupling rod F when the telephone is in circuit. The switch or coupling rod is of metal, so as to form an electric contact with the contact D, and it is hinged or loosely hung on an insulator secured on the wall, as shown at G. A feed-wire H has its end wrapped around the rod F near the pivot or hinge of the same and leads into the building and to the telephone, so as to carry the current to the instrument.

It is thought the use of the device will be readily understood. Ordinarily the switch or coupling rod is thrown over to the contact

D, and its end is held and clamped by the spring action of the branches of the same. The current then passes from the line-wire to the contact and connector and thence through the switch or coupling rod to the feed-wire and the telephone. Should a storm approach, the switch-rod is thrown out from the contact and hangs free on its pivot, thus interrupting the flow of the current, so that the path of least resistance will be across the arc between the end of the line-wire and the ground-wire, and consequently the current will flow into the ground-wire and pass to the ground. Any abnormal force of current which may be induced or collected in the line-wire will therefore be carried into the ground and prevented from passing inside the building. It will be obvious that the device serves as a lightning-rod to protect the building.

The device is very simple in its construction and manipulation and makes a direct ground connection for the release of an overcharge of electricity. The space between the ends of the line and ground wires is very slight and is no greater than a mere break in a continuous wire. The connector and the switch-rod may be secured to the wall of the building by small insulators; but I have shown them as secured upon a block of porcelain or other insulating material.

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

1. A telephone-protector consisting of a connector and contact, a switch-rod having its end adapted to engage the contact, the line-wire coiled around the connector and carried beyond the same, a ground-wire having its end adjacent to the end of the line-wire, and a feed-wire having one end coiled around the end of the switch-rod and leading to the telephone.

2. A telephone-protector having a connector and contact consisting of a wire having one end doubled on itself, and a switch or coupling rod loosely supported at one end and having its opposite end adapted to engage the doubled portion of the contact.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ALFRED DECK.

Witnesses:

WILLIAM H. BROWN,
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