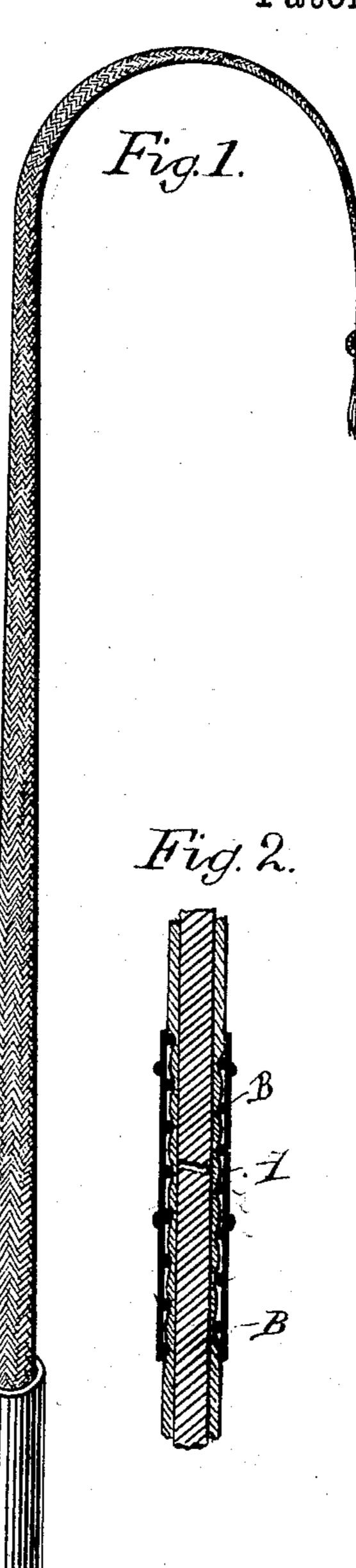
(No Model.)

E. PHELPS.

WHIP COUPLING.

No. 277,778.

Patented May 15, 1883.



Witnesses: Holmson H. Haylor Engel Phelps

## United States Patent Office.

ENOCH PHELPS, OF WESTFIELD, MASSACHUSETTS.

## WHIP-COUPLING.

SPECIFICATION forming part of Letters Patent No. 277,778, dated May 15, 1883.

Application filed March 29, 1883. (No model.)

To all whom it may concern:

Be it known that I, ENOCH PHELPS, a citizen of the United States of America, residing at Westfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Whip-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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in whip-couplings; and it has for its object to provide a joint the exterior surface of which-will be plain or smooth, and which is provided on its interior with a screw-thread, which is formed by inserting therein a spiral wire and soldering the same to the casing, as will be hereinafter more fully set forth, and pointed out in the claim.

In the annexed drawings, which illustrate my invention, Figure 1 is a view showing my improved whip-coupling applied. Fig. 2 is a longitudinal section.

In the annexed drawings, which illustrate my invention, A represents a tube, which is cylindrical in shape. This tube is preferably made of spun metal, and, having a smooth exterior, is adapted to receive ornamentation. The interior of the tube A is provided with a wire, B, which is bent spirally, and secured within the tube by means of solder. The ends of this wire, which terminate near the end of the tube, are sharpened. By this means the

interior of the tube is provided with a screwthread which does not show on the exterior, which is objectionable in high-priced whips.

I am aware that prior to my invention whip-couplings which consist of a sheet-metal sleeve having a thread spun upon the same have been constructed; but this construction, for the reason aforesaid, is considered objection-45 able. Whip couplings have also been constructed of wire which has been coiled and braced upon itself, which forms a screw-threaded interior and exterior; and I do not claim such as my invention, my invention being especially designed to obviate the objection set forth by the trade to the aforesaid style of coupling.

The coupling hereinbefore described may be cheaply manufactured, as the sleeve is made 55 of spun metal. The screw-threaded interior of the sleeve serves to hold the parts of the whip firmly and securely together.

Having thus described my invention, what I claim as new, and desire to secure by Letters 60 Patent, is—

The sheet-metal coupling for whips having a plain exterior, and provided on its interior with a screw-thread formed by a spirally-curved wire, which is secured to the interior of the 65 sleeve throughout its whole length, substantially as described, and for the purpose set forth.

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

ENOCH PHELPS.

Witnesses:

J. R. DUNBAR, M. B. WHITNY.