No. 857,671. PATENTED JUNE 25, 1907.

A. V. REYBURN, Jr.

REINFORCING BAR FOR CONCRETE.

APPLICATION FILED APR. 23, 1906.

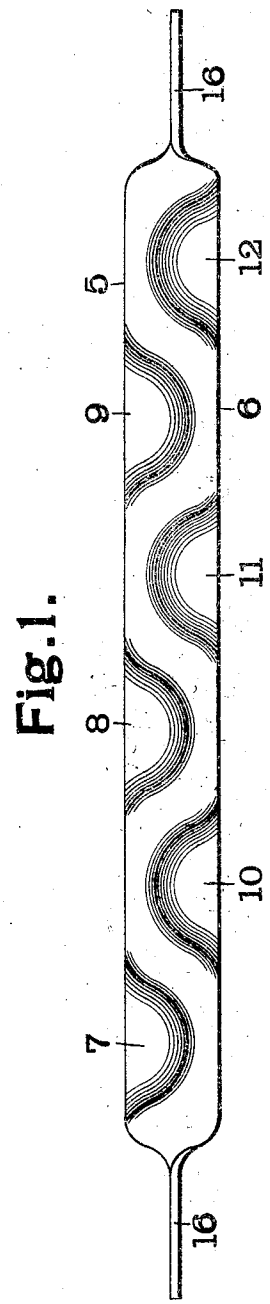

Fig. 1.

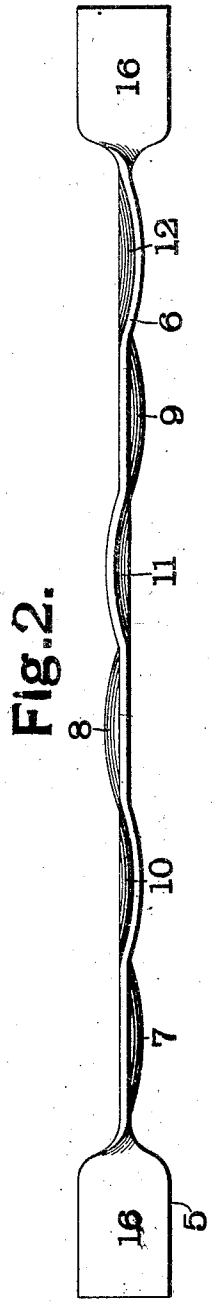

Fig. 2.

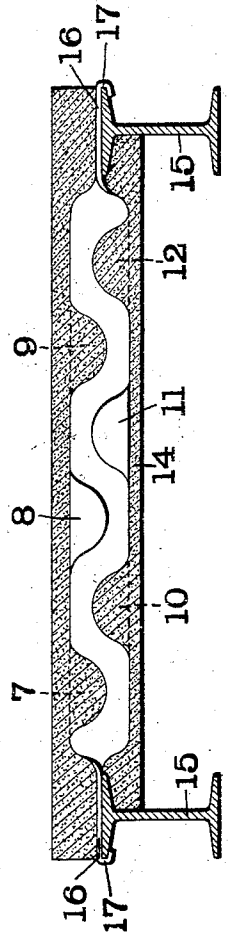

Fig. 3.

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REINFORCING-BAR FOR CONCRETE.

No. 857,671. Specification of Letters Patent. Patented June 25, 1907.

Application filed April 23, 1906. Serial No. 313,186.

To all whom it may concern:

Be it known that I, AMEDEE V. REYBURN, Jr., a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have invented a certain new and useful Reinforcing-Bar for Concrete, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates more particularly to a re-inforcing bar for the construction of concrete floors and other similar structures, and has for its object to provide a strong bar which may be easily rolled in the ordinary way and which will not readily be broken by the shearing strains to which such bars are subjected.

In the drawings, in which like characters of reference refer to similar parts in the different views, Figure 1 is a side elevation of a bar embodying a form of my invention; Fig. 2 is a top plan view of same, and Fig. 3 is a section of a concrete flooring in which my bar is embedded.

The bar is provided at each of its edges 5 and 6 with curved or rounded concavo-convex lateral projections transverse to the plane of the bar. As will be seen from Fig. 1, the projections 7, 8 and 9 at one edge of the bar extend only partly across the face of the bar and lie between, or, in other words, are staggered with or intermediate of, the projections 10, 11 and 12 at the opposite edge of the bar. The projections 10, 11 and 12 also extend only part way across the face of the bar. The direction in which these lateral projections extend is best shown in Fig. 2. Here the projections 7, 10, 9 and 12 extend laterally to one side of the bar and the projections 8 and 11 extend laterally in the opposite direction. It will also be noticed, referring to the series of projections 7, 8 and 9 at one edge of the bar, that the projections 7 and 9 extend laterally in an opposite direction to the projection 8. The same is true of the series of projections at the other edge of the bar, the projections 10 and 12 extending laterally in an opposite direction to that in which the projection 11 extends.

It will be observed that the projections 7, 8 and 9 extend more than half way across the face of the bar. The projections 7, 8 and 9 thus having their inner ends extend across the face of the bar beyond the line of the inner ends of the projections 10, 11 and 12. This arrangement results in leaving flat portions along the edges 5 and 6 in the plane of the bar and preserves the original strength of the bar.

In Fig. 3 the bar is shown embedded in a slab of concrete 14 forming a portion of a floor supported on I-beams 15. In this case each of the ends of the bar is provided with a portion 16 bent at right angles to the main body of the bar and provided with a hook portion 17 bent over the top of the I-beams 15.

It will be seen that by my invention I have provided a bar of this kind which can be easily rolled from a suitable sheet of iron or steel and which is provided with projections for locking or anchoring it in the concrete block of such a nature that they will not be readily broken by the shearing strain to which they are subjected, and at the same time the strength of the bar to withstand lateral and vertical strains is substantially preserved.

The ability of the bar to withstand such strains is further preserved by reason of the fact that its edges 5 and 6 substantially remain in two parallel planes after the bar has been rolled to form the transverse or lateral projections therein.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is—

1. A re-inforcing bar for concrete construction whose edges lie in two substantially parallel planes, and provided at each of its edges with a series of lateral projections transverse to the plane of the bar, said bar having flat portions at its edges and in the plane of the bar intervening between individual projections of the same series, the projections at one of said edges being intermediate those at the opposite edge.

2. A re-inforcing bar for concrete construction whose edges lie in two substantially parallel planes and provided at each of its edges with a series of lateral projections transverse to the plane of the bar, said bar having flat portions at its edges and in the plane of the bar intervening between individual projections of one of said series and flat portions at its edges and in the plane of the bar intervening between individual projections of the other series, the projections at one edge of said bar being intermediate those at the opposite edge.

3. A re-inforcing bar for concrete construction whose edges lie in two substantially parallel planes and provided at each of its edges with a series of lateral projections transverse to the plane of the bar, each projection of each series extending laterally in a direction opposite to that of the next adjacent member of its series, said bar having flat portions at its edges and in the plane of the bar intervening between individual projections in the same series, the projections at one of said edges being intermediate those at the opposite edge.

4. A re-inforcing bar for concrete construction, provided at each of its edges with a series of lateral projections transverse to the plane of the bar, the projections at one of said edges extending across the face of the bar beyond the line of the inner ends of the projections at the opposite edge of the bar.

5. A re-inforcing bar for concrete construction, provided at each of its edges with a series of lateral projections transverse to the plane of the bar, the projections at one of said edges extending across the face of the bar beyond the line of the inner ends of the projections at the opposite edge of the bar, each projection of each series extending in a direction opposite to that of the next adjacent member of its series.

6. A re-inforcing bar for concrete construction, provided at each of its edges with a series of lateral projections transverse to the plane of the bar, the projections each extending more than half way across the face of the bar.

7. A re-inforcing bar for concrete construction, provided at each of its edges with a series of lateral projections transverse to the plane of the bar, the projections each extending more than half way across the face of the bar and each projection of each series extending in a direction opposite to that of the next adjacent member of its series.

8. A re-inforcing bar for concrete construction whose edges lie in two substantially parallel planes, and provided at each of its edges with a series of lateral projections transverse to the plane of the bar, the projections at one edge of said bar extending across the face of the bar beyond the line of the inner ends of the projections at the opposite edge of said bar.

9. A re-inforcing bar for concrete construction, having edges lying in two substantially parallel planes, and provided at each of its edges with a series of curved lateral projections transverse to the plane of said bar, said bar having flat portions in the plane of the bar intervening between the individual projections of each series, the projections of each series extending across the face of said bar beyond the line of the inner ends of the projections of the series at the opposite edge of the bar, and each projection of each series extending laterally in a direction opposite to that of the next adjacent member of the series.

10. A re-inforcing bar for concrete construction whose edges lie in two substantially parallel planes, and provided at each of its edges with a series of concavo-convex lateral projections transversed to the plane of the bar, said bar having flat portions at its edges and in the plane of the bar and intervening between individual projections of the same series, the projections at one of said edges being intermediate those at the opposite edge.

11. A re-inforcing bar for concrete construction, provided at each of its edges with a series of concavo-convex lateral projections transversed to the plane of the bar, the projections at one of said edges extending across the face of the bar beyond the line of the inner ends of the projections at the opposite edge of the bar.

In testimony whereof, I have hereunto set my hand and affixed my seal in the presence of the two subscribing witnesses.

AMEDEE V. REYBURN, JR. [L. S.]

Witnesses:

JAMES H. BRYSON,

BENNETT PIKE.