

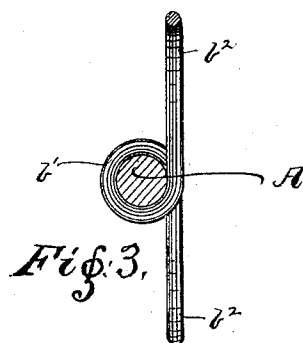
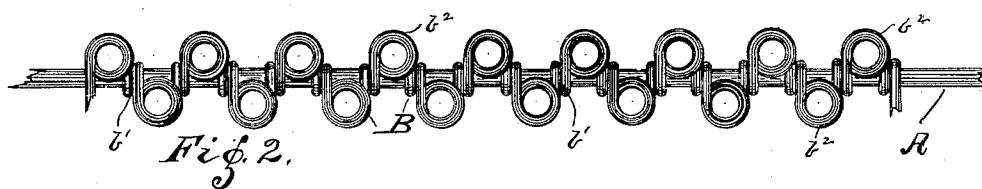
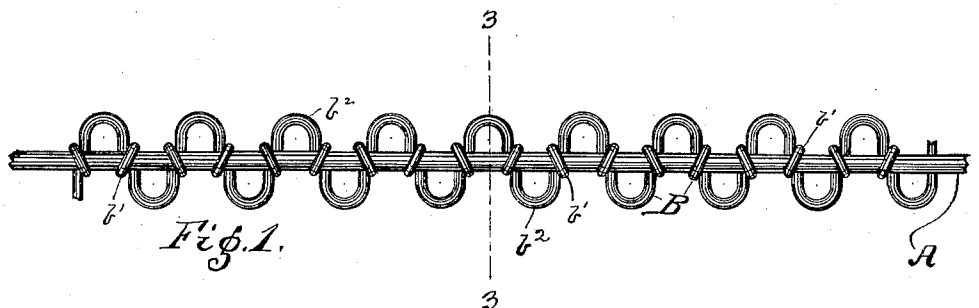
(No Model.)

2 Sheets—Sheet 1.

J. B. CLEAVELAND.
FENCE WIRE.

No. 475,718.

Patented May 24, 1892.



WITNESSES:

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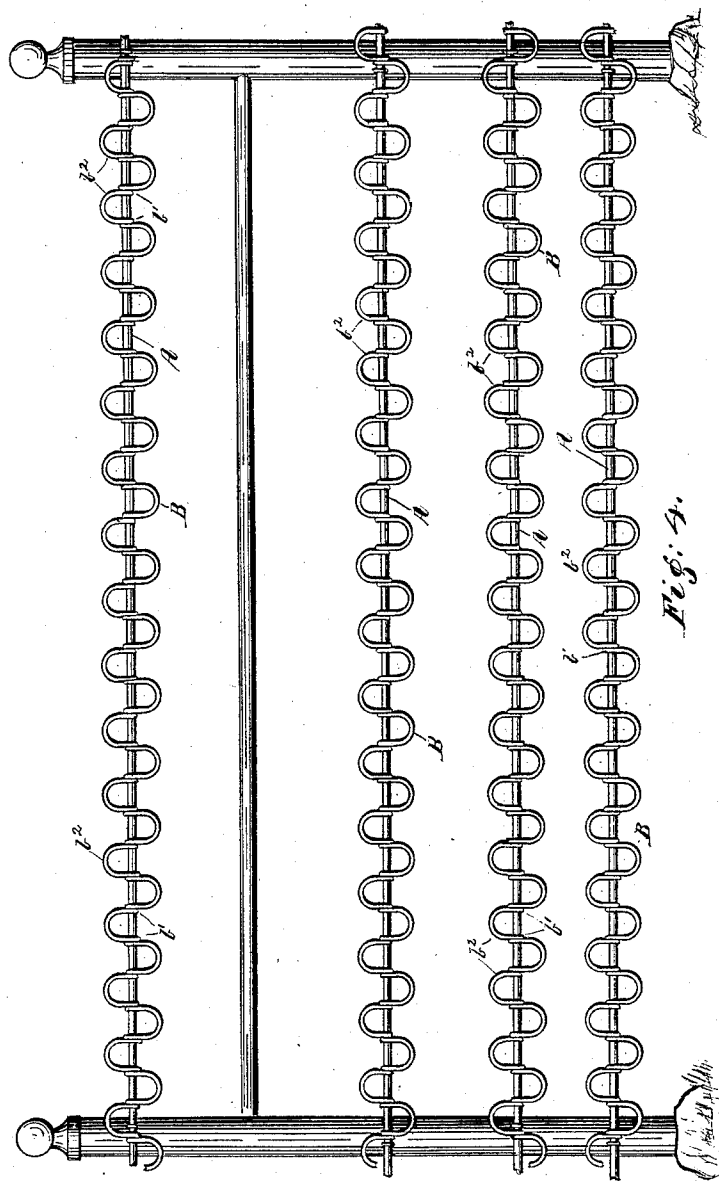
(No Model.)

2 Sheets—Sheet 2.

J. B. CLEAVELAND.
FENCE WIRE.

No. 475,718.

Patented May 24, 1892.



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Inventor:
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UNITED STATES PATENT OFFICE.

JOHN B. CLEAVELAND, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO MARY E. CLEAVELAND, OF SAME PLACE.

FENCE-WIRE.

SPECIFICATION forming part of Letters Patent No. 475,718, dated May 24, 1892.

Application filed September 22, 1890. Serial No. 365,859. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. CLEAVELAND, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Wire Fences; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in wires to be used as fencing and to the art of making the same, the object of the invention being to produce a wire that will be cheap, durable, and ornamental, of such construction as to compensate for longitudinal expansion and contraction by means of the contraction and expansion of the wire in the direction of its width and also in the direction of its length and in which the projecting portions will not be sharp or pointed, as in barbed wires, and which will be adequate for the purpose of barbed or ribbon wire, and to provide an ornamental wire with a broad and easily seen surface and having a straight unbent central core, thus avoiding any danger of breaking from expansion or contraction or injury to the galvanized or enameled surface, thereby making spots or defective places open to rust when cracked or injured.

With these objects in view this invention consists, essentially, in that improvement in the art of making fence-wire which consists in twisting or winding upon a straight wire core a wire or wires in such manner as to form curved, straight, or ornamental projections at two or more sides of the said core, substantially as hereinafter described and claimed.

It also consists in an ornamental wire as an article of manufacture which consists of a horizontally-straight body portion with one or more continuous wires woven or bent around said body portion in such manner as to form curved ornamental projections with smooth unbroken edges, substantially as hereinafter described and claimed.

It also consists in certain details of construction and in the combination and arrangement of the component parts of the said wire, substantially as hereinafter described and claimed.

Figure 1 represents in side elevation a wire for fences constructed in accordance with this invention; Fig. 2, a like view showing a modified construction; and Fig. 3, a cross-section on dotted line 3 3, Fig. 1. Fig. 4, Sheet 2, is a front view of a panel of fence constructed in accordance with this invention.

In the drawings, A represents the main body or core of the ornamental wire, which main body will preferably be a one-piece straight wire, but which it is obvious might be of other shapes. Bent around said main body is a continuous strand of wire B, which wire may be bent to many forms, two forms being shown in the drawings. Said wire B will preferably be first twisted around the wire or body A to form the helix or spiral coil b' and then bent outward and backward to form a U-shaped projection b^2 . Thence it is again bent around the main body A and outward at the opposite side to form another U-shaped projection at another side of the body A, as clearly shown in Figs. 1 and 3. If desired, the outward projections might, instead of being U-shaped, be coiled to the form shown in Fig. 2, or other shapes might be formed, as desired, the essential feature being to provide smooth projections of various ornamental patterns. If desired, the projections, instead of being opposite to one another, as shown, might be arranged at different angles to each other.

Instead of using a core or body A, as shown in the drawings, the wire B might be used alone and be so bent as to form a central stiffening portion. It is, however, preferable to use a core A.

By this construction it will be seen that the loops or projections b^2 will compensate for longitudinal expansion and contraction and that, while projections are formed which may be readily seen, there are no points or sharp edges to injure stock, as in barbed or ribbon wire commonly used for fencing.

The strand B might be applied to a fence-picket in the same manner it is applied to the core A, which would form a highly-ornamental picket of the same general construction the fence proper.

It is not desired to limit the use of this wire to the construction of fences or to any par-

ticular application of the wire, as an ornamental wire of the construction, as here described may be applied with advantage to many different purposes.

- 5 I am aware that a wire strap for boxes has been made in which a separate wire was wound continuously and in the same direction around a single central wire, so that the stems of each of the U-shaped loops were on
10 opposite sides of the central strand; but in my construction each succeeding loop is wound around the central wire in the opposite direction from that of the loop preceding it, thereby arranging the stems of the U-shaped loops all
15 on the same side of the central wire and producing a much handsomer pattern.

I claim—

1. As a new article of manufacture, an ornamental wire composed of a single central
20 wire A, with a single continuous wire B bent around said core to form the spirals b' , and the U or other shaped ornamental projections b^2 , connecting said spirals and integral therewith, the direction of winding the wire
25 for every alternate one of the said spirals to be from right to left and for the others in the opposite direction or from left to right, so as to arrange the stems of the projections b^2 all on the same side of the central wire.
30 2. In a wire fence, the combination, with the fence-posts, of a series of wire strands, each consisting of a wire B, fastened to the posts and bent into a pattern having a series of spirals throughout its length, each of said

spirals being wound in an opposite direction 35 from the one immediately preceding it, and a single straight wire A, passing through the spirals in the wire B and forming a core or stiffening to prevent the displacement of the bends in the wire B, substantially as de- 40 scribed and specified.

3. As an improved article of manufacture, a single wire forming a central body and transverse U or other shaped projections formed from one or more separate continu- 45 ous wires wound around the core or body wire in such a manner as to arrange the stems of the projections all on the same side of the central wire.

4. That improvement in the art of mak- 50 ing fence-wire which consists in bending or twisting a single separate continuous wire around a single central core-wire to form a fastening coil or spiral b' and subsequently bending said wire outward and inward and 55 around said core to form a series of alternate loops or projections and spaces along said core, the said spirals b' being bent substantially in the manner as described, whereby the stems of the loops will all be arranged 60 upon the same side of the central wire.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN B. CLEAVELAND.

Witnesses:

CHARLES F. CLEAVELAND,
FRANK W. WARNER.