

(No Model.)

A. GARTNER.
ELECTRIC WIRE JOINT.

No. 541,998.

Patented July 2, 1895.

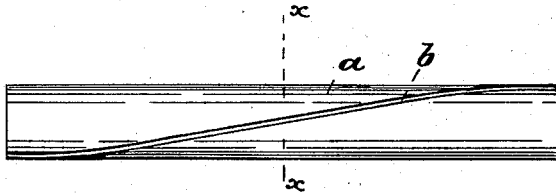


Fig. 1.



Fig. 3.

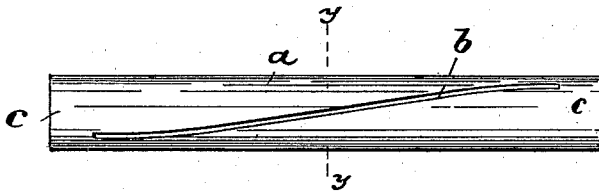


Fig. 2.

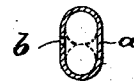


Fig. 4.



Fig. 5.

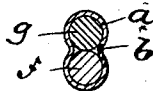


Fig. 6.

WITNESSES:

Arthur H. Thompson
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INVENTOR:

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BY

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UNITED STATES PATENT OFFICE.

ALFRED GARTNER, OF NEWARK, NEW JERSEY, ASSIGNOR TO CHARLES H. MCINTIRE, OF SAME PLACE.

ELECTRIC-WIRE JOINT.

SPECIFICATION forming part of Letters Patent No. 541,998, dated July 2, 1895.

Application filed May 24, 1895. Serial No. 550,496. (No model.)

To all whom it may concern:

Be it known that I, ALFRED GARTNER, a citizen of the United States, residing at Newark, county of Essex, and State of New Jersey, have invented certain new and useful Improvements in Electric-Wire Joints; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of my present invention is to provide a wire joint of simple, strong, and durable construction, easily handled, and which joint, when used for connecting telegraph or telephone wires, will give a perfect contact.

The invention consists in the improved wire joint, substantially as will be hereinafter more fully described, and finally embodied in the clauses of the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the several views, Figure 1 is a side elevation of my improved joint; Fig. 2, a similar view illustrating a slight modification thereof. Figs. 3 and 4 are sectional views on the lines xx and yy of Figs. 1 and 2, respectively; Fig. 5, a front elevation of my improved joint after being twisted along the ends of the connected wires; and Fig. 6 a sectional view on the line zz of Fig. 5.

In said drawings, a represents a metal tube, oblong in cross-section, and provided with a slot b extending longitudinally either through the entire length of the tube, as in Fig. 1, or to about the ends thereof, leaving a closed head or cap c , as clearly shown in Fig. 2. Said slot b is not arranged horizontally, but extends substantially spiral around said tube—that is to say, said slot is given such a pitch as to conform to the pitch of the twisted tube. The greater inner diameter of the tube is about

equal to the combined diameter of the wires to be jointed, while the smaller inner diameter is about equal to the diameter of a single wire.

In operation, when a joint is about to be made, the ends of the wires f and g are inserted from opposite directions into the metallic tube, which latter is then twisted, together with the wires, say, three or four times, (according to the length of the tube,) whereby said tube is drawn tight around the said wires and a perfect contact obtained.

A tube without the longitudinal spiral slot cannot very easily be brought in close or tight contact with the inclosed wires, and, furthermore, is liable to break while being twisted.

Therefore, what I claim as new, and desire to secure by Letters Patent, is—

1. A wire joint consisting of a tube, provided with a longitudinally and spirally arranged slot, said tube being adapted to be twisted with and around the inclosed wires, substantially as described.

2. A wire joint consisting of a tube, oblong in cross section and provided with a longitudinally and spirally arranged slot, said tube being adapted to be twisted with and around the inclosed wires, substantially as described.

3. A wire joint consisting of a tube, provided with a longitudinal slot extending to near the ends of the tube, the latter being adapted to be twisted with and around the inclosed wires, substantially as described.

4. A wire joint, oblong in cross section and provided with a spiral slot extending longitudinally to near the ends of the tube, the latter being adapted to be twisted with and around the inclosed wires, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of April, 1895.

ALFRED GARTNER.

Witnesses:

WM. D. BELL,
DUNCAN M. ROBERTSON.