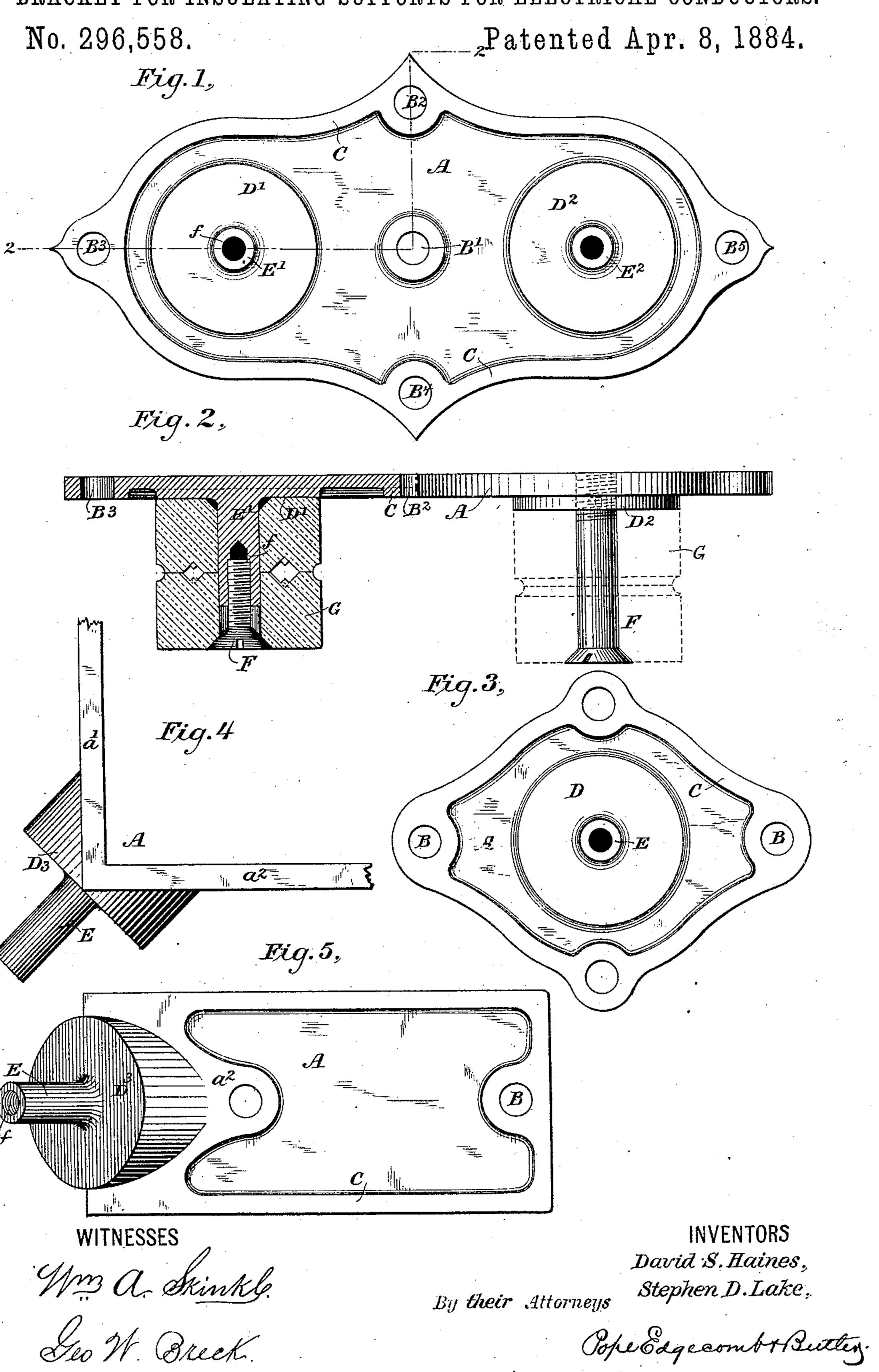
(No Model.)

## D. S. HAINES & S. D. LAKE.

BRACKET FOR INSULATING SUPPORTS FOR ELECTRICAL CONDUCTORS.



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BRACKET FOR INSULATING-SUPPORTS FOR ELECTRICAL CONDUCTORS.

SPECIFICATION forming part of Letters Patent No. 296,558, dated April 8, 1884.

Application filed November 30, 1883. (No model.)

To all whom it may concern:

Be it known that we, DAVID S. HAINES, of the city and county of New York, and STEPHEN D. Lake, of Brooklyn, county of Kings, both 5 in the State of New York, have jointly invented certain new and useful Improvements in Brackets for Insulating-Supports for Electrical Conductors, of which the following is a specification.

This invention relates to certain improvements in the construction of brackets for receiving insulators for telegraphic and other electric conductors, and particularly an insulator of the character invented by us, for which 15 application for Letters Patent has been made bearing even date with this. This insulator may be briefly described as being constructed in two cylindrical sections adapted to be placed and securely fastened with their ends 20 against each other. The confronting ends are grooved to receive the conductors to be supported, and in the groove are formed lugs or projections adapted to bind the conductor tightly by forcing it out of a straight line. The 25 sections of the insulators are provided with axial apertures, through which extends a spindle or support for holding the same in position.

Our invention consists in constructing a sup-30 porting-bracket of iron or other suitable material in a form designed to secure strength, and provided with the necessary parts for receiving the insulator and firmly supporting it in any desired place. Brackets for similar 35 purposes have heretofore been made of wood, which is liable to split, and, in order to be of sufficient strength, are necessarily so large as to be clumsy and unsightly. Where their use has been discontinued and their removal be-40 comes necessary, they are apt to be so damaged by removal that they cannot be used again.

In the accompanying drawings, which illustrate our invention, Figure 1 is a plan view of 45 a double bracket; and Fig. 2 is a side elevation of the same, a portion being shown in section with an insulator applied. Fig. 3 is a plan view of a single bracket. Fig. 4 is a plan

upon the corners of buildings, and Fig. 5 is a 50 side elevation of the same.

Referring to Figs. 1 and 2, A represents the base of the bracket, which is preferably made of malleable iron, although different metals or compositions may be used, if desired. The 55 base A, which is of any convenient form or shape, is provided with a suitable number of holes, B', B<sup>2</sup>, B<sup>3</sup>, B<sup>4</sup>, and B<sup>5</sup>, for receiving the screws or nails which are used for securing the brackets to a wall or other main support. The 60 general surface of the base A is preferably depressed, as shown more clearly in the sectional view, Fig. 2, thus forming a ridge, C, around the entire bracket, which serves to strengthen it. Slight elevations D' and D<sup>2</sup>, of a size cor- 65 responding to the insulating-supports G, which are to be placed upon them, are raised upon the depressed surface, and they may be of the same or greater height than the ridge C.

Extending from the centers of the raised 70 surfaces D' and D2, respectively, are projections or spindles E' E2, forming part of the bracket. These projections are drilled and tapped, as shown at f, for the admission of machine-screws F. The projections E are 75 somewhat shorter than the two sections of the insulating-support G which is placed upon it, in order that the screw may clamp the two sections firmly together, as shown in Fig. 2. In some cases, to secure greater strength, the 80 spindle may be omitted, the seat for the insulator raised somewhat more, and the screw may then be of the full size of the aperture formed in the insulator, and be screwed into the base. This construction is shown in the 85 right-hand portion of Fig. 2.

Fig. 3 illustrates the invention as embodied in a single support. The various parts are constructed in substantially the same manner as has been described, and are indicated by 90 corresponding reference-letters, and will therefore not require further description.

Figs. 4 and 5 represent the device arranged especially for attachment to the corners of buildings. The construction employed in this .95 modification is essentially the same. The projection D<sup>3</sup>, however, preferably extends from view of an angular form adapted to be placed | the exterior angle formed by the two sides a'

and  $a^2$  of the main support A, instead of from { the flat surface of the same, thus holding the insulator in the position generally most desired, when attached to the corner of any 5 structure.

Other forms may be used, adapted to different positions upon the surface or angles of the structure to which they are to be fastened.

We claim as our invention—

1. The combination, substantially as hereinbefore set forth, of an insulator-bracket, means for securing the same to a support, a stem for receiving an insulator, and a screw fitting into said stem and serving to bind said insulator 15 upon said stem.

2. The combination, substantially as hereinbefore set forth, of the bracket A, having a stem, E, the screw F, and the insulator G.

3. The combination, substantially as hereinbefore set forth, of an insulator-bracket, means 20 for securing the same to a permanent support, a seat for an insulator raised upon the surface of said bracket, and means, substantially such as described, for securing an insulator upon such seat.

In testimony whereof we have hereunto subscribed our names this 28th day of November,

A. D. 1883.

DAVID S. HAINES. STEPHEN D. LAKE.

Witnesses:

CARRIE E. DAVIDSON, CHARLES A. TERRY.