

(No Model.)

N. CLARK.
BARBED FENCE WIRE.

No. 254,923.

Patented Mar. 14, 1882.

Fig. 1

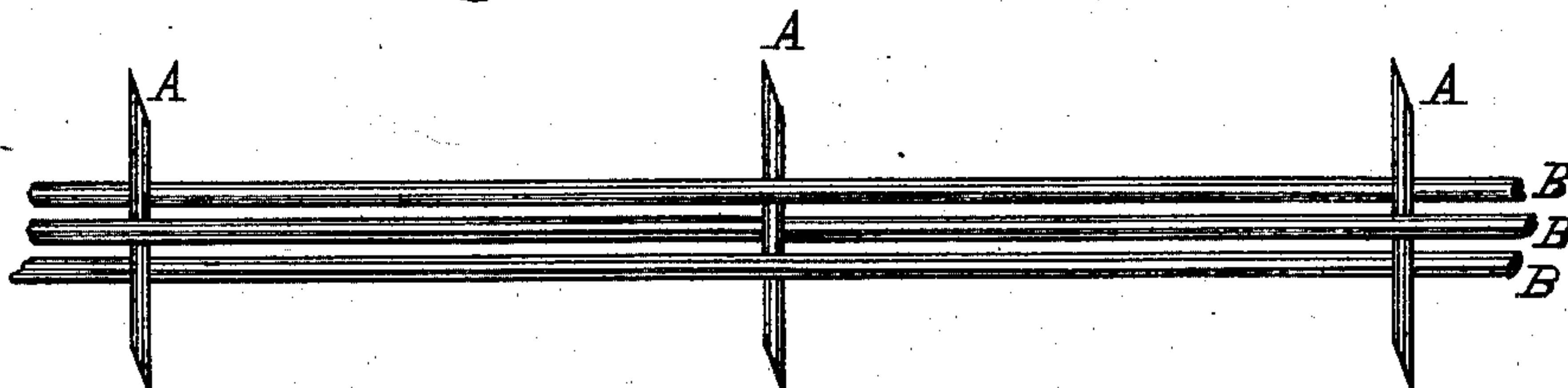


Fig. 2

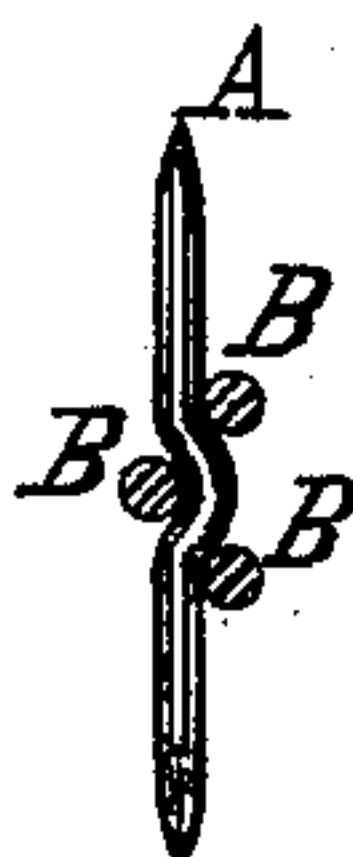


Fig. 3

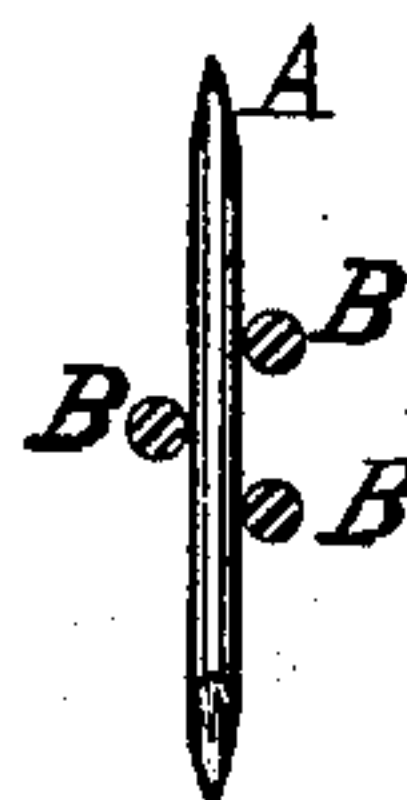
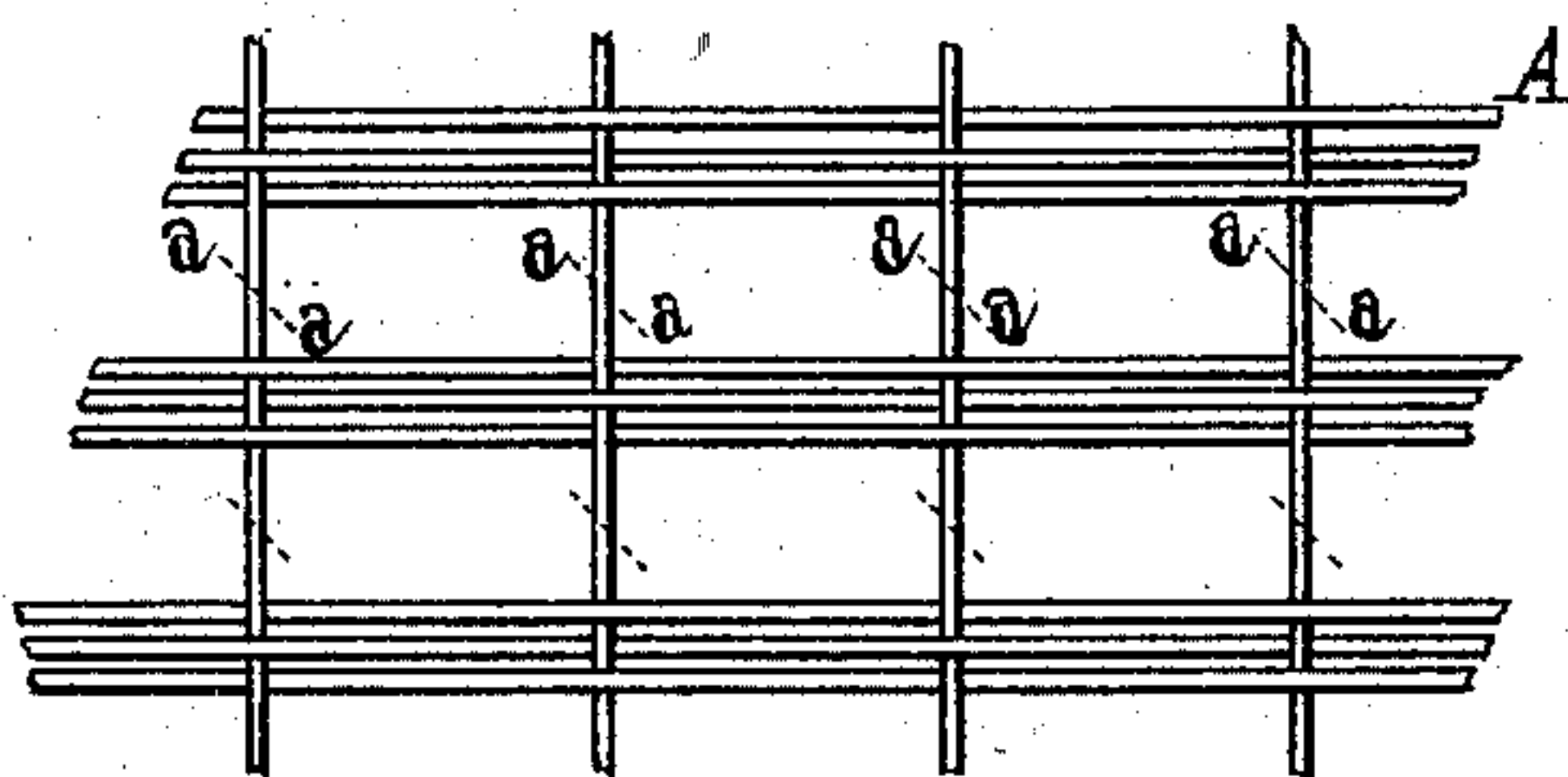


Fig. 4



Witnesses:

Allen Webster
Geo. O. Kingsbury

Inventor:

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Atty

UNITED STATES PATENT OFFICE.

NORMAN CLARK, OF STERLING, ILLINOIS.

BARBED FENCE-WIRE.

SPECIFICATION forming part of Letters Patent No. 254,923, dated March 14, 1882.

Application filed January 5, 1882. (No model.)

To all whom it may concern:

Be it known that I, NORMAN CLARK, of Sterling, in the county of Whiteside and State of Illinois, have invented certain new and useful Improvements in Barbed Fence-Wire, of which the following is a specification, reference being had to the accompanying drawings and letters of reference marked thereon.

My invention consists in a method of constructing a barbed fencing material, the same being to weave the material and afterward separate the web.

It further consists in a barbed fencing material in which the barbs are held in place by being interwoven with the main wires or strands as contradistinguished from twisting or braiding.

It further consists in the detail, as hereinafter set out, whereby the objects of my invention are attained.

Figure 1 is a side view of a section of my barbed fencing. Fig. 2 is a cross-section of the same, showing the position of the barb. Fig. 3 shows one of the many modifications which may be made, and Fig. 4 shows a portion of a web before being separated.

The objects of my invention are to produce a cheap, durable, tasty, and efficient barbed fencing material which will present a broad surface to the vision, and in which the best result as to strength is attained with a given amount of material, and a barbed fencing which will occupy a comparatively small space when packed for shipping; and I attain these objects by the process and construction herein shown.

In constructing this barbed fence-wire or fencing material, although a single rail may be cheaply and easily made, I deem it the best method to weave a sheet or web in the manner shown in Fig. 4, in which the main wires will form the warp and the wires from which the barb is made will form the woof. This is preferably woven as shown in the drawings, three of the main or warp wires being near together, and these groups being separated a distance nearly equal to twice the length it is intended the barb shall project from the outer wires of the group, the relative position of the parts being governed of course by the size of wire and the use to which it is to be applied.

I deem it best to crimp the woof, as is ordinarily done in weaving; but a good result is attained by weaving the woof-wires in without any crimping. In this case the barb will be straight.

With this process or method it will be seen I am enabled to cheaply construct a barbed fencing material possessing the desired qualities, and having either one or more main strands, as may be desired. If, however, a rail having but one or two main strands is to be made, it will be necessary to subject the web to a soldering or fastening process before separating the woof-wires, while if a rail having three or more main strands is made the fastening process will not in all cases be required, and if used at all may be either before or after the separation of the woof-wires. It is preferable, however, to subject the web before separation to the fastening process. In the fastening process the whole surface may be galvanized or tinned. This process preferably consists in running the web through a bath of suitable material, either molten or otherwise, which will fasten the parts together and will cover the whole with a non-corrosive material.

This method—to wit, the formation of a web and afterward separating the parts—enables me to construct a barbed fencing material at much less expense than any heretofore made. I can weave a great number of rails at the same time, which rails may have either one or more main strands, and this can be done with very simple machinery, skilled mechanics not being required, as in the manufacture of many other kinds of barbed fencing. By subjecting the material to a galvanizing or coating process before sharpening or pointing the barb, or before the separation of the woof or barb wires, a much sharper barb is produced, as the end of the barb does not become coated and blunted by the adherence of the coating material at the point of the barb, as is the case where the material is subjected to such process after the barbs are completed, which I am well aware has been heretofore done.

Some of the advantages of this fencing material over other barbed fencing are as follows: The main strands may be placed a considerable distance apart, thus giving a more sightly appearance, the advantages of which are too well

known to require description, while with other like fencing it is necessary that the main strands lie near each other. Again, in other barbed fencing material the construction is such that moisture is retained for a much longer time than is the case where the parts are open and the barb is not coiled around the strand and the strands do not come in contact with each other. With this construction, therefore, the danger from corrosion is much lessened. Again, greater strength is attained with the same amount of material, as the material composing the main strands may be subdivided and a greater number of strands made and woven in the rail without the injurious effects resulting from such subdivision in a twisted or braided rail, and less material is used in a given length, as very much less of the main strands are taken up in weaving than in twisting or braiding; and, further, the barbs may all be left on the same plane, and in a rail having two or more main strands there is less liability of the rail twisting or turning between the posts and presenting the barb in any other direction than perpendicularly. The danger, therefore, of an animal coming in contact with the sharp barb when not attempting to pass the fence is avoided. If, however, it is desired that the barbs should project in other directions, they may be bent in any convenient manner to project as desired. And, further, this fencing, when having three or more strands, is more elastic than that heretofore made, as the strands diverge slightly from a straight line, and when the metal contracts in cold weather the barbs will spring sufficiently to allow the main strands to become more nearly straight, thus compensating for the contraction and preventing breakage. The tendency of the barb to bend the main strand also prevents sagging by reason of expansion in warm weather. And, further, the barbs all being in

the same plane, less space is occupied in packing, as it will lie more closely together when wound upon the spool, and the danger of the barb becoming displaced is largely done away with. 45

I am well aware that a barbed fencing material has been heretofore made in which the barb is held in place by being interwoven in or among the strands of a rail, said strands being either twisted or braided together, and I make no claim to such construction. 50

Having therefore described my invention, what I claim, and desire to secure by Letters Patent, is— 55

1. The herein-described method of constructing a barbed fencing material, consisting of first weaving or forming a web and afterward separating the same, substantially as shown. 60

2. The combination of three or more strands, the same being neither braided nor twisted with each other, with barbs interwoven with said strands and held in position without being twisted or wrapped around any of said strands, substantially as shown. 65

3. An improved fencing material consisting of three or more strands, in combination with barbs held in position by being interwoven with said strands as contradistinguished from braiding or twisting, said strands not being in contact with each other, substantially as stated. 70

4. The method of manufacturing a coated fencing material having a sharp-pointed barb, consisting of subjecting the material to a galvanizing or coating process before pointing the barb, substantially as set out. 75

In witness whereof I hereunto set my hand, in the presence of two witnesses, this 30th day of December, A. D. 1881.

NORMAN CLARK.

Witnesses:

GEO. B. BEARDSLEY,
J. W. NELSON.