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INSULATOR SUPPORTING BRACKET.

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1,166,928.

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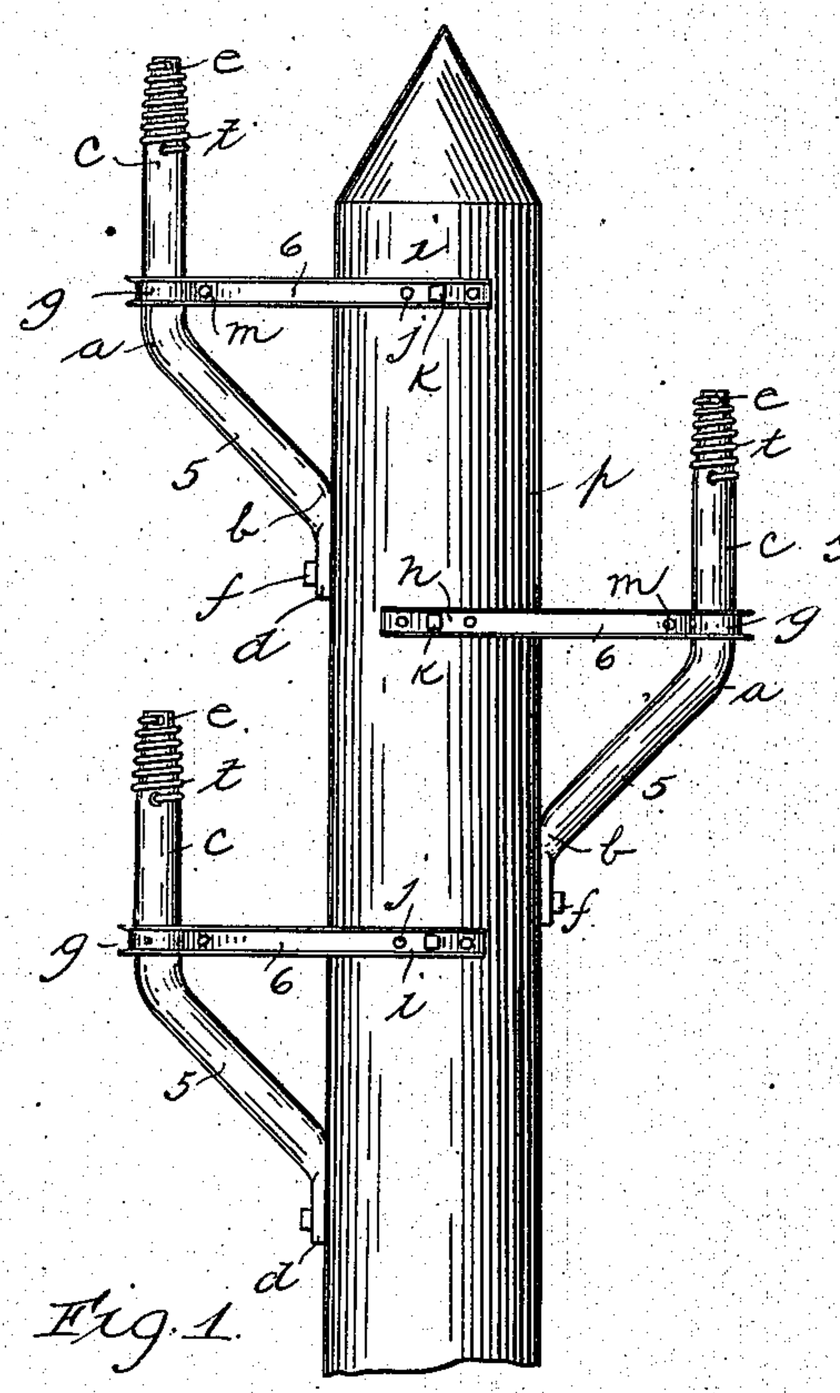

Fig. 1.

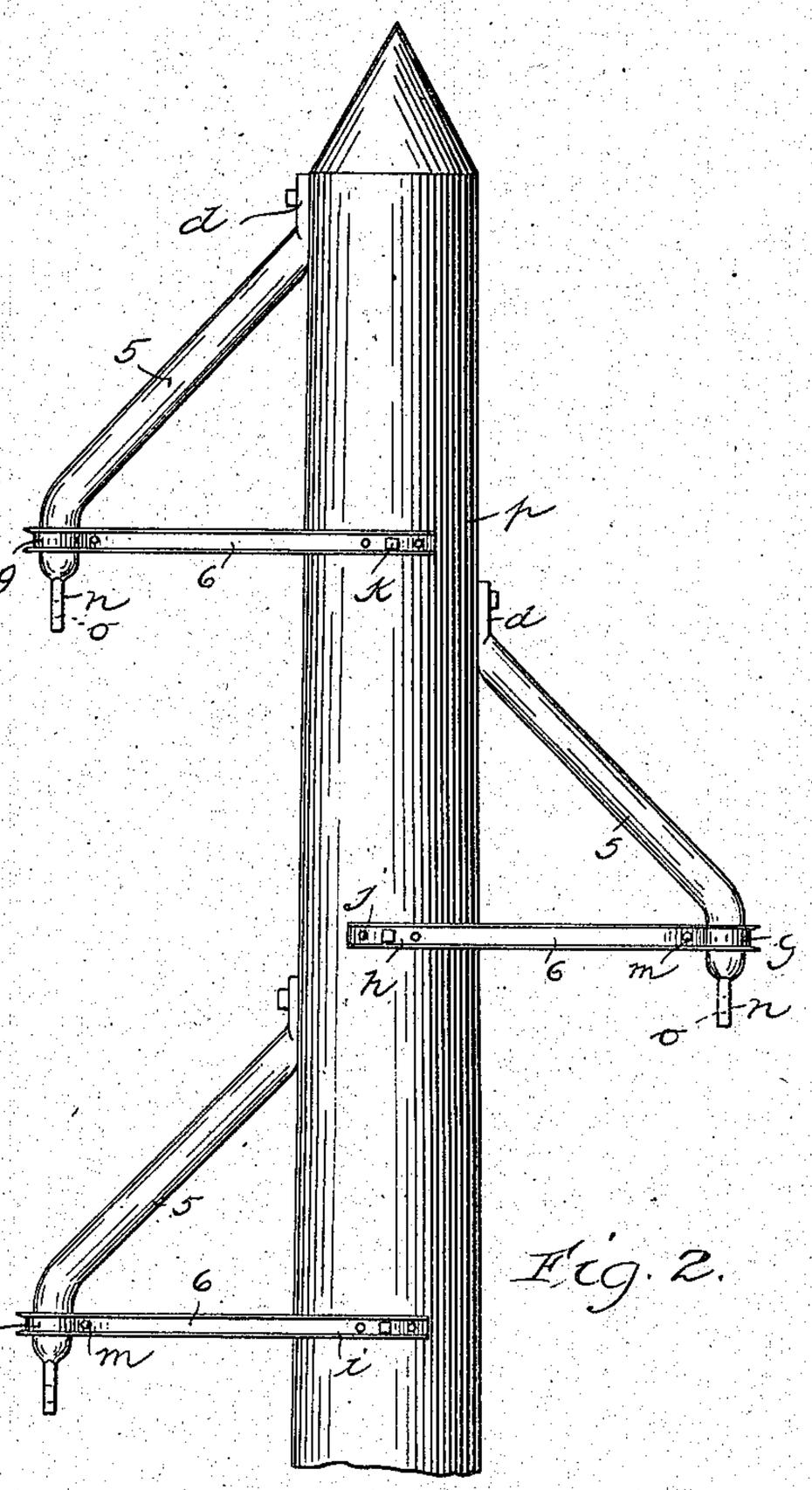

Fig. 2.

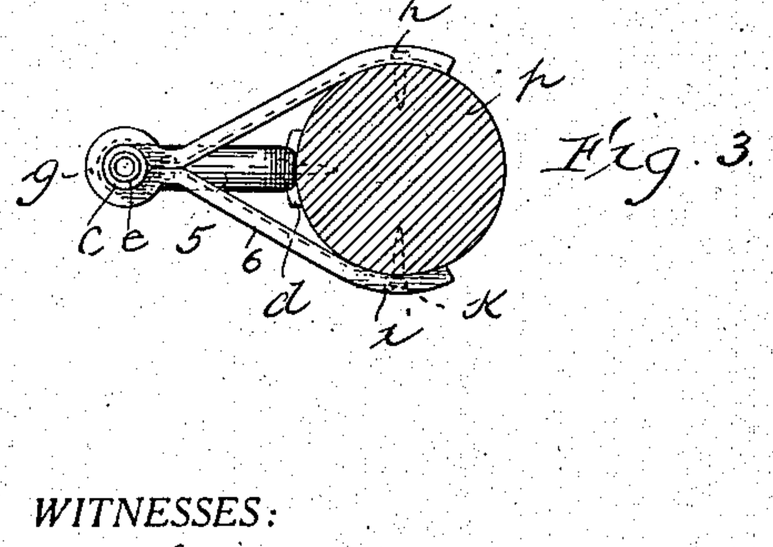

Fig. 3.

WITNESSES:

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INSULATOR-SUPPORTING BRACKET.

1,166,928. Specification of Letters Patent. Patented Jan. 4, 1916.

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To all whom it may concern:

Be it known that I, CHARLES L. PEIRCE, Jr., a citizen of the United States, and a resident of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Insulator-Supporting Brackets, of which the following is a specification.

My invention relates to insulator supporting brackets particularly adaptable for supporting the conductors of high tension distributing circuits.

Among the important objects of the invention are to provide a built-up bracket which can be inexpensively manufactured; to so brace the bracket that it will possess great strength and will efficiently meet any service strain in any direction; to provide such form of bracket that a number thereof may be arranged in any desired manner on a pole or other support; to provide a bracket which is adjustable to fit the varying diameter of poles and which in any position of adjustment can be rigidly secured to the support; and to provide an all metal bracket which is treated to efficiently withstand the weather.

The various features of the invention will be fully understood by reference to the accompanying drawings in which—

Figure 1 is an elevational view of the upper end of a pole showing three of my improved brackets arranged thereon for supporting the three wires of a high tension distributing circuit; Fig. 2 is a similar view showing a modified form of bracket and arrangement thereof; and Fig. 3 is a plan view of one of the brackets.

The brackets of my invention are preferably built up of commercial shapes of iron or steel. The insulator receiving member 5 of the bracket shown is formed from a length of ordinary pipe bent in one direction at *a* and in the opposite direction at *b* to off-set the upper end *c* from the lower end *d*, this end *d* being forged to form a widened base for engaging the support such as a pole *p*. The upper section *e* of the part *c* is preferably tapered by forging to receive a suitable thimble *t*, the thimble shown being in the form of a wire helix, it being understood, of course, that other forms of thimbles may be used or that the end *e* may be threaded or otherwise treated for directly receiving insulators.

The base *d* is shown secured to the pole by a lag screw *f* although a through bolt may be used, and in order to hold the part 5 in proper vertical alinement I provide a brace member 6 whose construction is best shown in Fig. 3. The brace is of general V-shape and preferably bent from a single length of stock metal such as channel bar, a loop or sleeve *g* being provided at the bend for receiving the upper part *c* of the bracket member 5. The ends *h* and *i* of the brace limbs are preferably curved to accurately fit the curved surface of the pole and these ends are each provided with a plurality of bolt holes *j* for receiving lag bolts or through bolts *k*. The sections of the limbs adjacent the loop *g* are preferably secured together by a rivet or bolt *m*. This form of brace is very strong but sufficiently flexible so that the limbs can be readily spread or brought together depending upon the diameter of the pole and to more snugly fit the pole. The limbs of the brace receive a considerable portion of the pole, and the resulting bracket structure is therefore very rigidly trussed and braced to meet any service strain, even at sharp corners, the limbs of the brace preventing rotation of the bracket about the pole. The parts of the bracket after formation are preferably hot galvanized on all sides and thus fully protected against the weather.

The particular structure of the brackets allows them to be readily spaced in any desired manner on a pole. In Fig. 1 three brackets are shown, two on one side, and one on the opposite side of the pole, the insulator supporting ends of the brackets extending upwardly and being equidistant from each other, this being a desirable arrangement for three wire suspension.

In Fig. 2 is shown a somewhat modified structure and arrangement. The members 5 are of substantially the same shape as those of Fig. 1 except that the insulator supporting ends *n* are flattened by forging and provided with a hole *o*, insulators of the bell type being adapted for suspension from these ends, which extend downwardly. The brackets 6 are of the same shape and construction as those in Fig. 1 and their loops *g* receive the members 5 just above flattened ends *o*.

The bracket structures may, of course, be arranged in any other desired manner on a pole or other support and their supporting ends may be of shapes other than those

shown to receive different styles and constructions of insulators or insulator supporting attachments. I do not therefore desire to be limited to the precise forms, structures and arrangements shown.

I claim as follows:

1. An insulator supporting bracket structure comprising a bracket member reversely bent and shaped at one end to form a supporting base and shaped at the other end to receive an insulator or insulator support, and a V-shaped brace receiving the bracket member at its bend and adapted at its ends to be secured against the opposite sides of a support.

2. An insulator supporting bracket structure comprising a bracket member reversely bent and having one end flattened to form a base adapted to be secured directly to a pole and at its other end being shaped to receive an insulator or insulator support, and a V-shaped brace having a loop at its bend for receiving the bracket member, and having its ends curved to fit the opposite rounded sides of the supporting pole, said ends being provided with bolt holes by means of which they may be secured to the pole.

3. An insulator supporting bracket structure comprising a bracket part reversely bent and flattened at one end to form a base adapted to be secured directly to a pole and shaped at its other end to receive an insulator or insulator support, and a V-shaped brace member bent from a single length of metal, said brace member being looped at its bend to receive the insulator supporting end of the bracket member and having its ends curved to fit the opposite sides of the pole, and said ends being provided with bolt holes by means of which the brace may be secured to the pole.

4. An insulator supporting bracket structure comprising a bracket member in the form of a length of pipe reversely bent and having one end flattened to form a base adapted to be secured to a pole and having its other end shaped to receive an insulator or insulator support, and a V-shaped brace member bent from a single piece of channel bar, said brace member having a loop provided in its bend for receiving the insulator supporting end of the bracket member, the limbs of the brace member being each provided with a plurality of bolt holes whereby such limbs may be secured to the opposite sides of a pole.

5. An insulator supporting bracket structure comprising a bracket member in the form of a length of pipe reversely bent and having one end flattened to form a base adapted to be secured to a pole and having its other end shaped to receive an insulator or insulator support, and a V-shaped brace member bent from a single length of channel bar, said brace member having a loop provided in its bend for receiving the insulator supporting end of the bracket member, the limbs of the brace member being each provided with a plurality of bolt holes whereby such limbs may be secured to the opposite sides of a pole, said ends being rounded to more accurately fit the pole surface.

6. An insulator supporting bracket structure comprising a bracket member adapted to be secured at one end to a pole and shaped at its other end to receive an insulator or insulator support, and a V-shaped brace member adapted to receive the bracket member at its bend and having its ends provided with bolt holes whereby they may be secured to opposite sides of a pole, such brace being flexible whereby the ends may be spread apart or brought together in accordance with the diameter of the pole.

7. An insulator supporting bracket structure comprising a bracket member having one end adapted to be secured to a pole and its other end shaped to receive an insulator or insulator support, and a V-shaped brace member bent from a single length of metal, said brace member being looped at its bend and the sides thereof secured together to keep the loop closed, said sides being flexible whereby they may be adjusted to fit snugly against the sides of a pole and their ends having bolt holes for receiving bolts by means of which they may be secured to a pole.

8. An insulator supporting bracket structure comprising a bracket member having one end adapted to be secured to a pole and its other end shaped to receive an insulator or insulator support, and a V-shaped brace member bent from a single length of metal, said brace member being looped at its bend and the sides thereof secured together to keep the loop closed, said sides being flexible whereby they may be adjusted to fit snugly against the sides of a pole and their ends having bolt holes for receiving bolts by means of which they may be secured to a pole, said ends being rounded to more accurately fit the pole.

In witness whereof, I hereunto subscribe my name this 27 day of April, A. D., 1914.

CHARLES L. PEIRCE, JR.

Witnesses:

CHARLES J. SCHMIDT,

S. B. CARR.