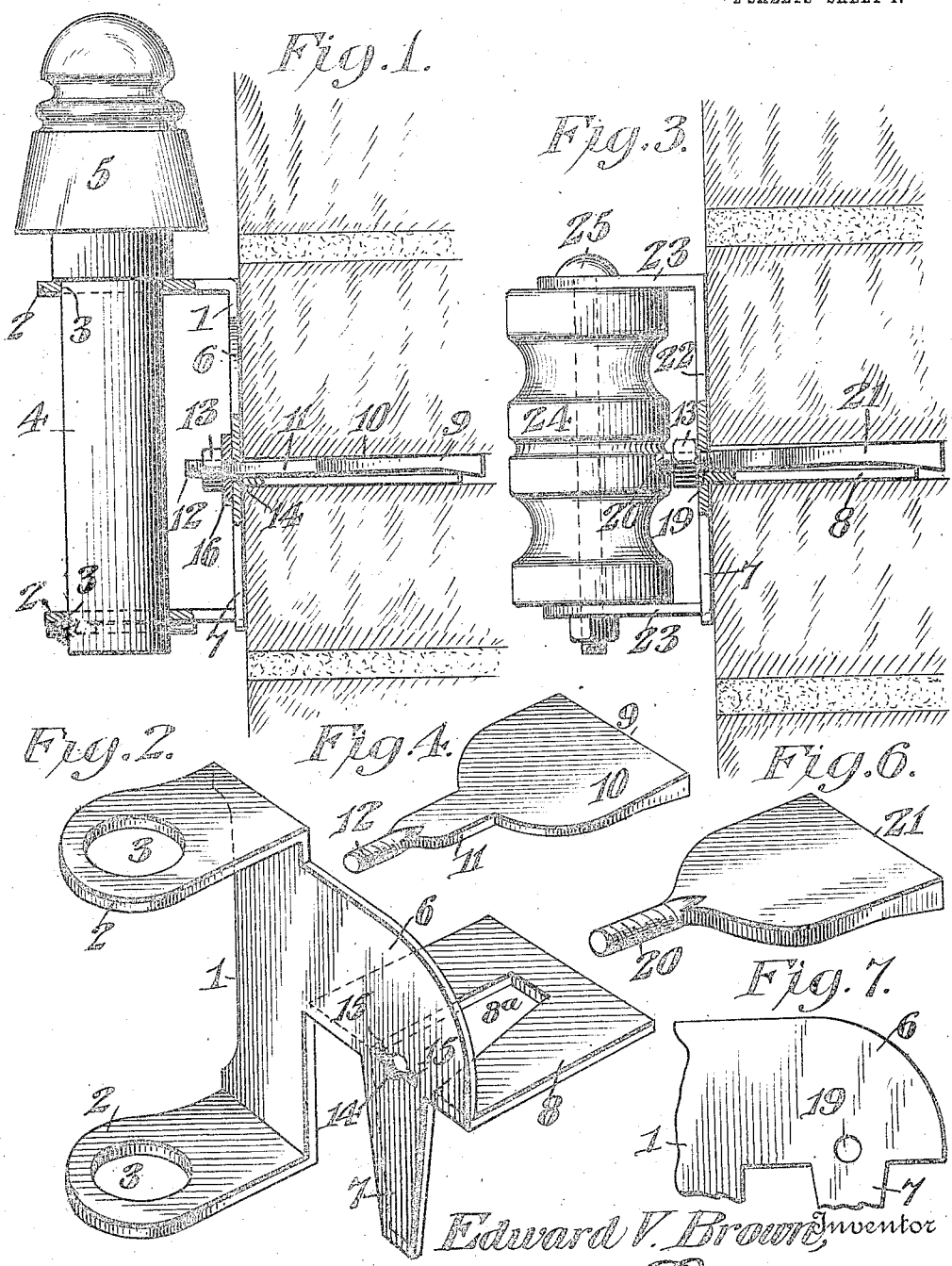


E. V. BROWN.
INSULATOR BRACKET.
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2 SHEETS—SHEET 1.

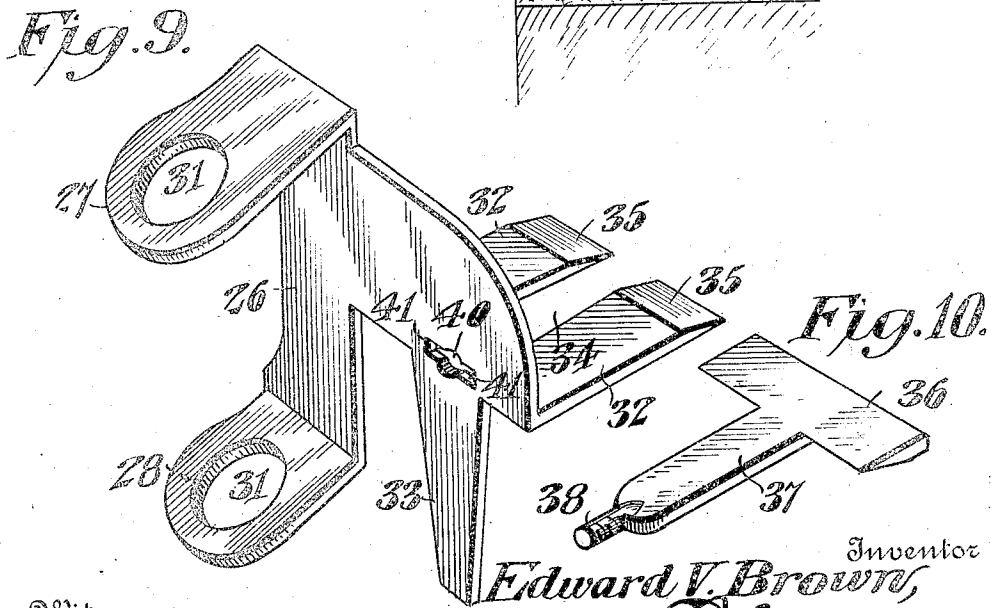
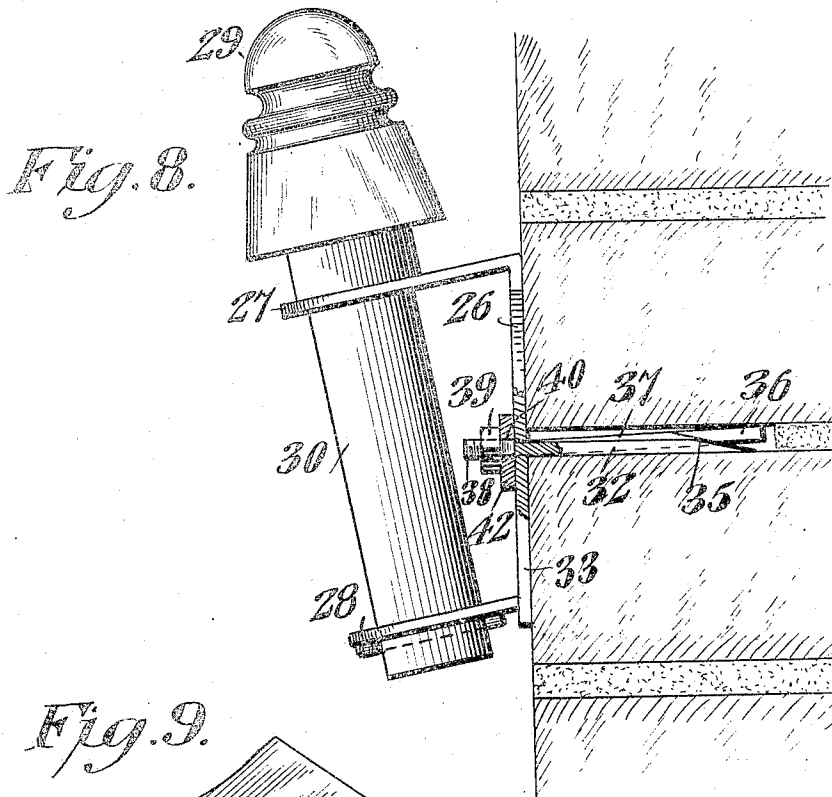


Witnesses
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Fig. 5
16
17
18
19

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UNITED STATES PATENT OFFICE.

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INSULATOR-BRACKET.

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To all whom it may concern:

Be it known that I, EDWARD V. BROWN, a citizen of the United States, residing at New Albany, in the county of Floyd and State of Indiana, have invented a new and useful Insulator-Bracket, of which the following is a specification.

The invention relates to improvements in insulator brackets.

The object of the present invention is to improve the construction of insulator brackets, designed for supporting telegraph, telephone and other electrical wires, and capable of being quickly applied to a brick or stone wall, and of being readily removed therefrom without damaging the wall.

Another object of the invention is to provide an insulator bracket of this character, adapted to be readily applied to any corner of a building, and equipped with means for firmly anchoring it to the same, whereby it is effectually prevented from being pulled therefrom by a light strain, so that the danger incident to live wires and resulting from the pulling out of the supporting brackets will be practically eliminated.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims here-to appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:—Figure 1 is a vertical sectional view, partly in elevation, of an insulator bracket, constructed in accordance with this invention. Fig. 2 is a perspective view of the bracket detached. Fig. 3 is a vertical sectional view partly in elevation, illustrating a slight modification of the invention. Fig. 4 is a detail perspective view of the slidable wedge, shown in Fig. 1. Fig. 5 is a detail perspective view of the slotted washer. Fig. 6 is a similar view of the slidable wedge, shown in Fig. 3. Fig. 7 is a detail view of a portion of the bracket, shown in Fig. 3. Fig. 8 is a vertical sectional view, partly in section, illustrating another form of the invention. Fig. 9 is a perspective view of the bracket illustrated

in Fig. 8. Fig. 10 is a detail perspective view of the slidable wedge, shown in Fig. 8.

Like numerals of reference designate corresponding parts in all the figures of the drawing.

1 designates an insulator bracket, designed to be preferably stamped from suitable sheet metal to enable it to be cheaply manufactured, but it may be constructed in any other preferred manner, as will be readily understood. The bracket, which has a vertical back or body portion to fit against a wall, is provided with upper and lower horizontal insulator supporting arms 2, which in the form of the invention illustrated in Figs. 1 and 2, are provided with vertically aligned circular openings 3, adapted to receive a pin 4, on which a standard insulator 5 is mounted in the usual manner. The insulator 5 is in the form of a cap and is screwed on the upper end of the pin. As the particular construction of the insulator and the manner of securing the same to the upper end of the pin do not constitute a portion of the present invention, detail elevation thereof is deemed unnecessary.

The vertical body or back of the bracket is provided at the upper portion with a lateral extension 6 from which depends a vertical arm 7, adapted to fit against the wall to brace the bracket. The bracket is also equipped with a rearwardly extending horizontal attaching member 8, adapted to be introduced into a joint between two bricks or stones, as illustrated in Fig. 1 of the drawing, and coöperating with a slidable wedge 9 to engage the bricks or stones at the joint, whereby the bracket is securely anchored to the wall. The horizontal member 8 is formed integral with the bracket, which is stamped from a single piece of metal, the depending arm 7 being cut from the central portion of the horizontal attaching member 8 prior to bending the blank into the form illustrated in Fig. 2.

A sufficient amount of mortar or cement is removed from the joint of a wall to enable the horizontal member 8 and the slidable wedge to be introduced therein. The slidable wedge is provided with a flat horizontal upper face 10, and its lower face is beveled or inclined at the rear portion to form the wedge. The member 8 is fitted against the flat front portion of the lower face of the wedge when the parts are introduced into

the joint, and the wedge is then drawn outward to carry the tapered rear portion forward and interpose the same between the horizontal member 8 and the upper brick or stone of the joint. This provides a positive clamp, which is adapted to effectually prevent the bracket from being pulled out by the strain incident to supporting telegraph, telephone and other electrical wires.

The slidable wedge is provided with a stem 11, having a threaded portion 12 adapted to be engaged by a nut 13. The stem 11, illustrated in Fig. 4, is thin and flat and extends through an opening 14, consisting of a central circular portion and side slots or extensions 15. A washer 16 is preferably interposed between the nut and the bracket, and is provided with an opening 17, having side slots or extensions 18 and corresponding with the opening 14. The thin flat shank is designed for use on buildings having pressed brick walls, where the joint is small and the wedge is correspondingly reduced in thickness. When, however, the bracket is to be employed on walls having relatively wide joint, a circular opening 19 and a round shank 20 are employed, and the wedge 21 is of increased thickness. The depending arm 7 is cut from the horizontal attaching member not only for the purpose of embracing the bracket, but also to provide a longitudinal slot or opening 8, extending rearwardly from the openings 14 or 19 and adapted to permit the shank of the wedge to be dropped to the desired extent. This will enable a relatively large shank or bolt to be employed for operating the wedge when desired.

The insulator bracket is adapted for supporting various kinds and styles of insulators, and the bracket 22, illustrated in Fig. 3 of the drawings, is provided with horizontal supporting arms 23 between which is arranged an insulator 24, which is in the form of a sleeve. The arms 23 are provided with openings for the reception of a bolt 25, which also passes through the insulator.

The insulator bracket, which is adapted to effect a great saving in time in applying wires to a wall does not damage the latter beyond the removal of a small amount of mortar or cement from the joint.

In Figs. 8 to 10 inclusive is illustrated a modification of the invention in which the bracket 26 is stamped, or otherwise formed from a single piece of sheet metal. This bracket is equipped with upper and lower supporting arms 27 and 28, extending downwardly and outwardly at an inclination and adapted to support an insulator 29 at an angle to the wall, as clearly illustrated in Fig. 8 of the drawings. The insulator, which is constructed similar to the insulator heretofore described, is mounted on a pin

30, secured in openings 31 of the upper and lower arms. The lower insulator arm 28 is shorter than the upper arm 27, as clearly shown in Fig. 8. The bracket is equipped with a rearwardly extending attaching member or members 32 and a depending arm 33 cut from the metal of the attaching members, the slot or opening 34 resulting from the formation of the depending arm extends to the rear edge of the horizontal attaching member, thereby dividing the latter into two spaced sections or members, as clearly shown in Fig. 9.

The rear ends of the spaced sections or members are provided with upper beveled faces 35, adapted to be engaged by a transversely disposed wedge 36 having a stem 37, adapted to slide in the slot or opening 34 and provided with a threaded shank 38. The threaded shank 38 is adapted to receive a nut 39, and the laterally extending portion of the bracket is provided with an opening 40 for the shank and opposite notches 41 to provide a passage-way for the stem. A washer 42 similar to that shown in Fig. 5 is interposed between the nut and the bracket.

The transversely disposed wedge 36 with its stem forms an adjustable T-shaped locking member, which is adapted to be arranged in substantially the same plane as the spaced attaching members 32 in introducing the parts into a joint, and it is capable of sliding forward on the inclined or beveled faces 35 to expand the parts and cause the same to engage the upper and lower surfaces of the joint.

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

1. A bracket of the class described provided with a projecting attaching member adapted to be introduced into a joint, a cooperating forwardly tapered wedge connected with the bracket and movable longitudinally of the attaching member and arranged to engage the same and the joint, said member and wedge having smooth contiguous faces, and means located at the front of the bracket for drawing the wedge outwardly.

2. A bracket of the class described provided with a flat projecting attaching member adapted to extend into a joint, a cooperating forwardly tapered wedge having a flat outer face and provided with a smooth inclined or beveled inner face to engage the attaching member, said wedge being also provided with a relatively thin inner portion, and means located at the front of the bracket for drawing the wedge outwardly.

3. A bracket of the class described provided with an integral horizontally disposed flange forming an attaching portion and adapted to extend into a joint, said bracket being also provided with a depending arm extending from the bracket at the front end

of the said flange, and a wedge cooperating with the flange and having a stem extending through the bracket and provided with means for operating the wedge.

5 4. A bracket of the class described provided with an integral horizontally disposed flange forming an attaching portion and adapted to extend into a joint, said bracket being also provided with a depending arm 10 connected with the bracket at the front end of the flange and cut from the latter, and a wedge cooperating with the flange to engage a joint.

5. A bracket of the class described constructed of sheet metal and comprising a 15 vertical body portion, outwardly projecting supporting arms extending outwardly from the top and bottom of the body portion, and a flat horizontal attaching flange extending rearwardly from the body portion at a point 20 intermediate of the top and bottom thereof adapted to extend into a joint.

6. A bracket of the class described comprising a vertical body portion, outwardly 25 projecting supporting arms, and a rearwardly extending horizontal attaching flange adapted to extend into a joint, and a wedge movable over the flange and cooperating with the same to engage the joint.

30 7. A bracket of the class described constructed of a single piece of sheet metal and consisting of a vertical body portion having a lateral extension, upper and lower arms projecting from the top and bottom of the 35 body portion, and a horizontal attaching flange connected with the lateral extension and adapted to be secured in a joint.

8. A bracket of the class described constructed of a single piece of sheet metal and 40 consisting of a vertical body portion having a lateral extension, upper and lower arms projecting from the top and bottom of the body portion, and a horizontal attaching flange connected with the lateral extension 45 and adapted to be secured in a joint, and an arm depending from the lateral extension and cut from the metal of the flange.

9. A bracket of the class described provided with an attaching member and having 50 an opening provided with opposite extensions, and a wedge cooperating with the attaching member and provided with a flat shank passing through the said opening and engaging the extensions thereof and provided 55 with an outer threaded portion, and a nut engaging the threaded portion.

10. A bracket of the class described pro-

vided with an attaching member and having an opening provided with opposite extensions, and a wedge cooperating with the attaching member and provided with a flat 60 shank passing through the said opening and engaging the extensions thereof and provided with an outer threaded portion, a washer arranged on the shank and provided with 65 an opening having opposite extensions, and a nut engaging the threads of the shank and the washer.

11. A bracket of the class described comprising a vertical body portion adapted to 70 fit against a wall, a rearwardly extending attaching portion arranged to extend into a joint, and outwardly projecting upper and lower supporting arms extending downwardly at an inclination, the lower arm being 75 shorter than the upper arm and the said arms being provided with openings and adapted to hold an insulator at an inclination in angular relation with the wall.

12. A bracket of the class described provided with spaced rearwardly projecting 80 members forming an intervening space or opening extending to the front of the bracket, a cooperating wedge having a stem slidable in the space between the members, 85 and means for adjusting the wedge from the front of the bracket.

13. A bracket of the class described provided with spaced rearwardly projecting 90 members forming an intervening space or opening extending to the front of the bracket, said members being adapted to be introduced into a joint and having beveled faces, and a transversely disposed wedge cooperating with the beveled faces and having 95 a stem operating in the space between the members and extending to the front of the bracket.

14. A bracket of the class described including rearwardly extending members having 100 a space or opening between them extending throughout their entire length, and a depending arm consisting of metal cut to form the said space or opening, and a locking member cooperating with the said members 105 and having a stem operating in the space or opening.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

EDWARD V. BROWN.

Witnesses:

STRAUD C. BULTEIL,
EDGAR B. MARTIN.