J. McNEILL.

Metal-Barbs for Fences.

No. 199,162. Patented Jan. 15, 1878.

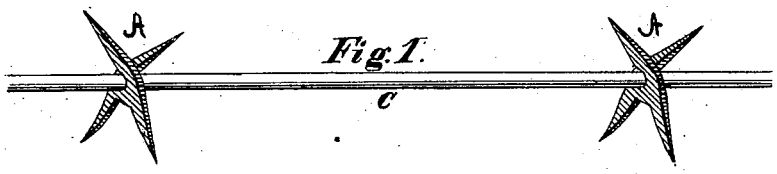

Fig. 1.

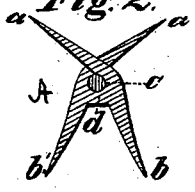

Fig. 2.

Fig. 4.

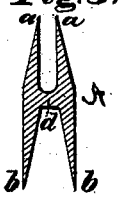

Fig. 3.

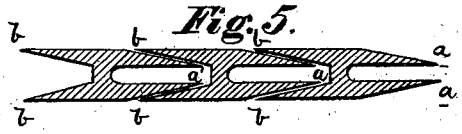

Fig. 5.

Witnesses;

Jacob Maag

Donald McLean

Inventor;

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UNITED STATES PATENT OFFICE.

JOHN McNEILL, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN METAL BARBS FOR FENCES.

Specification forming part of Letters Patent No. **199,162**, dated January 15, 1878; application filed April 14, 1877.

To all whom it may concern:

Be it known that I, JOHN McNEILL, of Chicago, county of Cook, and State of Illinois, have invented a new and useful Improvement in Metal Barbs for Fences, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, with letters of reference, which form a part of this specification.

Figure 1 shows my barb attached to a single-wire rail, C. Fig. 2 is an end view of the barb in position on a single-wire rail, C. Fig. 3 is a face view of the barb. Fig. 4 is an edge view of the barb, showing the points or prongs thrown out of line. Fig. 5 shows the manner in which the barbs are cut from flat metal.

My invention has for its object to furnish a cheap, durable, and effective barb, that can be applied edgewise to one or more rails of a fence for its protection from stock; and it consists in the construction of a four-pointed barb having two prongs running parallel to each other, or nearly so, and being connected at or near the center by an integral portion, as hereinafter more fully set forth.

The barbs are cut from a flat steel or other suitable metal blank of proper width and thickness that will bend edgewise and give sufficient bearing-surface to the rail. They are formed by cutting a series of longitudinal slots from the center of a flat metal blank, Fig. 5, the remaining metal on each side of the slots being cut diagonally, so as to form one pair of points, *a a*, beveling inward, and another pair of points, *b b*, on the preceding barb, beveling outward. The ends of these slots may be formed with a semicircular or any other suitable shape to conform to the shape of the rail to which the barb is to be applied; and to facilitate the application of the barb to a fence-rail, the points *a* and *b* are thrown out of line by slightly twisting the barb at *d*, as shown in Fig. 4, which allows the points to pass each other at suitable angles over the rail.

It will be readily seen that a great saving in material is effected by cutting the four-pointed barbs from flat metal, in the manner described.

These barbs can be cut with dies and punches rapidly and cheaply, and can be applied, by a hand tool made for that purpose, to a single rail of wire or other rail material when in position on its posts, or may be applied to the rail material by machinery before the fence is prepared for market.

In applying the barb to a single rail, C, with the hand tool, two prongs, *a a*, only are clasped on the rail edgewise by being bent down on the rail C, passing each other to nearly right angles, with sufficient pressure to indent the rail slightly, so that the barb will keep its place firmly without slipping or turning.

The prongs *b b* are slightly spread apart, so that all the points will stand at nearly equal distances from each other, so that stock coming in contact with the fence from any direction will be more sure to encounter one of the sharp points of the barb than where a fence is provided with barbs having but two or three points.

In applying the barbs to two rails twisted together or running parallel to each other, both pairs of prongs may be clasped onto the rails by being bent edgewise, crossing each other at sufficient angles over each rail, instead of spreading one pair of prongs, as in the case of a single rail. This mode of applying the barb to a rail composed of two parts has this advantage, namely, that if one of the rails should be broken it cannot fall down or untwist, for the barb will hold it securely to its place on each side of the break.

I am aware that four-pointed barbs have been used on fences and cut from flat metal; but such barbs were applied with their flat surface to the rail.

I am also aware that barbs having four points have been made of wire; but such barbs are bulky, and add unnecessary weight to a fence, besides giving more rusting surface, which is an objectionable feature in barbs when applied to wire rails.

I am also aware that barbs having three prongs, two of which have flat face surfaces and offsets, have been patented and used on fences; but such barbs are expensive, and do not possess the repelling qualities of my barb.

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

The flat metal barb for fences herein described, as represented in Figs. 3 and 4 of the drawing, having four points, *a b*, arranged nearly parallel with each other, and adapted to be applied edgewise to one or more rails of a fence, in the manner specified.

JOHN MCNEILL.

Witnesses:
JACOB MANY,
DONALD MCLEAN.