W. L. REYNOLDS.

BARBED FENCE-WIRE.

No. 187,049. Patented Feb. 6, 1877.

Fig. 1.

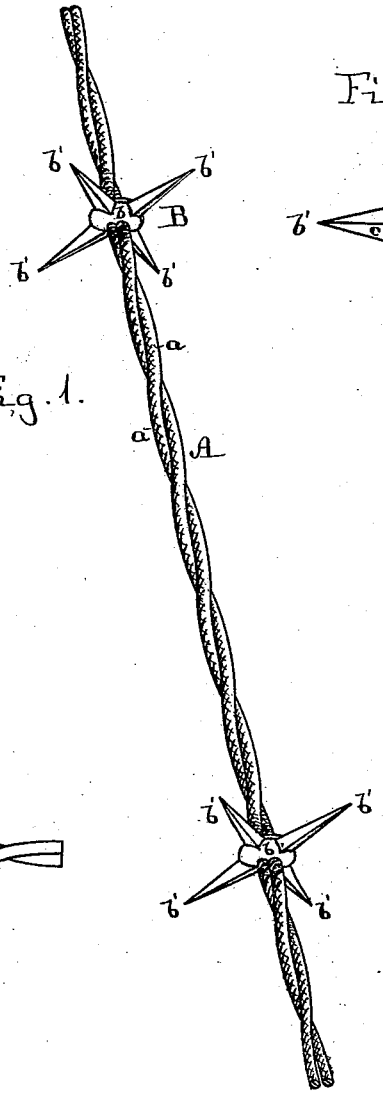


Fig. 2.

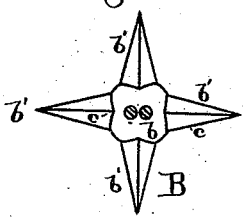
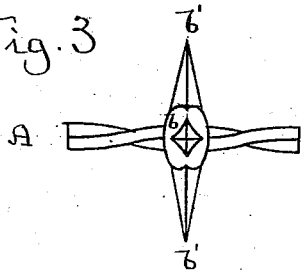


Fig. 3



WITNESSES.

Daniel T. Potter

Saml. S. Boyd

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William L. Reynolds

By Chas. D. Moody.

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UNITED STATES PATENT OFFICE.

WILLIAM L. REYNOLDS, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN BARBED FENCE-WIRE.

Specification forming part of Letters Patent No. **187,049**, dated February 6, 1877; application filed September 23, 1876.

To all whom it may concern:

Be it known that I, WILLIAM L. REYNOLDS, a resident of St. Louis, Missouri, have made a new and useful Improvement in Barbed Fence-Wire, of which the following is a full, clear, and exact description, reference being had to the annexed drawing, making part of this specification, in which—

Figure 1 shows the invention in perspective; Fig. 2, a cross-section on the line *x x* of Fig. 1, and Fig. 3 a plan.

Similar letters refer to similar parts.

By means of the present improvement a barb of almost any desirable shape can be readily and firmly attached to the wire, and to wires of any shape. It consists in forming the barb upon the wire by casting molten metal around the wire.

A desirable mode of carrying out the invention is indicated in the annexed drawing, where A represents the fence-wire, and B the barb. The former is, preferably, made in the form of two smaller wires, *a a*, twisted together. A single wire, however, or even several, may be used. The barb consists of a central part, *b*, that encircles the wire and points *b' b' b' b'*, radiating from the central part *b*. One or more of these points may be used, and, if desired, they may be concentrated more on one side of the part *b* than on the other; or they can be arranged unevenly around the part *b*. I prefer the number and arrangement shown. The points are sharpened not only at their extreme end, but, preferably, at their sides also, as shown at *c c*, &c. The barbs are made and attached in position by casting them from molten metal. A suitable mold, of shape to suit the intended number and arrangement of the points *b' b'*, &c., is held around the wire, and the metal of which the barb is to be formed is poured in a molten condition therein—that is, the barb is molded directly upon the wire.

Several advantages accrue from this method. The barbs are not only formed very easily and of any preferable shape, but they are firmly attached to the wire in consequence of the shrinkage of the metal in cooling. Moreover, the barb metal, in forming about the wire, accommodates itself to any inequality in the shape of the latter, and thus is more securely locked thereto.

The barb can be formed from a great variety of metals. The barbs hitherto in use have been liable to rust, and a wound by such a barb is objectionable in occasioning permanent injury. I therefore, preferably, make my improved barb of such metal as zinc, suitably hardened, and when thus made no difficulty from rusting occurs. A further advantage is in being able to readily form the barb of a bright metal, that from its luster will make the fence-wires much more conspicuous than when wrought-iron is used, and thus deter the approach of animals more effectually.

What I claim is—

A fence-wire having barbs cast thereon, for the purposes specified.

WM. L. REYNOLDS.

Witnesses:

WM. B. DEAN,

SAML. S. BOYD.