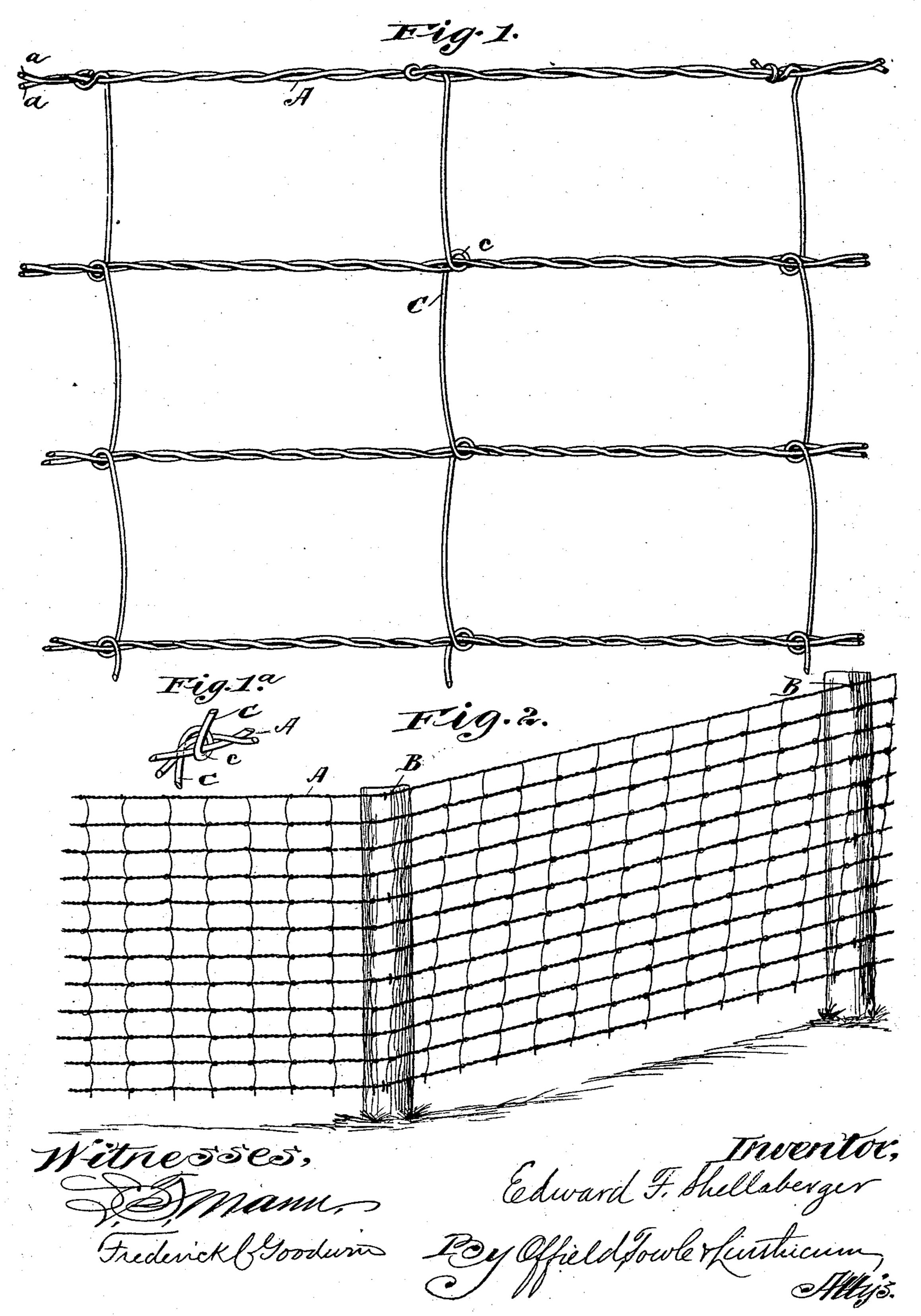
(No Model.) -

## E. F. SHELLABERGER. WIRE FENCE.

No. 572,317.

Patented Dec. 1, 1896.



## United States Patent Office.

EDWARD F. SHELLABERGER, OF DE KALB, ILLINOIS.

## WIRE FENCE.

SPECIFICATION forming part of Letters Patent No. 572,317, dated December 1, 1896.

Application filed August 1, 1894. Serial No. 519,162. (No model.)

To all whom it may concern:

Be it known that I, EDWARD F. SHELLA-BERGER, of De Kalb, Illinois, have invented certain new and useful Improvements in Wire 5 Fences, of which the following is a specification.

This invention relates to certain improvements in wire field-fences of that class which are composed of a series of longitudinal cable or strand wires and a series of transverse stay or tie wires interwoven therewith.

The invention consists in certain novel features of construction of the stay-wires and in the combination of such stay-wires with the strand or cable wires.

In fences of this character it is desirable, in order to secure requisite strength, to employ a plurality of wires, usually two, twisted together into a cable for the longitudinal 20 strands of the fence fabric, and in order to prevent the sagging or separation of these longitudinal cable-strands it is desirable to connect them transversely by the stay or tie wires. This has previously been done in many 25 ways, but the most efficient methods are those in which the connection between the tie-wires and the cable-wires will permit the cables to stretch or draw freely without bending or buckling the tie-wires, and to this end the con-30 nection between the tie-wires and the cables must be sufficiently free to permit this stretching over uneven ground, while at the same time preventing the tie-wires from moving longitudinally upon the cables and the cables 35 from moving vertically upon the tie-wires.

My invention consists in a wire fencing comprising a series of parallel cables and a series of stay-wires, each stay-wire having open eyes or loops with end portions passing 40 by each other in opposite directions, the bodies of the eyes or loops being substantially in the plane of the body of the strip and the cablestrands being partially embraced between the curved portions and the end portions of said 45 open eyes or loops. This provides a looselyinterlocked joint, in which the open eyes form arches, which when strain is put upon the tie-wires, as, for example, by weight thrown upon the strand-wires, the pull is 50 upon the arch and directly upon the strandwire beneath it. The result of this is that

such a strain tends to close the loop or eye upon the cable.

In the accompanying drawings, Figure 1 shows a section of this fencing with the stay- 55 wires each having loops embracing the several cables at the point of intersection, and Fig. 1° a detail of the same. Fig. 2 shows the fence applied.

In the drawings, A represents the longitu- 60 dinal cable-strands, each composed of two wires a a, which are twisted together and which are intended to be secured to posts, as B, Fig. 2. It is desirable at all times to maintain parallelism between the cables a a, and 65 to this end there is employed a series of transverse stay-wires C, which are provided between their ends and at suitable intervals, corresponding to the distances between the cable-wires, with open loops or eyes c, and at 70 their ends said pickets may be engaged in various ways with the top and bottom strands, as shown in Fig. 1.

As shown in Figs. 1 and 2, these loops or eyes do not completely encircle either of the 75 cable-strands; but it will be observed by referring to the detail, Fig. 1a, that one half of the loop or eye embraces one of the strands of the cable and the other half of the loop embraces the other strand. The open eyes 80 permit the strand-wires to enter, while the end portions of the open eyes pass by each other in opposite directions and the body of the loop or eye is substantially in the plane of the fabric, thus making a very strong but 85 loosely-woven joint. It will be seen, however, that this construction will prevent any movement of the cables vertically along the tie-wires, while the movement of the tie-wires along the cables is prevented by the twisting 90 of the latter on opposite sides of the loop. The joint is so loose that the fence will stretch up over uneven ground or rising ground, as shown in Fig. 2, without buckling or bending the tie-wires, while the parallelism 95 is maintained between the several cables of the fence and also between the several tiewires.

This fence can be very rapidly made, and the peculiar form of loop has a number of ad- 100 vantages in manufacture which are of considerable importance.

I do not claim to be the inventor of a wire fencing comprising a plurality of strand or cable wires and a series of transverse tie or stay wires interwoven with said strands and having portions loosely engaged therewith, such broad construction being shown and claimed in the patent to M. M. Shellaberger, No. 506,378, dated October 10, 1893. It will be observed, however, that in my construction the loosely-interlocked portions are arranged substantially in the plane of the fencing, while in said patented construction the interlocked portions are arranged substantially at right angles to that plane.

I claim—

A wire fencing comprising a series of parallel cables and a series of stay-wires, each stay-wire having open eyes with end portions passing by each other in opposite directions, substantially in line with the body of the 20 strip, the cable-strands being partially embraced between the curved portions and the end portions of the open eyes, as and for the purpose set forth.

EDWARD F. SHELLABERGER.

Witnesses:

C. C. LINTHICUM,
FREDERICK C. GOODWIN.