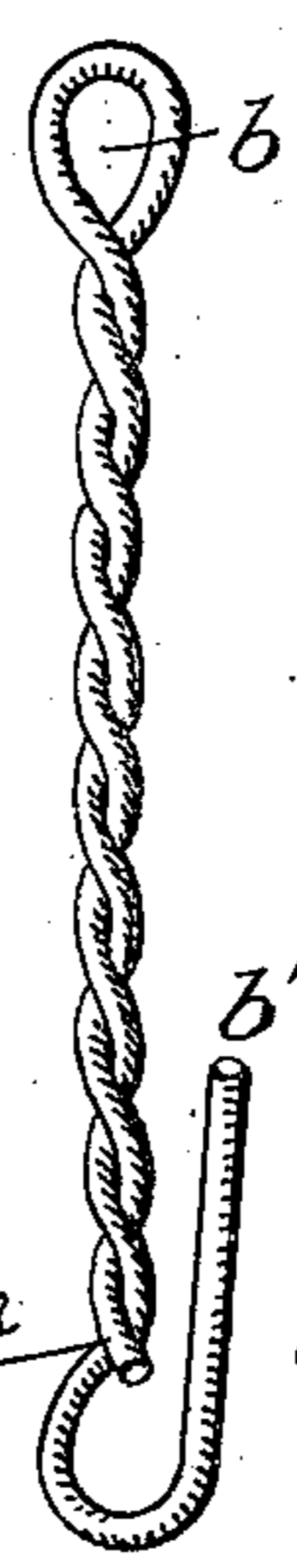
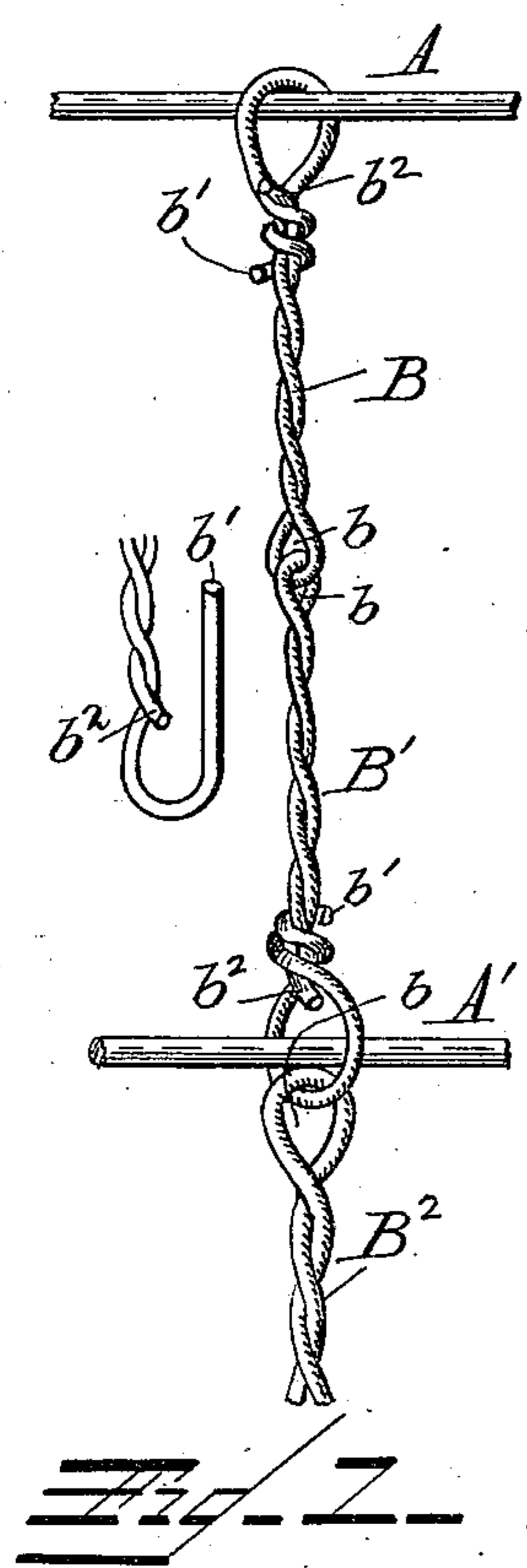
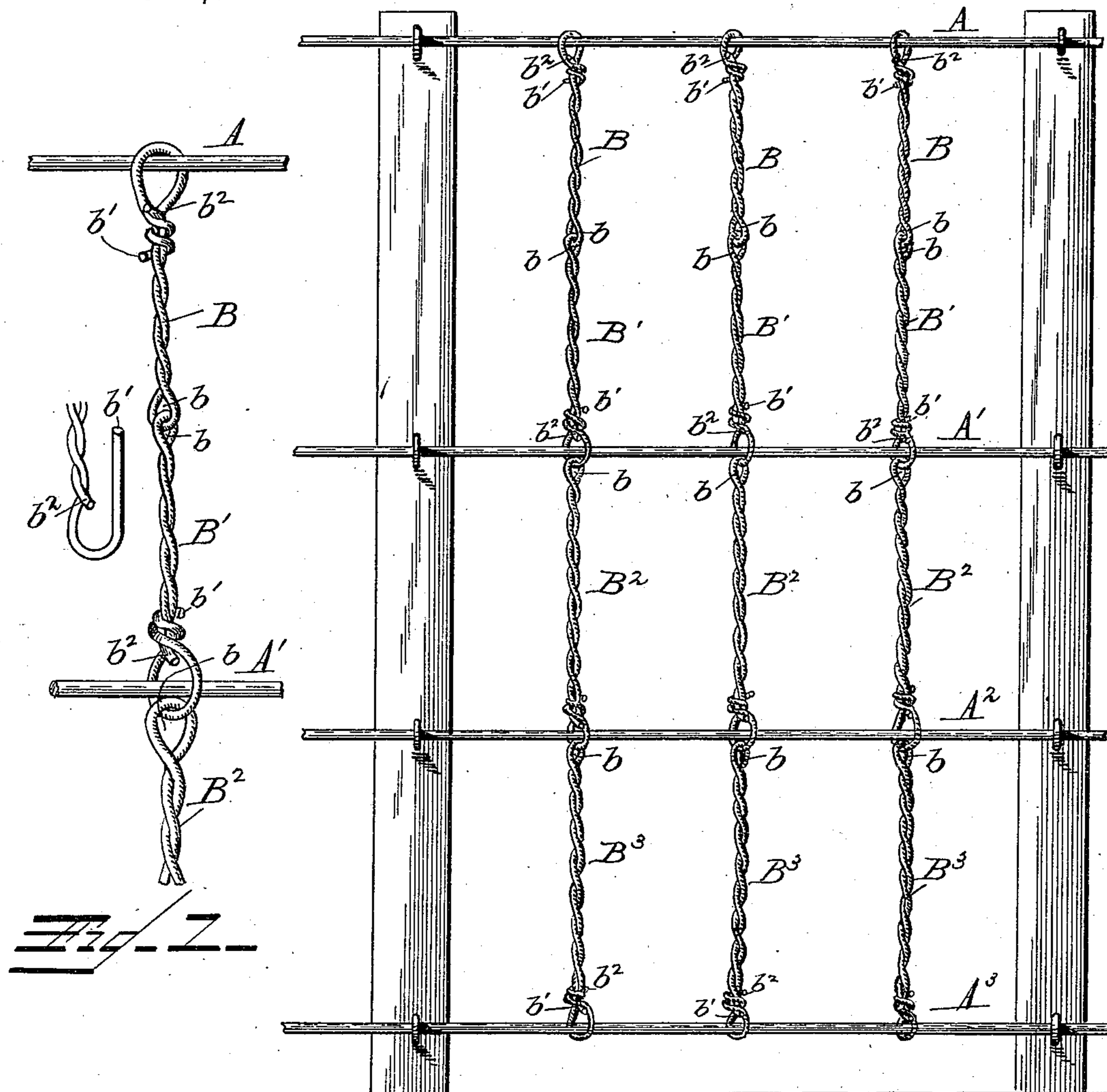


(No Model.)

F. C. & W. J. ZUMDAHL.
STAY FOR WIRE FENCES.

No. 550,313.

Patented Nov. 26, 1895.



Witnesses
F. L. Orvand.
J. Gregory

Inventors
Frederick C. Zumdahl
William J. Zumdahl
By J. C. Fitzgerald Attorney

UNITED STATES PATENT OFFICE.

FREDERICK C. ZUMDAHL AND WILLIAM J. ZUMDAHL, OF FORRESTON,
ILLINOIS.

STAY FOR WIRE FENCES.

SPECIFICATION forming part of Letters Patent No. 550,313, dated November 26, 1895.

Application filed August 1, 1895. Serial No. 557,868. (No model.)

To all whom it may concern:

Be it known that we, FREDERICK C. ZUMDAHL and WILLIAM J. ZUMDAHL, citizens of the United States, residing at Forreston, in the county of Ogle, State of Illinois, have invented certain new and useful Improvements in Stays for Wire Fences; and we 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.

Our invention relates to improvements in stays for wire fences.

The invention consists in the features, details of construction, and combination of parts, which will first be described in connection with the accompanying drawings, and then particularly pointed out in the claims.

In the drawings, Figure 1 is a view of a section of a wire fence provided with a stay embodying our invention. Fig. 2 is a view, on an enlarged scale, of one of the links forming the stay. Fig. 3 is a front elevation of a panel of a fence on an enlarged scale and provided with a stay of our construction.

Referring to the drawings, $A A' A^2 A^3$ are the wire stringers comprising the wire fence.

The stay device comprises a series of links $B B' B^2 B^3$, each consisting of a strand of wire doubled on itself and twisted, as shown, a loop b being left at that end of the link which is formed by the central portion of the strand, while at the other end of the link are the two ends of the strand of wire, one end b' projecting some distance beyond the other end b^2 , as shown in Fig. 2.

In putting together the links to form a stay the projecting end b' of one link B is looped around the top stringer of the fence and is then brought back and wrapped tightly around itself and the short free end b^2 , preferably making more than one turn, as shown in the drawings. The next link is then untwisted enough to allow it to be inserted into the loop b of the stay B just described, said loops b of both links engaging each other. The projecting end b' of this link B' is passed through the loop b of another link B^2 , and is bent around the second stringer A' , having its said pro-

jecting end secured as before described and as shown in the drawings.

It will be noticed that all the links except the upper two are long enough to reach from one stringer to another, whereas the said upper two together are only equal to the distance apart of the two strands which they conjointly connect. The reason of this is that the stay is formed at the factory so that it will have a pair of free ends $b' b^2$ to pass around each stringer of the fence, so that there will be no necessity of untwisting any of the links to pass them around the said stringers.

It will be seen that by our construction the free ends of the links are secured so firmly that no ordinary amount of strain can draw them from around the stringers or out of the loops of the adjacent links. At the same time a certain amount of lateral movement of the stay is permitted, so that it is better able to withstand lateral shocks.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a stay for wire fences, a link consisting of a strand of wire folded and twisted on itself to form an eye near its central portion and having one free end projecting beyond the other and adapted to be bent around a stringer and wrapped around itself and the other free end, substantially as described.

2. In a stay for wire fences, the combination, with a pair of short links each consisting of a strand of wire folded to form a central loop, the loops interlocking, the strands of wire being twisted together and each having one free end projecting beyond the other, the free end of one link being adapted to pass around a stringer and to be wrapped around itself and the other free end; and the free end of the other link being adapted to pass around its respective stringer and through the loop of the adjacent link and secured by being wrapped around itself and the other free end, substantially as described.

3. As an article of manufacture, a stay for wire fences comprising a series of links each formed of a strand of wire folded and twisted

together so as to form a loop near its center
and having one free end projecting beyond
the other; two of said links being shorter than
the others and having their central loops in
5 engagement, the free projecting end of one
link being adapted to pass around a fence
stringer and secured by being wrapped around
itself and the other free end; and the free end
of the other link being also adapted to pass
10 around a fence stringer and through the loop

of the adjacent link and secured by being
wrapped around itself and the other free end,
substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

FREDERICK C. ZUMDAHL.

WILLIAM J. ZUMDAHL.

Witnesses:

HENRY ZUMDAHL,

EDWARD E. HALLER.