H. CHERRY & H. E. WHEELER.

BARBED WIRE-FENCES.

No. 195,091. Patented Sept. 11, 1877.

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

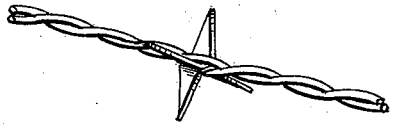
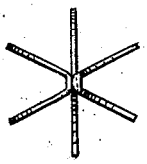
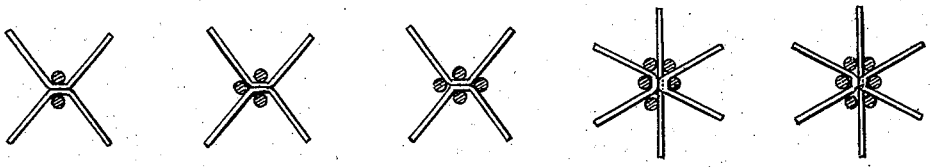


Fig. 6.

Fig. 7.





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UNITED STATES PATENT OFFICE.

HAMILTON CHERRY AND HARRY E. WHEELER, OF AURORA, ILLINOIS.

IMPROVEMENT IN BARBED-WIRE FENCES.

Specification forming part of Letters Patent No. **195,091**, dated September 11, 1877; application filed August 13, 1877.

To all whom it may concern:

Be it known that we, HAMILTON CHERRY and HARRY E. WHEELER, of Aurora, in the county of Kane and State of Illinois, have invented certain new and useful Improvements in Barbed-Wire Fences; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The object of our invention is to produce a better, lighter, stronger, and cheaper barbed fence than any known to us, and one in which the barbs will firmly hold to the places and positions assigned to them, and will stand at right angles to the line of the wire or cable, thus doing less damage to live stock; which admits of the cable being made of two, three, or more wires, if preferred, and which avoids all weakening slots cut transversely of the stock of the barb.

The description following and the claims fully define the invention.

Figure 1 represents a blank as cut from a sheet of metal, and from which is punched a piece of substantially the form shown in Fig. 2, having, preferably, four points, *a a a a*, the whole resembling two rhombs or elongated diamond shapes joined together.

The next operation is to bend this pointed piece (shown in Fig. 2) transversely, so that the two barbs on one side of its center shall be nearly at right angles to those on the opposite side of the center, as shown in Fig. 3, and it is then bent in a direction lengthwise and centrally, in the line *x x*, far enough to fold or double the metal back upon itself at its center, thus leaving four prongs or points projecting radially from such center, as shown in Fig. 4. This gives not only the four prongs integral, but also a doubled central web or connection of sufficient breadth to lie in the bight of the twist of the wires, as shown in Fig. 5; and as these wires lie and bind tightly in the angles where the prongs meet, the barb is held tightly in the desired and best position, viz., with its points projecting at right angles from the line of twisted wires, and not occupying much space lengthwise of the wires, but permitting a close twist upon the barb.

This pronged barb is simple and easily made, and very strong and durable; and as the wire is being twisted they may be placed as close to each other as desired, and should be galvanized to avoid damage from exposure to the weather.

The cable may be made of three or more wires, if preferred.

The barb may have six prongs, if desired, by simply commencing with a wider blank and cutting it with three, instead of two, rhombs or diamonds, as shown in Fig. 6. In such case the central points need not be bent, but the others should be, and then the metal should be doubled upon itself in the manner before described, both outer rhombs being doubled upon the center part.

It will be evident that variations in the shape of the prongs may be made without departing from the spirit of our invention; and that, if desired, some of the prongs may be shorter or blunter than the others, so long as the metal is retroverted or doubled upon itself, as described, and adapted to hold itself firmly between the twists of the wire, as above stated.

This doubling at the center enhances the strength at that point, while at the same time it reduces by one-half the breadth at that point, and prevents a long gap or untwisted part in the cable; hence the cable is stronger than if the barb were not so doubled or trebled.

We claim—

1. A barb for wire fences formed from a single piece of metal, having four or more prongs or points, and bent and doubled upon itself at the center, substantially as shown and described.

2. A barbed wire for fences, composed of barbs formed from a single piece of metal, having four or more prongs or points, and bent or doubled upon itself, as described, and a twisted-wire cable holding such barbs to place by means of its strands.

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