## J. HALLNER, Barbed Fence.

No. 199,538.

Patented Jan. 22, 1878.

Fig.2.



Mest. John Hallner, Made Brooks. by Louis Baggers & any.

## UNITED STATES PATENT OFFICE.

JOHN HALLNER, OF ITHACA, NEBRASKA.

## IMPROVEMENT IN BARBED FENCES.

Specification forming part of Letters Patent No. 199,538, dated January 22, 1878; application filed October 17, 1877.

To all whom it may concern:

Be it known that I, John Hallner, of Ithaca, in the county of Saunders and State of Nebraska, have invented certain new and useful Improvements in Barbed Fence-Wire; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which they appertain to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a plan view of the blank barbstrip before being twisted upon the wire. Fig. 2 is a similar view of a strip having a double row of barbs. Fig. 3 is a perspective view of a piece of fence-wire having the barbstrip shown in Fig. 1; and Fig. 4 is a similar view of a fence-wire having the barb-strip

shown in Fig. 2.

Similar letters of reference denote corre-

sponding parts in all the figures.

This invention relates to certain improvements in barbed fence-wires, as I shall now proceed more fully to describe, with reference to the drawings hereto annexed, in which—

A is a narrow strip of sheet metal, in the edge of which I make incisions a a, forming a series of barbs, b b. This strip or blank I twist around an ordinary fence-wire, when, in the act of twisting it, the barbs are made to stick out, as shown in the drawing, Fig. 3, thus forming a continuous barb-wire in which the barbs point in all directions.

In Figs. 2 and 4 I have shown a modification of my invention, which consists in making incisions a' a' in both edges instead of only one edge of the wire. In this case a wider blank or strip may be employed, thus saving time in twisting it upon the wire.

My improved barb-wire may be produced at a small cost. It is light and durable, and will absolutely prevent stock from breaking through fences erected with it.

Having thus described my invention, I claim and desire to secure by Letters Patent

of the United States—

1. The blank A, consisting of a continuous strip, having on one or both sides incisions a a, substantially as and for the purpose hereinbefore shown and specified.

2. The combination, with a fence-wire, of the continuous blank or strip A, having on one or both sides incisions *a a*, substantially as and for the purpose hereinbefore set forth.

3. The method of manufacturing barbed fence-wire, consisting in, first, making incisions a a in one or both sides of a continuous strip, A, and then twisting the blank thus formed around an ordinary fence-wire, by which operation the barbs b, formed by the incisions a, are made to project in all directions, substantially as and for the purpose herein shown and specified.

4. As an improved article of manufacture, the barbed fence-wire herein described, consisting of a core formed by an ordinary wire, around which a continuous blank or strip, A, having incisions a, has been twisted, substantially as and for the purpose herein shown

and specified.

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

JOHN HALLNER.

Witnesses: John Lindquist,

SAM PETTERSFORE.