

H. E. WHITE.
CONCRETE REINFORCE.
APPLICATION FILED FEB. 25, 1909.

934,378.

Patented Sept. 14, 1909.

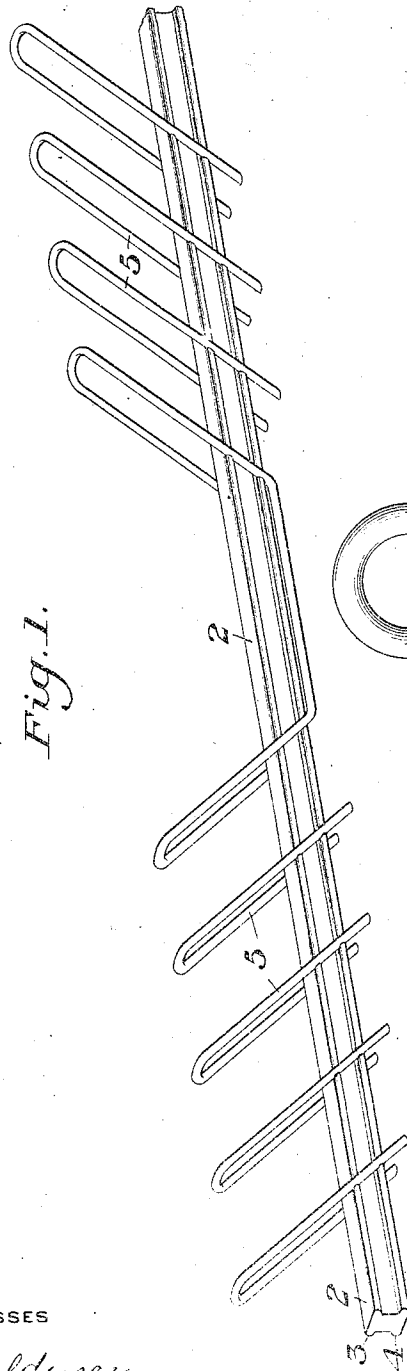


Fig. 1.

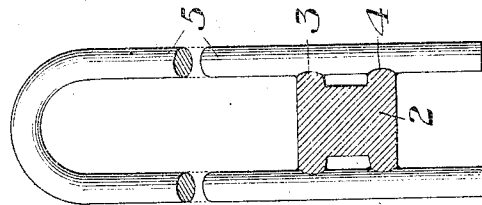


Fig. 2.

WITNESSES

R. A. Baldwin
Jesse B. Keller

INVENTOR

H. E. White

by Bakewell, Byrnes & Larned
Attys.

UNITED STATES PATENT OFFICE.

HERBERT E. WHITE, OF YOUNGSTOWN, OHIO, ASSIGNOR TO THE GENERAL FIRE-
PROOFING COMPANY, OF NEW YORK, N. Y., A CORPORATION OF OHIO.

CONCRETE-REINFORCE.

934,378

Specification of Letters Patent. Patented Sept. 14, 1909.

Application filed February 25, 1909. Serial No. 479,944.

To all whom it may concern:

Be it known that I, HERBERT E. WHITE, of Youngstown, in the county of Mahoning and State of Ohio, have invented a new and useful Concrete-Reinforce, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view showing my improved metal reinforcing structure; and Fig. 2 is a detail view of the connections between the tension member and the stay members.

My invention relates to metallic reinforces, particularly those employed for concrete beams, though it may be applied to other reinforces. In such reinforces, it is often desirable to secure members of smaller cross section to a reinforcing bar of much larger cross section, and heretofore it has been difficult or impossible to electrically weld such members together, since the smaller member would burn or melt away before the larger member reached the welding heat. I have discovered that I can overcome this difficulty by providing the larger member with a rib or ribs at the welded joint, these ribs being of proper size to electrically weld to the smaller member or members.

In the drawing, 2 represents the concrete bar having ribs 3 and 4, projecting from its corners on both sides. The bar may be rolled in this shape or otherwise formed to give the projecting ribs or lips.

5, 5, are inclined strut members, shown as formed of heavy wire that will not bend, their legs fitting against the ribs of the bar. These legs are electrically welded to the projecting ribs of the bar, this electrical welding being carried out in the ordinary manner. Owing to the reduced section of the ribs, as compared with the bar proper, this electrical welding may be easily and effectively carried out. The strut members may be terminated at the lower edge of the bar or may extend below it, or may be arranged in both ways, depending on the location, strains, etc.

The advantages of my invention result from the providing of a cheap and secure connection between the concrete bar and the member secured thereto.

Variations may be made in the form of the bar, the members connected thereto, and the

shape of the ribs, without departing from my invention.

I claim:

1. As a new article of manufacture, a concrete reinforcing bar, having a projecting portion of smaller cross-section than the body of the bar, and a reinforcing member welded to said rib, the cross-sectional areas of the projecting portion of the bar and of the reinforcing member being such that the portions to be welded can be brought to a welding heat in substantially the same period of time; substantially as described.

2. As a new article of manufacture, a concrete reinforcing bar, having a projecting rib of smaller cross-section than the body of the bar, and a reinforcing member having a portion of a cross-section substantially equal to that of the rib, said portion being welded to the rib; substantially as described.

3. As a new article of manufacture, a metal bar having a body portion of relatively large cross-section, and projecting ribs each of relatively small cross-section, and a metallic member having a cross-section approximately equal to that of each of the ribs, and welded to the ribs; substantially as described.

4. As a new article of manufacture, a concrete reinforcing bar having lateral ribs or projections at opposite sides of relatively small cross-section compared to the cross-section of the body portion of the bar, and shear members each of approximately the same cross-section as the ribs or projections, and welded thereto at both sides of the bar; substantially as described.

5. As a new article of manufacture, a concrete reinforcing bar, having lateral ribs or projections at opposite sides, said ribs or projections being each of relatively small cross-section compared to that of the body of the bar, and shear members of a cross-section substantially equal to the cross-section of the said ribs or projections and engaging opposite sides of the bar, and welded to the ribs or projections; substantially as described.

In testimony whereof, I have hereunto set my hand.

HERBERT E. WHITE.

Witnesses:

G. D. MAIGERUM,
O. D. KAISER.