

(No Model.)

R. DUNCAN.
INSULATOR HANGER.

No. 573,966.

Patented Dec. 29, 1896.

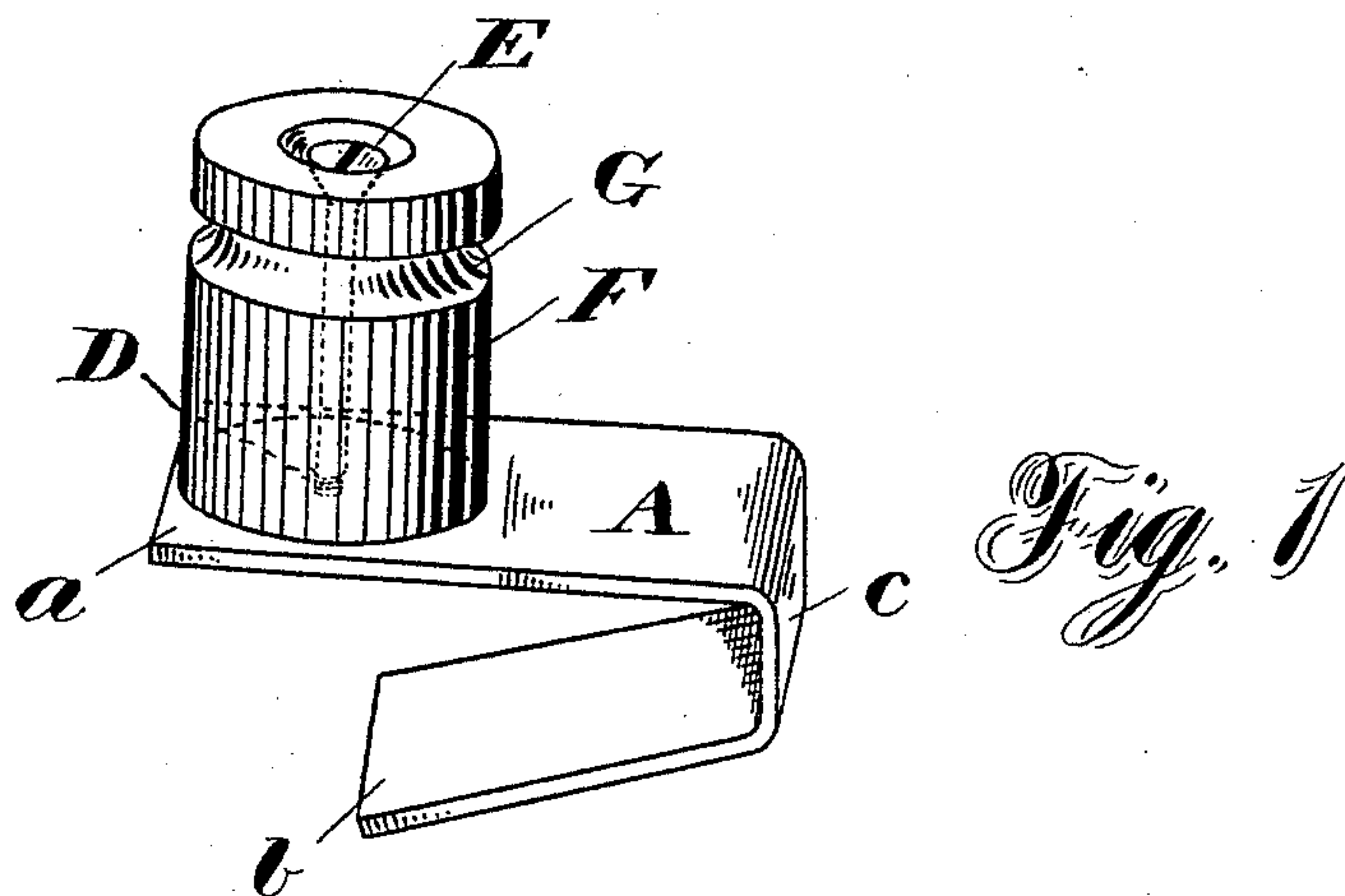


Fig. 2

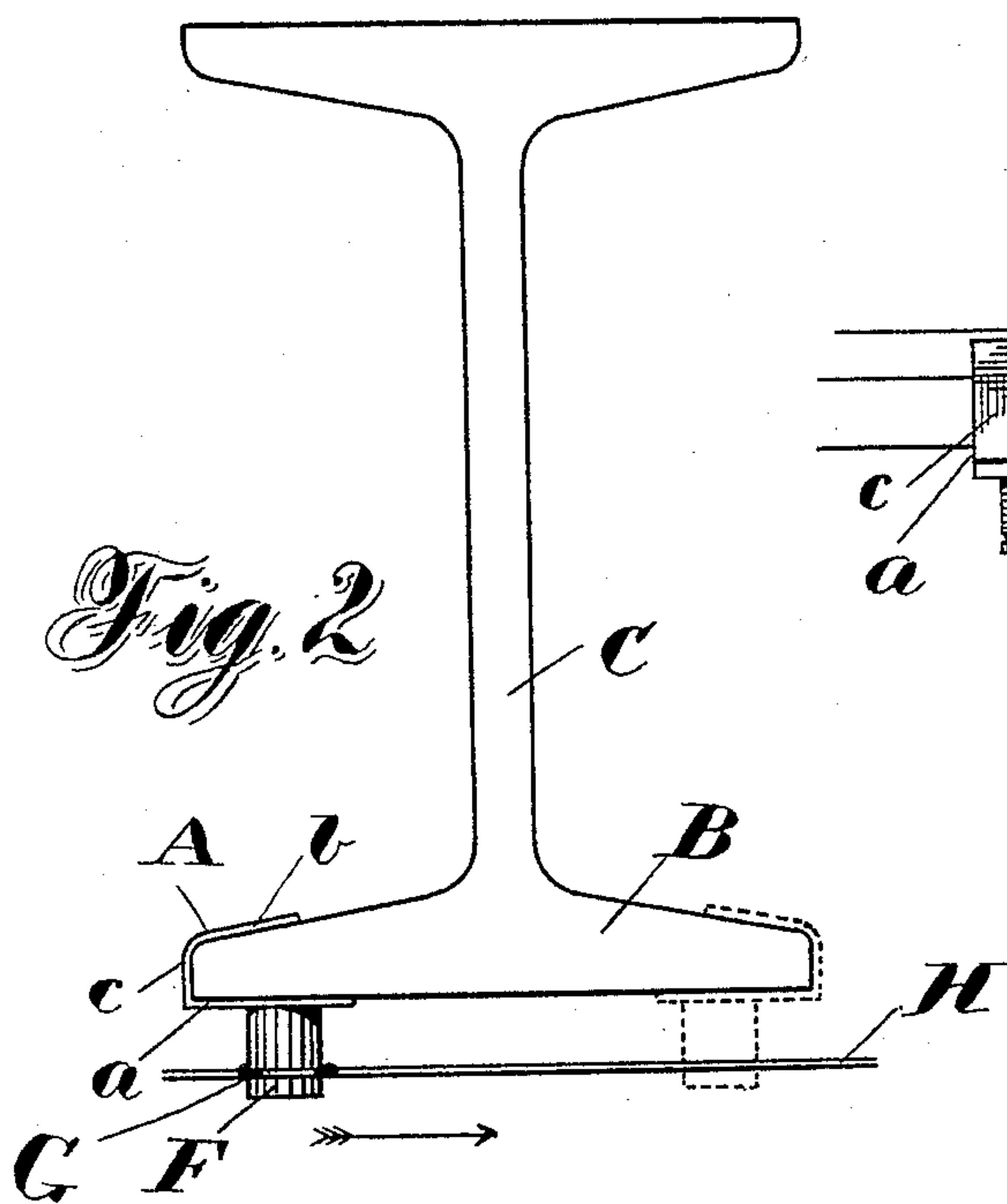
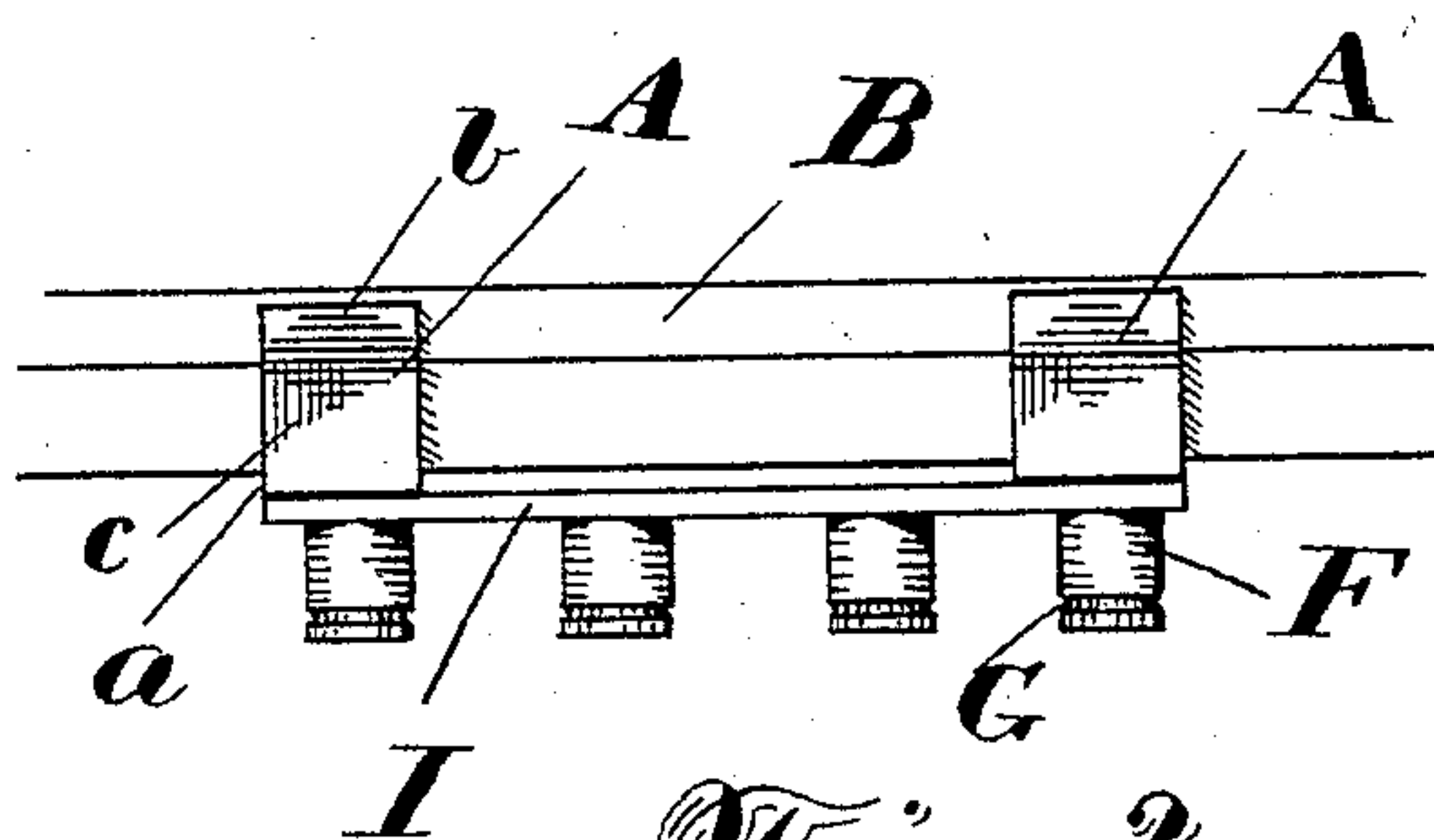


Fig. 3



Witnesses.

Edw. Kincaid.
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UNITED STATES PATENT OFFICE.

ROBERT DUNCAN, OF SAN FRANCISCO, CALIFORNIA.

INSULATOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 573,966, dated December 29, 1896.

Application filed December 31, 1895. Serial No. 573,954. (No model.)

To all whom it may concern:

Be it known that I, ROBERT DUNCAN, a citizen of the United States, and a resident of the city and county of San Francisco and State of California, have invented certain new and useful Improvements in Insulator-Hangers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to that class of devices known in the art as "insulator-hangers," which support wires for electrical purposes; and my prime object, among others, is to provide a simple, inexpensive, and durable device by the use of which the ordinary glass or porcelain insulators can be readily hung or attached to the common **I** or **T** shaped beams which form the supports of floors of buildings or other structures, and, further, to provide for the ready removal of the insulators as a result of a change in the line of wires.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

In the accompanying drawings, which form a part of this specification, I have clearly illustrated the invention, and in the several views have employed like letters of reference to designate like parts.

Figure 1 is a perspective view of my improved hanger with insulator positioned thereon. Fig. 2 is a sectional elevation of an ordinary **I**-shaped beam, showing the relative positions of hanger, insulator, and wire for carrying the current; and Fig. 3 is an elevation of an iron beam, showing the manner of hanging a group of insulators thereon.

I will now explain the construction of my invention, reference being had to the above figures.

The hanger proper consists of a single piece of flat metal **A**, bent upward and backward to conform with the flange **B** of an ordinary steel or iron **I** or **T** shaped beam **C**, which latter are employed almost exclusively to support successive floors of large buildings.

The lower leg *a* of the hanger, or that adapted to rest against the lower surface of the flange of the beam **C**, is made slightly

longer than the upper leg *b*, which latter is inclined slightly from a direction parallel to that of the leg *a* in order to conform with the tapering edge of the beam. The short connecting member *c* is either curved or straight to conform with the outer edge of the flange **B** of the beam. Near the outer extremity of the leg *a* is a threaded perforation **D**, into which is seated the extremity of a screw **E**, the latter passing longitudinally through the insulator **F**, which is of the ordinary form, with a peripheral groove **G** for the reception of the wire **H**, which carries the current.

In Fig. 2, assuming that the tension is in the direction of the arrow, the position of the hanger would evidently be that shown, but if the tension were in the opposite direction the hanger would assume the position shown in dotted lines.

In cases where it is desired to hang a number of parallel wires, instead of providing a hanger such as described for each insulator, it is my intention to group the insulators, at the desired distances apart on a board or other cheap substance, as shown at **I**, Fig. 3, and at each extremity of this board secure one of my hangers, when it will be readily seen that the entire group of assembled insulators can be readily attached to the beam.

In cases where extreme security is desired or where the direction of the wire is suddenly diverted a hanger may be placed at each side of the flange of the beam, as shown by dotted and full lines in Fig. 2.

The construction and arrangement of the several parts of my invention being thus made known, the employment and advantages of the same will, it is thought, be readily understood.

Having thus fully described my invention, what I claim, and desire to secure, is—

1. In combination with an electric wire, of a hanger for electric insulators consisting of a flat piece of metal bent or cast to removably and loosely fit over the flange of a metal beam, said hanger being retained on said beam by the horizontal tension of said wire substantially as and for the purpose set forth.

2. In combination with an electric wire, of an insulator provided with a bent hook

adapted to removably and loosely fit over the flange of a metal beam and retained thereon by the horizontal tension of said wire substantially as and for the purpose set forth.

- 5 3. An insulator-hanger consisting of plate I, metal hooks A A secured to opposite extremities of said plate and two or more insulators secured to said plate, said hooks being adapted to removably and loosely fit

over the flange of a metal beam, substantially as and for the purpose set forth.

In testimony whereof I hereunto set my hand in presence of two witnesses.

ROBERT DUNCAN.

Witnesses:

H. W. LITTLE,
ELIZ. KINCAID.