To all whom it may concern:

Be it known that I, GEORGE L. OSBORN, of Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Feed-Wire Connections, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention has for its object to construct a connection especially adapted for connecting a feed-wire to a rail—as, for instance, to a third rail—which will admit of being soldered to the rail and also soldered to the end of the feed-wire and said soldering operations carried on separately without affecting each other—as, for instance, the connection may be soldered to the rail and subsequently the end of the feed-wire soldered to the connection without detaching the previously-soldered joint; and the invention, furthermore, has for its object to construct a connection in such a manner that it is especially designed to have the feed-wire soldered to it after being soldered to the rail.

Figure 1 shows in side elevation a feed-wire connection embodying this invention, said figure also showing a portion of the feed-wire and a cross-section of the rail. Fig. 2 is a vertical section of the feed-wire connection shown in Fig. 1. Fig. 3 is a front elevation of the feed-wire connection, and Fig. 4 is a plan view of the feed-wire connection.

The connection comprises, essentially, a flat rail-engaging portion c, a cup d', adapted to receive the end of the feed-wire, and a neck d, connecting the cup d' with the rail-engaging portion c. The flat rail-engaging portion is made large enough to easily carry the current to the rail and preferably has upon its underside a plate c', of solder, by which it is to be attached to the rail when the latter is heated. The neck d' is made quite long, so that the cup d', which receives the end of the feed-wire, will be located a sufficient distance from the rail so that the heat applied to the cup when soldering the end of the feed-wire to it will not affect the soldered connection of the rail-engaging plate with the rail. The feed-wire usually employed is the ordinary stranded wire, and the strands thereof will be secured together by solder to present a solid current-carrying end portion either before or after insertion in the cup. The neck d' projects downwardly at approximately right angles to the rail-engaging plate c, and thereby holds the cup in vertical position to prevent spilling the solder when soldering the feed-wire and also to support the cup in a position whereby access to it may be easily obtained for the purpose of heating it. The cup may have a lining c' of solder.

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

A feed-wire connection consisting of a flat rail-engaging plate adapted to be soldered to a rail, a downwardly-projecting neck disposed at approximately right angles to said plate, a cup for the end of the feed-wire formed at the lower end of said neck on the side opposite the plate, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE L. OSBORN.

Witnesses:

B. J. NOYES,
L. H. HARRIMAN.