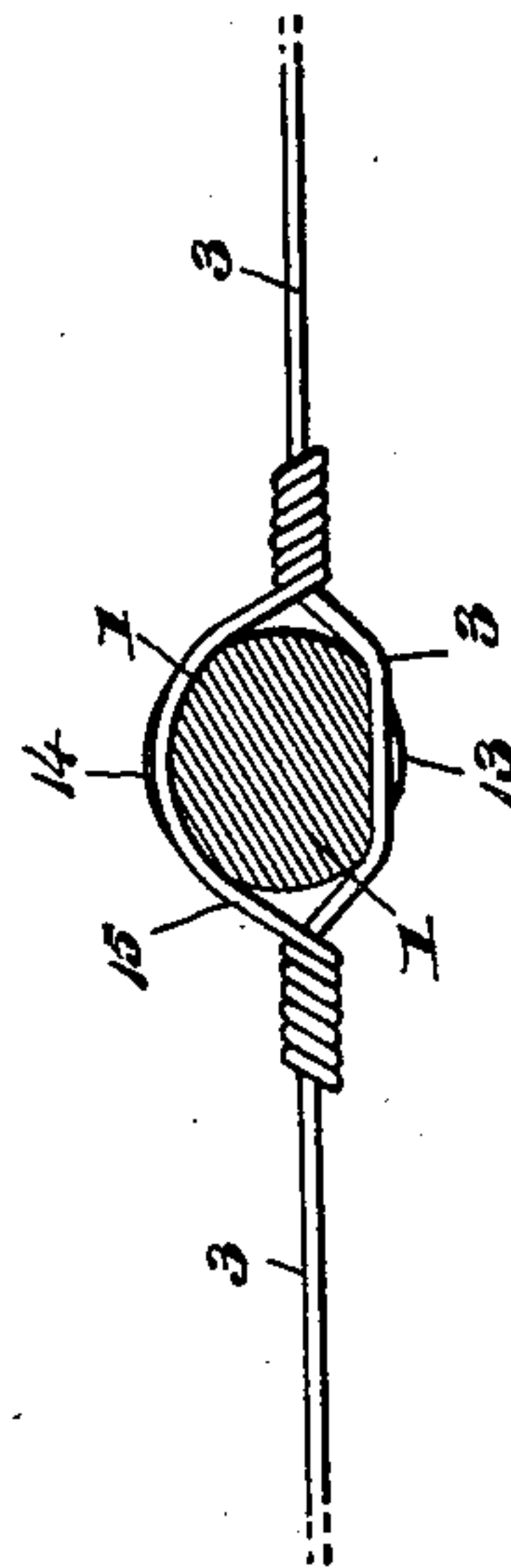
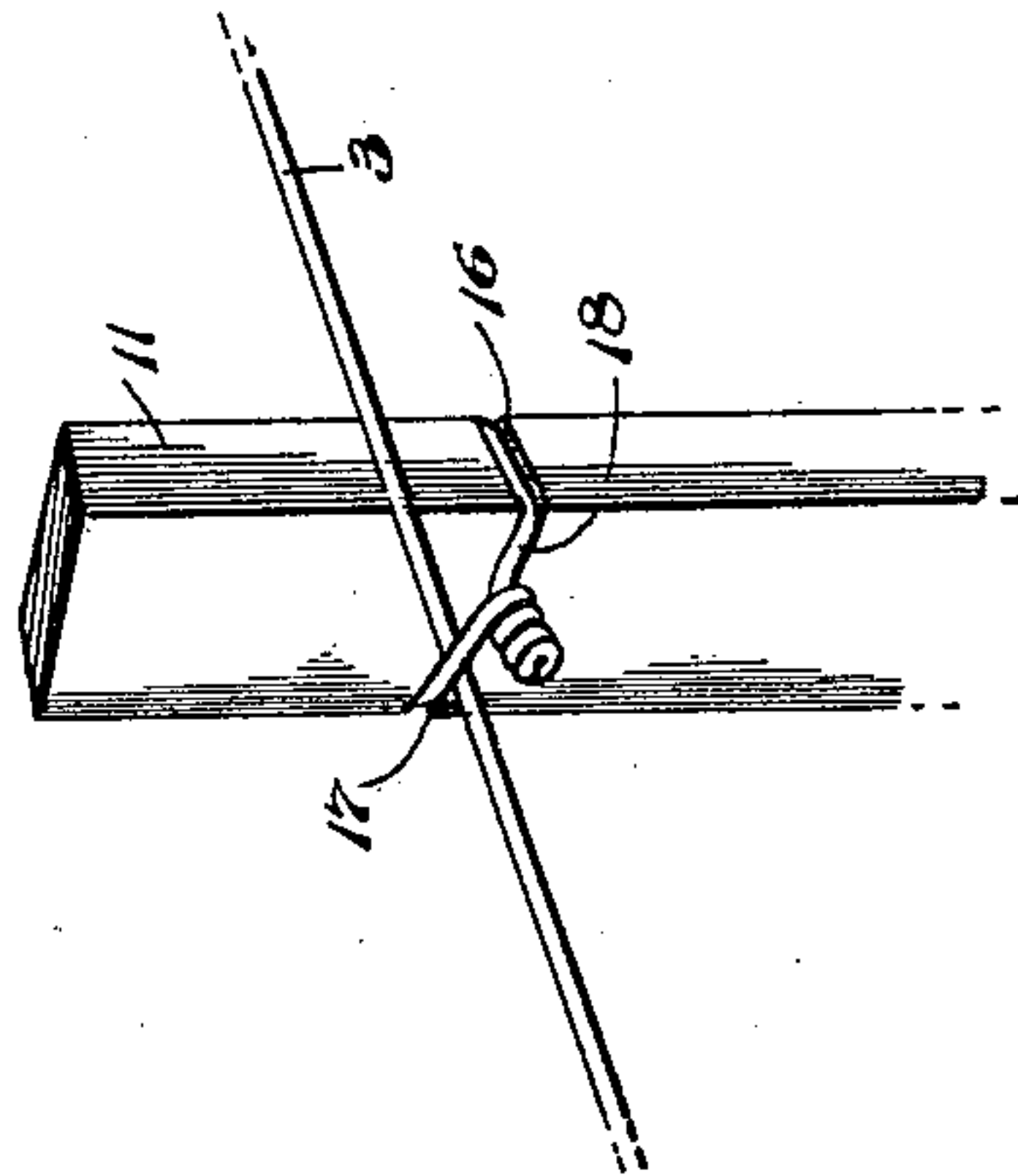
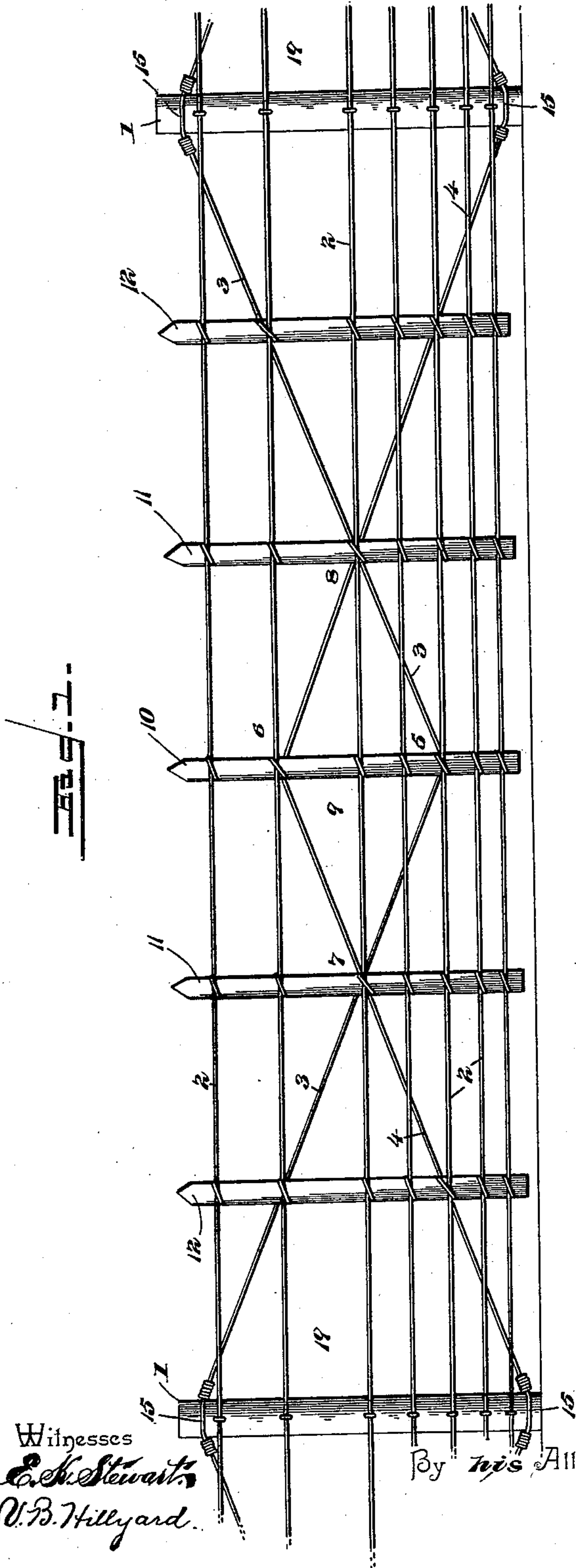


(No Model.)

W. S. COULTER.
FENCE.

No. 583,617.

Patented June 1, 1897.



Inventor

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UNITED STATES PATENT OFFICE.

WILLIAM SHERMAN COULTER, OF STOCKWELL, INDIANA.

FENCE.

SPECIFICATION forming part of Letters Patent No. 583,617, dated June 1, 1897.

Application filed March 11, 1895. Serial No. 541,310. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM SHERMAN COULTER, a citizen of the United States, residing at Stockwell, in the county of Tippecanoe and State of Indiana, have invented a new and useful Fence, of which the following is a specification.

My invention relates to improvements in that class of fences in which the line-wires are braced and strengthened intermediate of the fence-posts by pickets and oppositely-disposed brace or truss wires, and aims to provide a fence of this type which will admit of the fence-posts being located at greater distances apart than has been possible heretofore and which will obviate sagging of the panels and vertical movement thereof in an attempt of small stock endeavoring to pass beneath the lower edges of the said panels.

The vital feature of the improvement resides in the particular arrangement of the truss-wires with respect to the pickets or vertical stays. Many forms have been devised and abandoned because the results attained were not perfectly satisfactory.

The present improvement combines simplicity, efficiency, and durability, and the results have been superior to those of fences of similar prior construction.

The improvement consists, essentially, of the peculiar disposition of the truss-wires which form a diamond midway of the space between adjacent fence-posts and which form diamonds on each side of the middle diamonds and have the fence-posts forming the minor axes for the said end diamonds. The diamond figures located midway between the adjacent fence-posts are about half the size of the diamond figures at each end, and these smaller diamonds have vertical stays at a middle point in their length and similar stays at each end of the diamond at the point of crossing of the two truss-wires.

For a full understanding of the invention reference is to be had to the following description, taken in connection with the accompanying drawings, in which—

Figure 1 is a side elevation of a length of fence constructed in accordance with and embodying the vital principles of my invention. Fig. 2 is a detail view of the connection

between the fence-posts and the truss-wires. Fig. 3 is a detail view showing the manner of attaching the line-wires and the truss-wires to the vertical stays.

The fence-posts 1 and the several line-wires 2 are of ordinary and well-known construction. In the present instance the fence-posts 1 are arranged a greater distance apart than is customary. The upper truss-wire 3 is attached to the upper ends of the fence-posts 1 and is deflected at a central point to within a short distance of the lower edge of the panel, as shown at 5. The lower truss-wire 4 is attached to the fence-posts 1, near their lower ends, and is deflected upward at a middle point to within a short distance of the top edge of the panel, as shown at 6, the two deflected portions 5 and 6 coming opposite each other and in vertical alinement. The two truss-wires 3 and 4 cross each other at points 7 and 8, forming the diamond figure 9 at a point midway between the adjacent fence-posts. A stay or picket 10 is centrally disposed with respect to the distance between the adjacent fence-posts and the diamond figure 9 and is firmly attached to the truss-wires at the points 5 and 6. Similar stays or pickets 11 are located one at each end of the diamond figure 9 and are firmly attached to the truss-wires at the respective points of crossing 7 and 8. To attain additional strength, other stays or pickets 12 are located between the fence-posts and the stays 11 and are attached to the truss-wires at the points of crossing of the latter with the respective line-wires. The several stays 10, 11, and 12 are arranged parallel with each other and with the fence-posts and are disposed equidistant from each other and the said fence-posts, thereby giving and securing a pleasing appearance to the completed fence.

The truss-wires may be attached to the fence-posts in any desired manner, either by staples or any fastenings usually provided in structures of this nature. However, the preferred way consists in providing gains or notches 13 and 14 in the opposite sides of the fence-posts and fitting the truss-wire in one of the gains, as 13, and providing a short binding-wire 15, which is fitted in the opposite gain 14 and has its end portion coiled

about the said truss-wire on opposite sides of the fence-posts. This construction is shown most clearly in Fig. 2.

The stays may be attached to the line and truss wires in any approved manner, but the way shown most clearly in Fig. 3 gives the best results. In this construction the opposite edges of the stays are provided with gains or notches 16 and 17, and binding-wires 18 are passed around the stays and have their ends twisted together, said binding-wires entering the gains 16 and 17 and passing over the line-wires. At points where the line and truss wires cross the said wires pass upon opposite sides of the stays, thereby preventing injurious contact of the one with the other. The gains 16 and 17 occur at different levels in the length of the stays, thereby obviating the weakening of the said stays to such an extent as would result if the said gains 16 and 17 were directly opposite one another. The truss-wires are disposed so as to form diamond-shaped figures 19 at each end of the diamonds 9, and have the fence-posts located so as to form the minor axes thereof. The diamond figures 19 are approximately twice the size of the corresponding figures 9, and the said figures are alternately disposed in the length of the fence.

The preferable arrangement of the truss-wires is to attach the extremities of the upper truss to the adjacent fence-posts above the plane of the uppermost line-wire and the extremities of the lower truss to the said posts below the plane of the lowermost line-wire and deflect their centers in opposite directions to within a short distance, respectively, of the uppermost and lowermost line-wires,

without extending to the latter, whereby the centers of the truss-wires are separated a less distance than their extremities to allow a limited amount of vertical resilience to the centers of the panels without allowing the sagging thereof when not subjected to downward strain.

Having thus described the invention, what is claimed as new is—

The herein-described fence, comprising fence-posts, a series of longitudinal line-wires connecting the posts, an upper truss-wire connecting the upper ends of two adjacent posts with their extremities above the plane of the uppermost line-wire and deflected downwardly therebetween to within a short distance of the lowermost line-wire, a lower truss-wire connecting the lower ends of said posts with its extremities below the lowermost line-wire and deflected upwardly therebetween to within a short distance of the uppermost line-wire, whereby the centers of the truss-wires are separated a less distance than the extremities thereof to allow vertical resilience of the center of the panel, and vertical stays intersecting the line-wires and truss-wires and secured to the former by binding-wires, said binding-wires, at the points of intersection of the truss-wires, also engaging the latter, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM SHERMAN COULTER.

Witnesses:

LURIAN A. ROBERTS,
OLIVE RASH.