J. W. McCUNE.

COMBINED CROSS ARM SUPPORT AND BRACE.

APPLICATION FILED MAY 27, 1910.

970,091. Patented Sept. 13, 1910.

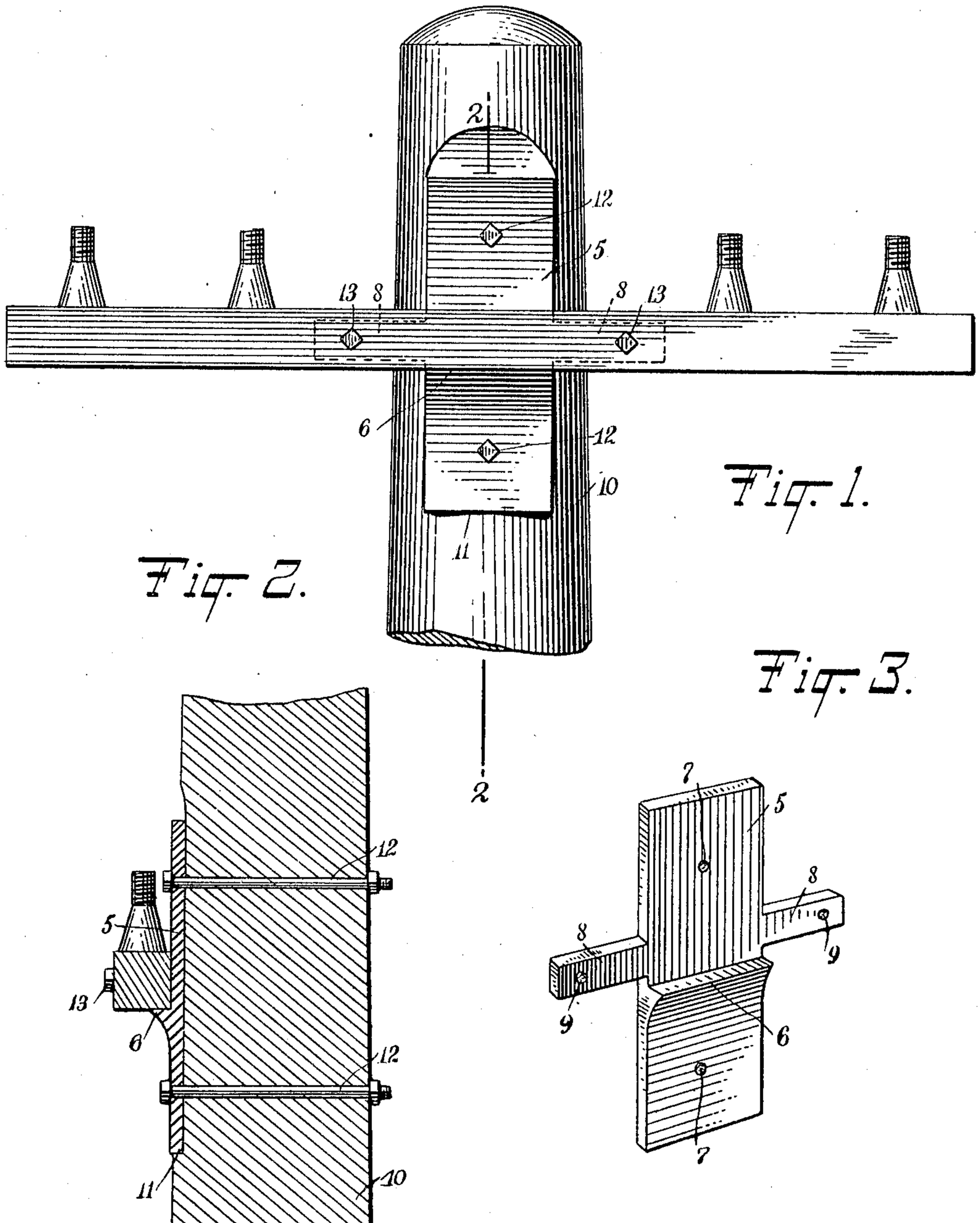

Fig. 1.

Fig. 2.

Fig. 3.

WITNESSES:

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JAMES WATT McCUNE, OF NEW ALBANY, MISSISSIPPI.

COMBINED CROSS-ARM SUPPORT AND BRACE.

970,091. Specification of Letters Patent. **Patented Sept. 13, 1910.**

Application filed May 27, 1910. Serial No. 563,806.

To all whom it may concern:

Be it known that I, JAMES WATT McCUNE, a citizen of the United States, and a resident of New Albany, in the county of Union and State of Mississippi, have invented a new and Improved Combined Cross-Arm Support and Brace, of which the following is a full, clear, and exact description.

The invention is an improvement in cross-arm supports for telegraph and telephone poles and other aerial wire carriers, and has in view a relatively simple device for connecting the cross-arm to the pole, which provides an effectual brace between the pole and cross-arm without need of separate or additional braces for this purpose.

The invention further has in view a cross-arm support with which the wires cannot contact should the wires become detached from the insulators, and, also, in which the fastening screws or bolts of the support will be relieved of the greater portion of the strain on the cross-arm, whereby the support will not work loose.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of a cross-arm support embodying my invention, the same being shown applied to the pole and arm; Fig. 2 is a section substantially on the line 2—2 of Fig. 1; and Fig. 3 is a perspective view of my improved cross-arm support.

In the construction of a cross-arm support in accordance with my invention, I provide a plate 5 of a width and length to afford a substantial bearing surface, the plate being shown to have a flat rear face, and at the opposite and front face provided with a shoulder 6, the shoulder extending transversely of the plate at an intermediate point of its length. A substantial distance above and below this shoulder the plate is provided with bolt or screw openings 7, for applying the plate to a telegraph pole. Adjacent to the shoulder 6, and ordinarily slightly elevated thereabove, are arms or braces 8, extending laterally from the edges of the plate, with the outer faces of the arms arranged in the plane of that portion of the plate immediately above the shoulder 6, the arms at or near the ends being each provided with a screw or bolt opening 9.

In the application of the cross-arm support to the pole 10, the latter is cut out along its length where the cross-arm is to be applied, so as to provide a flat seating surface, the cut-out portion presenting a shoulder 11 at the bottom. The cross-arm support is seated flat against the seat thus formed, and is bolted or screwed at the openings 7 by bolts or screws 12, with the bottom edge of the plate seating on the shoulder 11. The cross-arm, which may be applied to the support before or after the support is bolted to the pole, seats on the shoulder 6, and is fastened to the support by bolts or screws 13, passing through the bolt holes 9 of the braces 8, these bolts or screws when tightened, drawing the cross-arm flat against the braces and body of the support. It will be noted from Fig. 1 that the braces 8 are relatively narrower than the cross-arm, so that the support presents no projecting metal parts with which the wires contact, should the latter become detached from the insulators. By reason of the end of the plate seating against the shoulder 11 of the pole, and the cross-arm seating on the shoulder 6 of the plate, both the bolts securing the support to the pole and the cross-arm to the support, are relieved of the greater portion of the strain to which the cross-arm is subjected.

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

1. In combination, a pole having a shoulder, a cross-arm support secured to the pole, with the lower end of the support seating on the shoulder, the support having laterally-extending braces and provided with a shoulder extending across its outer face, and a cross-arm seating on the shoulder and secured to the braces, with the support extending a substantial distance above and below the cross-arm.

2. A cross-arm support comprising a plate having a cross-arm supporting shoulder extending across its outer face at an intermediate point of the length of the plate, and cross-arm braces laterally extending from the opposite side edges of the plate above the shoulder.

3. A cross-arm support comprising a plate having a flat seating face, said plate having

a cross-arm supporting shoulder extending thereacross intermediate its length, and cross-arm braces extending laterally from the opposite side edges of the plate above the shoulder, with the front faces of the braces lying in a plane with that portion of the front face of the body of the plate immediately above the shoulder.

4. In combination, a pole, a plate secured to the pole, having a shoulder extending thereacross intermediate its length, braces laterally extending from the opposite side edges of the plate above the shoulder, and a cross-arm seated on the shoulder and secured to the braces, with the upper edges of the braces arranged a substantial distance below the upper face of the cross-arm.

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

JAMES WATT McCUNE.

Witnesses:

LUTHER COX,

HARRY R. ROSSEN.