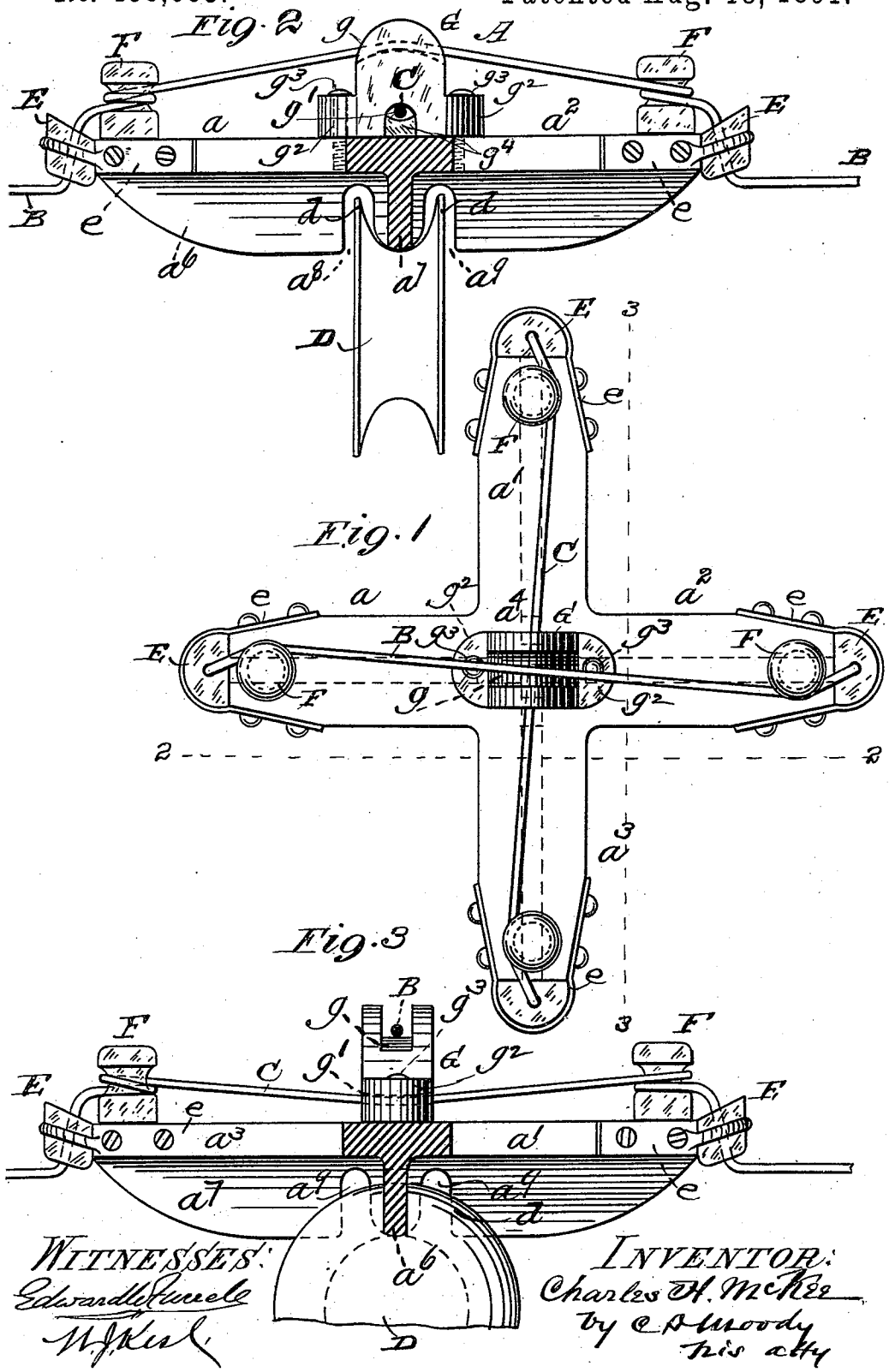
(No Model.)

C. H. McKEE.

ELECTRIC WIRE CROSSING.

No. 458,063. Patented Aug. 18, 1891.



WITNESSES:
Edward Lowell
W. J. Kirk

INVENTOR:
Charles H. McKee
by C. A. Moody
his atty

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES H. McKEE, OF ST. LOUIS, MISSOURI.

ELECTRIC-WIRE CROSSING.

SPECIFICATION forming part of Letters Patent No. 458,063, dated August 18, 1891.

Application filed January 26, 1891. Serial No. 379,218. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. McKEE, of St. Louis, Missouri, have made a new and useful Improvement in Electric-Wire Crossings, of which the following is a full, clear, and exact description.

The improvement relates more especially to that class of crossings which are used along lines of electric railway; and it consists substantially in the means hereinafter set forth and claimed, aided by the annexed drawings, making part of this specification, in which—

Figure 1 is a plan of the improved crossing; Fig. 2, a vertical section on the line 2 2 of Fig. 1, and Fig. 3 a vertical section on the line 3 3 of Fig. 1.

The same letters of reference denote the same parts.

A represents the improved crossing, and B and C, respectively, represent the crossing wires. The frame of the crossing in top view is cruciform, having four arms a a' a^2 a^3 extending outward from the central portion a^4 of the crossing. The arms in vertical cross-section are T-shaped, substantially as shown in Figs. 2 and 3. Each arm-web a^6 and a^7 is notched, substantially as shown at a^8 and a^9, respectively, to provide for the passage of the trolley D—that is, the trolley in passing the crossing bears upward against that web a^6 or a^7 which is in the direction of the movement of the trolley and its flanges d d pass through the notches in the other of the webs. The frame of the crossing is made of any material suitable for the purpose; but to provide for the insulation of the wires the frame is furnished at or toward the end of each of its arms with two bearings of insulating material—a bearing E, through which the wire passes, and is thereby deflected from a lower to a higher level, and another bearing F, whose function it is to control the position of the wire after it has passed to said upper level. The frame is also furnished with a central bearing G, which serves to insulate the wires from each other and also from the frame. This last-named bearing might be termed a "saddle," the part in question having a groove g in its top upon which the upper wire rides, and also being perforated or open in its under side, substantially as shown at g', to receive the lower wire.

The various-described bearings are suitably secured to the frame, the bearings E E being conveniently held in place at the extreme end of the arms by means of clips e e, substantially as shown, the bearings F being fastened in any desirable manner upon the top of the arms, and the saddle G having lugs g^2 g^2, through which screws g^3 g^3 pass and engage in the frame beneath.

Each wire as it approaches the crossing is carried at a low enough level to enable the trolley after it leaves the wire to readily encounter and bear upward against the web a^6 or a^7 which is in line with the wire, and to enable the wire to be firmly held in place with relation to the crossing the bearings F F and the corresponding bearings upon the saddle are so relatively arranged, substantially as shown, as to cause the wire to be strained upon the saddle in passing it—that is, the upper wire is strained upward and the lower wire is strained downward, substantially as shown in Figs. 2 and 3, respectively. By this means the two wires and the crossing are firmly secured together, and at the same time in a manner in which permits of the wires being relatively arranged in place. To readily provide for the lower wire-bearings g', the saddle is notched from its under side, and to prevent the lower wire from accidentally dropping to form a contact with the crossing a filling-piece g^4 of insulating material is inserted in said notch beneath the wire.

I claim—

1. An electric-wire crossing consisting of the cruciform frame having the two bearings arranged in planes at right angles to each other upon each arm, substantially as specified, and also having the central bearings for the crossing wires, substantially as set forth.

2. The combination of the wires and the crossing, said crossing consisting of the cruciform frame having each of its arms provided with the two bearings arranged in planes at right angles to each other, and also having the central bearings, substantially as described.

3. The electric-wire crossing comprising

the cruciform frame composed of T-shaped crossing arms, each having notches, one at each side of the center thereof, substantially as set forth.

4. The electric-wire crossing consisting of the cruciform frame composed of T-shaped crossing arms having two bearings upon each arm arranged in planes at right angles to each other, and the central bearings for the crossing wires, said crossing arms having notches, one at each side of the center thereof, substantially as specified.

Witness my hand this 14th day of January, 1891.

CHARLES H. McKEE.

Witnesses:
C. D. MOODY,
A. BONVILLE.