

D. MAXWELL.
TRUSS BAR FOR CONCRETE CONSTRUCTION.
APPLICATION FILED OCT. 17, 1907.

994,325.

Patented June 6, 1911.

Fig. 1.

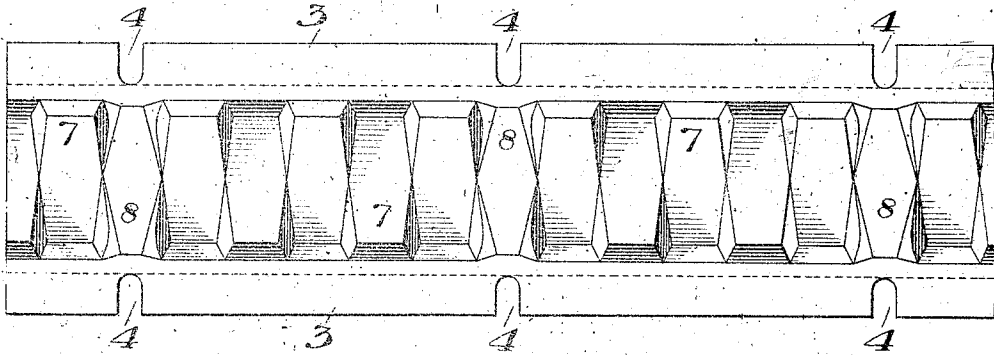


Fig. 2.

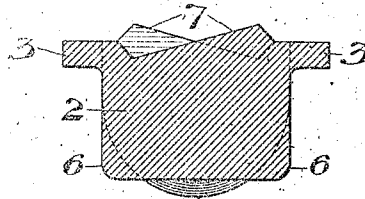
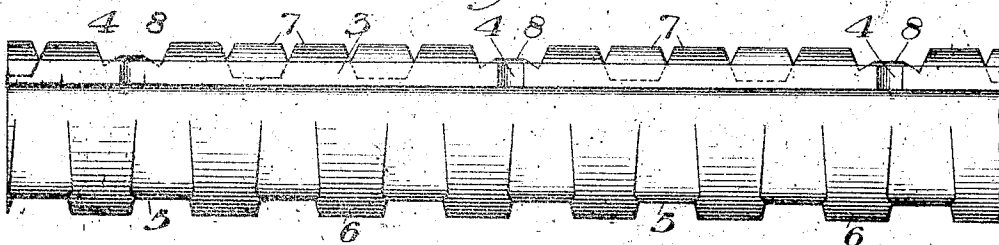


Fig. 3.



WITNESSES

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DAVID MAXWELL, OF DETROIT, MICHIGAN.

TRUSS-BAR FOR CONCRETE CONSTRUCTION.

994,325.

Specification of Letters Patent.

Patented June 6, 1911.

Application filed October 17, 1907. Serial No. 397,842.

To all whom it may concern:

Be it known that I, DAVID MAXWELL, of Detroit, Wayne county, Michigan, have invented a new and useful Truss-Bar for Concrete Construction, 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 plan view of a bar embodying my invention; Fig. 2 is a cross-section of the same; and Fig. 3 is a side view.

My invention has relation to metal reinforcements for concrete construction of the character more fully described and claimed in my Patent No. 859,314, dated July 9th, 1907. Said patent discloses a reinforcing truss for concrete construction having a flanged tension member, the flanges being notched to receive a webbing or lacing.

The present invention relates more particularly to the construction of the tension bar, and is designed to provide a bar of this character which shall have a substantially uniform cross-section at all points of its length, and which is provided with ribs or corrugations for bonding the bar in the surrounding concrete.

My invention will be best understood by reference to the accompanying drawing, in which the numeral 2 designates the body portion of a bar embodying my invention. This bar is formed with the lateral flanges 3 at its upper portion, said flanges being notched at intervals as indicated at 4, for the purpose of receiving the webbing or lacing. As originally formed, the bar has a convex lower portion, which is indented at intervals to form a series of corrugations or depressions 5 the material thereby displaced being forced laterally so as to form the angular projections 6.

The upper face of the bar is formed with a plurality of transverse ribs or corrugations 7. The upper surfaces of these ribs or corrugations are inclined, so that a portion of each is below the general plane of the top surface of the bar, while another portion is below such plane to an equal extent, adjacent corrugations being reversely inclined. By this arrangement of the corrugations, provision is made for securely bonding the bar in the surrounding concrete, a portion of which will embed itself between each adjacent pair of ribs or corrugations, while a portion of each rib or corrugation will embed itself in the body of concrete outside

of the plane of the surface of the bar. At the points where the flanges are notched to receive the lacing or webbing, a break is made in the corrugating, but the upper surface of the bar at this point is preferably reinforced as indicated at 8, to provide an amount of additional metal substantially equal to that which is removed in forming the notches 4. The corrugations 5, together with the angular ribs or projections 6 also form bonding means, as well as means for holding the lacing or webbing in place.

I do not claim herein broadly the feature of a bar having a corrugated face of the character described, inasmuch as this feature is broadly claimed in my copending application, Serial No. 397,843 of even date herewith.

What I claim is:—

1. A truss bar for concrete reinforcement having laterally extending notched flanges, and its upper face between said flanges formed with a plurality of transverse deformations, portions of which are above the plane of the upper surfaces of the flanges, and other portions of which are below such flanges; substantially as described.

2. A truss bar for concrete reinforcement having notched lateral flanges, and a plurality of deformations between said flanges, each deformation constituting a rib extending transversely of the bar, and adjacent deformations having reversely inclined upper surfaces, substantially as described.

3. A truss bar for concrete reinforcement having notched lateral flanges and a plurality of deformations between said flanges each deformation constituting a rib extending transversely of the bar and having an inclined upper surface portion above the plane of the upper surfaces of the flanges, adjacent deformations having their upper surfaces inclined in opposite directions.

4. A truss bar for concrete reinforcement, having notched lateral flanges, a convex portion below the flanges having parts thereof displaced laterally to form deformations, and an upper surface formed with transverse deformations, adjacent deformations being inclined in opposite directions, and portions of each of the inclined surfaces thereof being respectively above and below the plane of the upper surface of the flanges; substantially as described.

5. A reinforcing bar for concrete, consisting of a semi-cylindrical bar having portions

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- of its convex surface displaced laterally in opposite directions to form bar portions of angular cross-section, the bottom faces of which are approximately straight longitudinal of the bar, said portions alternating with portions which are of substantially the original cross-section of the bar and which join the same by abrupt shoulders; substantially as described.
- 10 6. A reinforcing bar for concrete of general semi-cylindrical cross-section, and having laterally projecting flanges at its top, said flanges being notched at intervals to receive lacing members, the convex surface of the bar being deformed to provide a plurality of bonding projections, and the top surface of the bar intermediate the flanges also having bonding deformations; substantially as described.
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- In testimony whereof, I have hereunto set my hand.
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DAVID MAXWELL.

Witnesses:

HAROLD MCINTYRE,
WALTER S. WHEELER.