

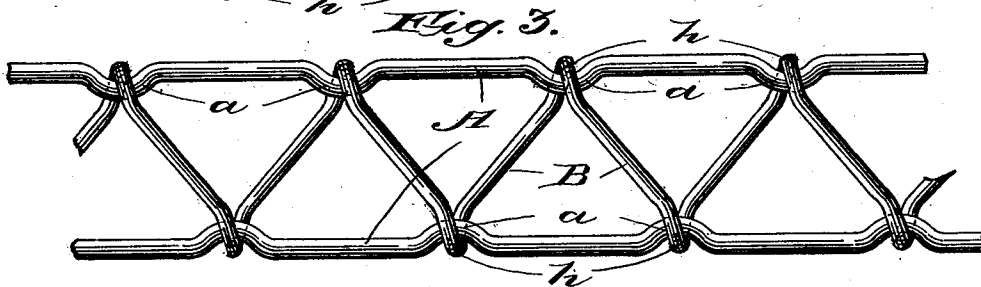
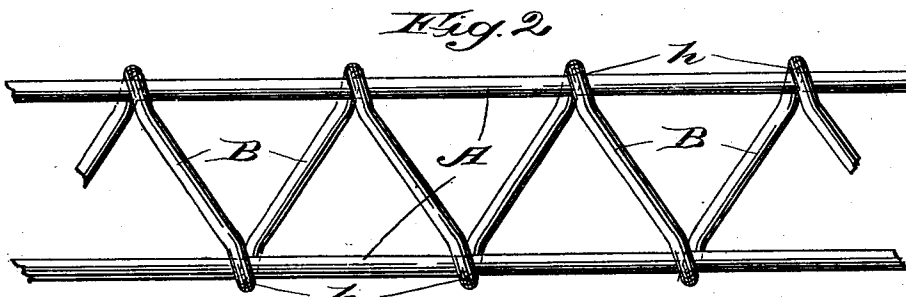
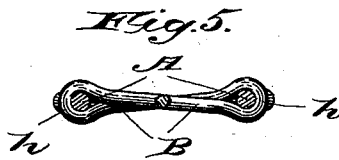
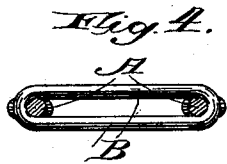
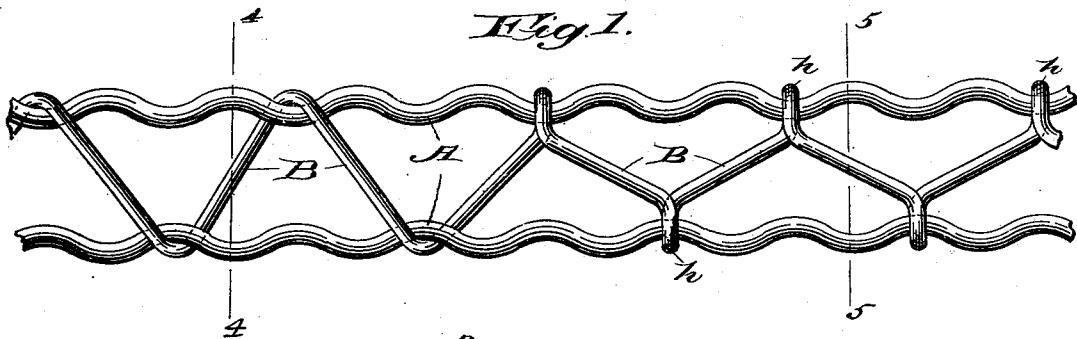
(No Model.)

A. B. WOODARD.

WIRE FENCING STRAND AND METHOD OF MAKING SAME.

No. 509,343.

Patented Nov. 21, 1893.



Witnesses:
[Signature]
C. M. Sweeney.

Inventor:
A. B. Woodard
by *[Signature]*
Attorney.

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ALONZO B. WOODARD, OF HORNELLSVILLE, NEW YORK.

WIRE-FENCING STRAND AND METHOD OF MAKING SAME.

SPECIFICATION forming part of Letters Patent No. 509,343, dated November 21, 1893.

Application filed January 27, 1891. Serial No. 379,324. (No model.)

To all whom it may concern:

Be it known that I, ALONZO B. WOODARD, a citizen of the United States, residing at Hornellsville, in the county of Steuben and State of New York, have invented certain new and useful Improvements in Wire-Fencing Strands or Strips and Methods of Making the Same, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to the manufacture of wire fencing strips or strands and has for its object to provide a strong and somewhat elastic strip or strand which may be manufactured at but little cost, which will be attractive in appearance and which may be so easily seen that persons and animals will readily notice a fence made thereof and thus avoid colliding with it.

To this end my improved fencing strand or strip comprises longitudinal wires, which may be plain, bent or corrugated, and a crossing or binding wire running spirally around the longitudinal wires and having its bights compressed together between said wires to form closed eyes embracing the longitudinal wires, thereby cross-bracing and holding them separated from each other and securing said binding wire to them at short intervals.

My improved fencing strand is produced by first winding the binding wire spirally around the longitudinal wires and then compressing each bight thereof together between said longitudinal wires, as above stated, to form the closed eyes referred to.

In the drawings Figure 1 represents a short section of one form of my improved fencing strip or strand, illustrating also its method of production. Figs. 2 and 3 illustrate modified forms of my invention. Figs. 4 and 5 are cross sections on lines 4—4 and 5—5, respectively, of Fig. 1.

A denotes the longitudinal wires of the fencing strip these wires being separated from each other, as shown, and being preferably crimped or corrugated as illustrated in Fig. 1; but they may be plain as in Fig. 2 or may be provided with bends *a* as in Fig. 3.

B denotes the binding or crossing wire which is first wound spirally around the longitudinal wires, as shown at the left of Fig. 1,

and is then compressed between the longitudinal wires A at each bight which loops around the said longitudinal wires, to form closed eyes *b* which embrace said wires, thereby securing the binding wire thereto at short intervals of about one inch, said binding wire thus at the same time cross-bracing the longitudinal wires to hold them separated from each other; thereby producing a very strong fencing strip or strand which is neat and attractive in appearance.

By corrugating or crimping the longitudinal wires, as shown in Fig. 1, the fencing strip is rendered sufficiently elastic so that it will stretch considerably and then again contract, under the influence of heat and cold, or other strains, and thus the strands which may have been stretched taut when the fence was first built will always remain so, particularly when the strand is composed of steel wire, which is preferred in its manufacture. This elasticity of the strand may, in a measure, be secured by forming bends *a* in the longitudinal wires at points where the binding wire H is looped around them, as shown in Fig. 3. It will also be apparent that when the side or longitudinal wires are either corrugated or bent, as shown in Figs. 1 and 3, respectively, the closed loops or eyes *b* of the binding wire will have a better hold thereon, to avoid slipping, than when said longitudinal wires are plain as in Fig. 2, although the form of strand shown in said Fig. 2 takes a little less wire for a given length of strand and may therefore be produced at a slightly less cost than the other forms of my invention.

In the manufacture of my improved fencing strand of any of the forms above described the binding wire is first wound spirally round and round the longitudinal wires and the bights or loops of said binding wire are then compressed together (see Fig. 5) between said longitudinal wires to close said bights or loops onto the latter wires. This operation is preferably performed mechanically on the machine fully shown and described in my application, Serial No. 380,163, filed February 4, 1891, the binding wire being wound spirally round and round the longitudinal wires as they are fed through the machine, and the loops or bights being then compressed to-

gether between bending wheels. When the longitudinal wires are to be corrugated or crimped, as shown in Fig. 1, said wires are first passed through crimping wheels for this purpose; and when said wires are to be bent, as shown in Fig. 3, they are subjected to suitable bending mechanism.

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

10 1. A fencing strand or strip consisting of longitudinal wires and a binding wire passing round and round said longitudinal wires and running diagonally from one to the other thereof, the bights or loops of said binding
15 wire being compressed together between the longitudinal wires to form closed eyes embracing the latter.

2. A fencing strand or strip consisting of crimped or corrugated longitudinal wires and
20 a binding wire passing round and round said longitudinal wires and running diagonally from one to the other thereof, the bights or loops of said binding wire being compressed

together between the corrugated longitudinal wires to form closed eyes embracing the latter. 25

3. The herein described method of forming a fencing strand, the same consisting in winding a binding wire spirally around separated longitudinal wires and then compressing the loops or bights of said binding wire together, between said longitudinal wires, to form closed eyes embracing them at intervals. 30

4. The herein described method of forming a fencing strand, the same consisting in first crimping or corrugating longitudinal wires, next winding a binding wire spirally around said longitudinal wires and then compressing the loops or bights of said binding wire together, between said longitudinal wires, to form closed eyes embracing them at intervals. 35 40

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

ALONZO B. WOODARD.

Witnesses:

EWELL A. DICK,
HENRY CALVER.