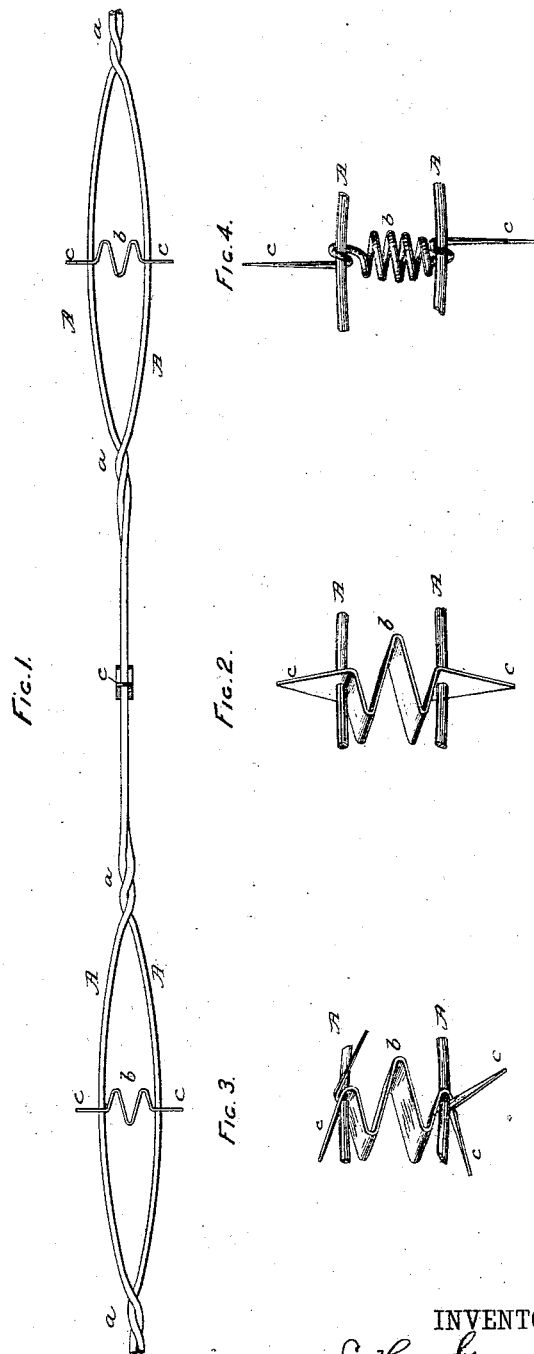


S. H. GREGG.  
Barbed Fence-Wire.

No. 221,300.

Patented Nov. 4, 1879.



WITNESSES:

*Edw. P. Hallingworth*  
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# UNITED STATES PATENT OFFICE.

SAMUEL H. GREGG, OF CRAWFORDSVILLE, INDIANA.

## IMPROVEMENT IN BARBED FENCE-WIRE.

Specification forming part of Letters Patent No. **221,300**, dated November 4, 1879; application filed September 20, 1879.

*To all whom it may concern:*

Be it known that I, SAMUEL H. GREGG, of Crawfordsville, in the county of Montgomery and State of Indiana, have invented a new and Improved Barbed Fence-Wire; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of the barbed fence-wire. Figs. 2, 3, and 4 are enlarged details, in perspective, illustrating different constructions of combined barbs and springs and the manner of attaching the same to the cable-wires.

The object of my invention is to so construct a barbed fence-wire as to enable it to be under proper tension at all seasons of the year, so as to avoid snapping caused by the too great tension from contraction in winter; and also to avoid sagging or looseness caused by the expansion and relaxation of tension in summer; and also, further, to prevent pulling the posts out of proper position. Heretofore this result has been aimed at by making the line-wires of two strands, twisted together at intervals, and provided with barbs at their twisted points, between these points said wires being swelled or bowed away from each other, and held apart by a spiral spring contained in a transverse tube.

My invention consists in the peculiar construction of barb and manner of inserting the same in a wire or cable composed of two strands, whereby a single piece is made to form both a spring for distending the wires and a barb for pricking the animals, the said barbs being secured upon the bowed portion of the wire in such relation as to project farthest from the central line.

In the drawings, A A represent the two strands of a line wire or cable, which are twisted together at intervals of eight or ten inches, as at *a a*, and between these points are swelled or bowed away from each other in alternating right-angular planes. Now, if a spring be inserted between the bowed portion of the wires it will be seen that the tension of these springs has a tendency to increase the bend of the bow, and in so doing causes the cable to contract in its length, while a tension on the cable in its length causes the

bowed portions of the two wires to approach each other against the tension of the inserted spring as the line wire or cable is drawn out. This, it will be seen, makes a line-wire which is elastic in its length, but which, however, I do not broadly claim.

Now, in rendering practical the employment of this construction, I make the barbs partially in the form of a spring, and locate them in the widest portion of the bowed wires, so that the spring portion of the barb distends the two wires of the bow, while the point or barbs proper project from the swelled portion of the wire, where they more readily come in contact with the animals as they rub against the fence.

In constructing these barbs I may make them as shown in Fig. 2, in which the spring is formed by zigzag bends in the center, and in which the strands of the cable are connected to the combined spring and barb by being passed through perforations in the barbs; or I may construct them as shown in Fig. 3, in which a zigzag bend in the middle forms the spring with two barbs at each end, which are bent in reverse directions across the strands of wire, to embrace the latter and secure the barb to the cable; or, as in Fig. 4, the barb and spring may be formed of wire wound in a spiral on the center for the spring, and the two ends then bent at right angles around the cable-strands and left projecting outwardly.

Having thus described my invention, what I claim as new is—

1. A barbed fence-wire consisting of the combination of two strands, twisted at intervals and bowed between these points, and a barb having its middle portion formed into a spring and fastened between the bowed wires with the barb projecting outwardly, substantially as described.

2. The combination, with the twisted strands A A, bowed at intervals, of the zigzag spring and barb, having perforations to give passage to the said strands, substantially as described.

The above specification of my invention signed by me this 18th day of September, 1879.

S. H. GREGG.

Witnesses:

CHAS. A. PETTIT,  
SOLON C. KEMON.