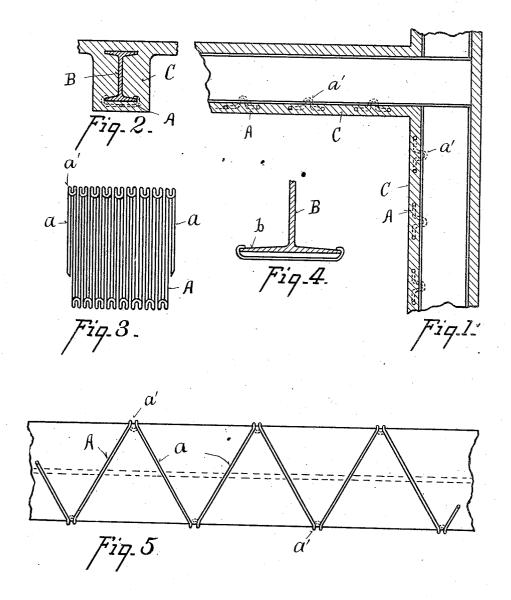
No. 835,723.

PATENTED NOV. 13, 1906.

## R. ANDERSON.

REINFORCED CONCRETE COVERING FOR STRUCTURAL MEMBERS.

APPLICATION FILED JULY 12, 1905.



Witnesses C.W. Miles, W. Mrc. Bormack). Robert Anderson

33 Halber Fibrurray

Attorney

## UNITED STATES PATENT OFFICE.

ROBERT ANDERSON, OF CINCINNATI, OHIO, ASSIGNOR TO THE FERRO CONCRETE CONSTRUCTION COMPANY, OF CINCINNATI, OHIO, A CORPORATION OF OHIO.

## REINFORCED CONCRETE COVERING FOR STRUCTURAL MEMBERS.

No. 835,723.

Specification of Letters Patent.

Patented Nov. 13, 1906.

Application filed July 12, 1905. Serial No. 269,312.

To all whom it may concern:

Be it known that I, ROBERT ANDERSON, a citizen of the United States of America, and a resident of Cincinnati, county of Hamilton, State of Ohio, have invented certain new and useful Improvements in Reinforced Concrete Coverings for Structural Members, of which the following is a specification.

The object of my invention is a means for reinforcing the concrete covering of beams, which is strong, may be placed in position readily, and may be produced at an eco-

nomical cost.

In the accompanying drawings, Figure 1 is a cross-sectional view of a column and a beam covered with a reinforced concrete embodying my invention. Fig. 2 is a cross-section of the same. Fig. 3 is an elevation of the wire bent into return-bends in the form in 20 which it is supplied to the workmen before it has been extended for engaging the beams. Fig. 4 is a detail view, upon an enlarged scale, showing the flange of the beam in cross-section and a section of wire applied thereto. 25 Fig. 5 is an inverted plan view of an I-beam with the wire return-bends engaging the same.

Referring to the parts, the wire A is bent into a series of return-bends a, wherein the successive members stand substantially par3° allel to each other. The ends of the bends are bent into hooks a', as shown in Fig. 3. The wire in this form is supplied to the workman, who engages it with the flange b of a

beam B by engaging one of the hooks a' with the flange, then the successive hooks a', 35 spreading the parallel members apart at angles such that the hooks are made to grasp the flange firmly. After the hooks have been thus engaged with the flange of the beam the wire stands at a short distance 40 from the surface of the flange. When the concrete C is placed about the beam, it fills in the spaces between the wire and the beam and takes a firm grip upon the wire, so that it prevents the concrete being separated from 45 the beam.

The process of applying the wire to a beam is a simple and rapid one, and the wire may be bent into the proper shape readily and

economically.

What I claim is—
1. The combination of a structural member, a continuous wire bent into return-bends, means at the ends of the bends engaging the structural member and concrete covering the 55 wire and the member.

2. The combination of a structural member, a wire bent into return-bends, the return-bends bent at the ends into hooks, the hooks engaging the edges of the member, and con-60 crete covering the wire and the member.

ROBERT ANDERSON.

Witnesses:

WALTER F. MURRAY, AGNES McCORMACK.