## A. J. NELLIS. BARBED FENCE.

No. 187,723.

Patented Feb. 27, 1877.

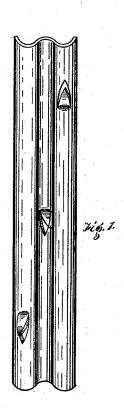


Fig. 2.

Le Fotter James 2: Hay

JOVETEOR.
Savon Of Pellis
by Bakewello Kin
Attorneys

## UNITED STATES PATENT OFFICE.

AARON J. NELLIS, OF PITTSBURG, PENNSYLVANIA.

## IMPROVEMENT IN BARBED FENCES.

Specification forming part of Letters Patent No. 187,723, dated February 27, 1877; application filed January 18, 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 Yard and Field Fences; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, forming a part of this specifition, in which—

Figure 1 is a perspective view of a longitudinally-corrugated barbed strip or rail for fences. Fig. 2 is a cross-section through x x.

My invention relates to an improvement in metallic fences; and it is designed to secure the lightness, cheapness, and strength of corrugated hoop-iron, and at the same time without injuriously reducing its strength or increasing its size or weight—the advantage of a barbed rail. It consists of a barbed corrugated hoop-iron rail.

The object of the barbing of fence rails and wires is to prevent the climbing over fences and to keep cattle off of them, which in light wire and iron fences is a great desideratum.

I have discovered that the ordinary light hoop-iron is too much weakened by forming barbs upon it to be used for fence-rails, and that the increase of size and strength necessary to fit it for such purpose destroys its use-

fulness by increasing its cost beyond an economical figure.

It is well-known that the strength of sheet and hoop iron is enormously increased by corrugating it. I have discovered that a strip of ordinary hoop-iron corrugated longitudinally may be barbed by striking up points or barbs along its surface without so decreasing its strength as to unfit it for use as a fence-rail, or necessitating an increase of weight or size. By reference to the drawing, such a strip will be seen. It is of ordinary hoop-iron; or it may be made of Bessemer steel, or other suitable material. It is corrugated by passing it through suitably-grooved rolls, or in any other well-known way, and is barbed by punching or stamping or setting up by means of suitable tools or machines.

I am aware of a fence-wire having thickened edges and integral barbs, and do not claim such subject-matter; but

What I claim as my invention, and desire to secure by Letters Patent, is—

A barbed corrugated metal fence-rail, substantially as described.

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

Witnesses: AARON J. NELLIS.

T. B. KERR, JAMES I. KAY.