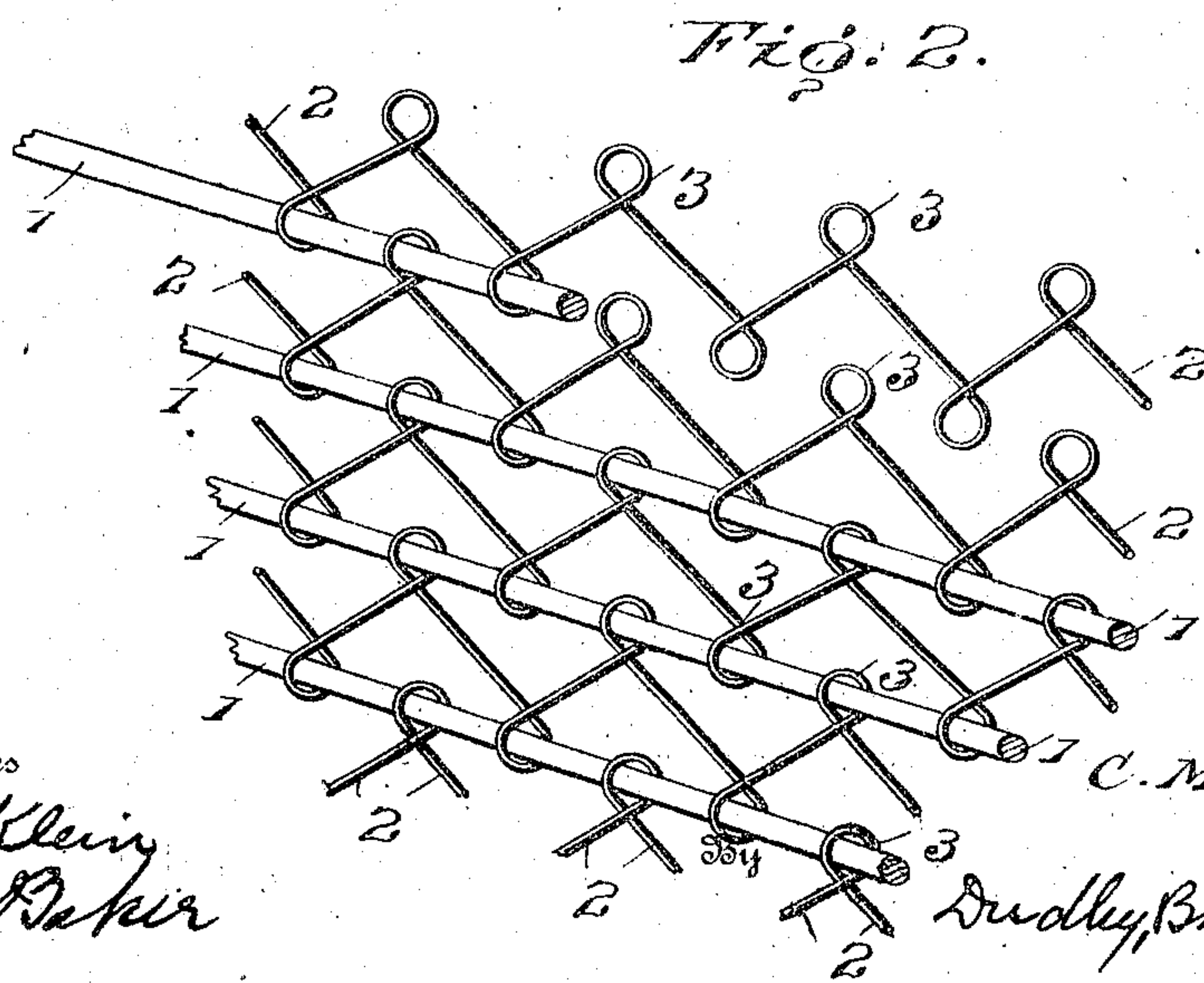
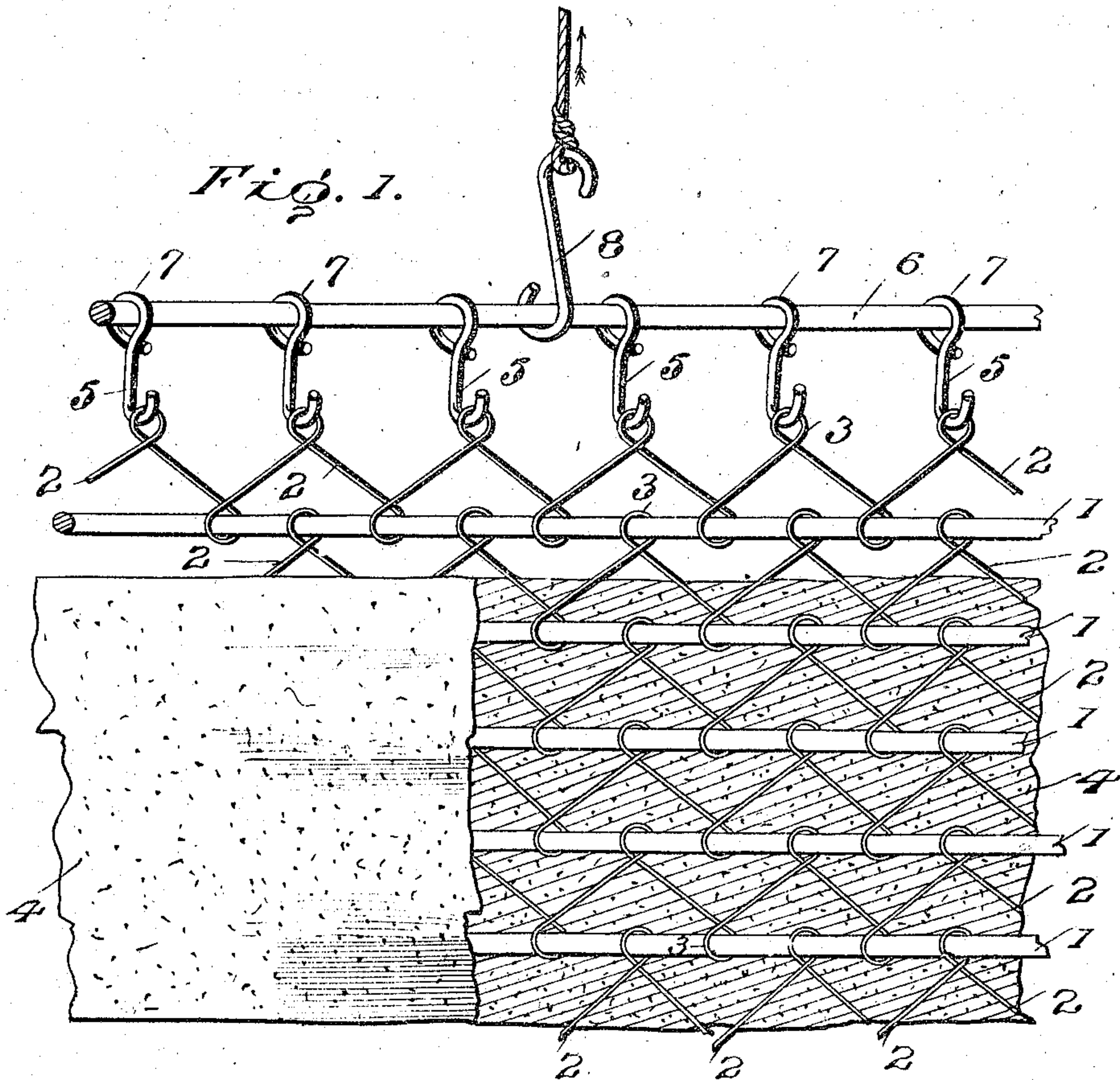


No. 867,665.

PATENTED OCT. 8, 1907.

C. MANKEDICK.
REINFORCED CONCRETE STRUCTURE.
APPLICATION FILED MAR. 2, 1907.



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UNITED STATES PATENT OFFICE.

CHARLES MANKEDICK, OF SULLIVAN, INDIANA.

REINFORCED CONCRETE STRUCTURE.

No. 867,665.

Specification of Letters Patent.

Patented Oct. 8, 1907.

Application filed March 2, 1907. Serial No. 360,253.

To all whom it may concern:

Be it known, that I, CHARLES MANKEDICK, a citizen of the United States, residing at Sullivan, in the county of Sullivan and State of Indiana, have invented certain new and useful Improvements in Reinforced Concrete Structures, of which the following is a specification.

My invention relates to certain new and useful improvements in reinforced concrete structures.

The object of my invention is to produce a structure of great tensile and compressive strength, which shall be sufficiently elastic and cohesive, and which shall offer great resistance to shearing, as well as a structure in which the strength is evenly distributed throughout the mass thereof.

With these objects in view my invention consists in certain constructions, combinations and arrangement of parts, the preferred form of which will be first described in connection with the accompanying drawings and then the invention particularly pointed out in the claims.

Referring to the drawings wherein the same part is designated by the same reference numeral wherever it occurs, Figure 1 is a side elevation of a wall in the course of construction. Fig. 2 is a perspective view showing the method by which the reinforced structure is united together.

1 designates a series of rods which may be of any desired size, and arranged either vertically or horizontally in the structure as may be desired. These rods may be formed of iron, steel or other suitable metal.

2 designates the wires which form the mesh between the rods 1. These wires as seen extend from one rod to the adjacent rod and encircle the rods alternately. Preferably, and as shown, the wires 2 are turned upon themselves, so as to form eyes 3 around the rods. Around this structure composed of the rods 1 and the mesh formed by the wires 2 I mold concrete 4 in any ordinary or desired manner.

In Fig. 1 I have shown the construction as used in a side wall or other flat construction, such for instance as a floor. It is to be understood however that my structure is equally well adapted for use in constructing arches, girders, chimneys or other structures in which reinforced concrete may be found useful.

In building a wall in accordance with my invention I preferably have the wire mesh formed into zigzag strips with loops at each angle of the zigzag through which the rods 1 may be passed. I then place a rod in position with the mesh thereon, and to the other side of the mesh attach hooks 5 which are loosely mounted upon a rod 6 by means of the eyes 7 formed in the hooks.

One of these hooks is hooked within the loop of each angle of the mesh, and by suitably supporting the rod 8 as by their ends the mesh is held in position. The sides of the mold are then placed around the mesh and concrete tamped in to a depth so as to leave the eyes of the mesh exposed. The hooks 5 are now removed from the mesh and a second line of mesh is placed in position and another rod 1 inserted through the eyes of this second mesh and the projecting eyes of the first mesh. The hooks 5 are then secured to the eyes on the other sides of the second mesh, the molds replaced and concrete again tamped in as before. If it is not convenient to support the rod 6 at its ends as above suggested, the same may be supported by a suitable hook 8 which can be attached to any convenient supporting device.

The structure is of simple form and is economical to build and can be used in any form of structure where reinforced construction is desired.

While I have described what I believe to be the preferred form of my invention, I desire to have it understood that many changes may be made in the form, construction and arrangement of parts without departing from the spirit of my invention.

What I claim as new and desire to secure by Letters Patent is

1. The method of building reinforced concrete structures which consists in supporting a wire bent into zigzag form, and molding concrete around the body of the same, leaving the line of angles on one side of said wire projecting, then connecting a second wire bent into zigzag form by passing a rod through the angles of the embedded wire and said second wire, supporting said second wire in the desired position, molding concrete around the uncovered portion of the first wire and the major portion of the second wire, and continuing said operation till the structure desired is produced.

2. The method of building reinforced concrete structures which consists in supporting a wire bent into zigzag form and having an eye formed at each bend of the wire, molding concrete around the body of the same, leaving the eyes on one side projecting, then connecting a second wire similarly bent by passing a straight rod through the adjacent eyes of the wires, supporting said second wire in the desired position, molding concrete around the uncovered eyes of the first wire and the major portion of the second wire, leaving the eyes on the free edge of the second wire uncovered, and continuing said operation till the structure desired is produced.

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

CHARLES MANKEDICK.

Witnesses:

H. V. BENEFIELD,
JOS. P. DUFFY.