

No. 826,687.

PATENTED JULY 24, 1906.

C. L. PEIRCE, JR
WIRE CONNECTOR.

APPLICATION FILED FEB. 23, 1904.

Fig. 1.

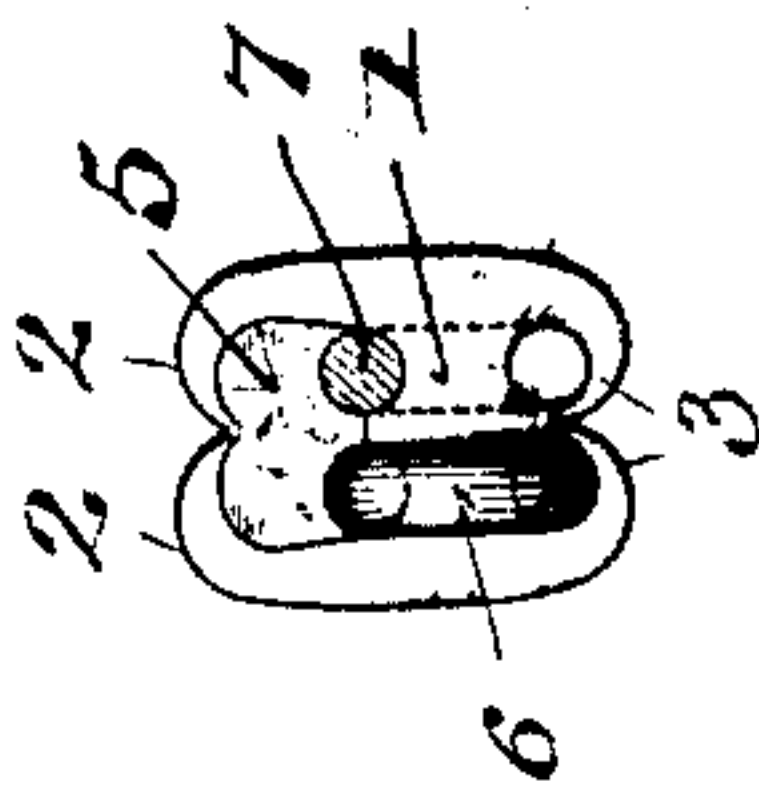


Fig. 2.

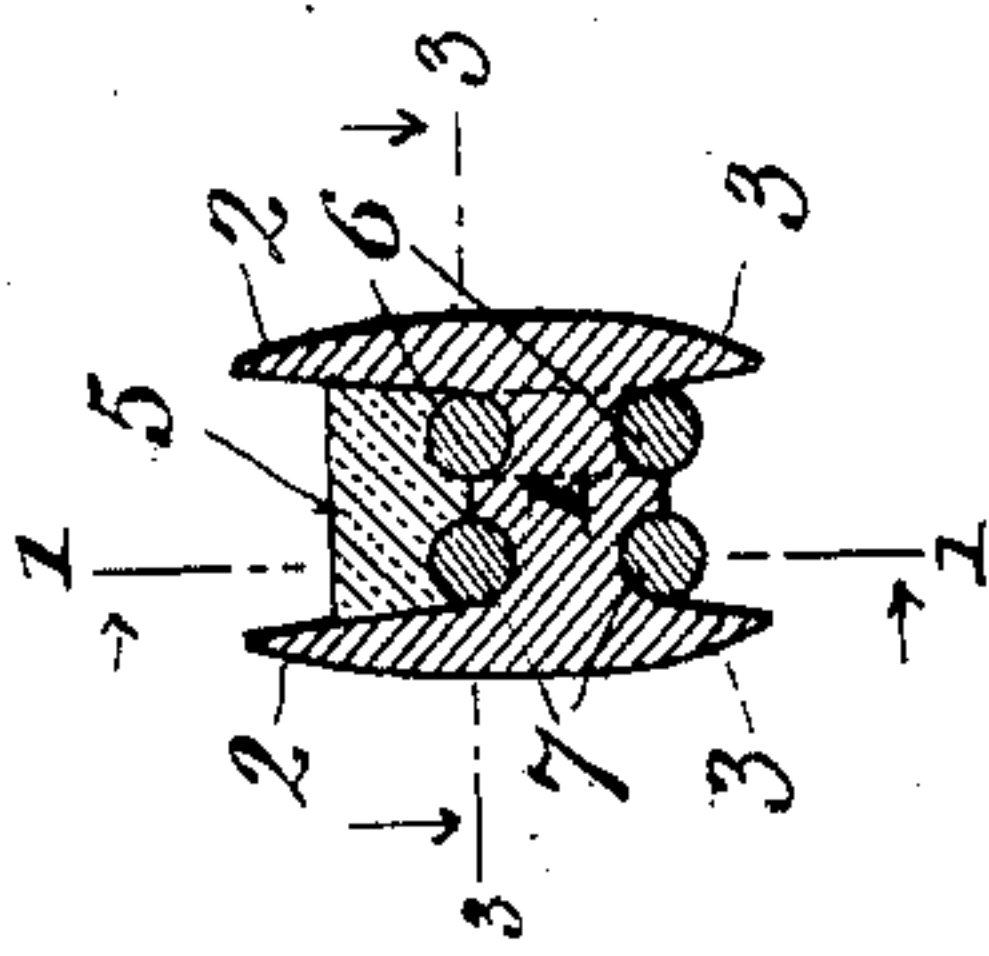


Fig. 3.

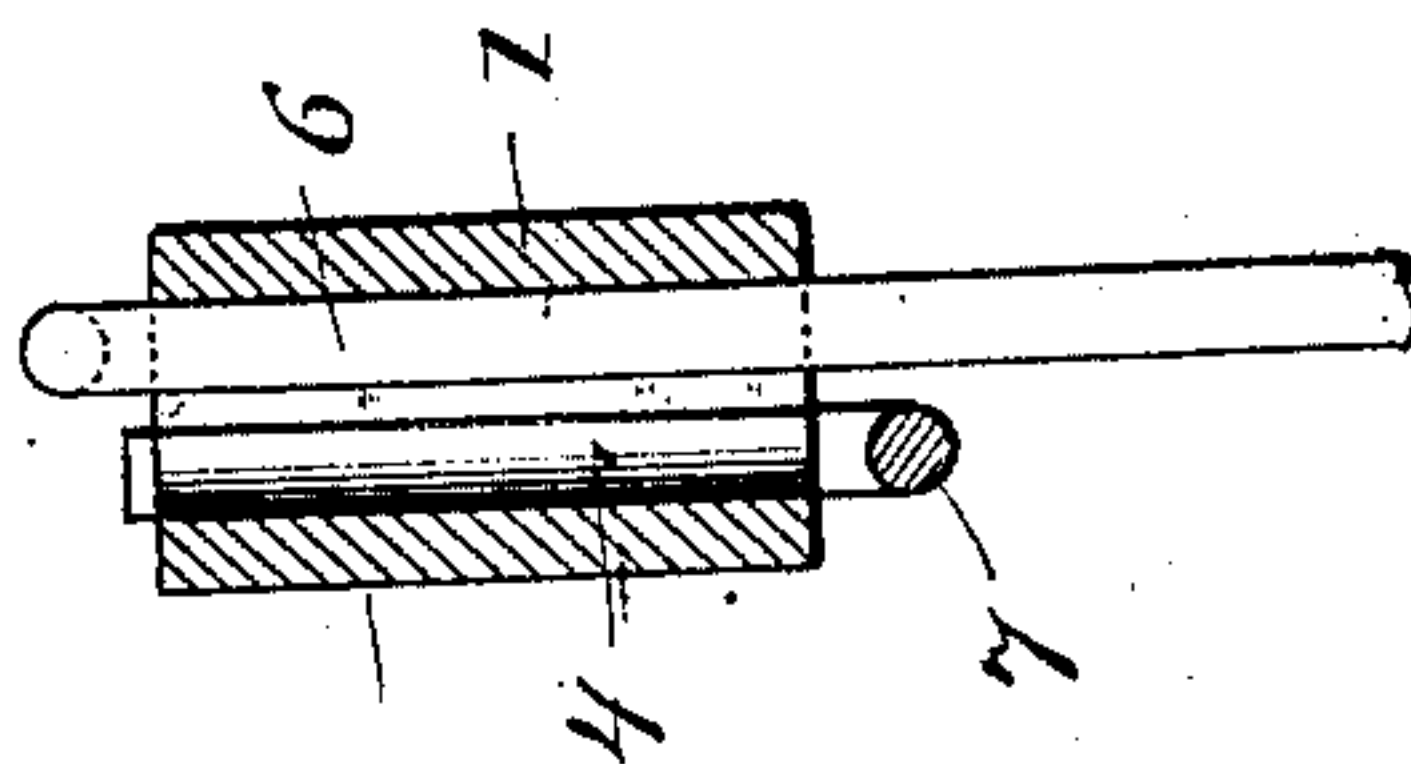
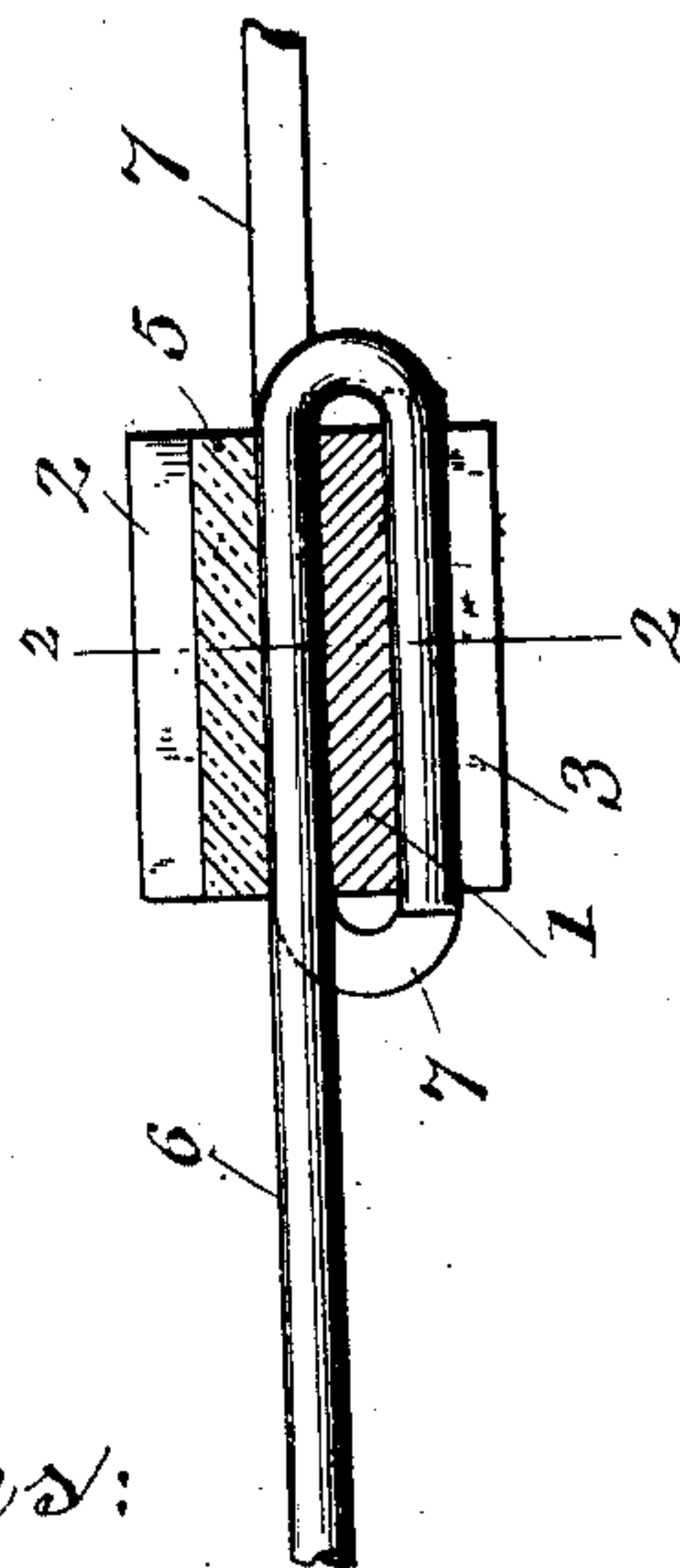


Fig. 3.

Witnesses:
Geo. W. Young.
R. J. Barach.

Inventor:
Charles L. Peirce, Jr.
By H. G. Underwood
Attorneys

UNITED STATES PATENT OFFICE.

CHARLES L. PEIRCE, JR., OF CHICAGO, ILLINOIS.

WIRE-CONNECTOR.

No. 826,687.

Specification of Letters Patent.

Patented July 24, 1906.

Application filed February 23, 1904. Serial No. 194,799.

To all whom it may concern:

Be it known that I, CHARLES L. PEIRCE, Jr., a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Wire-Connectors; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has especial reference to means for connecting two wires electrically as well as mechanically; and it consists in certain peculiarities of construction and combination of parts, as will be fully set forth hereinafter in connection with the accompanying drawings and subsequently claimed.

In the said drawings, Figure 1 is a longitudinal vertical sectional view of my said connector with wires in place, but before the shell-flanges are bent over, taken on the plane indicated by the line 1 1 in Fig. 2. Fig. 2 is a transverse vertical sectional view of the same, taken on the plane indicated by the line 2 2 in Fig. 1. Fig. 3 is a transverse horizontal sectional view taken on the plane indicated by the line 3 3 in Fig. 2. Fig. 4 is an end view of the complete device with the connected wires in place therein and the flanges bent over.

The principal use of my invention is in making electrical connection between the adjacent ends of two conductors, as where a wire is broken or where a splice is necessary.

Referring by numerals to the drawings, 1 represents the body of a shell made, preferably, of copper, having upper outer flanges 2 2 and lower outer flanges 3 3 of less height. Between the upper flanges the body 1 is formed with two longitudinal parallel semicircular grooves, (one being shown at 4 in Fig. 3,) and between the lower flanges 3 3 the said body has likewise two longitudinal parallel semicircular grooves. Above the upper set of grooves the space between the flanges 2 2 is filled with some soft or very ductile metal, like lead or some alloy or amalgam which readily flows under pressure, it being desirable that this filling material (marked 5) should be considerably softer or more ductile than the copper or other material of which the said shell is formed, the lower surface of the filling 5 having also semicircular grooves therein which register with those below in the

upper surface of the body 1 of copper or other harder material.

As shown in the drawings, one of the two wires to be connected (here marked 6) is first slipped through one of the circular grooves formed between said parts 1 and 5 and then the wire doubled under and the lower end located in the lower semicircular groove, which is just underneath the groove first named. Similarly, the other wire (here marked 7) is pushed from the opposite direction through the upper circular groove, then bent and doubled under, and the lower end located in the remaining lower groove. Next the upper flanges 2 2 are bent over and down on the soft filling 5 and the lower flanges 3 3 bent over and up against the lower ends of the wires 6 and 7, as shown in Fig. 4.

By the use of the filling material air and moisture are excluded from the wires within the upper part of the shell, and thereby oxidation and consequent partial insulation prevented.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A wire-connector, comprising a metallic shell with solid central body and outer upper and lower bendable flanges in pairs, the said body having parallel longitudinal semicircular grooves between each pair of the flanges, for the reception of the ends of the wires to be connected, and a filling of softer or more ductile material than the shell located between the upper pair of flanges and grooved on its under surface to register with the adjacent grooves in the shell-body.

2. A wire-connector comprising a metallic shell having a solid central body provided with opposite bendable flanges, and a filling of softer ductile material between which and the shell the wires to be connected are received, the filling being held in place by the flanges aforesaid bent inward thereon.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

CHARLES L. PEIRCE, JR.

Witnesses:

H. G. UNDERWOOD,
R. J. BARSCH.