(No Model.)

E. L. CLARK.

HOLLOW BAR.

No. 456,646. Patented July 28, 1891.

Fig. 1

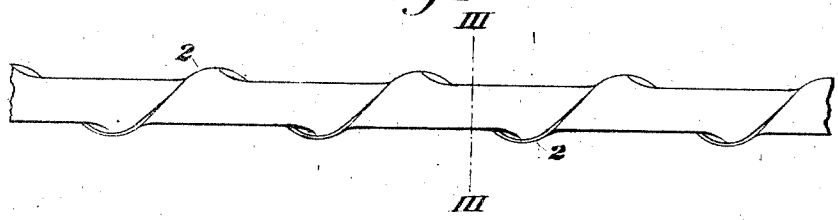


Fig. 2.

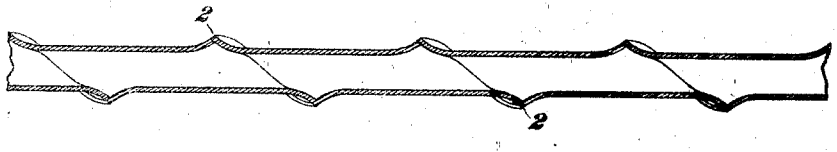
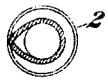


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

EDWARD L. CLARK, OF PITTSBURG, PENNSYLVANIA.

HOLLOW BAR.

SPECIFICATION forming part of Letters Patent No. 456,646, dated July 28, 1891.

Application filed January 26, 1891. Serial No. 379,101. (No model.)

To all whom it may concern:

Be it known that I, EDWARD L. CLARK, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Spiral Hollow Bars, of which the following is a full, clear, and exact description.

My invention relates to an improvement in bars or rods of metal adapted to be used for fence-posts, and for other purposes where a strong light structure is required. It is illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a rod embodying my invention. Fig. 2 is a longitudinal axial section thereof, and Fig. 3 is a cross-section on the line III III of Fig. 1.

The article shown in the drawings is a hollow rod made by twisting into spiral form a strip of metal (iron or steel) preferably with sufficient tightness to cause the edges to meet and to force each other out in the form of a spiral ridge 2. This I effect by twisting the strip when cold, by which I mean any temperature less than welding-heat, preferably ordinary atmospheric temperature.

Any suitable machine may be used in the manufacture of the rod. Suitable means consist of a revolving head, to which one end of the strip is attached, while the other end is fixed or is secured to a head revolving in the opposite direction. By such twisting I have discovered that the edges are brought together, and by continuing it they exert pressure on each other and are thereby bent outwardly, so as to form the spiral ridge. The bar thus produced is light in weight, but is remarkably strong and rigid, being able to resist great strains and being especially adapted to be employed for making fence-posts and for other purposes which will be suggested to those skilled in the art.

My invention, broadly considered, is not limited to the rod with the spirally-projecting rib, but will cover a hollow rod made as above described, but without bringing the edges together with sufficient tightness to produce the rib.

I claim—

1. As a new article of manufacture, a metal rod composed of a spirally wound and twisted strip of uniform thickness having a projecting spiral rib at the meeting edges, substantially as and for the purposes described.

2. The method herein described, which consists in twisting a strip of metal when cold into spiral form, bringing thereby its edges into contact, and by pressure of contact forming a projecting spiral rib, substantially as and for the purposes described.

In testimony whereof I have hereunto set my hand this 24th day of January, A. D. 1891.

EDWARD L. CLARK.

Witnesses:

THOMAS W. BAKEWELL,

W. B. CORWIN.