F. ARMSTRONG.

BARBS FOR WIRE FENCES.

No. 182,626. Patented Sept. 26, 1876.

Fig. 1.

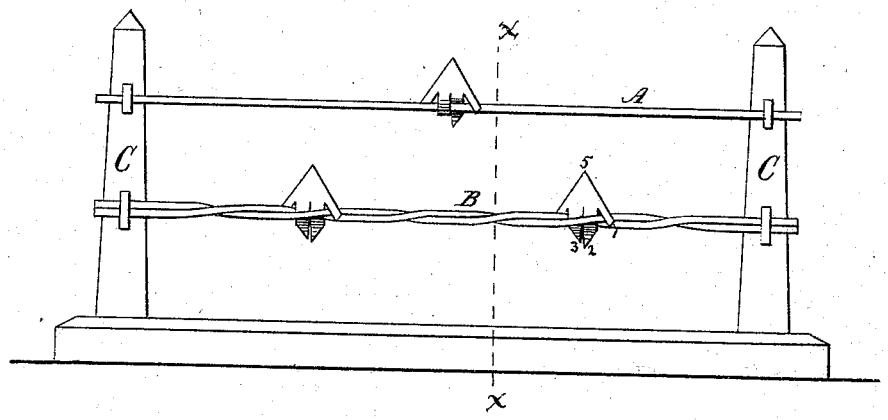


Fig. 4.

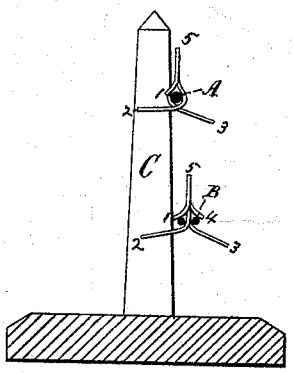


Fig. 2.

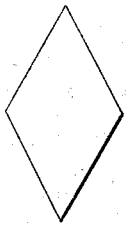
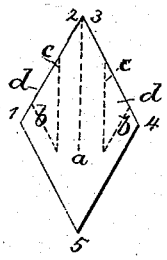


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

FRANK ARMSTRONG, OF BRIDGEPORT, CONNECTICUT.

IMPROVEMENT IN BARBS FOR WIRE FENCES.

Specification forming part of Letters Patent No. **182,626**, dated September 26, 1876; application filed August 28, 1876.

To all whom it may concern:

Be it known that I, FRANK ARMSTRONG, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Barbs for Wire Fence; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification.

My present invention relates to a novel improvement in the construction of sheet-metal barbs and their application to wire fences, as patented by me December 21, 1875, and April 18, 1876.

It has for its object to render the barb simple and economic in construction, and readily securable to the wires composing the fence, whether said fences be formed of single or double or cable wires; and with these objects in view my invention consists of a sheet-metal barb formed from a diamond-shaped blank by splitting or dividing it centrally from one end for a distance somewhat more than one half its length, and again cut or split for a short distance on each side parallel to the lower oblique sides of the blank, and again cut on each side of, and about parallel with or slightly oblique to, the first or central slit, and down to and intersecting the two oblique cuts, removing the piece bounded by said cuts, and bending the points thus formed, as will be hereinafter more fully set forth.

To enable others to more fully understand the construction and application of my improved barb, I will proceed to describe the same, referring by letters to the accompanying drawing, in which—

Figure 1 is a front elevation of a section of wire fence, showing my improved barb attached to both a single and a double twisted or cable wire. Fig. 2 is a plan of a diamond-shaped blank previous to being slit and cut; Fig. 3, a similar view, showing the same after being cut and slit. Fig. 4 is a vertical section at line *x x* of Fig. 1, showing the method of attaching the barbs to the wires.

Similar letters indicate like parts in the several figures.

A represents a single, and B a double or cable, wire, secured in the usual manner to posts C, thus producing the ordinary wire fence. The barb is formed form a diamond-shaped blank of sheet metal by splitting it centrally from one end on the dotted line *a*, a distance somewhat more than one-half the length of the blank, and again splitting it on the dotted lines *b* parallel with the lower oblique sides of the blank, and again cut on the dotted lines *c* each side of, and about parallel with or slightly oblique to, the line *a*, down to and intersecting with the lines *b b*, thus removing the portion *d* and producing the five points 1 2 3 4 5. The two shoulder points 1 and 4 are slightly bent in reverse directions, and the points 2 and 3 separated slightly by pressing one or both above and below the horizontal plane. It is desirable that this bending of the points should be done by the manufacturer, though it is not essentially necessary, as it may be done by those applying the same to the fences.

It will be observed that the removal of the piece *d* permits the points 2 3 to pass farther beyond the axial line of the wire than would be the case if said piece were not removed by the additional cut *c;* and in this particular my present invention is, in addition to other differences, an improvement upon the barbs shown in the patents hereinbefore referred to.

The barb thus formed is readily applied to either a single or twisted wire, as clearly illustrated at Fig. 4 of the drawing. When applied to a single wire, the points 2 3, being separated, straddle the wire, and are bent over at about right angles to the point 5, the points 1 and 4 being bent to embrace the wire on opposite sides, and hold the barb practically against displacement. Should they, however, turn upon the wire, it will be observed that the relation of the points 2 3 5 to the wire are radial, and the pushing away of any one will induce to another taking its place, so that a sharp point is ever presented to any disturbing force. In the case of a twisted or double wire the two points 2 and 3 are passed between the two wires and bent, as in the case of the single wire, and the points or shoulders 1 and 4 bent in reverse directions to embrace opposite sides of the two wires.

In the application of the barbs to fence-wires the points or shoulders 1 4 serve as abutments to arrest the barb at the proper

point for its permanent fixture, and also serve as a hold-fast against the strain exerted to bend the points 2 and 3 in opposite directions.

Having fully described my invention and its advantages, what I claim as new, and desire to secure by Letters Patent, is—

As a new article of manufacture a barb for wire fences, composed of sheet metal, cut as shown, with the portions *d* removed, and adapted to be applied to a fence-wire, substantially as hereinbefore set forth.

Witness my hand and seal this 25th day of August, A. D. 1876.

FRANK ARMSTRONG. [L. S.]

Witnesses:
JNO. J. BONNER,
JOHN TYLER.