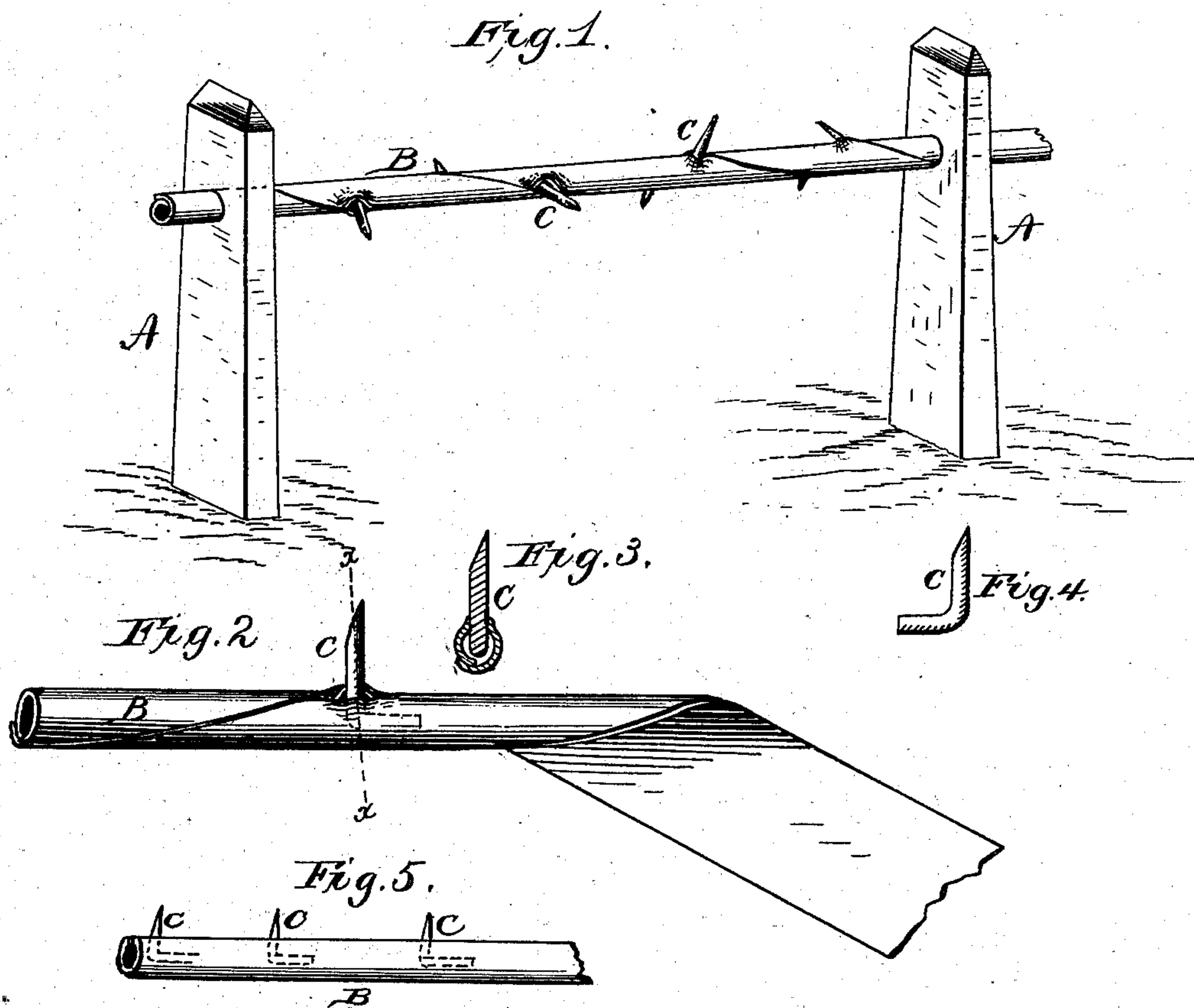


(No Model.)

A. J. UPHAM.  
Metallic Barb Fencing.

No. 239,892.

Patented April 5, 1881.



Witnesses.  
A. L. Ourand.  
George Cornell.

Inventor,  
Andrew J. Upham.  
by L. Deane,  
his atty.



# UNITED STATES PATENT OFFICE.

ANDREW J. UPHAM, OF STERLING, ILLINOIS.

## METALLIC-BARB FENCING.

SPECIFICATION forming part of Letters Patent No. 239,892, dated April 5, 1881.

Application filed February 18, 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 Metallic-Barb Fencing; 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 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.

Figure 1 is a perspective view of a fence-panel with one horizontal piece of the fencing material. Fig. 2 is a side elevation (enlarged) showing the pointed barb as twisted into the fencing-strand. Fig. 3 shows tubular fencing and barb in section; Fig. 4, side elevation of barb. Fig. 5 is a side elevation, showing the barbs placed in a straight seam made by the edges of the untwisted metal strip.

The object of this invention is to afford a very-easily constructed, cheap, and durable metallic rail or fencing material or strand, and the details by which I have accomplished this will now be more fully set out and explained.

Heretofore the strands or cables in metallic fencing have been made of two or more wires twisted upon each other, while at suitable intervals along said wires barbs have been twisted about said cable-wires. Objections have been made to this construction and to fences of that character, not only because of the intricacy of the manufacture and cost of the machines, but also from the weight of the barbed fence-wires per rod, which produced a very serious item in freight and in use, and having no compensation whatever in the durability of the fence or beauty of appearance, or in any other way.

In the present instance I have produced a rail or fencing material that is composed of very cheap iron or other metal of a very narrow width, which is twisted spirally, so as to form a continuous line of very light tubular material, and at proper intervals along this, and projecting from the seam caused by the edge of the iron, I have secured small barbs,

which are so anchored inside said iron by means of its twist as to be firmly secured in place.

In the accompanying drawings, A denotes any ordinary fence-posts, and B the rail or fencing material properly secured therein or there-to. This rail or fencing material is composed of a thin strip of steel or strap-iron, and a barb, c, said barb being made of any bit of iron or wire, or other material suitable for barbs of small size, about three-fourths of an inch long, bent at right angles near its middle. This strap is now twisted evenly and smoothly upon itself, preferably by machinery, and at suitable intervals along the tube so made is fed or placed the bent pieces c, so that about a half part thereof shall be secured within the tube, and the other part shall project at right angles outside of it. Thus the pointed ends will be caused by the line of the twist to project up and down, out and in from the rail as often as shall be desired.

This fencing material can be wound on spools, and shipped or handled as easily as the ordinary wire fencing.

It is evident that the device shown in Fig. 5, where the fencing-strip is untwisted, comes within the scope of my invention.

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

1. A tubular fencing material having barbs made of a separate piece secured along its periphery, substantially as described.

2. A fencing material composed of twisted strip-iron having barbs made of a separate piece secured in it along the seam or line of twist, substantially as described.

3. The tubular fence-cable B, having barbs c intertwined in it along its length, so as to project from its periphery at regular or nearly regular intervals on all sides, substantially as described.

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

ANDREW J. UPHAM.

Witnesses:

L. C. JOHNSON,  
C. F. BEHREND.