(No Model.)

F. S. POND.

COUPLING FOR ELECTRIC OR OTHER WIRES.

No. 372,637. Patented Nov. 1, 1887.

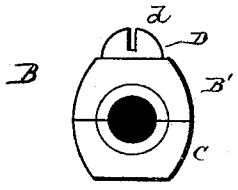


Fig. 1.

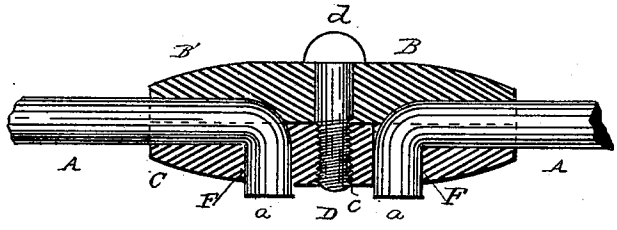


Fig. 2.

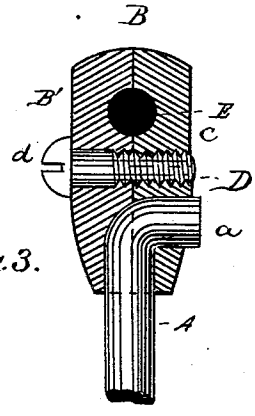


Fig. 3.

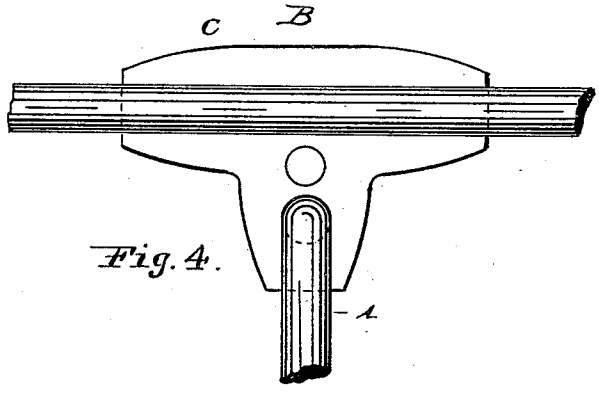


Fig. 4.

Witnesses.

M. B. Harris

Phillesmasi.

Inventor.

F. S. Pond.

by E. W. Anderson

Attorney.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

FRANK S. POND, OF WOONSOCKET, RHODE ISLAND.

COUPLING FOR ELECTRIC OR OTHER WIRES.

SPECIFICATION forming part of Letters Patent No. 372,637, dated November 1, 1887.

Application filed August 13, 1887. Serial No. 246,881. (No model.)

To all whom it may concern:

Be it known that I, FRANK S. POND, a citizen of the United States, and a resident of Woonsocket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Couplings for Electric or other Wires; and I do 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 or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is an end view of my coupling. Fig. 2 is a sectional view of same. Fig. 3 is a sectional view. Fig. 4 is a top view of same.

The invention relates to improvements in electric-wire couplings, the objects being to provide sure electric connection and to provide a simpler and better joint than the usual rolled joint, and one more economical and stronger than those in ordinary use; and it consists in the construction and novel combination of parts, hereinafter set forth.

Referring by letter to the drawings, A A designate two sections of wire having their ends *a a* bent at right angles, as shown in Fig. 2.

B represents the coupling, formed of two sections, B′ and C, connected together by the screw D, which passes centrally and transversely through openings in said pieces, with its head *d* resting upon the surface of the section B′. The screw-opening *c* in the section C is threaded to engage the threaded portion of the screw D.

The meeting surfaces of the sections B′ and C are provided with longitudinal semicircular grooves E E, running a suitable distance in from their ends, which grooves register when the sections are screwed together and form circular channels for the ends of the wires A. From the inner ends of said channels, channels F, of equal diameter, extend transversely through the section C, and receive the bent ends *a a* of the wires. The channels are made to fit snugly the wires used.

In coupling a branch wire the sections are shaped somewhat differently, being both T-shaped, and the grooves E extending entirely through the aligned arms of the sections to receive and bind on a suitable part of the main-line wire. The screw-opening in this modification is made at the junction of the arms, and the grooves E for the branch wire in the arms at right angles to the aligned arms.

In fitting the couplings the wires are placed in the grooves E and channels F of the section C, the section B′ put in place, and the two sections bound together by the screw D, thus forming a strong clamp on the wire. The points *a a* in the openings F are then soldered or tinned in the usual manner, to prevent corrosion by the entrance of moisture and make a perfect connection.

The clamping-sections B′ C may be of any suitable metal, but are preferably of copper.

The branch wire may be made to extend from the main wire at any desired angle.

The simplicity of the connection enables the wires to be connected and disconnected very easily and quickly, as one screw only has to be removed, and the closeness and extent of contact of the wires with the clamping-sections and the amount of metal in the coupling prevent the development of undue electrical resistance, which is apt to occur at joints, and is both annoying and dangerous.

Having described my invention, I claim—

1. An electric-wire coupling consisting of two clamping-pieces provided on their meeting surfaces with registering grooves to receive and hold the ends of adjacent wires, one section having openings at right angles to said grooves to receive the bent extremities of said wires, and a single screw binding the clamping-pieces together between the wires, substantially as specified.

2. The combination of the wires A, having the bent ends *a*, the section B′, provided with grooves E, the section C, provided with grooves E and channels F, and the screw D, passing transversely through openings in the sections between the wires, the opening in the section C being tapped to engage the screw, substantially as specified.

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

FRANK S. POND.

Witnesses:

JEFFERSON ALDRICH,

GEORGE W. SPAULDING.