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D. G. SMEAD

1,961,434

ADJUSTABLE INSULATOR BRACKET

Filed Dec. 26, 1933

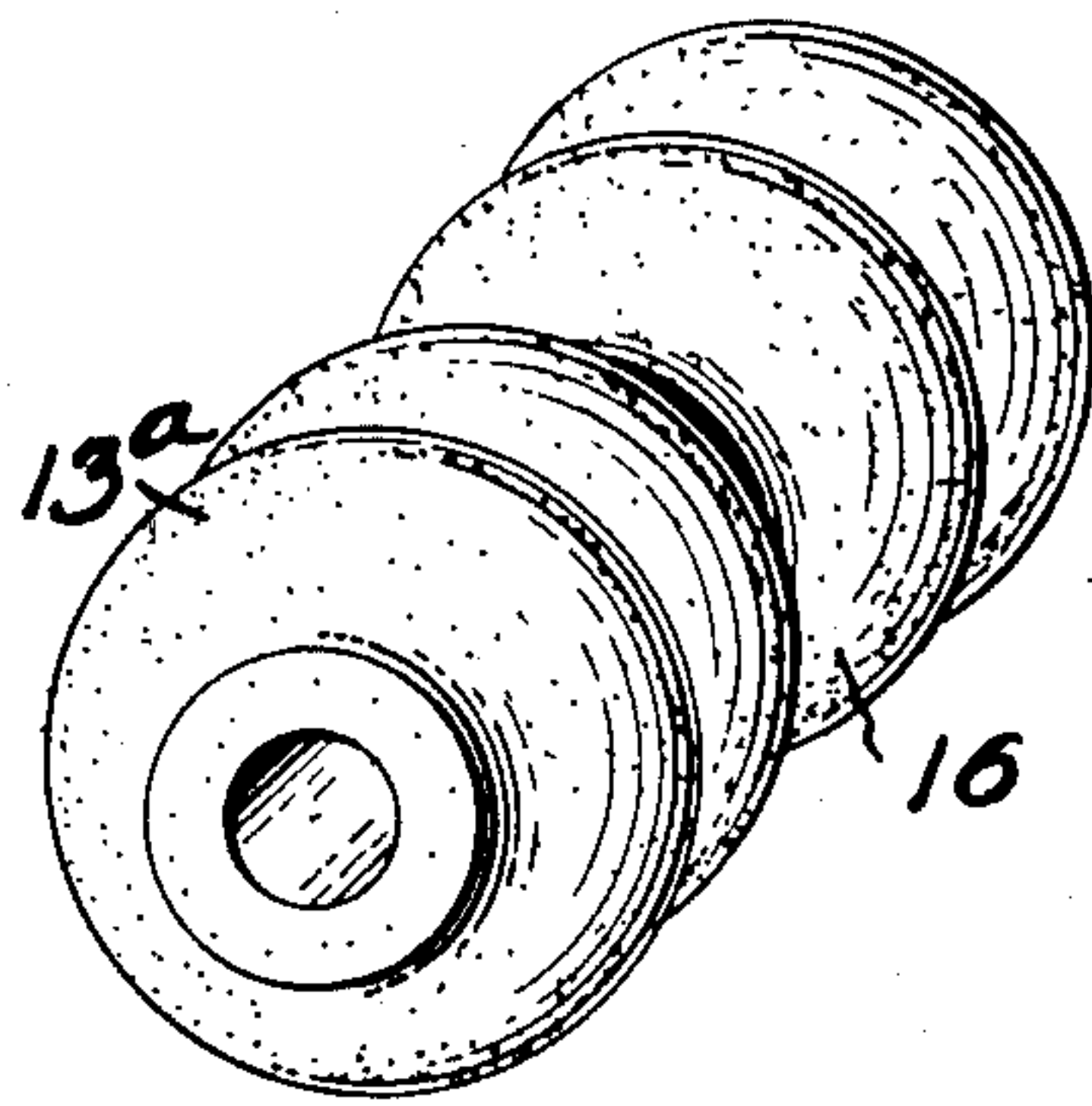
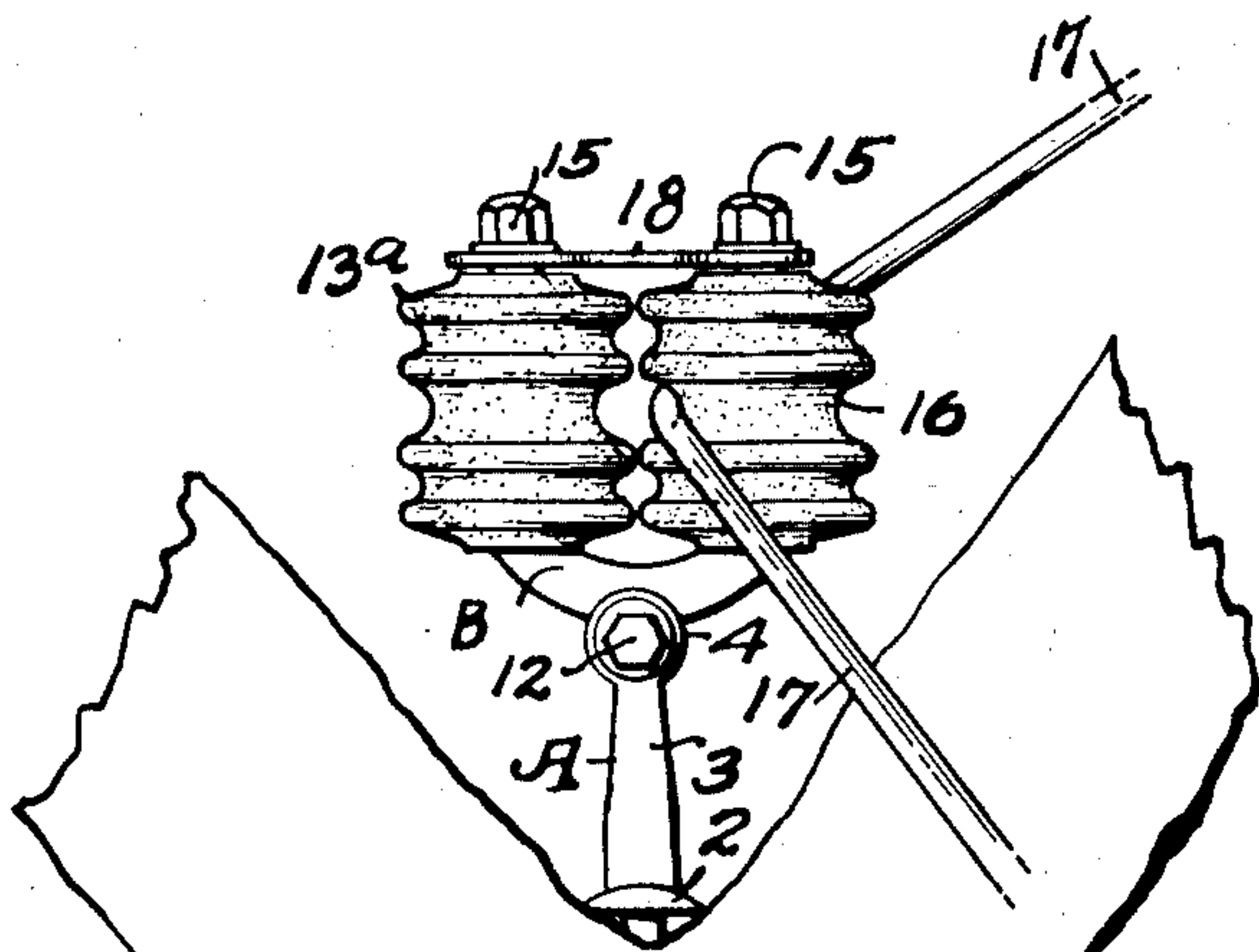


Fig. 3.

Fig. 5.

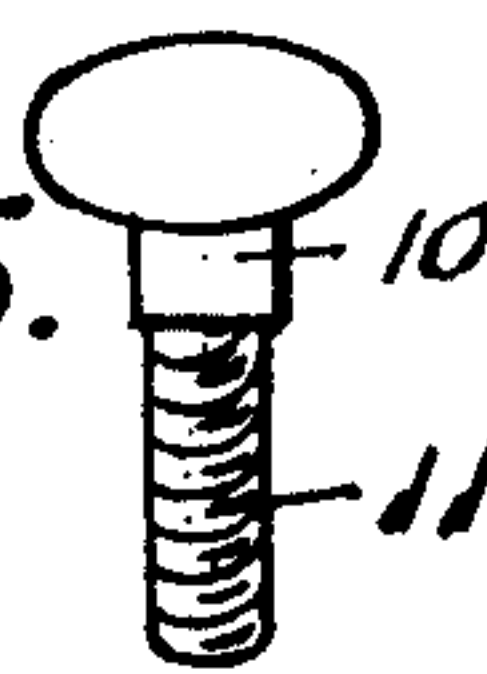


Fig. 4.

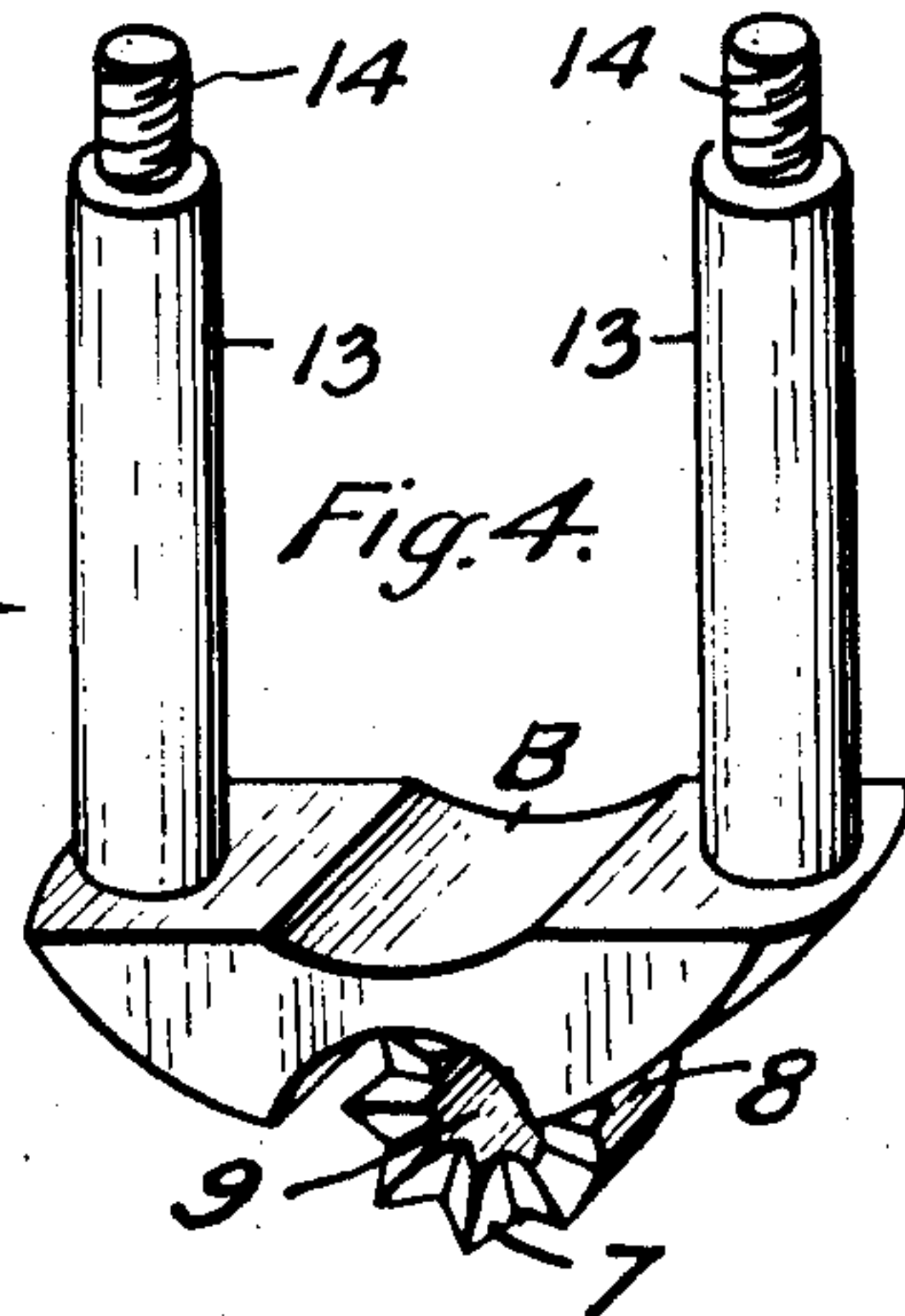


Fig. 6.

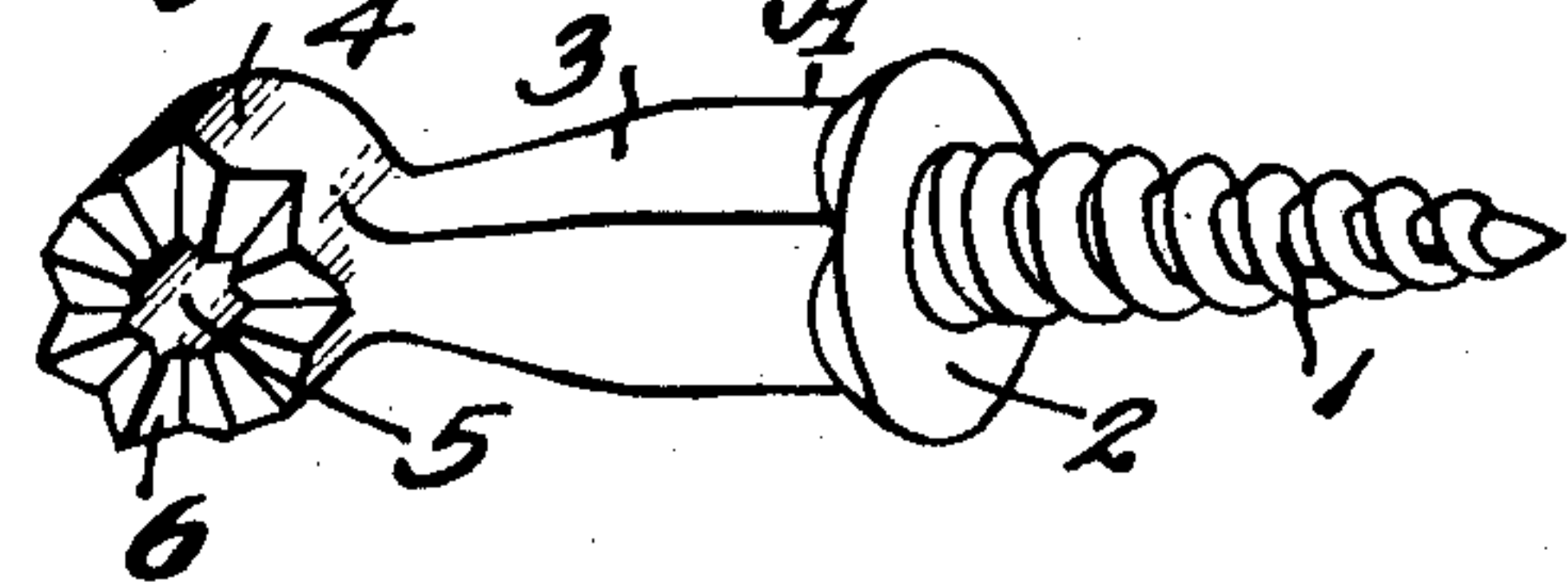


Fig. 1.

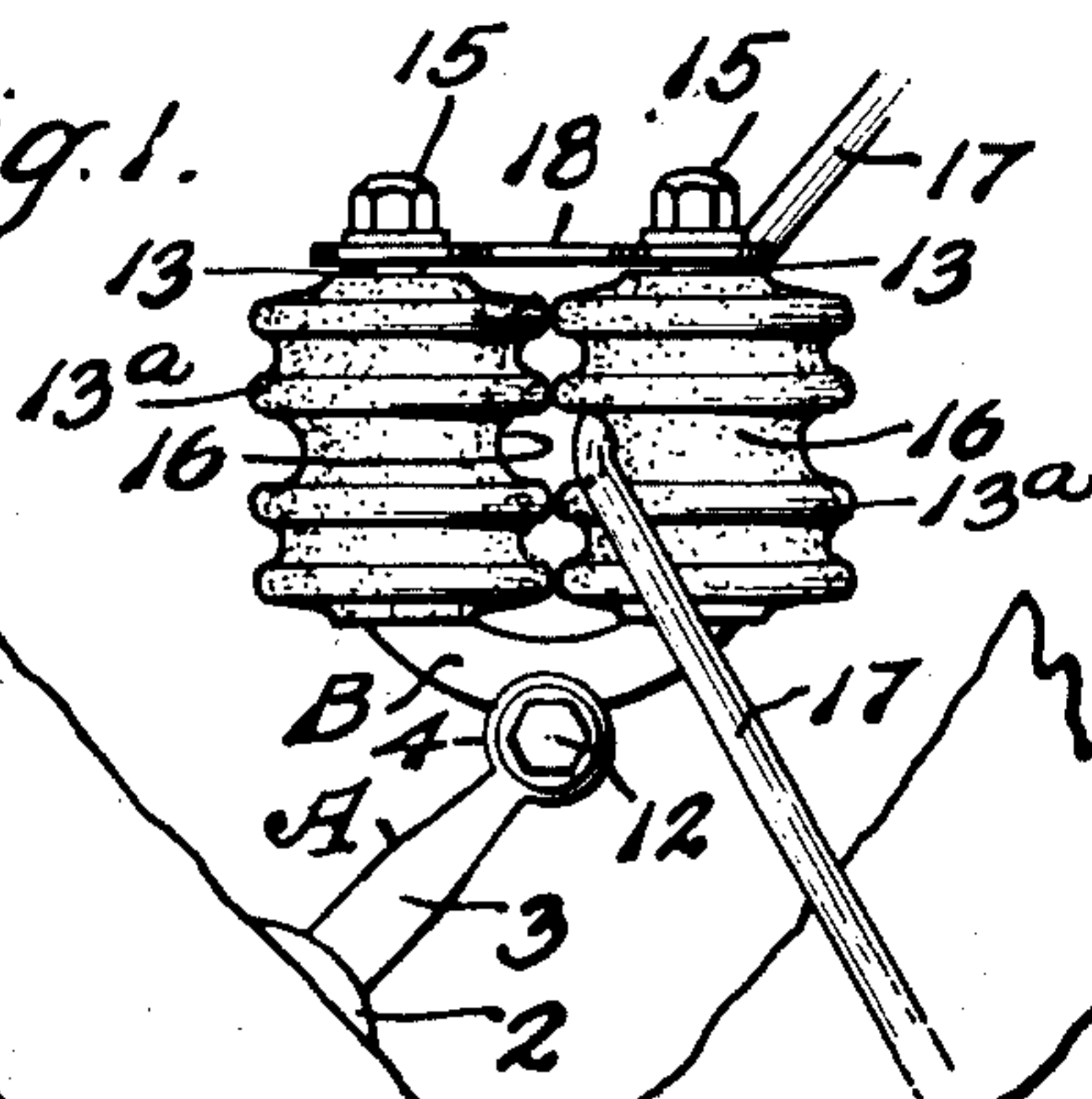


Fig. 2.

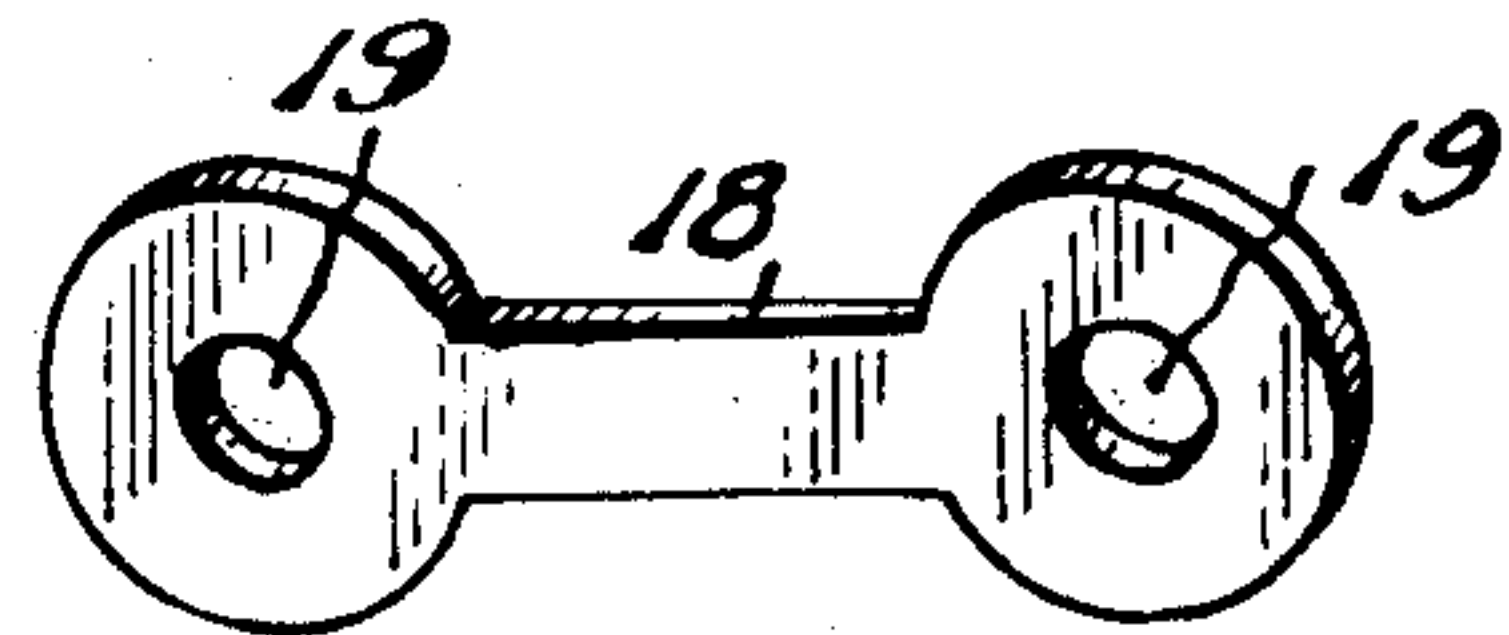


Fig. 7.

Inventor
D. G. Smead

Robb & Robb

Attorneys

UNITED STATES PATENT OFFICE

1,961,434

ADJUSTABLE INSULATOR BRACKET

Donald G. Smead, Greenfield, Mass.

Application December 26, 1933, Serial No. 704,034

1 Claim. (Cl. 173—321)

This invention relates to insulator mountings and more particularly, to those types of mountings applicable to trees, such as where it is desirable or necessary to string a cable or conductor through the limbs of a tree or in close proximity thereto. In such applications, it is important to avoid actual contact between the conductor and the tree so as to prevent chafing of the insulation about the conductor, in the case of an insulated conductor, due to swaying of the limbs, which would ultimately result in grounding the conductor and possible heavy short circuit sufficient to burn the conductor in two, not to mention the likelihood of injury to the tree. This grounding of conductors against trees is frequently the source of disturbances on radio sets so annoying to the listener.

In applying insulators to trees, it is important to provide a mounting which may be firmly secured in position with the least possibility of injury to the tree. My improved mounting has been devised with all of the foregoing in mind, and to the end of providing a light weight, yet durable and strong mounting capable of adjustment to various positions depending upon the desired or required location of the conductor and its relative position with respect to the tree, bearing in mind that the limbs extend in many and various angles and directions.

More specifically, the invention comprises two main sections, a shank or screw section and a forked insulator support adjustably connected to the first mentioned section, the said sections together forming a light bracket which may be secured in different angular positions on a tree or other support, as may be required.

Other and further objects and advantages of the invention will be hereinafter set forth and the novel features thereof defined by the appended claim.

In the drawing:

Fig. 1 is a view showing two insulator mountings secured to a tree, one showing a vertical and the other a right angle adjustment, each particularly suited for the point of mounting upon a tree;

Fig. 2 is a similar view showing an embodiment of the invention with a 45° adjustment of the insulator member;

Fig. 3 is a perspective view of one of the insulator members;

Fig. 4 is a perspective view of the forked section of the bracket;

Fig. 5 is a detail view of the connecting bolt and nut;

Fig. 6 is a perspective view of the shank or screw section of the bracket; and

Fig. 7 is a detailed view of a connecting strap for the insulator supports.

Like reference characters designate corresponding parts in the several figures of the drawing.

Referring to the drawing, the shank section A, shown in Fig. 6 comprises the screw portion 1 terminating at its top in the flange 2 merging into the wrench-hold portion 3 which in turn terminates in the head 4 having a transverse bore 5 to receive the connecting member hereinafter referred to. The side face of the head 4 is formed with serrations or notches 6 to interengage with a corresponding face 7 in the extension boss 8 at the base of the forked section B, said boss being also provided with a squared bore 9 to receive the squared portion 10 of the connecting bolt 11. 12 designates the flanged nut for the bolt 11.

From the base of the section B extend upwardly the spaced posts 13—13 terminating in the reduced threaded extremities 14—14 adapted to receive cap nuts 15—15. Upon the posts 13 are mounted a pair of high voltage insulators 13^a which are correspondingly provided with annular grooves the central one 16 of which forms a wire or conductor receiving seat. The posts 13 are so spaced apart that the peripheries of the insulator members substantially touch each other so that the grooves 16 when in this association are effectively closed against displacement of the conductor 17, once this conductor is mounted therebetween.

To prevent bending of the posts under lateral strains produced in the use of the device is preferably employed a connecting strap 18 having spaced apertures 19 to receive the threaded ends 14 of the posts 13. The strap serves also as a washer member against which the cap nuts 15 are screwed.

In the use of the insulator bracket above described the shank section A is first applied at the proper position upon a tree or other object. After inserting the conductor between the insulator members 13^a in assembling this section, said section B is connected to the shank section A by means of the connecting bolt and nut 11, 12. The section B is disposed in the angular position best suited to accommodate the conductor before the connecting bolt is tightened. In the device illustrated the section B may be disposed in three different positions, in the vertical position shown in the top of Fig. 1; in the right

angle or 90° position shown at the bottom of Fig. 1, or in the 45° angle position shown in Fig. 2. It is to be understood of course that the serrations or teeth forming the interengaging joint may be so constructed as to give a greater number of positions or adjustments for this bracket. It is preferable that non-rusting material, such as aluminum should be used in the construction of this supporting bracket in order that a light article may be provided but other materials may be employed as found desirable.

As hereinbefore premised the insulator members 13^a are free to rotate as the bracket moves relatively to the conductor 17 due to swaying of the tree or branches to which it is connected. This eliminates the wear of the insulation on the conductor to a great extent and serves to prevent undue strains in an obvious manner.

While the specific details of construction have been herein shown and described, the invention is not confined thereto as alterations may be made without departing from the spirit thereof as defined by the appended claim.

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

An insulator bracket of the class described comprising a shank section adapted to be connected to a tree or similar support, the head of said shank section being provided with a transverse bore and serrations on one face thereof, an adjustable section having on the base thereof a boss extension transversely bored and provided with serrations adapted to coact with the serrations on the shank section, a connecting member for positively holding the adjustable section at different angles relative to the shank section, post members extending upwardly from the base of the adjustable section, insulator members rotatably mounted on said posts, and a connecting strap for connecting the posts together at their free ends, said insulator members being provided with a conductor receiving seat which is substantially closed in the coacting relation of said insulator members.

DONALD G. SMEAD.

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