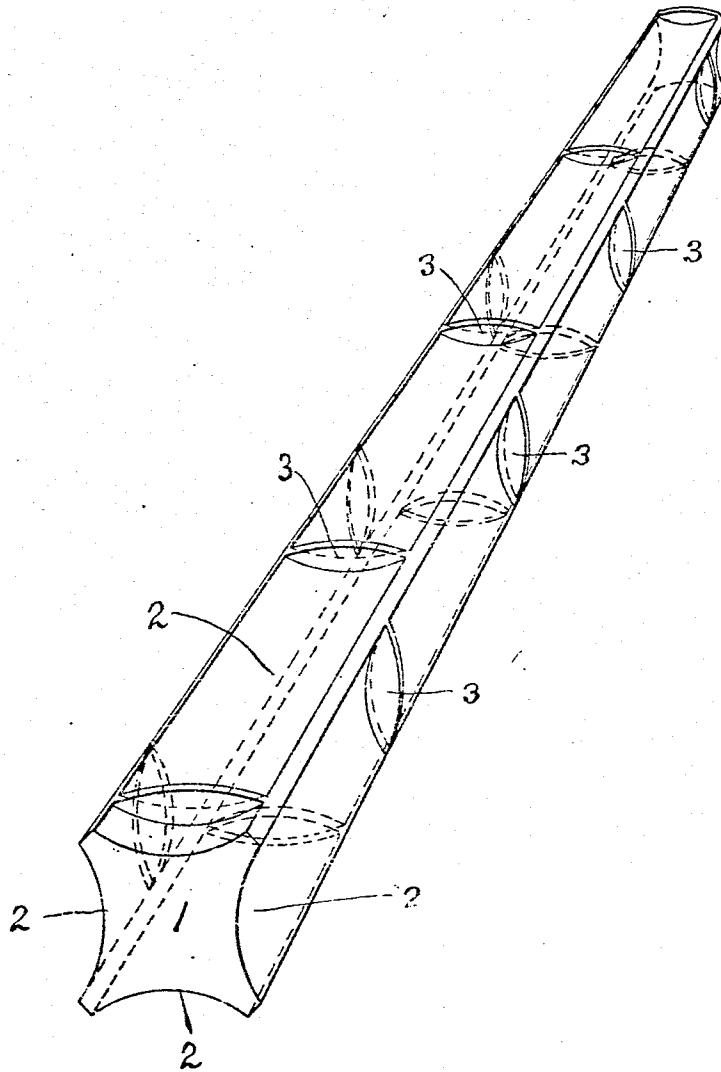


T. W. JENKS.
TENSION MEMBER FOR CONCRETE CONSTRUCTION.
APPLICATION FILED APR. 11, 1907.

952,259.

Patented Mar. 15, 1910.



Witnesses:
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UNITED STATES PATENT OFFICE.

THOMAS W. JENKS, OF BELLEVUE, PENNSYLVANIA.

TENSION MEMBER FOR CONCRETE CONSTRUCTION.

952,259.

Specification of Letters Patent. Patented Mar. 15, 1910.

Application filed April 11, 1907. Serial No. 367,488.

To all whom it may concern:

Be it known that I, THOMAS W. JENKS, a citizen of the United States, residing at Bellevue, in the county of Allegheny and State of Pennsylvania, have invented a new Improved Tension Member for Concrete Construction, of which the following is a specification.

My invention relates to reinforcing members adapted to take up the tensional stresses set up in the bottoms of concrete beams and slabs or wherever it may be used to advantage, and the object of my improvements is to provide a member of this kind which shall be so formed that the best possible union shall be attained between the concrete and metal. The reinforcing member consists of a rolled metal bar having a plurality of concave or inwardly recessed or curved faces terminating in intervening longitudinal edges and forming longitudinal ribs at the corners of the bar, and transverse ribs extending across the recessed faces at intervals and merging into the longitudinal ribs.

In the accompanying drawing which is a perspective view of a bar showing one form of my invention, the body —1— of the bar is generally rectangular in cross section with its sides forming segments of cylinders and thus forming grooves —2—. Cross ribs —3— extend across these grooves, thus forming pockets for the reception of the concrete. For ease of rolling these cross ribs are preferably staggered around the bar, and to provide greater contact surfaces the ribs may be made convex. Another advantage of staggering these ribs is that the stresses occasioned by the pressure of the concrete against the ribs are more equally transmitted to the body of the bar. The deep pockets thus formed conduce to large projections of concrete which projections have even curved surfaces devoid of projecting angles which are always a source of weakness. The concave form of the pockets as-

sure the greatest area of contact between the ribs —3— and the concrete in the pockets, thus providing for maximum crushing stresses of the concrete at those points. The spacing of the ribs at considerable distances permits the shearing area of the concrete in the pockets to be at a maximum, while the convex form of the ribs provides great bearing surfaces between the concrete and the ribs to take up the compression stresses.

Having now explained my improvements, what I claim as my invention and desire to secure by Letters Patent is:—

1. A metal bar for construction of reinforced concrete having a plurality of inwardly-curved faces forming longitudinal ribs at the corners of the bar, and a series of transverse ribs extending entirely across the said faces and merging into said longitudinal ribs.

2. A metal bar polygonal in cross section for constructions of reinforced concrete having a plurality of faces each formed with a plurality of depressions, and each of said depressions being formed by an inwardly curved surface and by transverse ribs joining the outstanding parts of said inwardly curved surface.

3. A metal bar for reinforcing concrete comprising a solid body, generally rectangular in cross-section with the edges slightly blunted and the entire sides concave and substantially segments of circles, and ribs extending across said sides to form pockets for the reception of the concrete, the outer surfaces of the ribs being convex, and forming segments of circles reversely arranged.

In testimony whereof I have signed this application in the presence of two subscribing witnesses.

THOMAS W. JENKS.

Witnesses:

EDWARD N. PAGESSEN,
T. L. MANN, JR.