(No Model.)

F. F. ELLIS

CHAIN LINK.

No. 418,453. Patented Dec. 31, 1889.

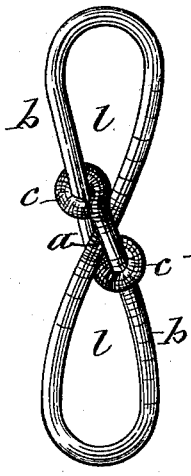

Fig. 1

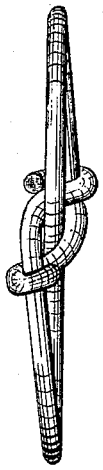

Fig. 2

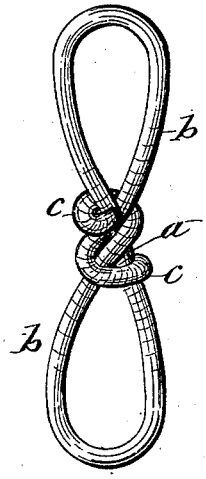

Fig. 3

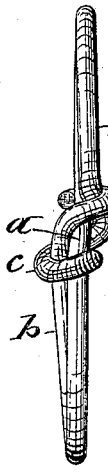

Fig. 4

WITNESSES:

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BY

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UNITED STATES PATENT OFFICE.

FERRAND F. ELLIS, OF ONEIDA, ASSIGNOR TO THE ONEIDA COMMUNITY, (LIMITED,) OF KENWOOD, NEW YORK.

CHAIN-LINK.

SPECIFICATION forming part of Letters Patent No. 418,453, dated December 31, 1889.

Application filed October 17, 1889. Serial No. 327,315. (No model.)

To all whom it may concern:

Be it known that I, FERRAND F. ELLIS, of Oneida, in the county of Madison, in the State of New York, have invented new and useful Improvements in Chain-Links, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the class of chain-links which are formed of wire bent into the shape of loops and tied at the ends.

My present invention consists in bending the end portions of the wire back and extending them first respectively across opposite sides of the central portion and then terminating each with a twist or coil embracing the other end portion. Each end portion of the wire is thus fulcrumed directly on the central portion and subsequently interlocked or intertwined with the other end portion, and the two end portions are caused to draw each other against opposite sides of the central portion of the wire.

The invention is fully illustrated in the annexed drawings, in which—

Figure 1 is a plan view of a chain-link embodying my invention. Fig. 2 is an edge view of the same. Fig. 3 is a plan view of a modification of my invention, and Fig. 4 is an edge view of said modification.

My improved chain-link is formed by bending the end portions *b b* of the wire back and extending them first respectively across opposite sides of the central portion *a* of the wire, and then through the loops *l l* thus formed by said end portions. Each of these end portions terminates with a twist *c* around the other end portion, so as to effectually embrace the same in proximity to the central portion or the aforesaid crossing of the wire, as shown in Figs. 1 and 2 of the drawings. By this construction the end portions of the wire are effectually interlocked with each other and tied at opposite sides of the central portion in such a manner as to cause said end portions to draw each other more tightly against opposite sides of the intervening central portion, and thus grip the same more firmly as the strain is increased on the link. I do not, however, wish to be limited specifically to the aforesaid construction, inasmuch as the end portions of the wire may be extended across opposite sides of the central portion and interlocked with each other without passing through the loops *l l*, as shown in Figs. 3 and 4 of the drawings, in which each end portion of the wire, after crossing the central portion *a* thereof, terminates with a twist *c* around the other end portion and central portion.

What I claim as my invention, and desire to secure by Letters Patent, is—

The improved chain-link formed of a wire bent with its end portions back and extending first respectively across opposite sides of the central portion, and then each of said end portions terminated with coils embracing the other end portion, substantially as described and shown.

In testimony whereof I have hereunto signed my name this 5th day of October, 1889.

FERRAND F. ELLIS. [L. S.]

Witnesses:
C. CARSKADDAN,
F. WAYLAND-SMITH.