J. & W. M. BRINKERHOFF.
Barbed Fence.

No. 219,143. Patented Sept. 2, 1879.

FIG. 1.

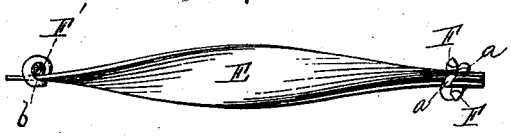


FIG. 2.

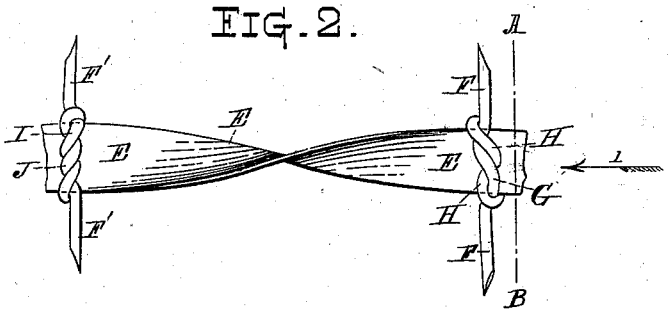


FIG. 4.

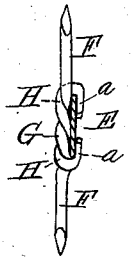


FIG. 3.

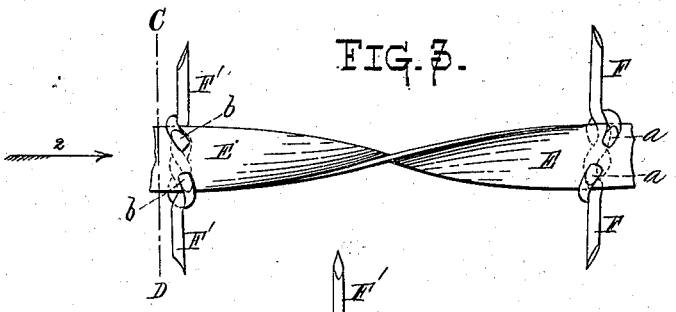
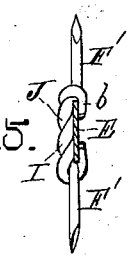


FIG. 5.



Witnesses=

Thos. G. Dodge
Edwin E. Moore

Inventors=

Jacob Brinkerhoff
Warren M. Brinkerhoff

UNITED STATES PATENT OFFICE.

JACOB BRINKERHOFF AND WARREN M. BRINKERHOFF, OF AUBURN, NEW YORK, ASSIGNORS TO WASHBURN & MOEN MANUFACTURING COMPANY, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN BARBED FENCES.

Specification forming part of Letters Patent No. **219,143**, dated September 2, 1879; application filed May 12, 1879.

To all whom it may concern:

Be it known that we, JACOB BRINKERHOFF and WARREN M. BRINKERHOFF, both of Auburn, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Barbed Fences; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 represents a top or plan view of a section of our improved barb-fencing, showing barbs attached at two points upon the same, as will be hereinafter more fully described. Figs. 2 and 3 represent a front and back view, respectively, of the parts shown in Fig. 1. Fig. 4 represents a vertical section through the metal strip, or main body of the fencing, taken on line A B, Fig. 2, looking in the direction indicated by arrow 1 of the same figure, showing a side view of one mode of fastening the barbs upon the fence-strip; and Fig. 5 represents a vertical section similar to Fig. 4, taken on line C D, Fig. 3, looking in the direction indicated by arrow 2 of the same figure, showing a modification in the manner of fastening the barbs upon the fence-strip to that of Fig. 4.

Our invention relates to barbed fences made of flattened metal strips with the barbs attached thereto; and it consists in the manner of twisting the wires from which the barbs are formed, so as to secure and form said barbs upon the fence-strip, as hereinafter more fully explained.

To enable those skilled in the art to which our invention belongs to make and use the same, we will proceed to describe it more in detail.

In the drawings, E represents a flat twisted metal fence-strip, upon which the barbs F F′ are secured. The barbs F form a part of the wire G, which is intertwisted with wire H, the ends *a* of the latter being bent over the edges of strip E, as fully represented in Figs. 3 and 4 of the drawings, thereby securely holding wire G and its barbs F in place upon the strip.

The manner of fastening barbs F′, is simply a modification of that employed for fastening barbs F. In the latter case two pieces of wire, I and J, are used and intertwisted as in the former; but instead of forming both barbs F upon one piece, G, only one end of each piece I and J constitutes a barb, their other ends being bent over the edge of the fence-strip, as represented at *b*, in the same manner as the ends *a* of wire H. It will therefore be seen that the latter method, although differing somewhat in form to that of the former, is essentially the same in principle. Strip E may be made from any suitable metal.

The barbs are secured at proper distances upon strips of any desired length, after which they may be twisted, as represented in the drawings, thereby effectually preventing the barbs from slipping upon said strips.

The metal strip E may be made in any desired form in cross-section, and may be twisted either before or after the strip is attached to the fence-posts, although we prefer, and it may be found in practice more desirable, to attach the fence-strip E to the fence-posts before it is twisted, and then twisted by sections, as fully described in the Letters Patent granted to Jacob Brinkerhoff, October 24, 1876, No. 183,531.

From the foregoing description it will be seen that a very strong and durable fencing material is produced. By securing the barbs upon flat metal strips instead of wire, the fence is more easily observed by horses, cattle, &c., thus preventing their running against the same and injuring themselves.

It will furthermore be observed that the form and manner of constructing the barbs and their holding devices, and their combination with the metallic fencing-strip, are substantially different from the mode of construction and combination shown and described in the Letters Patent No. 175,667, granted to M. W. Colwell, April 4, 1876.

In our invention the barb-wire and its holding device stand at right angles with the fencing-strip, and the barbs project in the same plane in which the coiled part is arranged, and the mode of holding the barb to the fencing is unique and novel, one hooked or holding end being just opposite to the other, and

in the same or nearly the same vertical plane, when the metal strip is first secured to the fencing-post, while the barbs project in the same or nearly the same plane as the twisted portion, thereby obviating the necessity of bending the barb-wire, which is thus left standing with its full strength, and without being weakened, as is the case when it is bent at a right angle, or nearly so, to its body part.

Having described our improvements in barbed fences, what we claim therein as new and of our invention, and desire to secure by Letters Patent, is—

1. The combination, with a piece of metallic fencing material, E, of the barbs F and the locking fastening-piece H, substantially as and for the purposes set forth.

2. The combination and relative arrangement of hook-barb holding ends *a* and *b* with a flat-metal fencing-strip, E, and its barbs, substantially as and for the purposes set forth.

JACOB BRINKERHOFF.
WARREN M. BRINKERHOFF.

Witnesses:
THOS. H. DODGE,
EDWIN E. MOORE.