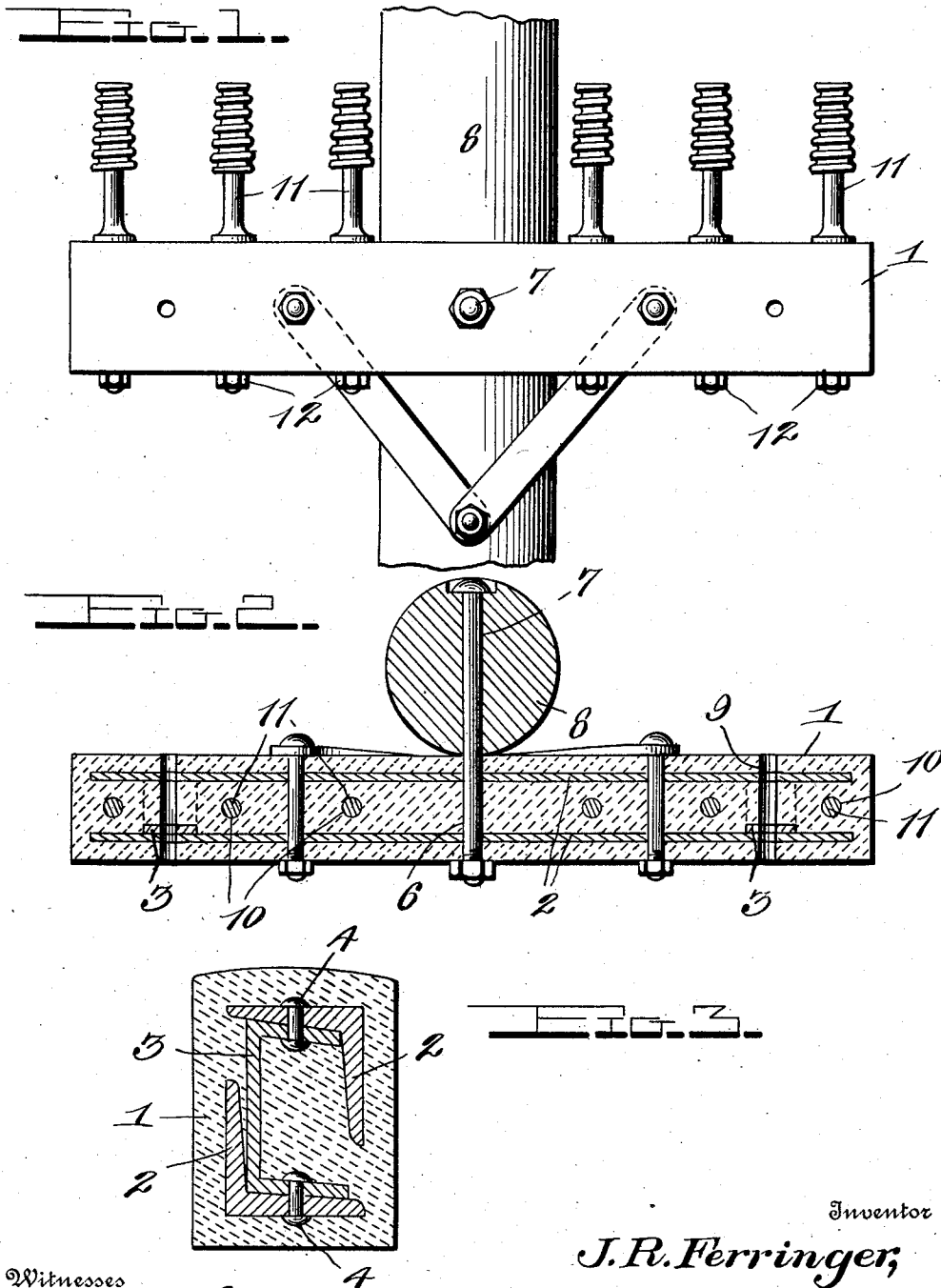


J. R. FERRINGER.
CROSS ARM FOR TELEPHONE OR TELEGRAPH POLES.
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1,021,831.

Patented Apr. 2, 1912.



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Witnesses

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JOHN REED FERRINGER, OF EMLENTON, PENNSYLVANIA.

CROSS-ARM FOR TELEPHONE OR TELEGRAPH POLES.

1,021,831.

Specification of Letters Patent.

Patented Apr. 2, 1912.

Application filed October 25, 1911. Serial No. 656,589.

To all whom it may concern:

Be it known that I, JOHN REED FERRINGER, a citizen of the United States, residing at Emlenton, in the county of Venango and State of Pennsylvania, have invented certain new and useful Improvements in Cross-Arms for Telephone or Telegraph Poles, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to new and useful improvements in cross arms for telephone or telegraph poles and relates more particularly to that class of cross arms constructed of plastic material and which are provided with suitable reinforcing elements.

Another object of the invention is to provide a cross arm of plastic material which will take the place of the wooden cross arm in use at the present time.

Another object of the invention is to produce a cross arm which will possess advantages in points of efficiency and durability, is inexpensive of manufacture and at the same time is simple in construction and operation.

With the above and other objects in view, the invention consists in the novel features of construction and the combination and arrangement of parts hereinafter fully described, pointed out in the claim and shown in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved cross arm showing the same secured to a pole; Fig. 2 is a longitudinal sectional view; and Fig. 3 is a transverse sectional view.

Referring more particularly to the drawings 1 indicates my improved cross arm constructed of cement, concrete or other suitable plastic material. Longitudinally disposed within the arm 1 are the reinforcing angle bars 2, said bars being spaced apart and arranged in parallel relation, and held securely in place by means of the U-shaped fastening members 3. The fastening members are rigidly secured to the bars 2 by means of the rivets 4. A circular opening 6 is disposed transversely of the cross arm and adapted to receive the bolt 7 by means of which the arm is secured to the pole 8. An opening 9 is provided on each side of the central opening 6 and near the end of the arm so that when it is desired to put two

arms on one pole and arrange them on opposite sides of the pole the ends of the arms can be secured together by bolts or other suitable means. Vertical openings 10 are formed in said arm and extend through the arm and through one web of the bars 2, said openings being adapted to receive the insulator pins 11 which are securely held in place by means of the nuts 12 threaded on the lower end thereof.

It will be understood that this arm may be constructed of any suitable plastic material that will withstand the weather and may be made in any suitable size desired and any suitable fastening means may be used to secure the same to the pole.

It will be seen from the above that I have provided a cross arm which is simple in construction and can be manufactured at a very low cost and one which can be used a greater length of time than the wooden cross arms in use at the present time.

While I have shown and described the preferred form of my invention it will be obvious that various changes in the details of construction and in the proportions may be resorted to for successfully carrying my invention into practice without sacrificing any of the novel features or departing from the scope thereof.

Having thus described the invention what is claimed is:—

A cross arm constructed of plastic material, longitudinally disposed reinforcing angle bars spaced apart and arranged in parallel relation within said arm, U-shaped fastening members secured to said bars to hold the same securely in place, said arm having vertical openings disposed there-through and through one web of each of the angle bars, insulator pins disposed in said openings to hold said bars against any relative lateral movement, nuts threaded on the lower end of said pins to hold them securely within the openings, and means for securing said arm to a pole.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

JOHN REED FERRINGER.

Witnesses:

FRANK L. HARVEY,
HOWARD R. PANTON.