(No Model.)

H. D. PLIMSOLL.

MODE OF WEAVING METALLIC BARS.

No. 297,631. Patented Apr. 29, 1884.

Fig. 1.

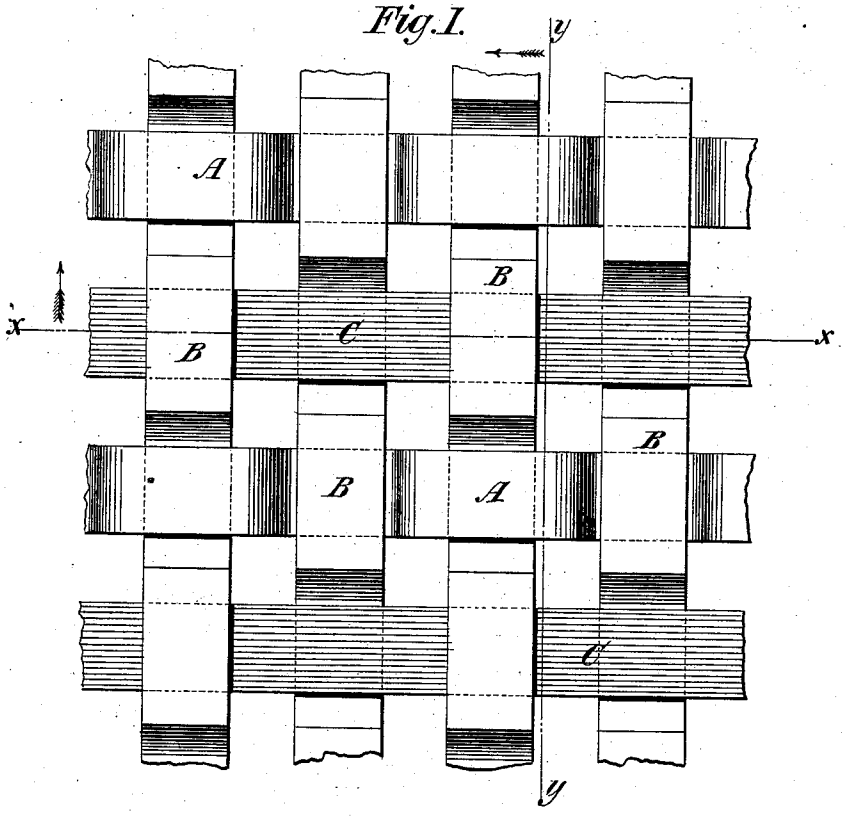


Fig. 2.

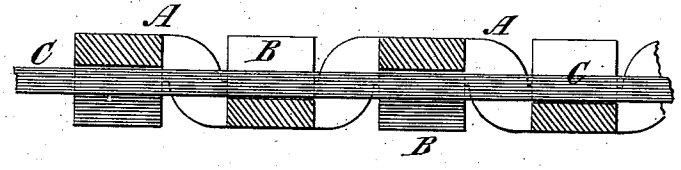
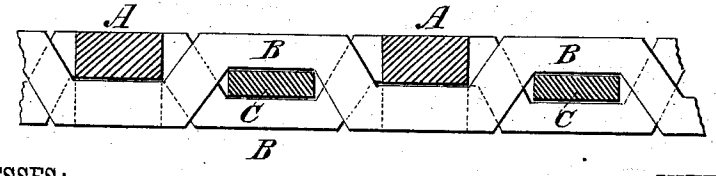


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HENRY DAVIDSON PLIMSOLL, OF NEW YORK, N. Y.

MODE OF WEAVING METALLIC BARS.

SPECIFICATION forming part of Letters Patent No. 297,631, dated April 29, 1884.

Application filed June 6, 1883. (No model.)

To all whom it may concern:

Be it known that I, HENRY DAVIDSON PLIMSOLL, residing at New York, in the county of New York and State of New York, a subject of Great Britain, have invented a new and useful Mode of Weaving Iron or other Metallic Bars or Tubes, of which the following is a specification.

My invention has for its object the construction of a woven fabric of iron or other metallic bars or tubes suitable for a covering for sunken railways, pavement for streets, and other purposes. My attainment of this object will be better understood by reference to the accompanying drawings, of which—

Figure 1 represents a plan view; and Figs. 2 and 3 are vertical sections of the same, taken, respectively, on the lines *x x* and *y y*.

Similar letters of reference indicate corresponding parts.

My mode of procedure is as follows: Having decided upon the size and form of the fabric when woven, and of each separate part, I prepare a series of bars or tubes, of iron or other metallic substance, which are rolled, forged, cast, or pressed into a wavy or undulating form. These I will call the "longitudinal" bars or tubes, and are indicated on the drawings by the letters B B. I also prepare a series of bars or tubes, (indicated by the letters A A,) which are of a different thickness and curve than the former, and are intended to interlace with the primary series of bars or tubes B; and I also prepare a series of straight bars or tubes (indicated by the letters C C), and which are intended to lock together the bars or tubes respectively lettered A A and B B.

The woven fabric is prepared in the following manner: One half of the bars or tubes B are placed in position at suitable intervals of space, and across them, resting in the curves or deflections, are placed the bars or tubes A, whose curve or deflection is different from that of the bars or tubes B. The second half of the bars or tubes B is then placed across the curves or deflections of the cross-bars A, so as to rest on the same. When the first and second series of bars or tubes are thus arranged, it will be found that between the first half of the bars or tubes B and the second half of the same last placed in position there are openings or eyes, through which may be passed straight bars or tubes C, by which all the interlacing bars or tubes become fixed in their position, and form a firmly-united structure.

The interlaced or woven fabric may be made of any size, and then, by having a portion of the straight bars or tubes partly in and partly out, the projecting ends of one slab may be inserted in the openings so provided in the neighboring slab, thus uniting them. The bars or tubes are not necessarily of curved or corrugated form, but may also be made of angular form, provided that alternating ridges and depressions are arranged for the analogous interlocking of the cross bars or tubes.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The mode of forming a woven fabric from bars or tubes of metal, which consists in rolling, forging, casting, or pressing a series of bars or tubes, B, into wavy or undulating form, and similarly preparing another series of bars or tubes, A, of a different thickness and curve, as shown, and arranging them as described, and then inserting in the openings or loops formed by the bars or tubes B a series of straight bars, C, to lock together said bars or tubes A and B, in the manner shown and described.

HENRY DAVIDSON PLIMSOLL.

Witnesses:

RICHARD F. STEVENS,

JOSEPH G. SWEZEY.