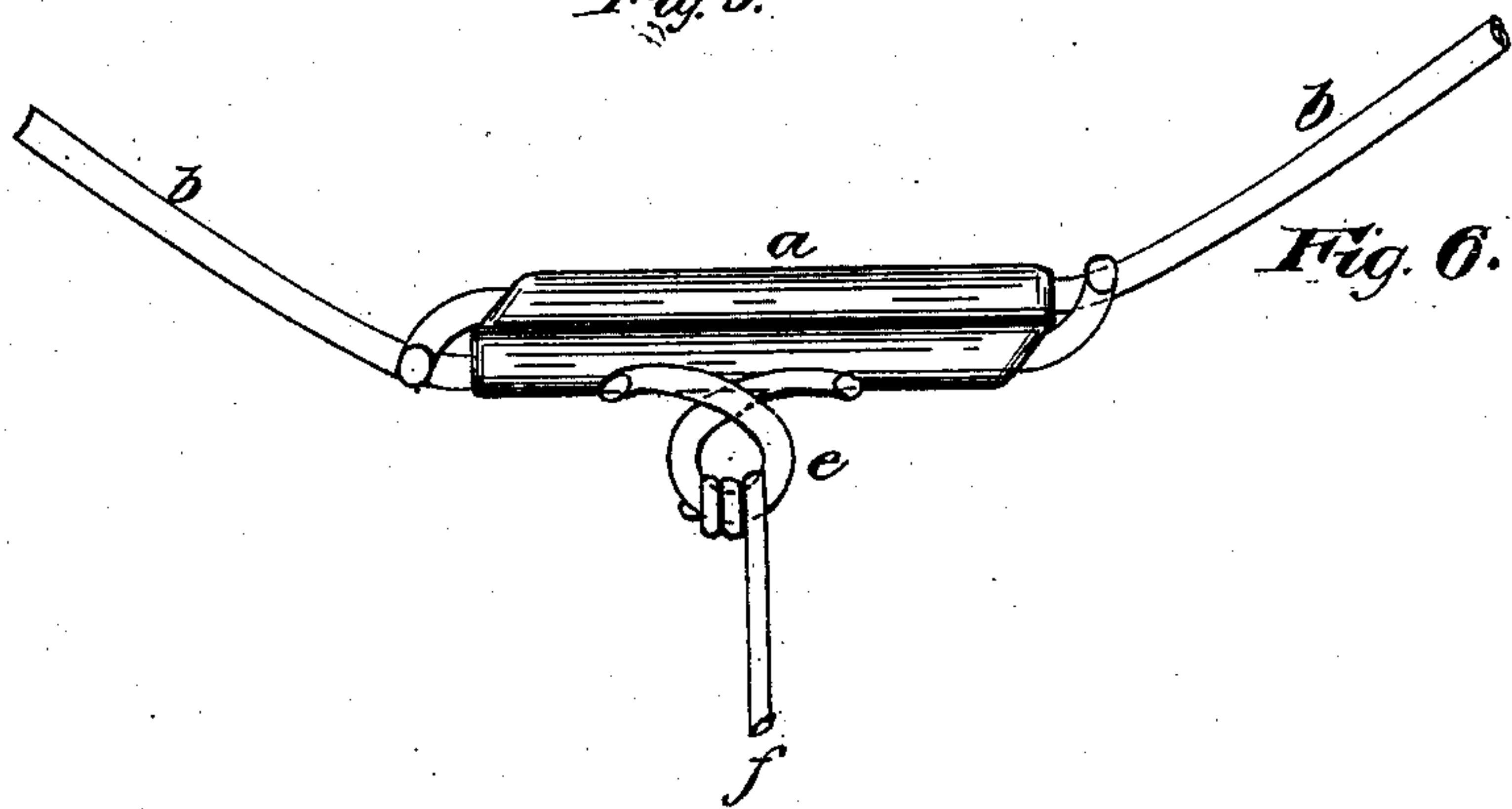
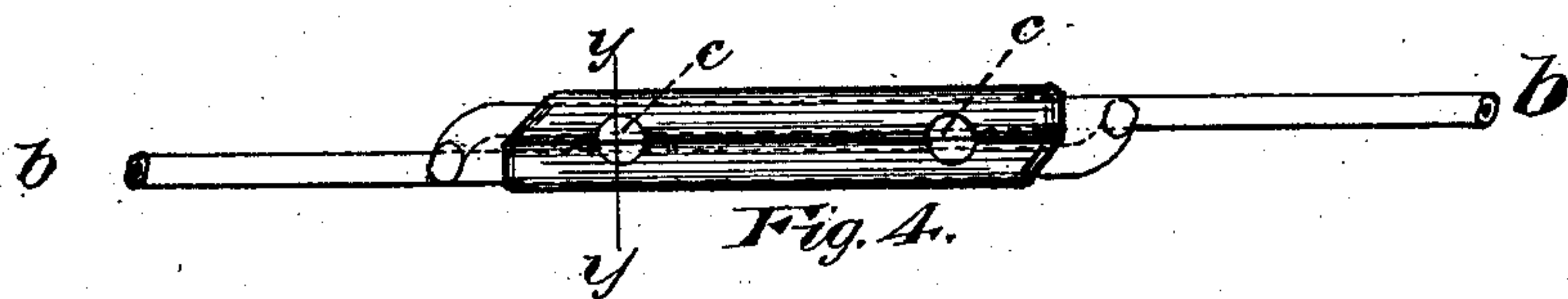
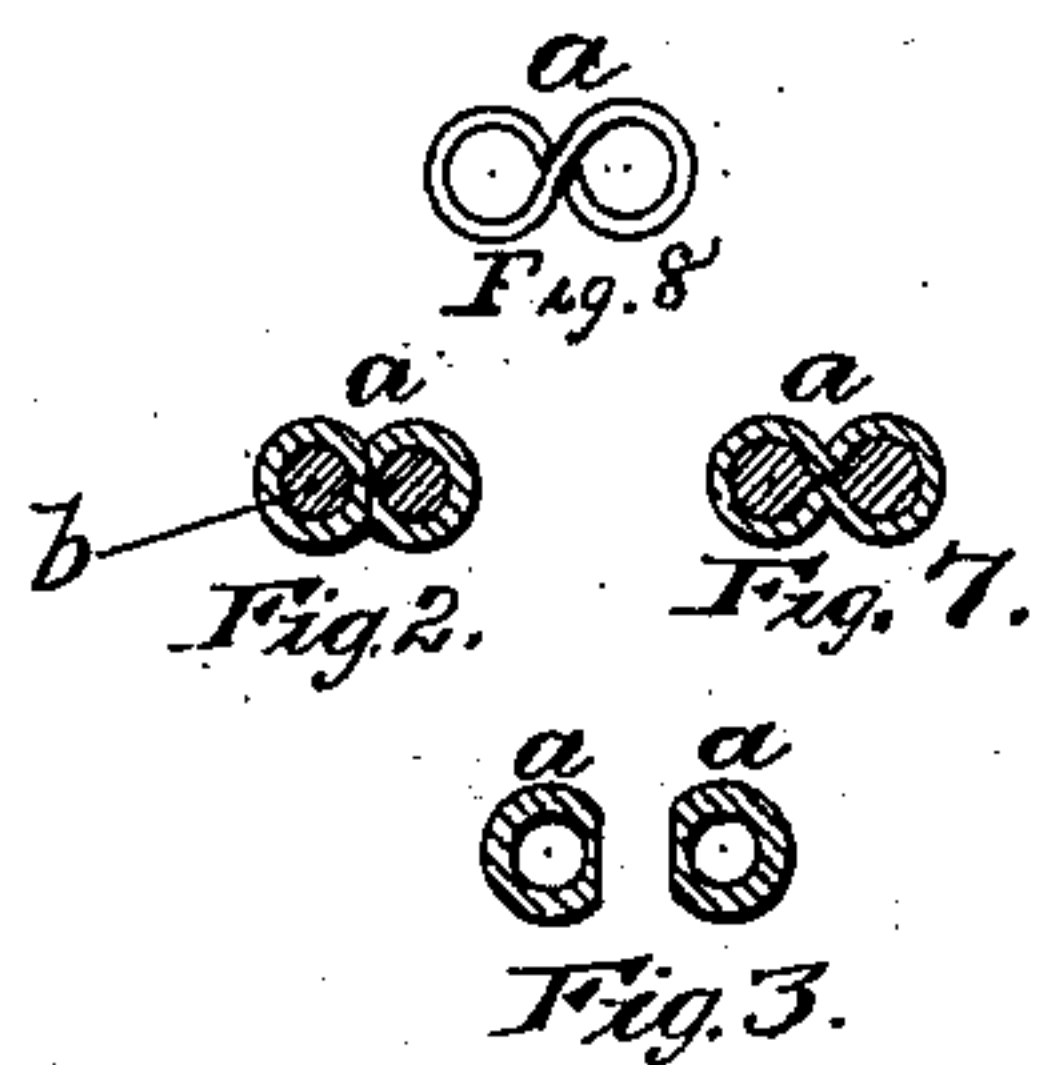
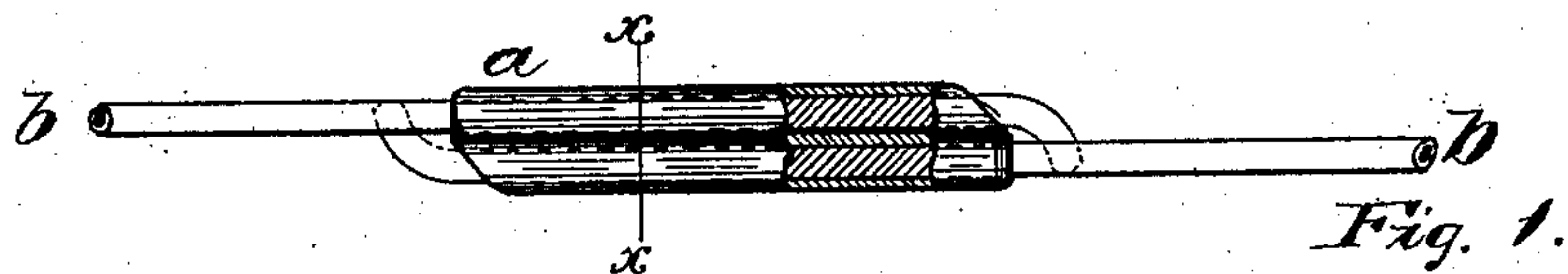


(No Model.)

C. McINTIRE.
TELEGRAPH WIRE JOINT.

No. 291,211.

Patented Jan. 1, 1884.



Attest:
J. J. Campbell.
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Inventor:
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UNITED STATES PATENT OFFICE.

CHARLES MCINTIRE, OF NEWARK, NEW JERSEY.

TELEGRAPH-WIRE JOINT.

SPECIFICATION forming part of Letters Patent No. 291,211, dated January 1, 1884.

Application filed July 13, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES MCINTIRE, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Telegraph-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 this invention is to secure a more perfect contact of united telegraph-wires, to allow the wires to be soldered together more quickly and perfectly, and to provide a joint of greater strength than is possessed by those joints heretofore in use.

The invention consists in the improved telegraph-wire joint formed, arranged, and combined substantially as hereinafter set forth, and finally embodied in the claims.

Referring to the accompanying drawings, in which similar letters of reference indicate like parts in each of the figures, Figure 1 illustrates my improved joint, partly in longitudinal section. Fig. 2 is a section of the same, taken through line *x*. Fig. 3 illustrates the joint in course of construction. Fig. 4 shows the opposite side of the joint from that shown in Fig. 1. Fig. 5 is an enlarged sectional view through *y*, more clearly illustrating the formation and arrangement of the soldering-holes. Fig. 6 shows a joint having a loop or hook combined therewith, and Figs. 7 and 8 illustrate modified forms of the joint.

In carrying out my invention I form a joint of a double metallic tube or device having longitudinal chambers conforming to the size and shape of the telegraph-wires, arranged side by side and separated by a middle wall or partition. Into said chambers the ends of the telegraph-wires are secured by having the extremities which project from the joint bent, as shown, and the three parts are then soldered together. The said double tube is preferably constructed as shown in Figs. 2 and 3, wherein are illustrated single tubes having flattened sides formed thereon, which, when brought together and brazed or soldered, form the said double tube, with a single partition between,

of about the thickness of the sides of the joint. The bore of the tubes being approximately the same as the diameter of the wires, when the three metallic parts are brought together a contact is made more perfect than is made by any of the joints heretofore in use. The joint is provided with soldering perforations *c*, adapted to allow the solder to gain access to both wire chambers at the same time and fill any space that may remain between the wires and the inner walls of the tubes. Said space being more limited than where the joint is formed of a simple band surrounding the wires, the said space is more perfectly filled, the solder being less liable to flow from the joint before cooling.

The double tubular or 8-shaped joint may be formed in other ways than that described—for example, in the manner illustrated in Figs. 7 and 8—where sheet metal is bent in varying ways to form the double tubes; but although adequate contact is gained by these modes of construction, yet joints thus formed would not supply the strength of the joint first described, as will be evident.

I may provide my joint with a hook, loop, or device, *e*, adapted to receive a holding-wire, *f*, when it is desired to hold the telegraph-wire at an angle.

Having thus described my invention, what I claim as new is—

1. A telegraph-wire joint provided with a hook, loop, or device adapted to receive a holding-wire, substantially as and for the purposes set forth.

2. In a telegraph-wire joint, a partition adapted to separate the wires, and having soldering-openings *c*, adapted to allow the entrance of solder to both chambers at the same time, substantially as shown and described.

3. A telegraph-wire joint formed of two tubes, flattened, as shown, and secured together, and having soldering-openings *c* therein, as a new article of manufacture.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of July, 1883.

CHARLES MCINTIRE.

Witnesses:

CHARLES H. PELL,
F. F. CAMPBELL.