

(No Model.)

J. HAISH.
BARBED FENCE.

No. 332,393.

Patented Dec. 15, 1885.

Fig. 1.

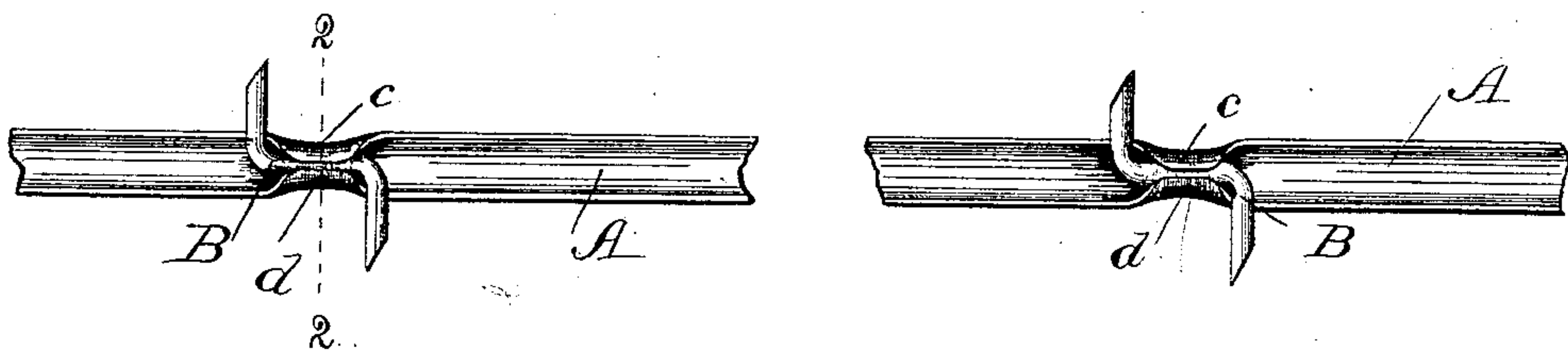


Fig. 2.

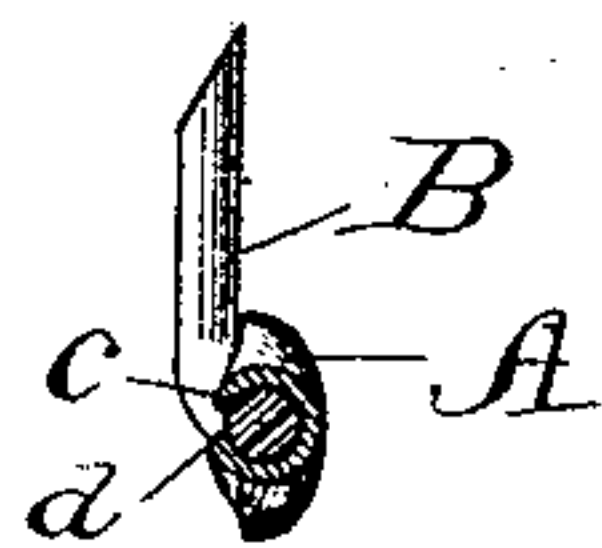


Fig. 3.

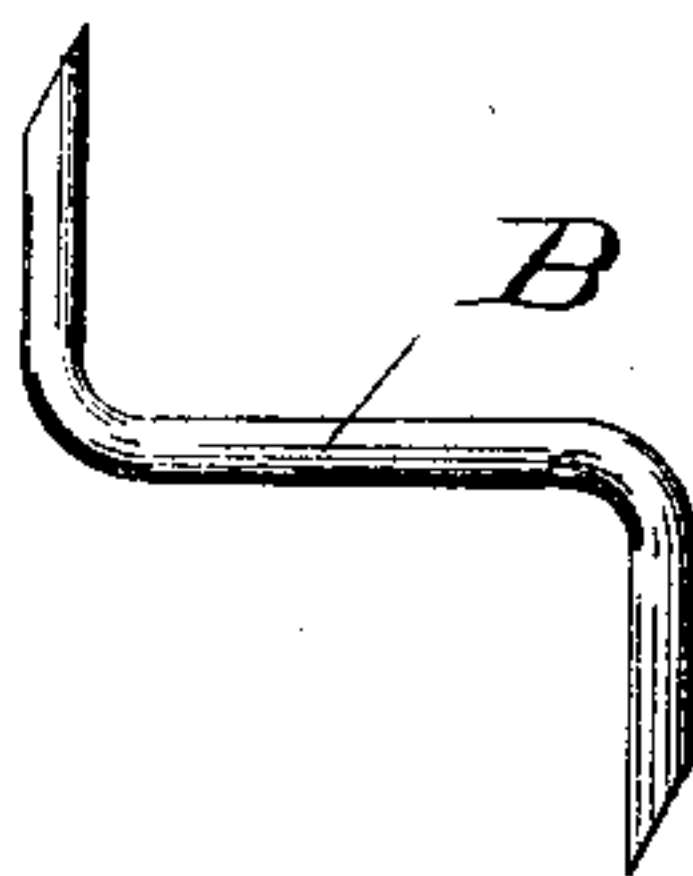


Fig. 4.

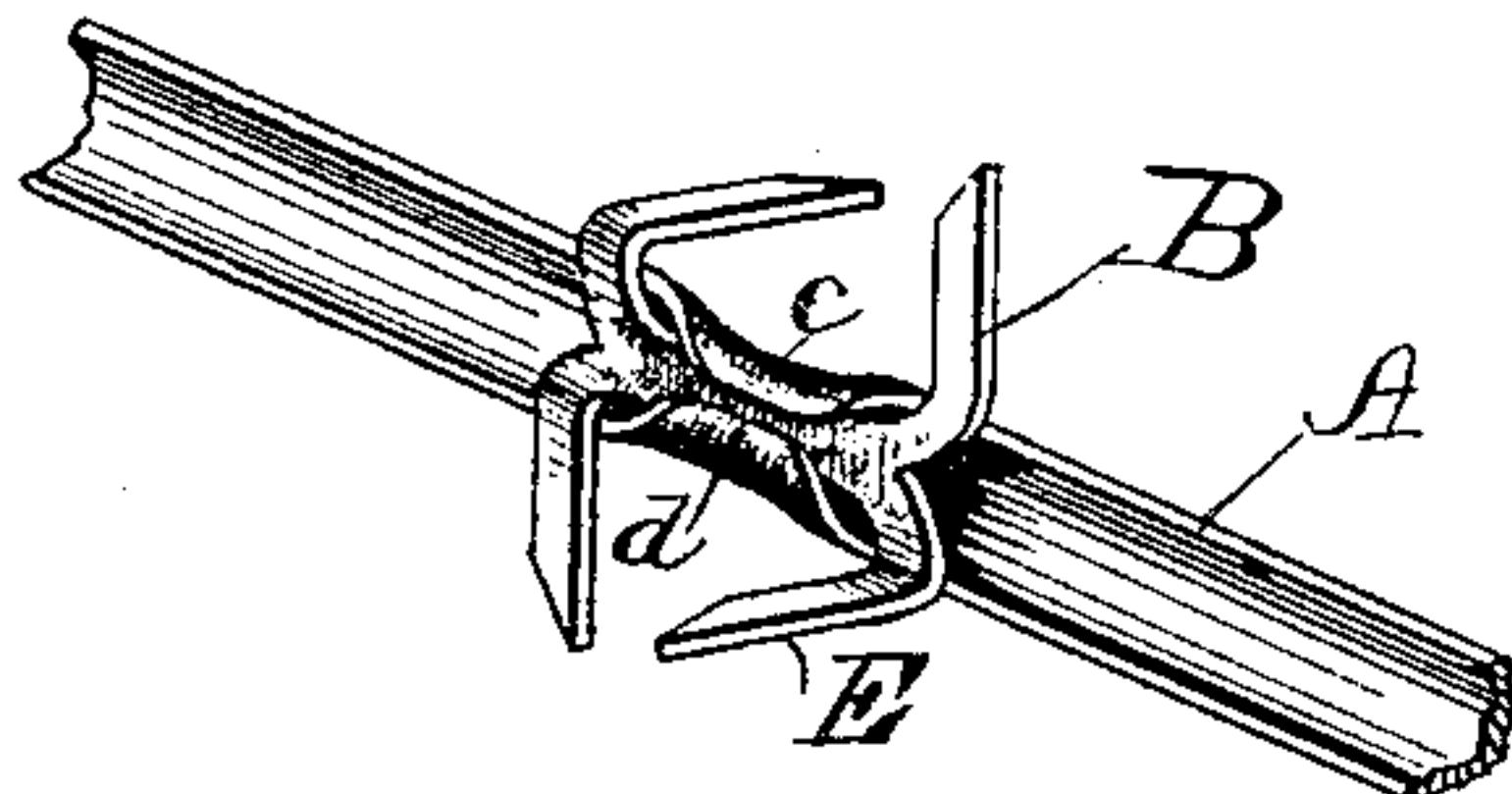
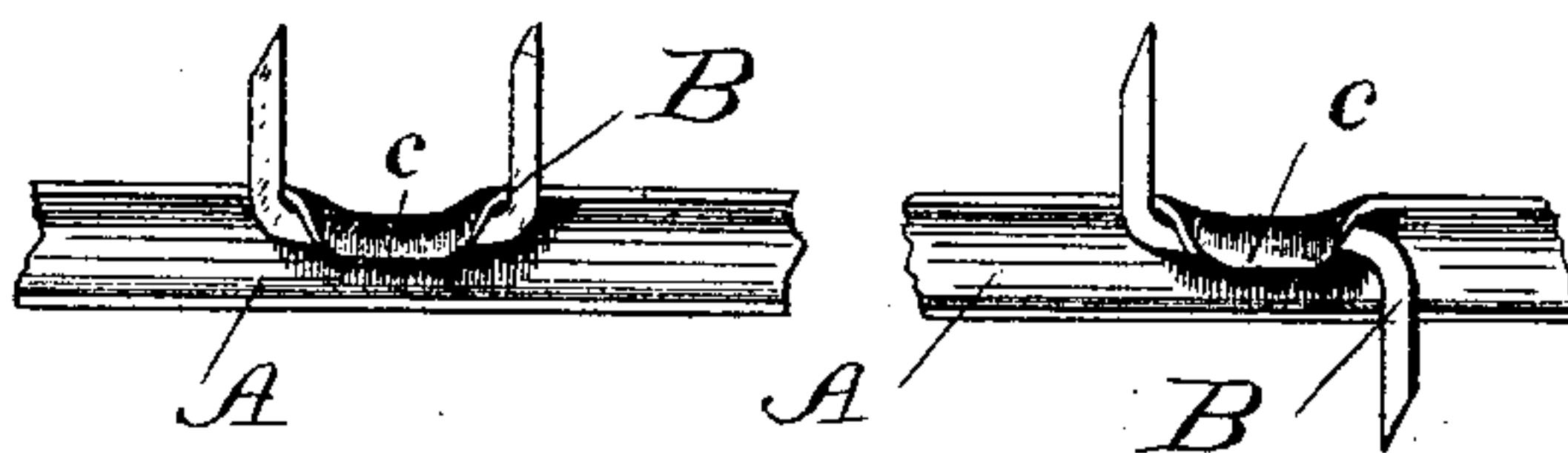


Fig. 5.



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JACOB HAISH, OF DE KALB, ILLINOIS.

BARBED FENCE.

SPECIFICATION forming part of Letters Patent No. 332,393, dated December 15, 1885.

Application filed April 20, 1883. Serial No. 92,374. (No model.)

To all whom it may concern:

Be it known that I, JACOB HAISH, a citizen of the United States, residing at De Kalb, in the county of De Kalb and State of Illinois, have invented a certain new and useful Improvement in Barbed Fences, of which the following is a specification.

My invention relates to that form of barbed-wire fence in which the barb is attached to a metallic strip; and it consists, chiefly, in a new method of attaching the barb to the strip, simpler and less expensive than the constructions now in use. While very many different styles and forms of barbs to be used in connection with strip-fences and various means for attaching the barbs to the strips have been devised, nothing, to my knowledge, has been invented which even remotely approaches the simplicity of my construction; nor has it been possible hitherto to attach the barbs upon metallic strips or upon single or twisted drawn wires with the uniformity, permanence, and economy shown in my invention.

The present very extended use of barbed fences has been largely due to the cheapness of their construction when compared with the expense of the material in use previous to their introduction; but a still further lessening of the expense of such construction is an object deserving of every consideration, in view of the great importance of affording fencing material at a cost which will bring the same within the reach of persons of small means.

My invention aims to afford a barbed sheet-metal fence considerably cheaper than any now in use, yet possessing strength and durability.

I have illustrated my invention by the accompanying drawings, in which Figure 1 is a front view of two sections of sheet-metal fencing embodying my invention, showing one barb in position on each section. Fig. 2 is a cross-section or end view on lines 2 2 of Fig. 1. Fig. 3 is an enlarged view of a barb adapted to my improved construction. Fig. 4 shows a modified form of construction, which may be used when a four-pointed barb is preferred or desired. Fig. 5 shows two further modifications of my invention, which may be successfully used, if desired.

Like letters refer to like parts.

A indicates a curvilinear metallic strip of the construction used by me, being convex upon one side and concave upon the other.

B represents the barb.

c and d indicate the flanges or edges which when turned over upon the concave side of the strip act to secure or hold the barbs in position.

E indicates the additional barb, shown in Fig. 4 of my modified construction, which may be used when four points instead of two are desired.

I am aware that a number of patents have been issued for various kinds or forms of barbed sheet-metal fencing, in most of which the barbs have been formed by diagonally cutting the edges and turning up or bending the points thus formed for barbs. The objection to using a strip in this manner is that the cutting of the edges greatly weakens its strength, and that the barbs so formed by being bent have slight resisting power, and are readily displaced or bent back into the plane of the strip from which they have been formed, and they thus fail to afford the protection intended and desired. Sheet-metal fencing with the barbs cut from the strip has therefore been found to be unsatisfactory, while at the same time the use of a metallic strip instead of drawn wire has been recognized as having many advantages, the defects applying entirely to the want of permanence and strength of a barb of this construction, and to the weakening of the metal by the cutting of the edges. A strip, being much more readily discernible to the eye, is superior to round or drawn wire, as animals are much less liable to come in contact with barbs secured to a strip. Much difficulty has been experienced in securing barbs formed from round or drawn wire in position on sheet or strip metal with sufficient firmness to prevent displacement.

I filed an application April 6, 1883, wherein I show a barb formed of drawn wire secured to a metallic strip of the same form or shape here indicated. I do not, therefore, in this application include the curvilinear or concave and convex strip as forming a part of my invention, but confine myself to a barb of the construction herein shown in combination with such strip, and to the novel and original method or manner by which I secure or connect said barb.

My improved construction consists in taking a strip of rolled or sheet steel, or other suitable metal, so formed by bending or passing

between rollers as to be concave upon one side and convex upon the other. In connection with such strip I use a simple double-L barb, or what might be termed a "double-knee barb," which is placed within or upon the concave side of the strip, and held in position by the turning over of the opposite edges or sides of the strip, so as to press against or upon the lengthwise or longitudinal portion of said barb, thus firmly holding or securing the same within or against the said concave side of the strip, the perpendicular pointed ends of the barb extending in opposite directions, or one upward and the other downward. One advantage in a barb thus uniformly placed and held so as not to be capable of being turned or displaced is that the points do not extend outward or horizontally, and animals are therefore much less apt to be injured thereby. Automatic working machinery for the securing of round or drawn wire barbs upon a strip of this description, as well as for forming the barbs, can be constructed at comparatively small expense.

The modified construction shown in Fig. 4 consists of a double barb, or two barbs U-shaped placed together, so as to present four points instead of two, and held in position in precisely the same manner as described and shown in Figs. 1 and 2, the sides or edges of the strip being turned over and bent so as to press tightly against or upon such barbs at the point where the same extend lengthwise or longitudinally upon the concave side of the strip, the points of one barb extending upward and those of the other downward, thus forming a double or four pointed barb.

The modified construction shown in Fig. 5 consists in the use of a single U-shaped barb, or a barb having both points extending in the same direction, when it is desired to have barbs upon one side and not upon both sides of the strip, said U-shaped double-pointed barb being held by turning over one

side or flange of strip A, instead of both sides, as shown in Fig. 1, while the further modification shown in Fig. 5 consists of a double-knee-shaped barb secured or held in position by turning over or compressing one side or edge of the strip, instead of both edges, as shown in Fig. 1.

Familiar as I am with the state of the art in this department, and with the various forms of barbed fencing now in use, I am confident that the improvements described and shown by me can be utilized to greater advantage in the construction of barbed sheet-metal fencing at much less expense than any fencing of this class known to the trade, and will at the same time possess all the needful requirements of strength and durability.

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

1. In combination with a strip of sheet metal for fencing, a double-kneed barb attached thereto by bending in the edges of the strip between the knees of the barb, substantially as described.

2. In combination with a concave metal strip for fencing, a double-kneed barb attached thereto by bending in the edges of the strip between the knees of the barb, whereby the barb is firmly held in position and lateral movement thereof is prevented, substantially as shown and described.

3. In combination with a strip of sheet metal for fencing, a barb formed with projecting parts, substantially as described, attached thereto by bending in the sides of the strip between the projecting parts of the barb, whereby lateral motion of the barb is prevented.

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