(No Model.)

W. BAINBRIDGE.

WIRE COUPLING.

No. 399,465. Patented Mar. 12, 1889.

Fig. 1.

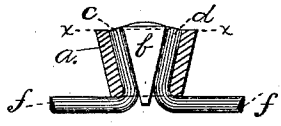


Fig. 2.

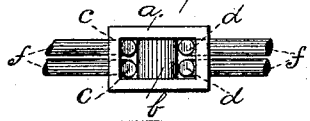


Fig. 3.

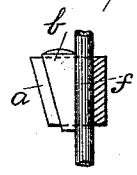


Fig. 7.

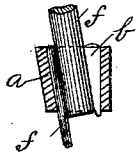


Fig. 8.

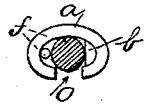


Fig. 4.

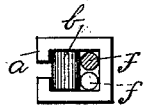


Fig. 5.

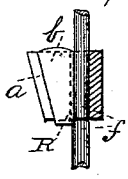


Fig. 9.

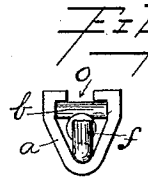
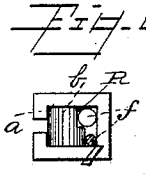


Fig. 6.



WITNESSES.

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UNITED STATES PATENT OFFICE.

WILLIAM BAINBRIDGE, OF OMAHA, NEBRASKA.

WIRE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 399,465, dated March 12, 1889.

Application filed August 25, 1888. Serial No. 283,715. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BAINBRIDGE, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Wire-Couplings; 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.

My invention relates to a device for coupling the ends of wires; and my object is to produce a more simple, cheap, and effective arrangement than those hitherto in use.

With these ends in view my invention consists in the peculiar features and combination of parts, more fully described hereinafter, and pointed out in the claim.

In the accompanying drawings, Figure 1 represents a sectional elevation of my invention; Fig. 2, a top view, and Figs. 3, 4, 5, 6, 7, 8, and 9 modifications.

The reference-letter *a* denotes a sleeve having straight converging inner walls throughout its length, whereby one end of the chamber is made larger than the opposite end. The interior chamber of the sleeve is, by preference, given a rectangular form in horizontal cross-section. The top of the sleeve through line *x x* of Fig. 1 is oblong, while the lower opening is more nearly square.

b indicates a wedge having a length and width sufficient to enter the interior of the sleeve, yet leave enough room for the reception of the ends *c* and *d* of wires *f*. The opposite walls of the wedge are given an inclination substantially parallel with those of the sleeve in order to secure an equal bearing throughout the length of the wedge. This construction insures a more tenacious hold of the wires and prevents them from slipping loose.

In using my invention the operator simply places the opposite ends *c d* of the wires *f* into the sleeve. The wedge is then inserted between the wires and driven home, as shown in Fig. 1. The wires *f*, being bent around the lower corners of the sleeve, form an acute angle and render slipping much more difficult.

It sometimes becomes necessary to connect wires of a different diameter. When this occurs, a sleeve with straight and inclined walls, in combination with a wedge provided with corresponding grooved surfaces, may sometimes be employed, as shown in Figs. 5 and 6. In this case a recess, R, to receive the larger wire is made in one side of the wedge. In Figs. 7 and 8 a sleeve, which is oval in horizontal cross-section and provided with a slot, *o*, in one side, may be resorted to. In using this modification the ends of the wires are made to overlap each other and the wedge is driven in at the side.

The modification shown in Fig. 9 shows the ends of the wires overlapping each other within a trough-shaped sleeve, having a longitudinal slot, *o*, for the reception of the wires, and the wedge is driven alongside the wires in such a manner as to cover said slot *o* and lock the wires together.

It is evident that numerous other slight changes which might suggest themselves to a skilled mechanic could be resorted to without departing from the spirit and scope of my invention; hence I do not limit myself to the precise constructions herein shown.

Having thus described the preferred form and leading characteristics of my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, in a wire-coupling, of a sleeve provided with a central chamber larger at one end than at its opposite end, and having straight inner walls inclined toward each other throughout the length of the sleeve, a wedge having an inclined exterior surface corresponding with the inner walls of the sleeve, and wires interposed between the wedge and sleeve, in the manner and for the purpose described.

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

WILLIAM BAINBRIDGE.

Witnesses:
C. E. STRATTON,
R. A. CODDING.