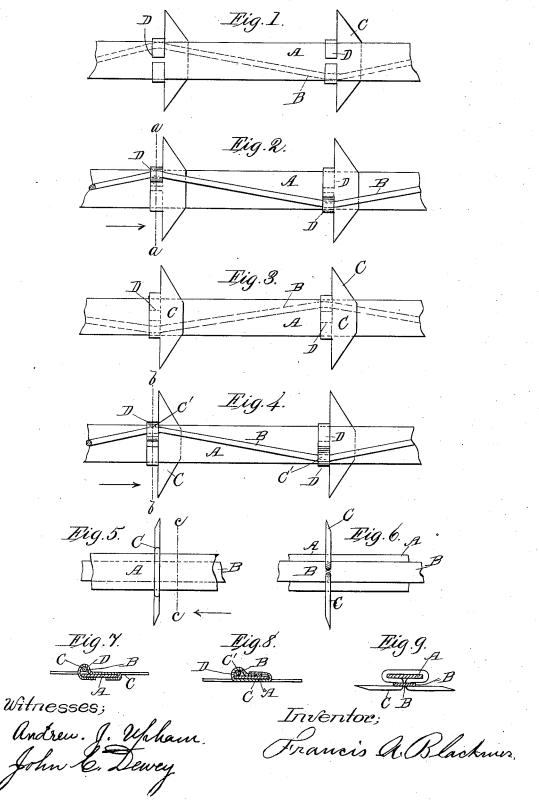
### F. A. BLACKMER.

# BARBED METAL STRIP FENCING.

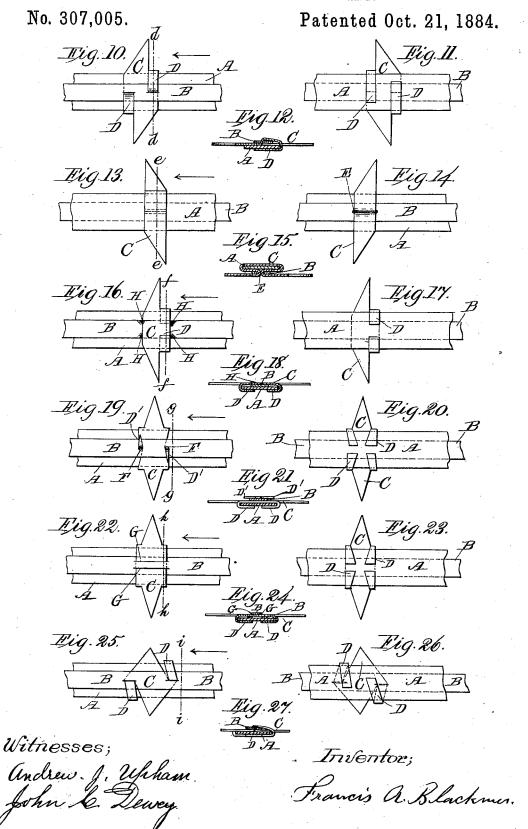
No. 307,005.

Patented Oct. 21, 1884.



## F. A. BLACKMER.

#### BARBED METAL STRIP FENCING.



# UNITED STATES PATENT OFFICE.

FRANCIS A. BLACKMER, OF SPRINGFIELD, ASSIGNOR TO THE WASHBURN & MOEN MANUFACTURING COMPANY, OF WORCESTER, MASS.

#### BARBED-METAL-STRIP FENCING.

SPECIFICATION forming part of Letters Patent No. 307,005, dated October 21, 1884.

Application filed May 15, 1882. (No model.)

To all whom it may concern:

GERGER 1

Be it known that I, Francis A. Blackmer, of the city of Springfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Barbed-Metal-Strip Fencing; and I 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 side view of a section of my barbed-metal-strip fencing, the barbs and the supporting or re-enforce piece being upon the opposite side of the section from that 15 shown in the drawings. Fig. 2 represents a view of the opposite side of the section shown in Fig. 1. Fig. 7 represents a cross-section taken on line a a, Fig. 2, looking in the direction of the arrow, same figure. Figs. 3, 4, 5, 20, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, and 27 represent modifications of my improved barbed-metal-strip fencing, as will be fully described hereinafter

25 The present invention consists in a metal fencing in which a thin metal strip is re-enforced by a re-enforcing piece, and the barbs have parts looped or bent around both said strip and re-enforcing piece to unite them 30 firmly together.

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

In the drawings, the part marked A represents a strip of thin metal of any suitable kind. The part marked B represents the reenforce piece, used in combination with the strip A in the manner to be hereinafter described. The parts marked Crepresent barbs, which may be made of sheet metal or strips, with their ends pointed, and may be made in the shapes or of the forms shown in the drawings, or other similar shapes, without departing from the principle of my invention.

In Figs. 1, 2, and 7 of the drawings the reenforce piece B is made of wire placed zigzag upon the strip A, and upon the same side of said strip as the barbs C are placed. Said

barbs have each two lugs or ears, D, bent one 50 over the top and the other under the bottom of strip A. One of these parts D on each barb is formed into a loop on the same side of strip A as the main portion of the barb itself, and through this loop the re-enforce wire D passes. 55 By this construction strip A and wire B are firmly secured together, and the barb C is likewise prevented from slipping.

In Figs. 3, 4, and 8 of the drawings the reenforce piece B is placed upon the opposite 60 side of the strip from that shown in Figs. 1, 2, and 7, so that the barbs will be upon one side of the strip and the re-enforce piece or wire B upon the other, as shown in the drawings, the re-enforce piece being held in place upon the 65 strip by bending over the same one of the lugs or ears D of the barb C, as fully shown in Fig. 8 of the drawings, and the barb C being retained in place and prevented from slipping or moving upon the strip A by thus bending 70 the lug D over the re-enforce piece B at the points C', where the re-enforce piece is bent.

In Figs. 5, 6, and 9 of the drawings the reenforce piece B is made of a thin strip of metal, and the barb C is held in place upon the strip 75 A by bending the barbs, so as to encircle said strip A, and inserting the ends through holes or openings in the re-enforce piece B, and then bending them over, so as to extend out in opposite directions, thus holding and retaining 80 securely in place upon the strip A the barb C, as fully shown in Fig. 9 of the drawings, and preventing any motion of barb C upon the fencing-strip A.

In Figs. 10, 11, and 12 the strip A, re-en-85 force piece B, and barbs C are combined together by placing the barbs between the strip A and re-enforce piece B and inserting the lugs or ears D of the barbs C through slots or openings in the re-enforce piece B, and then 90 bending them over the edges of the strip A, so that their ends will be upon the opposite side of the said strip A from the re-enforce piece B, as fully shown in Fig. 12 of the drawings, and thus in this modification the re-en-95 force strip B serves to retain the barbs C securely in place upon the fencing-strip A.

The construction of the fencing shown in

Figs. 13, 14, and 15 differs from that shown in Figs. 5, 6, and 9 only in that a sheet-metal barb, C, is substituted for the wire barb C, the ends of said sheet-metal barb being inserted through 5 a slot, E, in the re-enforce piece B, and then bent out, as fully shown in Fig. 15 of the drawings, the re-enforce piece B retaining the barb C in place upon the fencing-strip A in the same manner as in Figs. 5, 6, and 9.

In Figs. 16, 17, and 18 the re-enforce piece B is placed between the strip A and the barb C, and said barb C is retained in place and prevented from slipping upon the strip A by making cuts upon the edges of re-enforce piece 15 B upon each side of the barb C, and then bending them up, so as to form small projections H on each side of the barb C, as fully shown in Fig. 16 of the drawings. The lugs D are bent over upon the other side of the strip A, 20 as shown in Fig. 17, and the barb C is thus, by means of the re-enforce piece B, as described, retained in place upon the strip-fencing A.

In Figs. 19, 20, and 21 the barb C is placed between the strip A and re-enforce piece B. 25 Said barb is held in place upon said strip A by inserting through holes or openings F in the re-enforce piece B the pointed lugs D', cut from barb C, and pressing or bending them over, as shown in Fig. 19, and the lugs D are 30 also bent over and pressed down, as shown in Fig. 20 of the drawings, upon the opposite side of the strip A. Thus the barb is held securely in place and prevented from slipping upon the fencing-strip A.

In Figs. 22, 23, and 24 the re-enforce piece B is provided with two longitudinal slots or cuts, G, through which the barb C is inserted, as

shown in Fig. 22, and then the lugs D bent over the edges of strip A, as shown in Fig. 23 of the drawings, so that the barbs are secured 40 firmly upon the fencing-strip A and prevented from moving.

The fencing shown in Figs. 25, 26, and 27 is constructed in the same way as that shown in Figs. 10, 11, and 12, the barb C being retained 45 in place upon the strip A by inserting the lugs D through slots or cuts in the re-enforce piece B and then bending them over the edges of strip A, as shown in the drawings; but the shape of the barb is different from that shown 50 in Figs. 10, 11, and 12.

In my application of even date herewith, serially numbered 61,451, I have set forth and specifically claimed a barbed-strip fencing comprising a metal strip, a re-enforcing wire, 55 and barbs, the latter having a central loop encircling the wire, and having its ends passed through the strip and bent in opposite directions. Such construction, therefore, is not specifically claimed herein.

Having described my improvements in barbed fencing, what I claim therein as new and of my invention, and desire to secure by Letters Patent, is-

A barbed-metal fencing comprising a thin 65 strip of metal, a re-enforcing piece, and barbs, the latter having portions bent or looped around both the former, so as to fasten the two firmly together, substantially as described.

FRANCIS A. BLACKMER.

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Witnesses:

Andrew J. Upham, John C. Dewey.