April 28, 1931. L. S. TRACHSEL 1,802,397

STRUCTURAL SHAPE AND METHOD OF MAKING SAME

Filed Dec. 1, 1927

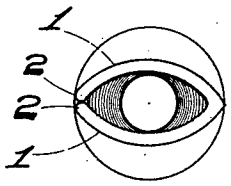


FIG. 1.

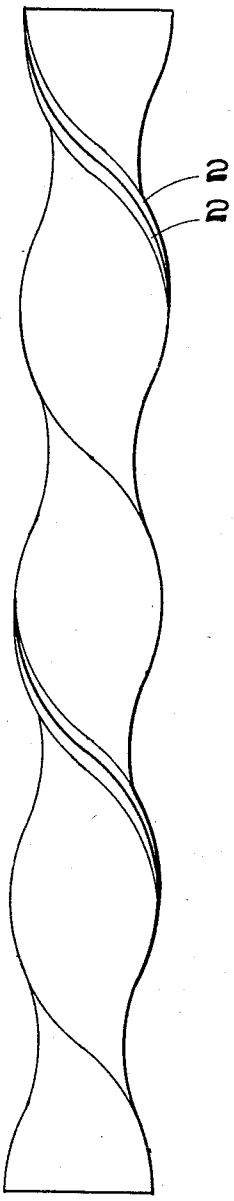


FIG. 2.

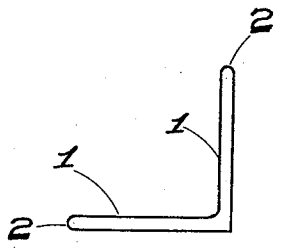


FIG. 3.

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UNITED STATES PATENT OFFICE

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STRUCTURAL SHAPE AND METHOD OF MAKING SAME

Application filed December 1, 1927. Serial No. 237,007.

The object of this invention is to provide a new tubular, twisted ornamental shape in wrought iron or steel suitable for structural, architectural and many other industrial purposes, such as electrical fixtures, etc.

My improved shape is clearly illustrated in the accompanying drawings in which:

Fig. 1 is an end view,

Fig. 2 is a side elevation of the shape, and

Fig. 3 illustrates the form which this shape has prior to the operation of twisting.

The clearest and most simple description of my improved structural shape is in a description of the method of producing same, which is as follows:

This first step in the manufacture of this shape is taken in the process of rolling a suitable metal, whereby a ninety degree angle having equal legs as shown in Fig. 3 is produced.

Said angle is then twisted in either a hot or cold state, but preferably hot and in this operation the legs 1, 1, take on a converging, arcuate form, transversely considered and the edges 2 are caused to converge and to contact closely, whereby a tubular form of elliptical cross section is formed.

In case the angle is twisted hot the edges 2 will remain in contact, but if the angle is twisted cold there will be a slight recoil that will cause said edges to spring apart slightly.

I claim the following:

1. A structural steel shape consisting of a twisted tube of elliptical cross section formed by twisting a structural angle sufficiently to cause the legs of said angle to meet at the edges thereof, the resulting tube having two spaced ribs, one of which is formed by the outside corner of said angle and the other by and at the junction of said meeting edges.

2. The method of producing a structural shape which consists in, forming a suitable metal by the process of rolling, into a ninety degree angle having equal legs, then twisting said angle sufficiently to cause the edges of the legs of said angle to meet and form a tubular structure of elliptical cross section having two spaced ribs, one of which is formed by the outside corner of said angle and the other by and at the meeting point of said edges.

In testimony whereof I affix my signature.

LOUIS S. TRACHSEL.