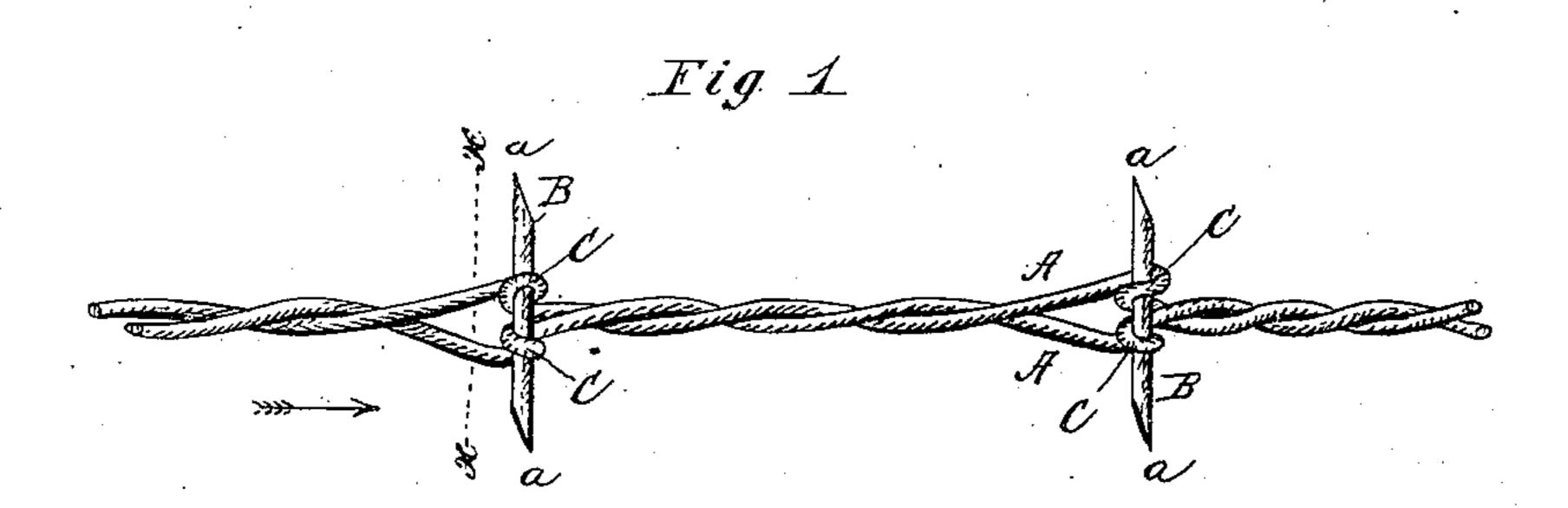
(No Model.)

A. J. UPHAM.

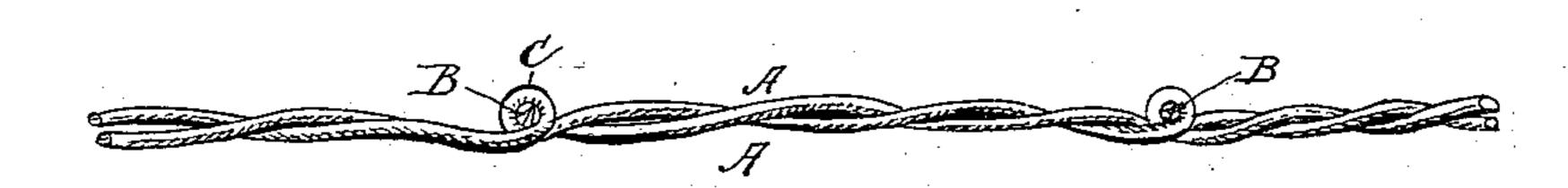
BARBED WIRE.

No. 313,391.

Patented Mar. 3, 1885.



Tig 2



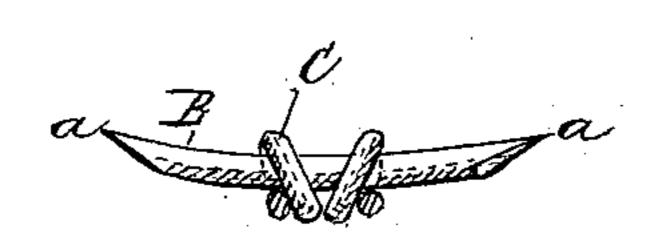


Fig 3

Witnesses John W. Alexander-John C. Dewey.

Inventor Andrew. J. Upham

United States Patent Office.

ANDREW J. UPHAM, OF STERLING, ILLINOIS, ASSIGNOR TO THE WASHBURN & MOEN MANUFACTURING COMPANY, OF WORCESTER, MASSACHUSETTS, AND ISAAC L. ELLWOOD, OF DE KALB, ILLINOIS.

BARBED WIRE.

SPECIFICATION forming part of Letters Patent No. 313,391, dated March 3, 1885.

Application filed July 14, 1882. (No model,)

To all whom it may concern:

Be it known that I, ANDREW J. UPHAM, of Sterling, in the county of Whiteside and State of Illinois, have invented certain new and useful Improvements in Barbed Wire; 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 top or plan view of a section of my improved barbed wire complete. Fig. 2 represents a side view of the section of fencing shown in Fig. 1; and Fig. 3 represents a cross-section on line $x \, x$, Fig. 1, looking in the direction of the arrow, same figure.

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 de-20 tail.

The nature of my invention consists in the combination, with two main fence-wires having loops or eyes formed therefrom, of a barb inserted through said loops or eyes, as will be hereinafter more fully described.

In the drawings, the parts marked A A represent the main fence-wires cabled or twisted together. B represents the barb with pointed ends a a; CC, the loops or eyes formed from the main fence-wires A A.

I will now proceed to describe one good practical way in which my said invention may be carried out. The spools containing the main fence wires A A being mounted 35 upon a suitable rotating eccentric device, and at such distances apart as will enable them to be rotated without interfering with each other, the ends of said main wires are drawn forward and attached to some winding spool or device, 40 after which the spools containing the separate coils of main wires are rotated about an axis eccentric to the axis of the spools, whereby two separate loops, C C, will be formed of any desired size, and such loops, after being 45 formed, are drawn up either by friction upon the spools of main wire or upon the winding

or receiving spool, or both; but before the

loops are drawn down to the finished size the end of the barb-wire is run through such loops, whereby, when the loops are completed, the 50 barb-wire will be clamped and held therein, as indicated in the drawings. The barb B may be fed in by hand, or by suitable mechanism arranged for that purpose. If fed in by hand, the barbs could be cut off in quantities 55 preparatory to being fed in by children or unskilled workmen; but if fed in by machinery I prefer to have the end of the barb-wire run in through the loops and not severed from the main strand of barb-wire until just at the com- 60 pletion of the contraction of the loops about the central portion of the body of the barb. If it is desired to have the main strands cabled or twisted together, as represented in the drawings, the spool which receives the barbed 65 strands as they pass on from the barbing apparatus will be secured in a twisting apparatus, which may be of any of the forms of construction now in common use, and, if preferred, the barbs may be given a slightly bent 70 or curved form, as indicated in Fig. 3, or they may be straight.

Of course any other proper mode of manufacture may be adopted whereby my said invention may be carried out. If desired, one 75 end of the barb B might be bent up and the other down, so as to extend in opposite directions from the fencing, said bends serving to prevent any endwise movement of the barbs B in the loops C C without departing from the 80 principle of my invention.

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

The combination, with two main fence-wires, A. A., provided with loops C. C., of a barb, B., inserted through said loops or eyes, substantially as shown and described.

ANDREW J. UPHAM.

Witnesses:
John W. Alexander,
John C. Dewey.