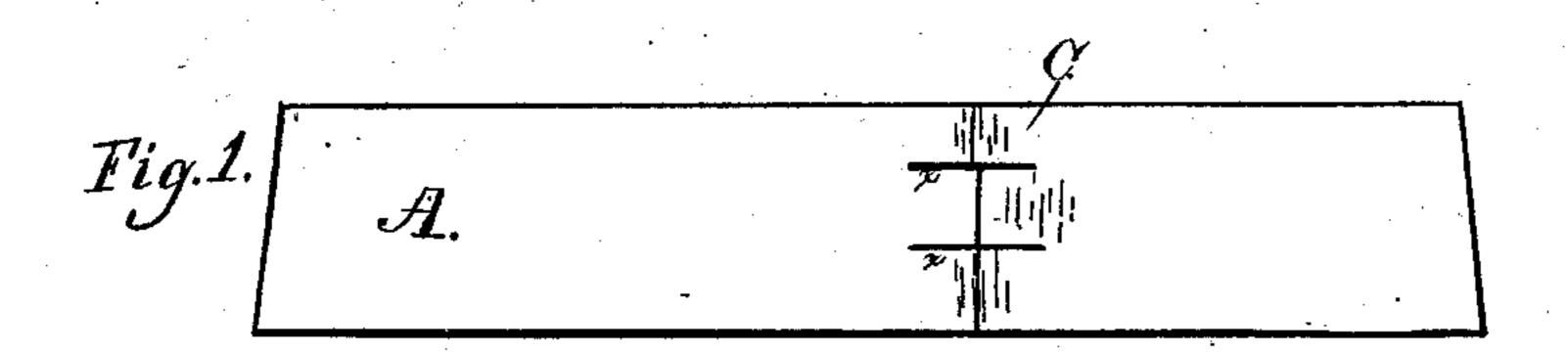
(No Model.)

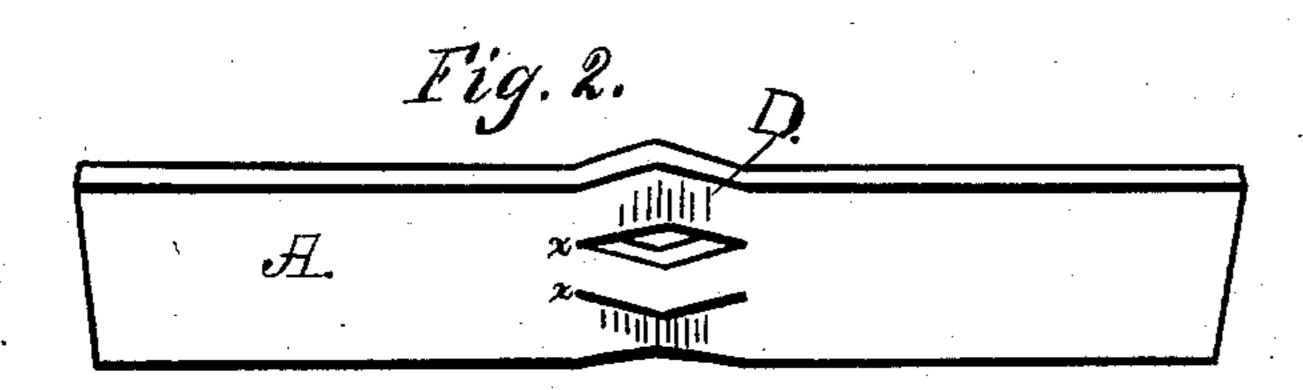
## A. J. UPHAM.

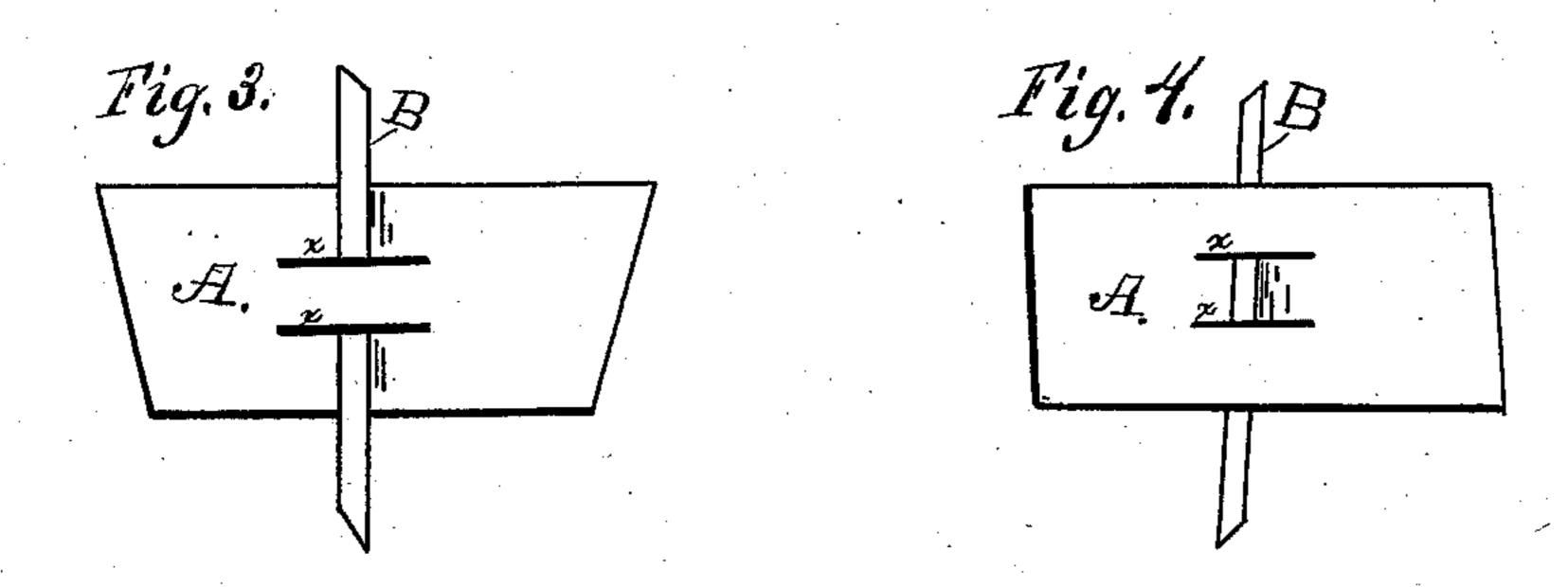
## BARBED FENCE.

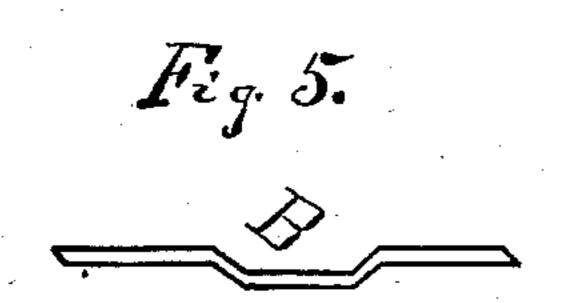
No. 255,399.

Patented Mar. 21, 1882.









Mit nesses J.O. Overholser J. Hish Inventor.

andrew J. Upham

By Manahan and Ward
his attys.

## United States Patent Office.

ANDREW J. UPHAM, OF STERLING, ILL., ASSIGNOR TO THE WASHBURN & MOEN MANUFACTURING COMPANY, OF WORCESTER, MASS.

## BARBED FENCE.

SPECIFICATION forming part of Letters Patent No. 255,399, dated March 21, 1882.

Application filed September 16, 1881. (No model.)

To all whom it may concern:

Be it known that I, Andrew J. Upham, a citizen of the United States, residing at Sterling, in the county of Whiteside and State of Illinois, have invented certain new and useful Improvements in Barbed Fences; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which to it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention consists in a simple, rapid, and cheap mode of making barbed fence material by fixing a wire or metallic barb upon a flat metallic strip

flat metallic strip.

In the drawings, Figure 1 represents the metallic strip prepared to receive the barb. Fig. 20 2 is a section of such strip, showing the conformation of the receptacle for the barb. Fig. 3 is a section of the metal strip provided with the barbs.

A is a strip or ribbon, of steel, iron, or other metal suitable for fence material, and may be of any desired width and thickness. I find, however, that a width of seven-sixteenths of an inch is preferable.

B is the barb, of any desired length, and 30 having its ends cut diagonally to furnish sharp

points.

In the process of manufacture the strip A is passed through a machine, which, by means of a die and punch, forms the holes x x, to reserve the barb B, and throws up that part of the strip A between the holes x x and throws down those parts of the strip A which lie outside of the holes x x, respectively, as shown in Fig. 2. To accomplish this the strip A passes between two opposing dies having conformed faces, to produce the shape described, and at the same time punch or cut the holes or slits x x. The strip A lies flat during the whole of the process of preparation for and fixing the barb. The barb B is fed transversely into the holes x x from a reel of wire or metal strip,

being cut into the required length coincidently with its insertion into such holes x x, the transit of the strip A being momentarily intermitted to permit such insertion. After the 50 barb B is inserted as described the strip A passes, thus furnished with the barb B, between two horizontal metallic rollers, which presses those portions of the strip A between the holes x x and the parts lying outside of 55 such holes into nearly the same plane, and by reason of part of the strip A being on one side of the barb B and part of such strip being on the opposite side of such barb, the latter is slightly dented or bent at each hole xx, 60 thus preventing any casual removing or withdrawal of the barb B in handling the material or after the same is placed upon the fence.

What I claim as my invention, and desire to secure by Letters Patent of the United States, 65

The process of manufacturing barbed-fence material which consists in taking a metallic strip, A, about seven sixteenths of an inch in width, and of any suitable thickness, and pass. 70 ing the same flatwise between a stamp and a die having conformed faces, so as to produce the punctures x x in and conformation of the strip A shown in Fig. 2, then passing the barb B transversely any desired distance 75 through the punctures x x and severing such barb diagonally the desired length, and finally passing such strip A, thus furnished with the barb B, between two horizontal rollers having flat faces, by means whereof the strip A and 80 barb B are pressed into nearly the same plane, thus slightly bending the barb B at the punctures xx aforesaid and firmly scating such barb, substantially as herein described.

In testimony whereof I affix my signature 85 in presence of two witnesses.

ANDREW J. UPHAM.

Witnesses:

J. P. OVERHOLSER,

J. F. Mish.