Aug. 12, 1930. W. E. WHITE 1,772,653

CLIP AND SPACER FOR BARS

Original Filed Oct. 30, 1926

Fig. 2.

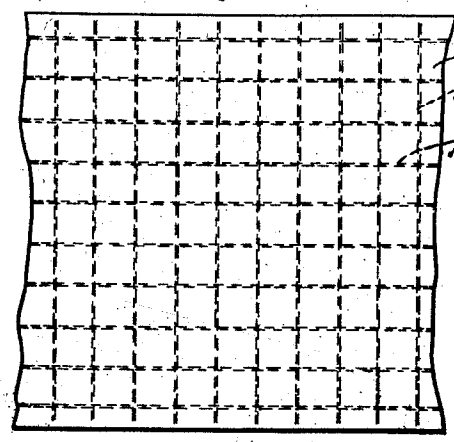
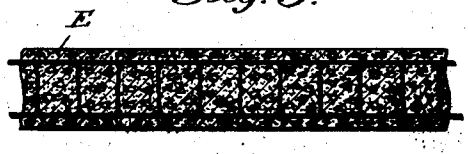


Fig. 3.



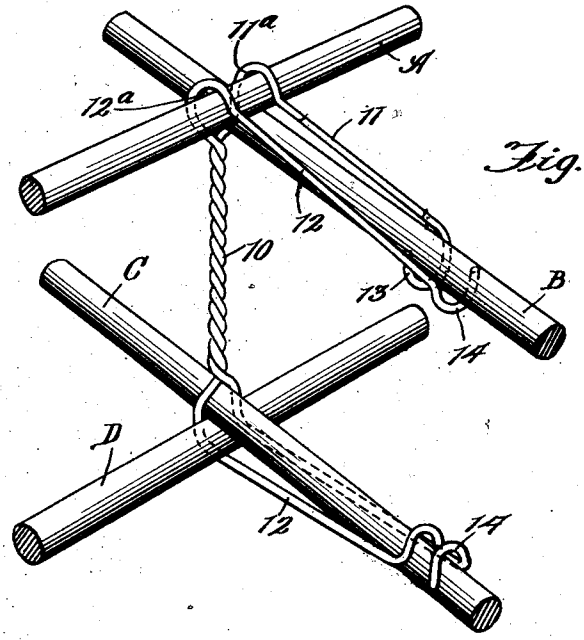


Fig. 1.

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Patented Aug. 12, 1930 1,772,653

UNITED STATES PATENT OFFICE

WILLIAM E. WHITE, OF CHICAGO, ILLINOIS, ASSIGNOR TO KALMAN STEEL COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF DELAWARE

CLIP AND SPACER FOR BARS

Application filed October 30, 1926, Serial No. 145,225. Renewed January 6, 1930.

My invention relates to reinforcements and particularly to means for holding a series of crossed reinforcing rods in spaced relation.

In some types of construction, it is desirable to assemble the reinforcement before placing it in position, and numerous expedients have been adopted for accomplishing the desired result. In the construction here disclosed I have provided a simple device having no loose or separate parts and functioning to space apart two layers of reinforcement and to hold the crossed bars in rigid relation. The device consists essentially of a rigid member having a crotch at each end and arms or fingers formed as extensions of the crotch arms and adapted to overlie and underlie, respectively a pair of right-angularly disposed bars.

One form of the invention is illustrated in the accompanying drawings, in which;

Fig. 1 is a perspective view at an intersection of two layers of crossed reinforcing rods, showing my improved device in operative position;

Fig. 2 is a plan view showing a portion of a unit in place, and:

Fig. 3 is a sectional view through a concrete slab containing the reinforcement.

In the drawings, I have illustrated upper crossed bars A and B, and lower crossed bars, C and D. As shown in Fig. 3, these rods are intended to be imbedded in a slab E, of concrete.

The device of my invention in its narrow conception, consists of a pair of wires composed of resilient material and twisted together at their intermediate portions to form the rigid strut or spacer, 10. At both ends of the member, 10, the two wires are spaced apart to form crotches to receive the bars B, C. The material composing the crotches is extended to form spring arms or fingers, 11, 12, the inner ends of which are bent to form pockets for the crossed bars, A, D. The terminal portions of the arms, 11, 12 are both bent to form hooks, 13, 14, one arm being somewhat longer than the other, both of the hooks overlying the bars, B, C. The arms are formed in an angular position relative to that shown in Fig. 1, so that the hooked ends, 13, 14 must be deflected downwardly in order to effect engagement with the bars.

The operation of effecting engagement between the crossed bars is very simple. The bar B, being placed in the respective crotch, the bar A is then placed thereover at a point beneath the seats, 11^a, 12^a, formed in the arms. Thereafter the arms are bent downwardly into the position shown in the drawings.

Obviously the construction is capable of considerable modification, and I do not wish to be limited except as indicated in the appended claims.

I claim:

1. In combination a pair of wires interengaged at their intermediate portions to form a rigid spacing structure having a crotch for receiving a bar, the end portions of the wires being bent to provide spring arms having hooks on their ends, said arm being adapted to overlie a crossed bar and to engage at their ends beneath the first mentioned bar.

2. In combination, a pair of wires interengaged at their intermediate portions to form a rigid spacing structure, having a crotch at both ends for receiving parallel spaced bars, the free ends of the wires being in the form of spring arms adapted to overlie crossed bars, the terminals of the arms being provided with hooks to underlie the first mentioned bars.

3. In combination, a pair of wires twisted together at their intermediate portions to form a rigid spacer having a crotch at both ends, each crotch adapted to receive a bar, the end portions of the wires being bent to form spring arms adapted to overlie a crossed bar and to engage with the bar held in the crotch at a point remote from the junction of the crossed bars.

In testimony whereof I have affixed my signature.

WILLIAM E. WHITE.