

M. Kelly,
Barbed Fence,
No 84,062, Patented Nov. 17, 1868.

Fig. 1.

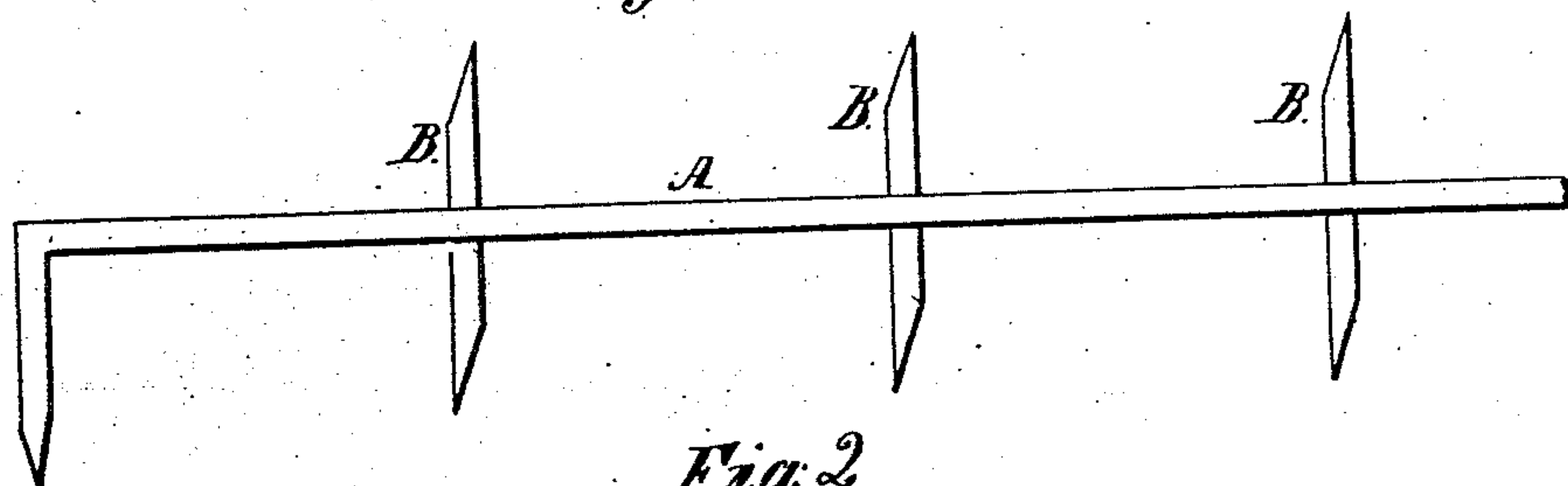


Fig. 2.

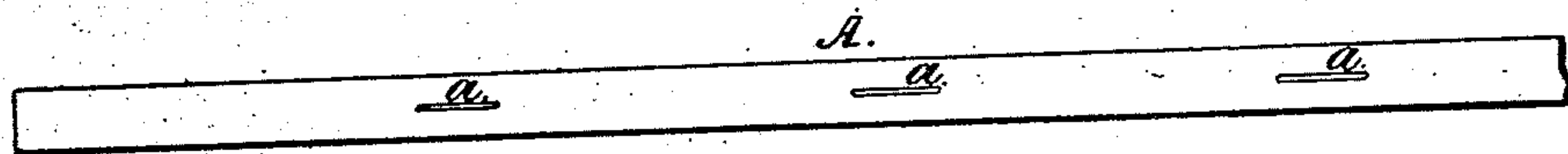


Fig. 3.

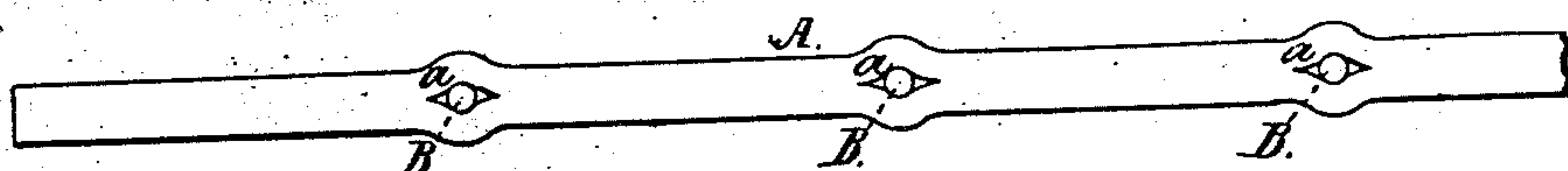


Fig. 4.

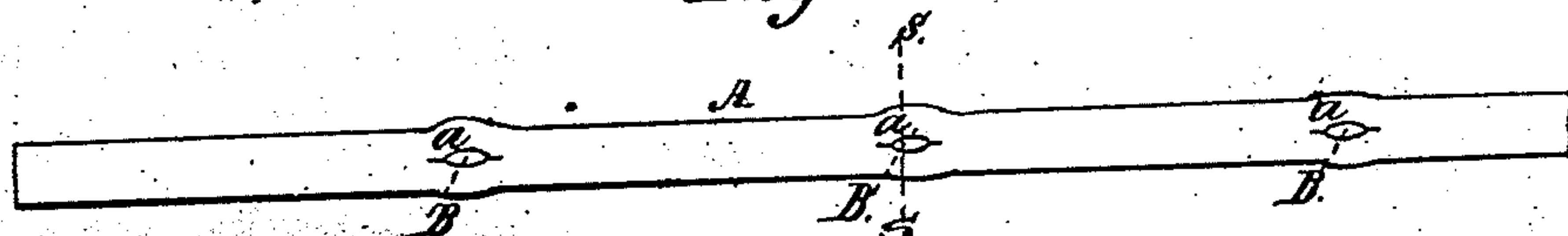


Fig. 6.

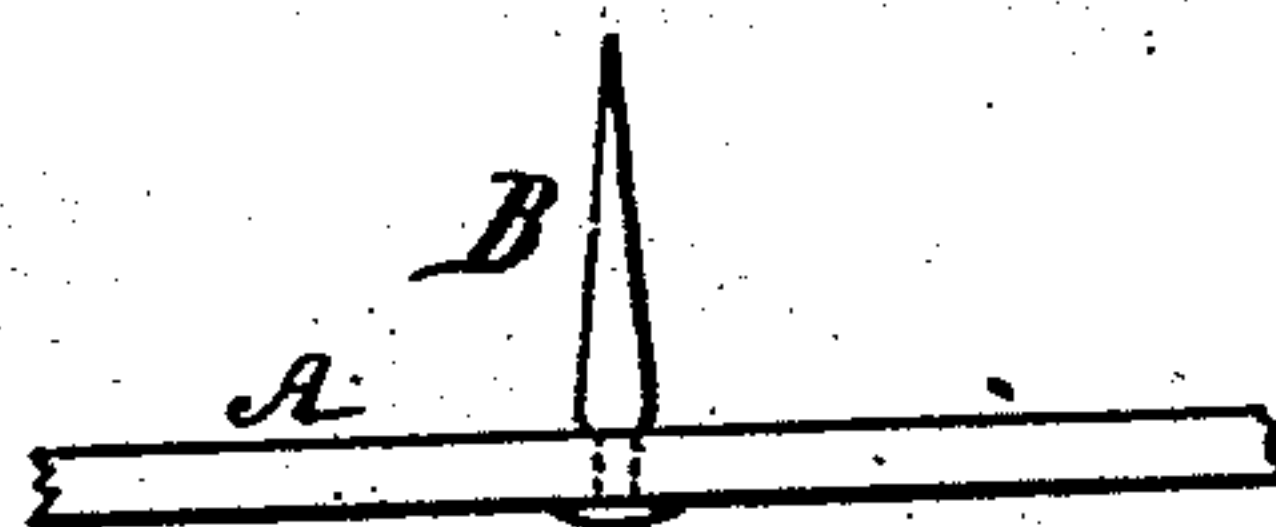


Fig. 5.

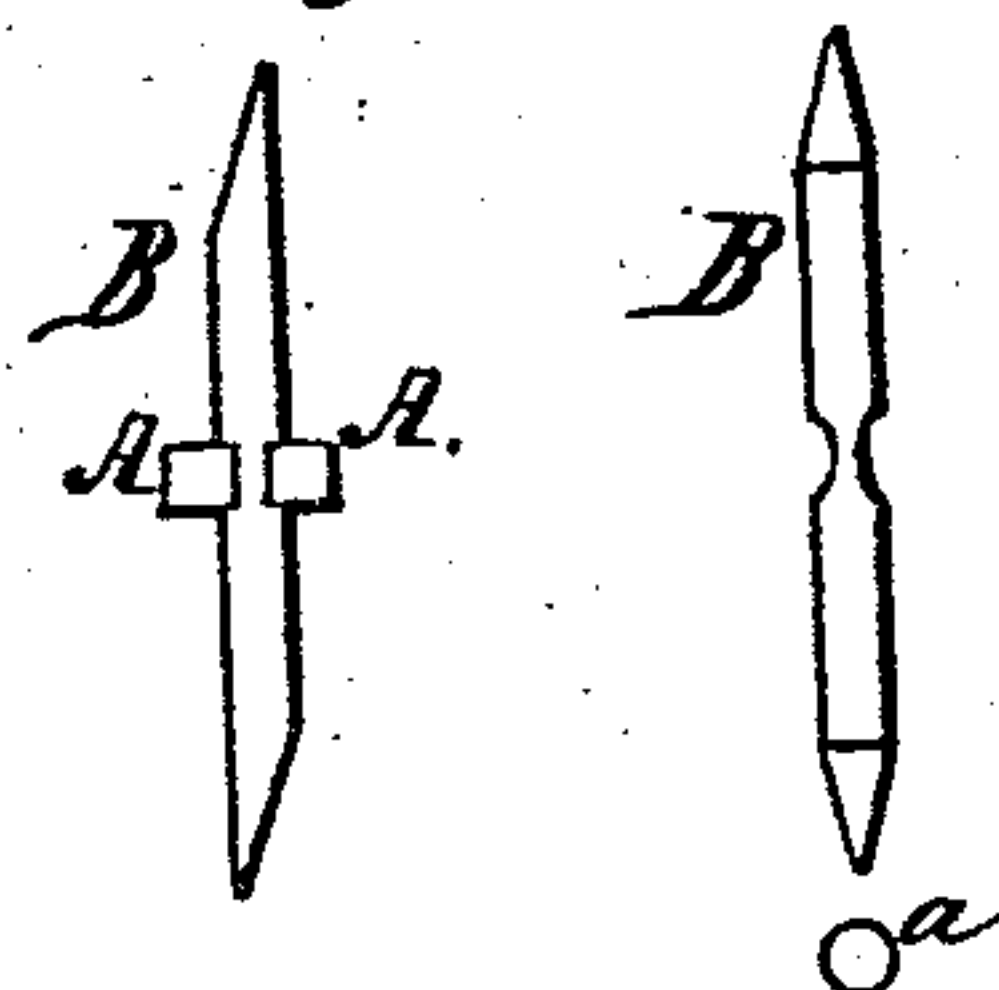


Fig. 8.

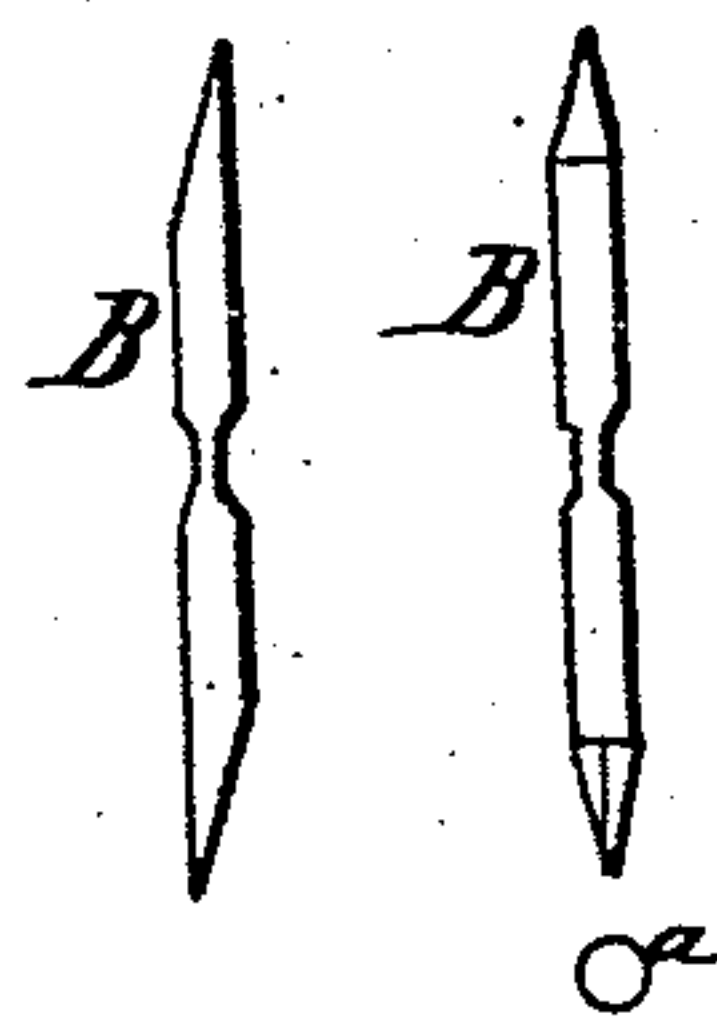
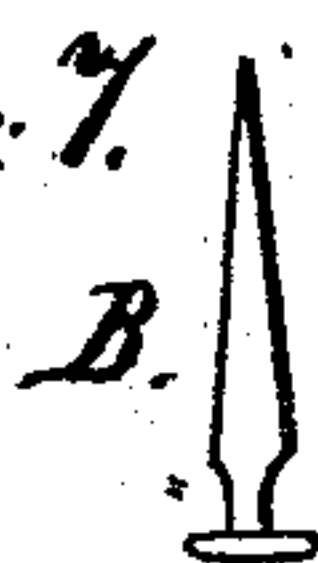


Fig. 7.



Witnesses:

L. L. Livingst.
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UNITED STATES PATENT OFFICE.

MICHAEL KELLY, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF, WILLIAM LALOR, AND JAMES SLAMMON, OF SAME PLACE.

IMPROVEMENT IN METALLIC FENCES.

Specification forming part of Letters Patent No. 84,062, dated November 17, 1868.

To all whom it may concern:

Be it known that I, MICHAEL KELLY, of the city and county of New York, State of New York, have invented certain new and useful Improvements in Metallic Fences; and I do hereby declare that the following is a full and exact description thereof.

In the patent issued to me dated 11th day of February, 1868, I have described a fence composed of round wire carrying thorns or pointed pieces strung thereon, the wires passing through the thorns. In my present invention the thorns are thrust through the wires, thereby making a fence equally desirable with less labor.

My new form can be very readily made by machinery which shall draw along the wire, perforate it, insert the thorn, and confine it. My former construction, though analogous thereto in some important points, involved difficulties in its construction which this avoids. It is impossible to pull the length of wire through the thorn by machinery, or even by hand, except very slowly and tediously.

I will proceed to describe what I consider the best means of carrying out my invention.

The accompanying drawings form a part of this specification.

Figure 1 is a plan view of a portion of the wire with the thorns in place, the wire being flat and presented edge upward. The thorns are represented nearer together than I propose to make them in general practice. I esteem six inches a good distance; but this distance may be varied indefinitely.

Fig. 2 is a side view of the same, representing the wire after the holes have been marked or slightly cut through by a sharp instrument before they have been spread open.

Fig. 3 represents the same after the holes have been spread open by the introduction of a pointed punch or the like, and the thorns have been inserted, but not secured.

Fig. 4 represents the same after the thorns have been firmly secured by compressing the wire and the thorn forcibly together by a blow of a hammer or otherwise.

Fig. 5 is a cross-section on the line S S in Fig. 4.

Fig. 6 is a plan view of a modification, in which the thorn is made in the form of a com-

mon tack, but with the dies in which the tack is gripped so formed and operated as to compress or indent the tack for a space about equal to the thickness of the wire. This construction allows the thorn to be locked in place with but a very gentle compression of the wire upon it.

Fig. 7 shows the tack separately before its connection with the wire.

Fig. 8 represents a thorn prepared from common round wire, cutting it off obliquely in the same manner in which the thorn is prepared in Figs. 3, 4, and 5, but gripped in machinery, (not represented,) so as to compress it near the middle and adapt it to be more readily locked.

Similar letters of reference indicate corresponding parts in all the figures.

The tints employed do not necessarily indicate differences of material. The material of the whole may be iron tinned or otherwise protected from the weather.

Referring to Fig. 1, A, in contradistinction from fixing the main wire within the thorns, is a flat wire, rolled or otherwise produced in considerable lengths in the ordinary manner. Through this wire I produce holes *a* by punching or otherwise, by hand or machinery. B are thorns, made by hand or by machinery, pointed at each end. They are thrust into the holes *a*, and are there retained by compressing the wire upon, and partially into, the same.

I can set the thorns in my wire after the fence is erected, if necessary in any case; but I esteem it preferable to set the thorns by hand or by machinery before the wire has left the manufactory. I prefer to form the thorns of metal which is a little softer than the wire, so that in the act of compression the thorns will yield and be firmly locked without much drawing or diminishing the thickness of the main wire at that point. By cutting off the thorns B very obliquely, as represented, I insure a good point at each end without labor or loss of material.

The several other modifications represented will be readily understood without detailed description.

My present invention avoids the serious difficulty incident to the making of the fence described in my previous patent.

It will be obvious that in fixing thorns on great lengths of wire, according to my previous patent, each thorn required to be moved or slid along a great distance on the wire. I can make my present fence in any length desired without encountering any corresponding difficulty.

For most purposes, however, I propose to manufacture the thorny material in short lengths from twelve to sixteen or twenty feet, setting the posts at a corresponding distance apart. I have represented the wires A as pointed at the ends and bent at right angles, as indicated by A'. The lengths may be attached to the posts by driving the ends therein, as will be obvious.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The construction of thorny fence by fixing the thorns B in holes in the wire A, in the manner and for the purposes herein set forth.

In testimony whereof I have hereunto set my name in presence of two subscribing witnesses.

MICHAEL KELLY.

Witnesses:

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W. E. RUTTAN.