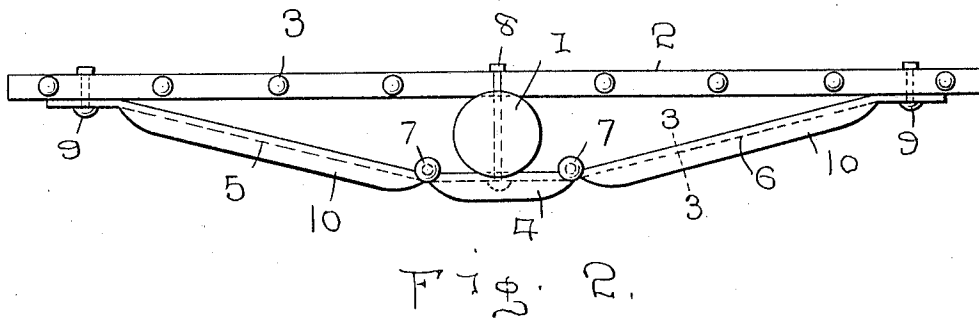
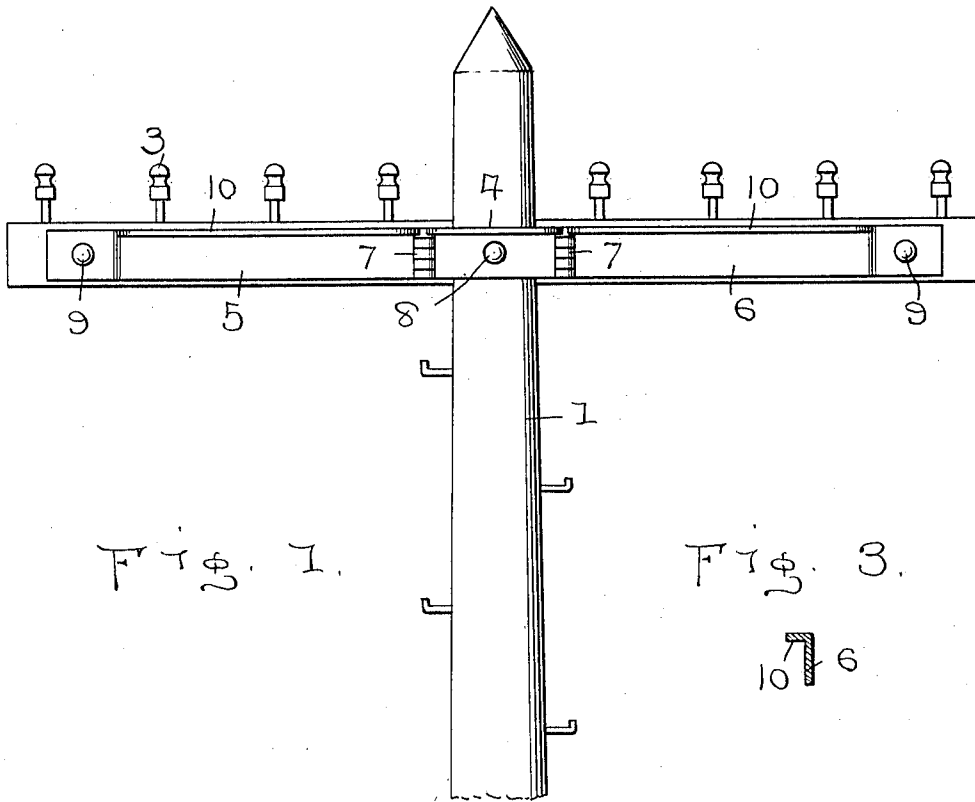


I. CLINE.
 BRACE FOR CROSS ARMS OF TELEGRAPH AND TELEPHONE POLES.
 APPLICATION FILED FEB. 7, 1911.

1,048,496.

Patented Dec. 31, 1912.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ISAAC CLINE, OF HUNTINGTON, INDIANA.

BRACE FOR CROSS-ARMS OF TELEGRAPH AND TELEPHONE POLES.

1,048,496.

Specification of Letters Patent.

Patented Dec. 31, 1912.

Application filed February 7, 1911. Serial No. 607,116.

To all whom it may concern:

Be it known that I, ISAAC CLINE, a citizen of the United States, residing at Huntington, in the county of Huntington and State of Indiana, have invented certain new and useful Improvements in Braces for Cross-Arms of Telegraph and Telephone Poles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to new and useful improvements in braces for the cross arms of telegraph and telephone poles and my object is to provide for reinforcing or strengthening the said cross arms and thereby greatly prolonging the usefulness thereof.

Other objects and advantages will be hereinafter made clearly apparent, reference being had to the accompanying drawings made a part of this application, and in which,

Figure 1 shows a side elevation of my invention as applied to use upon an ordinary telegraph or telephone pole. Fig. 2 is a top plan view of Fig. 1, while, Fig. 3 is a sectional view on line 3—3, of Fig. 2.

Referring in detail to the various parts of my invention and also to cooperating adjuncts, 1 indicates the telephone or telegraph pole of the usual or any preferred construction, while 2 designates the cross arm, also of the usual or preferred pattern, 3 indicating the insulators ready to receive the wires.

Upon the inner side of the cross arm 2, I mount my reinforcing or bracing member consisting preferably of three parts as the middle portion 4 and the outer members 5 and 6, the hinge members being designated by the numeral 7. The central member 4 is provided with an opening, through which an anchoring bolt 8 is entered, said bolt passing entirely through the telegraph pole and the cross arm 2, as shown in Fig. 2. I provide the hinges 7 so that my improved brace may be readily applied to its operative position without reference to the size of the pole, it being understood that the outer ends of the members 5 and 6 are permanently anchored in union with the outer

ends of the cross arm, as indicated by the bolts 9.

In order to strengthen the members 4, 5 and 6, I prefer to provide upon one or both edges thereof, the flange 10, as shown in Fig. 3, thus making it possible to use a minimum amount of material in the construction of said braces.

In applying my improved brace to use, all that is necessary is to enter the bolt or bolts 8 in position and then force the outer ends of the members 5 and 6 in engagement with the outer ends and inner side of the cross arm 2, when a hole of proper size may be bored through said cross arm and the bolt 9 entered therein, it being understood that suitable apertures have already been formed in the outer ends of said members 5 and 6.

By the use of my bracing appliance, the severe strain upon the cross arm 2 is reduced to a minimum and distributed so that there will be no liability of breaking said cross arm, as is now common. It is thought, therefore, that the importance and value of my improved brace and its capacity to accommodate itself to cross arms and poles of any size, will thus be made clearly apparent, and further description is deemed unnecessary.

What I claim is:—

1. The combination with a pole and a straight cross arm, of a bracing member formed in sections, said sections being hingedly secured together and extending horizontally, means to attach the bracing member and cross arm to the pole and means to attach the ends of the bracing member to the cross arm.

2. The combination with a pole and a straight cross arm, of a bracing member consisting of a horizontal middle and two horizontal outer sections, means to hinge said sections together, means to secure the middle member and cross arm to the pole and additional means to secure the free ends of the outer sections to the cross arm.

3. The combination with a pole and a straight solid cross arm, of a horizontal middle section parallel with the cross arm and two horizontal outer sections at an angle with the cross arm to brace the latter

against the strain exerted by wires carried
by said arm, said sections being of L-shaped
form in cross section, hinges securing the
outer sections to the middle section, means to
5 attach the bracing member and cross arm
to the pole and means to attach the ends
of the bracing member to the cross arm.

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

ISAAC CLINE.

Witnesses:

DAN BATEMAN,
JAMES B. NEFF.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."