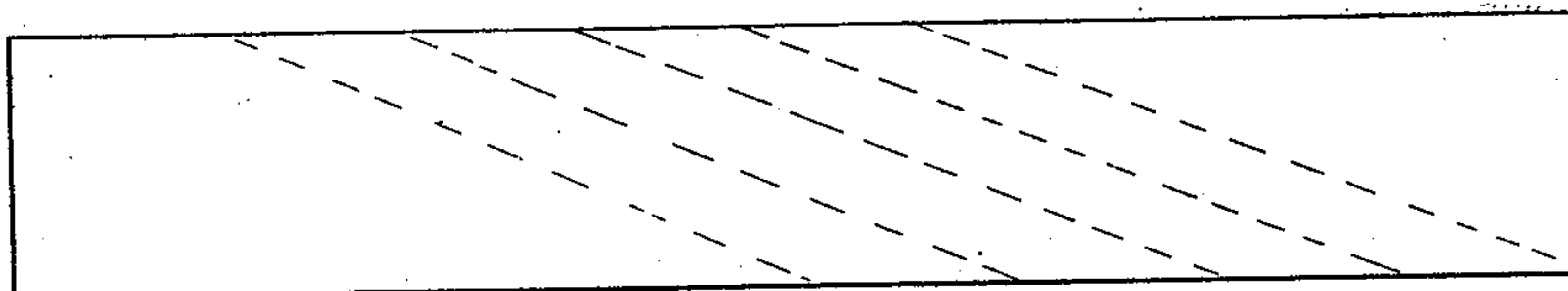
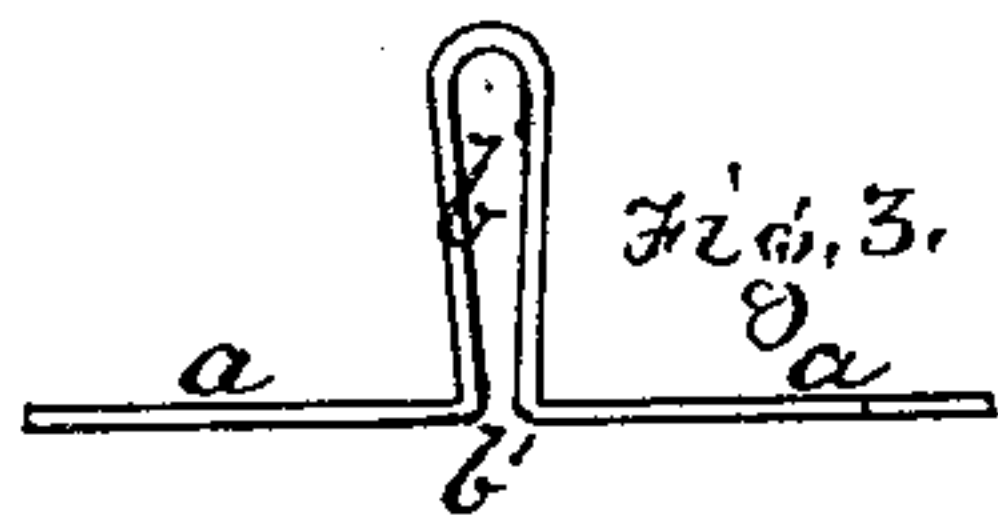
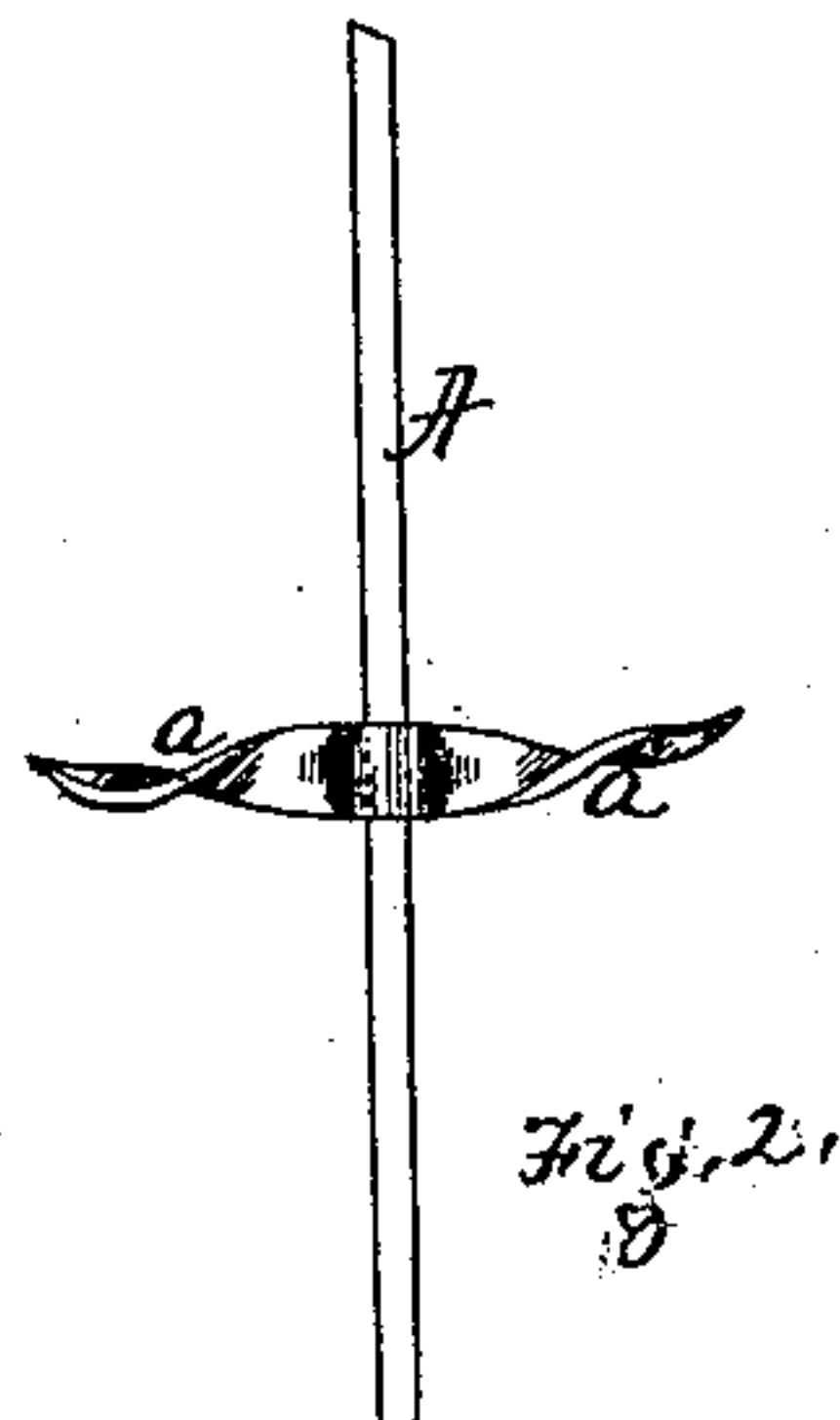
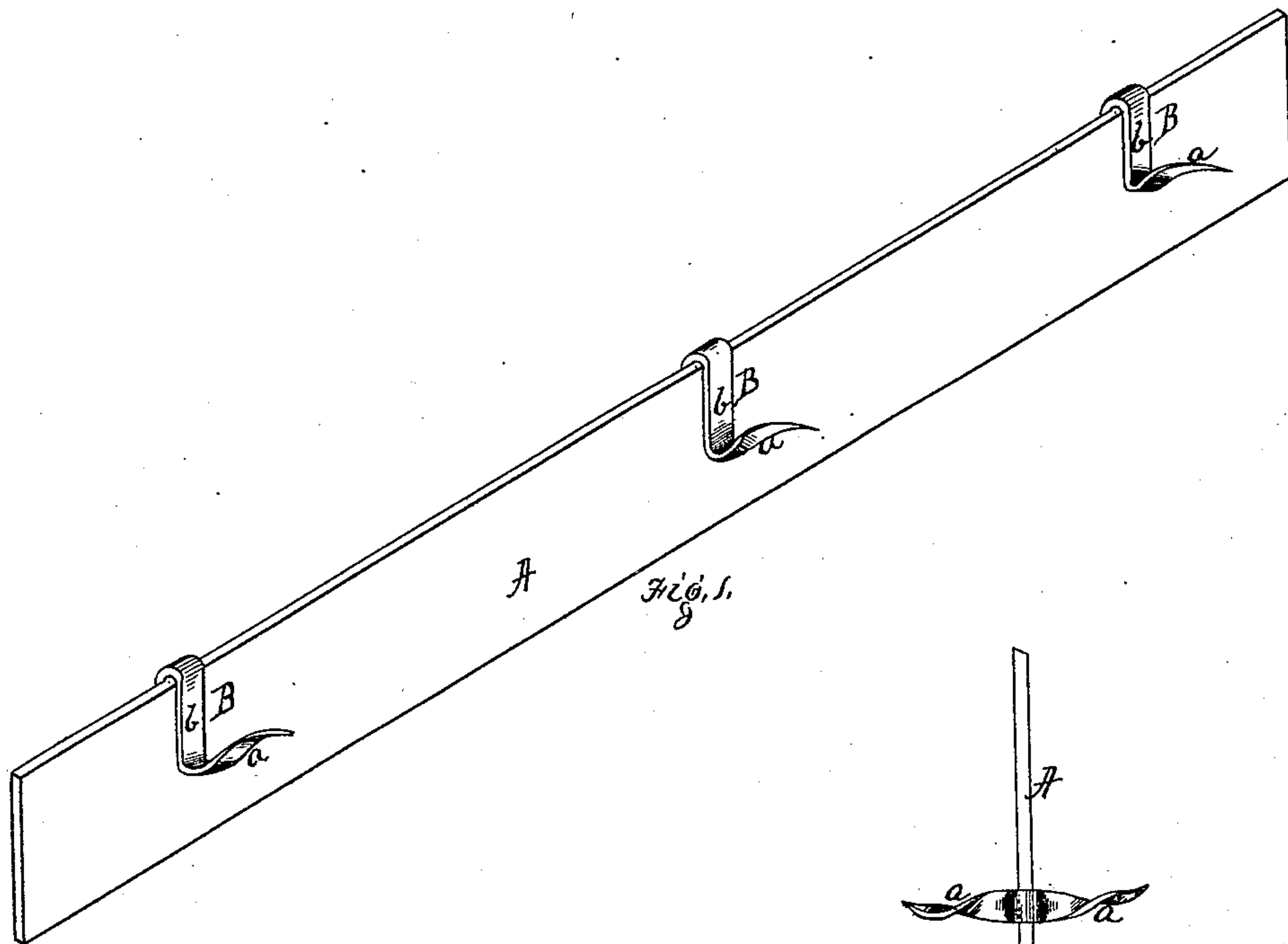


A. J. NELLIS.

FENCE-BARB.

No. 191,011.

Patented May 22, 1877.



Witnesses.

R. W. Farnsworth
J. K. Smith

INVENTOR.

Arvon J. Nellis
By Bakewell & Kerr
attys

UNITED STATES PATENT OFFICE.

AARON J. NELLIS, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN FENCE-BARBS.

Specification forming part of Letters Patent No. **191,011**, dated May 22, 1877; application filed March 15, 1877.

To all whom it may concern:

Be it known that I, AARON J. NELLIS, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Fence-Barbs; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a perspective view of a metallic fence rail or strip having my improvement applied. Fig. 2 is an edge view of the same. Fig. 3 is a detached view of one of the spring-barbs, and Fig. 4 is a diagram illustrating how the barb-blank may be advantageously formed.

Like letters refer to like parts wherever they occur.

My invention relates to improvements in barbs for metallic fence rails or strips; and consists in a spring clamp or loop, furnished with projecting points, which may be readily slipped upon a fence-rail, of hoop-iron or like character, and will retain its position firmly upon the rail or hoop.

The object of the present invention is to furnish a cheap and effective barb for metallic fences without slotting, cutting, or otherwise reducing the strength of the fence strip or rail, and also a barb which can be readily applied, either before or after the fence is put up, and without special tool or appliances.

I will now proceed to describe my invention so that others skilled in the art to which it appertains may apply the same.

In the drawing, A represents a metallic rail or fence-strip, which may be hoop-iron, Bessemer steel, or other suitable metal, either plain or corrugated longitudinally, as preferred. B represents the spring or clamp barb, made from elastic metal, preferably spring-steel, though any metal which can be looped and has sufficient spring to clamp the rail will answer. In forming the barbs, I find it convenient to take a strip or plate of metal similar to that shown in the diagram, Fig. 4, having

straight and parallel edges, and cut the same diagonally, as indicated by dotted lines, by which means the points of the barbs are formed at one and the same operation. The blank thus obtained is then bent by suitable mechanism into the form shown in Fig. 3—that is, having a loop or yoke, *b*, preferably with contracted opening at the point *b'*, so as to increase the clamping effect, and with points or barbs *a*, extending at an angle to the body or loop *b*. If desired, the point *a* may be twisted, as shown, to increase the strength of the point and the spring of the clamp.

Where the barb is made from a straight piece of metal, or is cut directly across the bar, it will have to be pointed as well as looped, thus increasing the labor of manufacture. If the barb is intended for a corrugated rail, the loop *b* will have to be made wider and with more spring than when used for a plain rail or strip. The barb is applied to the rail or strip, either before or after the fence is in position, by slipping the loop or yoke over the edge of the rail and driving it down with a hammer or like instrument.

The advantages of my invention are that a cheap and effective barb is obtained, one easily applied, and which, while retaining its position firmly upon the rail, can be removed and reapplied at pleasure.

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

1. A spring-clamp fence-barb of flat, elastic metal, substantially as and for the purpose specified.

2. In combination with a fence rail or strip A, a detachable elastic metal spring-clamp barb B, substantially as and for the purpose specified.

In testimony whereof I, the said AARON J. NELLIS, have hereunto set my hand.

AARON J. NELLIS.

Witnesses:

JAMES I. KAY,
J. K. SMITH.