

(No Model.)

2 Sheets—Sheet 1.

M. D. PENDERGAST.
WIRE FENCE.

No. 596,538.

Patented Jan. 4, 1898.

Fig. 1.

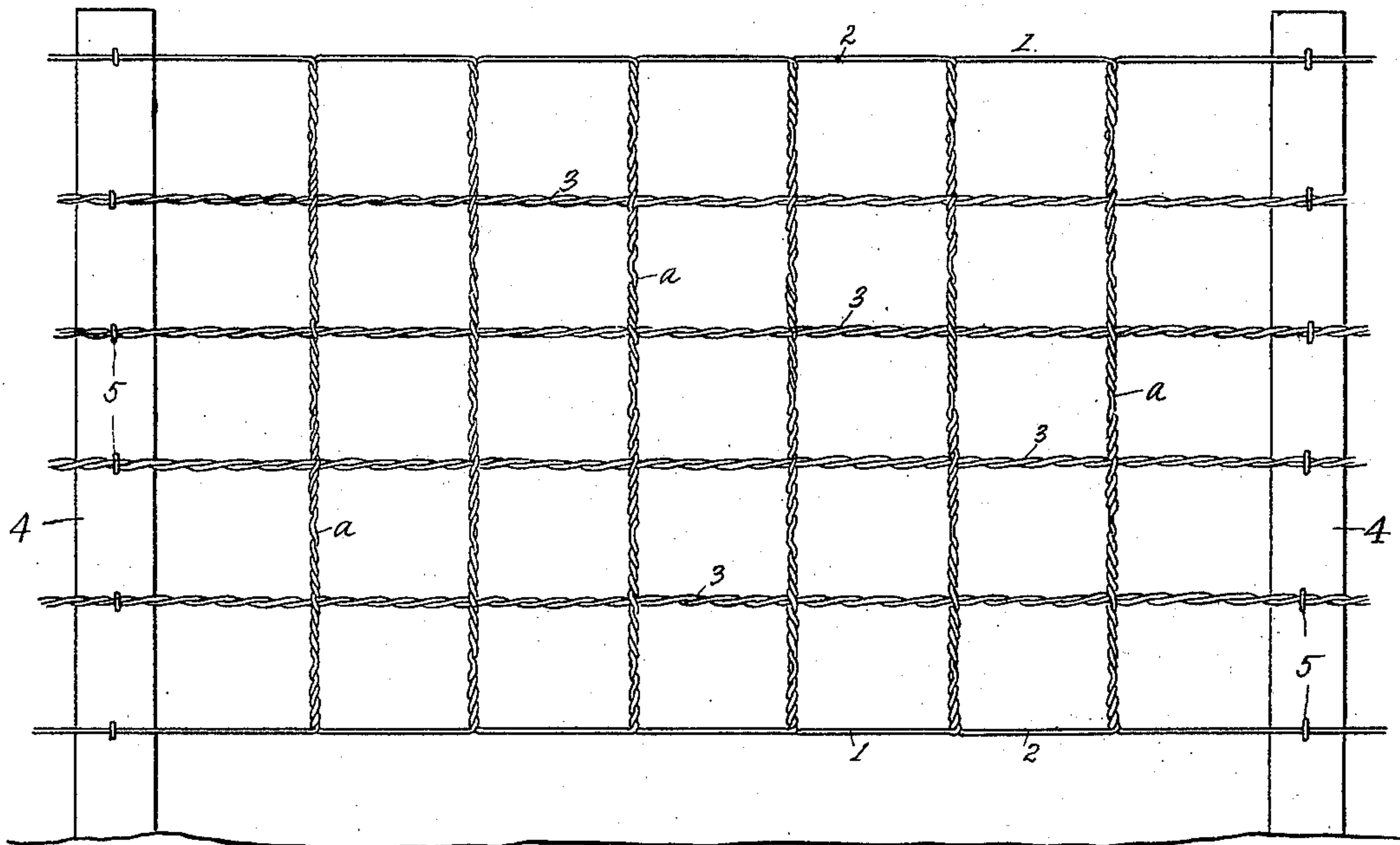


Fig. 2.

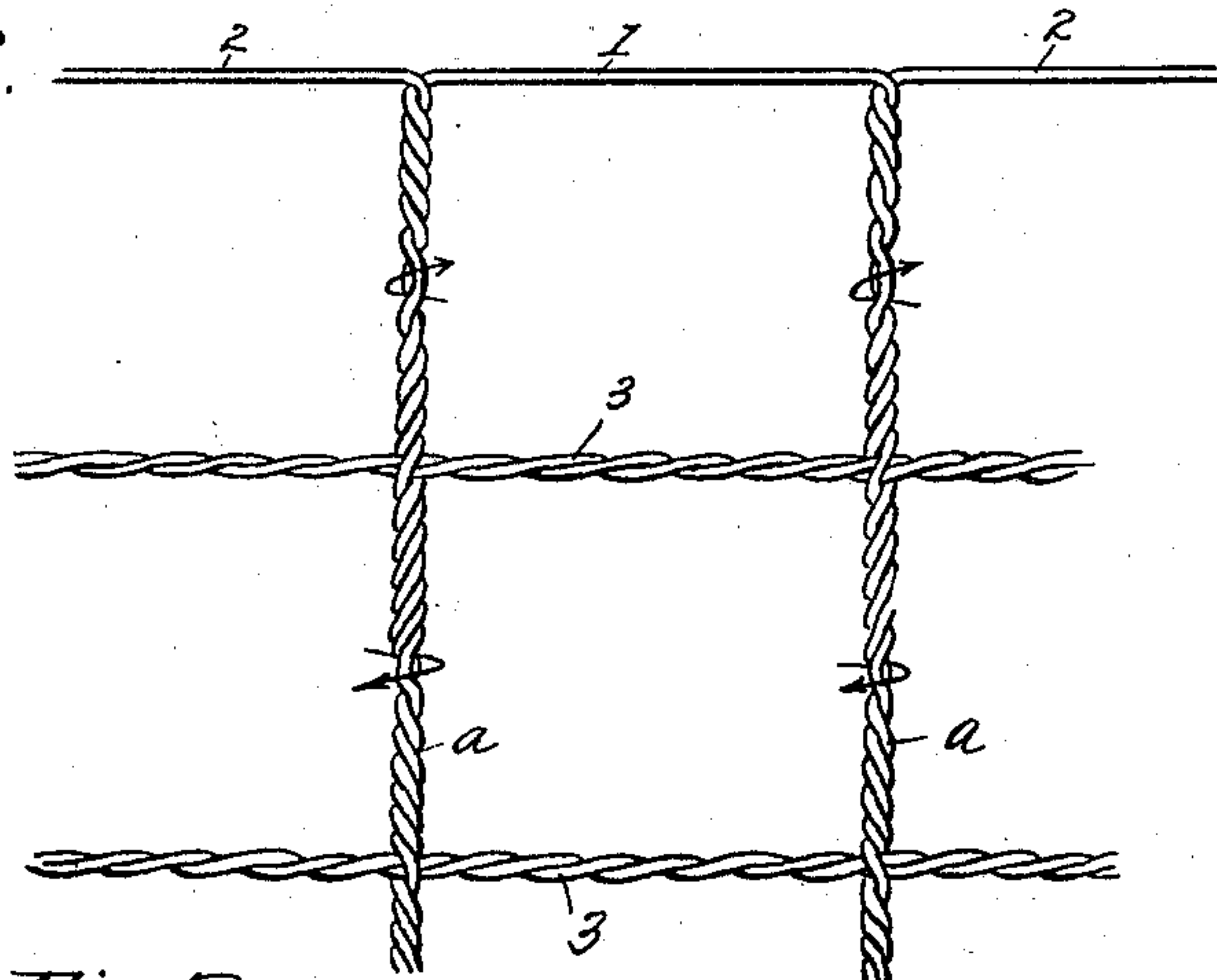
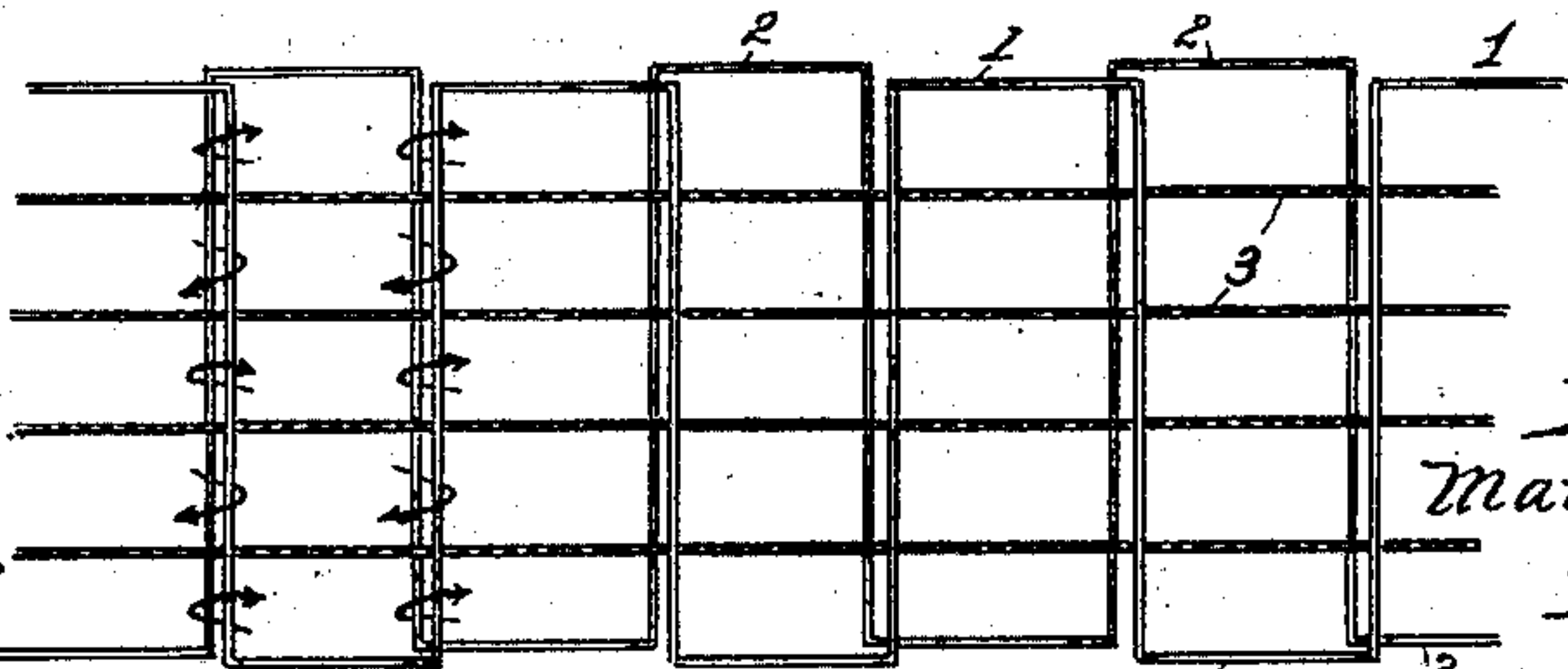


Fig. 3.



Witnesses
C. F. Kilgore
B. B. Nelson

Inventor
Maurice D. Pendergast
By his Attorney

Jas. F. Williamson

(No Model.)

2 Sheets—Sheet 2.

M. D. PENDERGAST.
WIRE FENCE.

No. 596,538.

Patented Jan. 4, 1898.

Fig. 4.

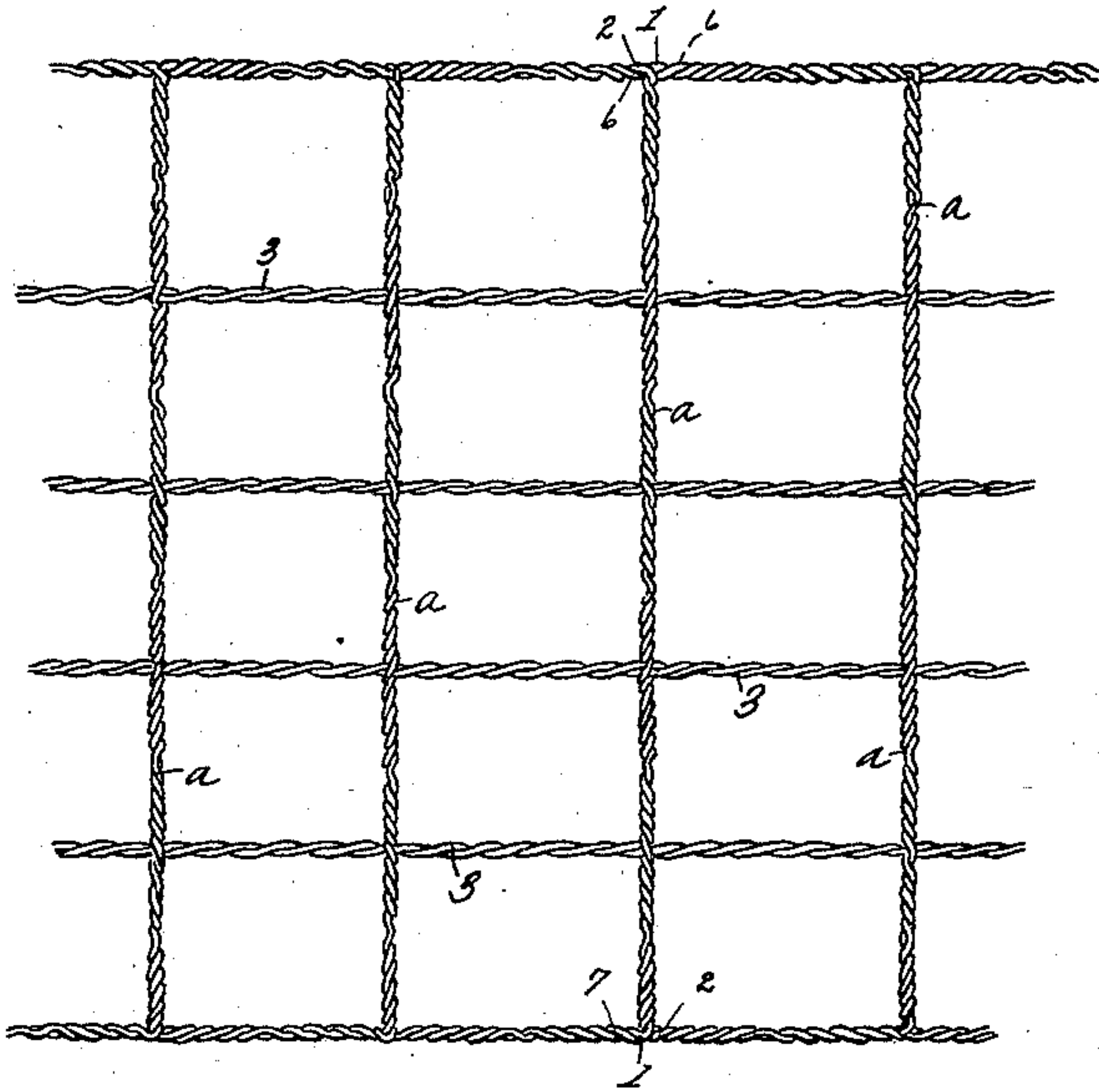


Fig. 5.

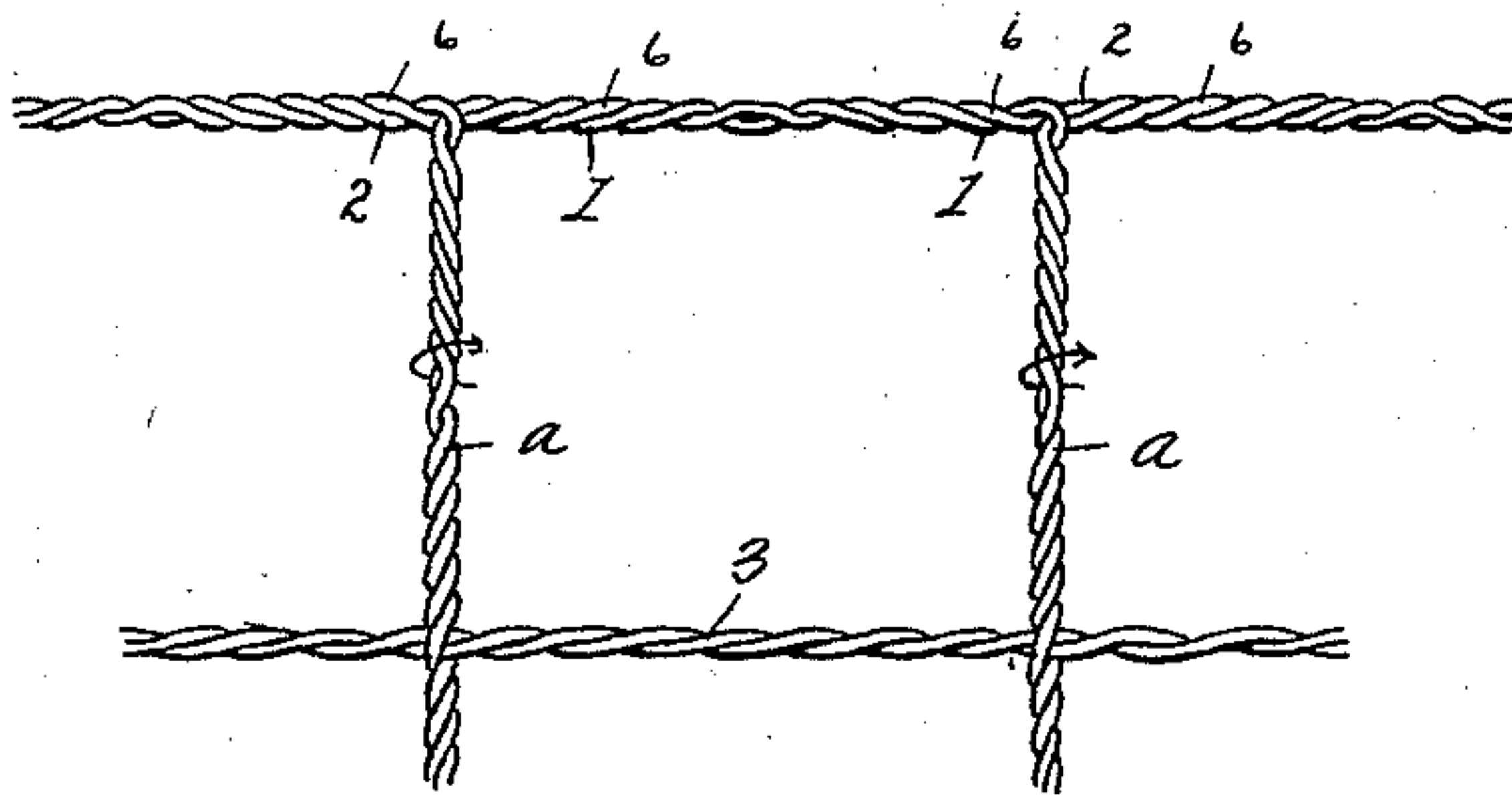
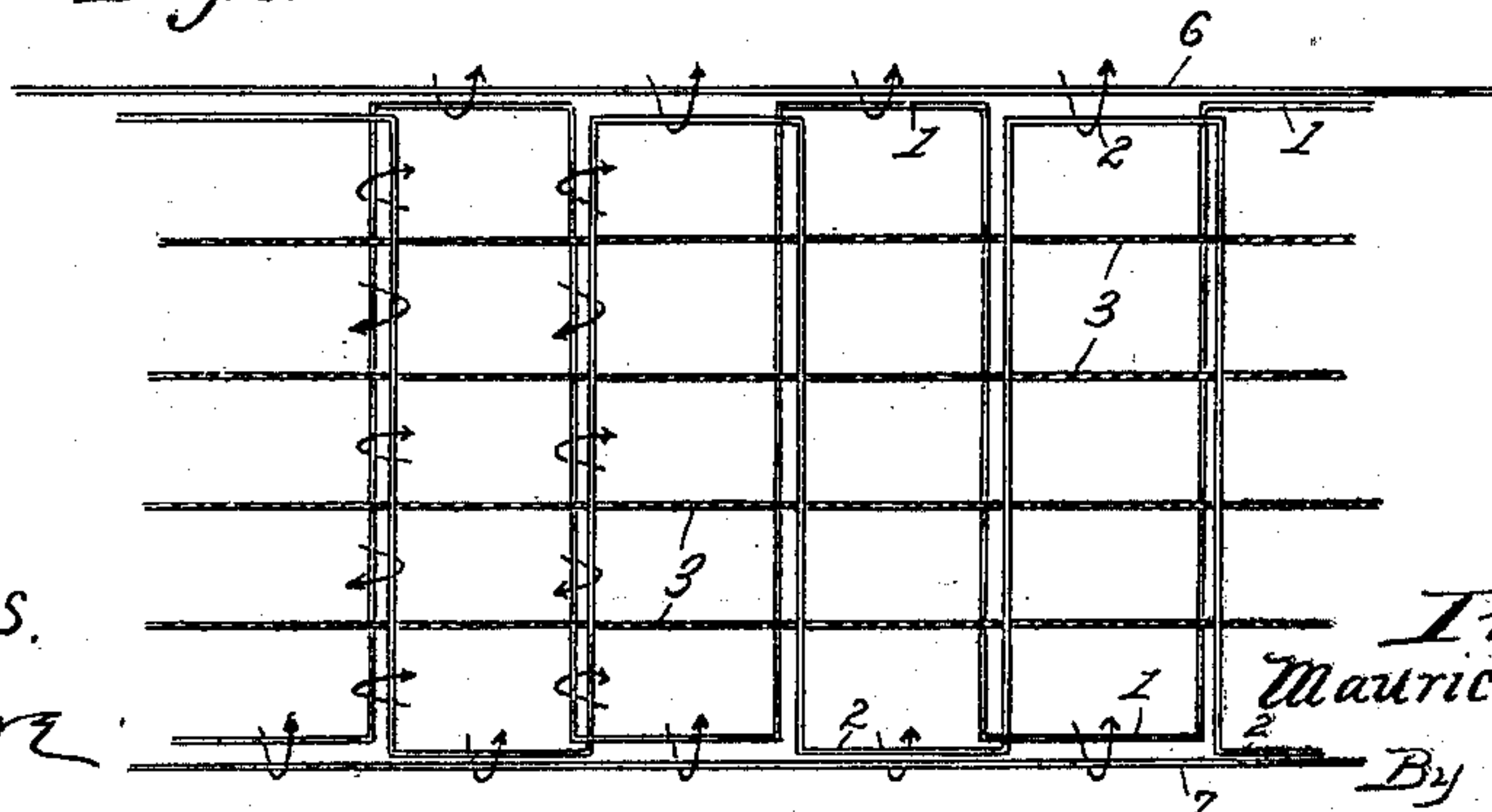


Fig. 6.



Witnesses.

C. F. Kilgore

B. B. Nelson

Inventor

Maurice D. Pendergast

By his Attorney

Jas. F. Williamson

UNITED STATES PATENT OFFICE.

MAURICE D. PENDERGAST, OF HUTCHINSON, MINNESOTA, ASSIGNOR OF
ONE-FOURTH TO WILLIAM W. SIVRIGHT, OF SAME PLACE.

WIRE FENCE.

SPECIFICATION forming part of Letters Patent No. 596,538, dated January 4, 1898.

Application filed November 13, 1897. Serial No. 658,386. (No model.)

To all whom it may concern:

Be it known that I, MAURICE D. PENDERGAST, a citizen of the United States, residing at Hutchinson, in the county of McLeod and State of Minnesota, have invented certain new and useful Improvements in Wire Fences; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to wire fences, and has for its object to improve the construction with a view to increased efficiency and economy. To these ends my invention consists of the novel structure hereinafter described, and defined in the claims.

The invention is illustrated in the accompanying drawings, wherein, like notations referring to like parts throughout the several views—

Figure 1 is a front elevation of my improved fence in its simplest form. Fig. 2 is a similar view of a part of one panel on a larger scale than Fig. 1. Fig. 3 is a diagram view for better illustrating the relative disposition of the wires, showing the same as they would appear before the fence is entirely completed. Fig. 4 is a view similar to Fig. 1, with some parts broken away, showing a modified construction involving additional elements beside, those shown in Figs. 1, 2, and 3. Fig. 5 is an enlarged detail of some of the parts shown in Fig. 4, and Fig. 6 is a diagram view showing the disposition of the wires for the form of fence illustrated in Figs. 4 and 5 before the fence is completed.

Directing attention first to the simplest form of construction, as illustrated in Figs. 1, 2, and 3, it may be noted that I employ in the construction of this fence a pair of main wires 1 and 2, a series of filling-wires 3, suitable stationary posts 4, located at proper intervals apart, and staples 5. The main wires 1 and 2 are reversely looped in opposite directions to form in succession the top and bottom strands of the fence and afford pairs of vertical strands embracing the filling-wires 3, with the pairs of vertical strands twisted together between the filling-wires 3 embraced thereby to afford the vertical stays *a* of the

fence. Otherwise stated, the main wires 1 and 2 are bent to form a series of loops with horizontal and vertical sections so disposed that the horizontal sections of the two wires form the top and bottom strands of the fence, and the vertical sections of the loops formed out of the two main wires overlies each other and embrace the filling-wires 3, thereby permitting the same to be twisted together between the filling-wires to hold the filling-wires in position and constitute the vertical stays of the fence. With this disposition of the wires it is obvious that the main wires 1 and 2 have their horizontal sections alternately at the top and at the bottom of the fence and that the top and bottom strands, together with the vertical stays of the fence, are formed out of the single pair of continuous wires 1 and 2. The way in which the main wires 1 and 2 are looped and disposed in respect to each other and the filling-wires 3 is best shown in Fig. 3 of the drawings; but after the vertical strands of the loops are properly twisted together the fence will appear as in Figs. 1 and 2. In the diagram view Fig. 3 the wires are shown as if the loops formed in the main wires were all disposed in respect to the filling-wires before any of the vertical strands of the loops were twisted together to form the vertical stays of the fence; but it will be understood that in the manufacture of the fence the vertical strands of the two adjacent or cooperating loops formed in the main wires 1 and 2 are twisted together to form a vertical stay *a* before the wires are again bent and conducted in reverse directions to form the next loops. For the filling-wires 3 I preferably employ the cable or rope like wire shown in Figs. 1 and 2. The vertical strands of the main wires 1 and 2, embracing the said rope-like filling-wires 3, are twisted in reverse directions between successive members of said filling-wires to form the said vertical stays *a*, and by these reverse twists in the vertical stays *a* of the fence the filling-wires 3 of cable form are held properly spaced apart in the vertical plane and from longitudinal movement in respect to the stays in the horizontal plane. The wire structure thus formed is then secured to the post 4 by staples 5, engaging the top and bottom strands

and the filling-wires of the fence in the usual way for holding the wire structure in proper position in respect to the posts, as shown in Fig. 1. The cable form for the filling-wires 3 is desirable, because thereby the fence is rendered sufficiently elastic for the required conditions of change in temperature and for the further reason that the vertical stays *a*, formed from the vertical strands of the main wires, twisted together reversely between adjacent filling-wires, as described, will lock the stays and the filling-wires together in such a way that the filling-wires and the stays cannot move in respect to each other.

By actual usage I have demonstrated the operativeness and efficiency of the fence constructed as above described, or, in other words, in the form shown in Figs. 1 and 2. I have found that with a fence so constructed the same will stand the heaviest strains to which ordinary wire fence for farm purposes is ever subjected and that the posts may be placed as far apart as in any other known form of fence. By actual tests I have also found that the twisted strands or vertical stays *a*, formed out of the main wires 1 and 2, cannot be pulled apart by any possible strains applied in opposite directions to the two wires making up the said loops; but, on the contrary, I have found that the said wires will break before the twisted strands constituting the vertical stays will pull apart.

A wire fence of the structure above described may be rapidly and cheaply made, thereby greatly reducing the first cost of wire fences.

In the modification illustrated in Figs. 4, 5, and 6 the same elements are employed and in the same disposition as in Figs. 1, 2, and 3; but two additional elements in the nature of marginal or lock wires 6 and 7 are employed, one at the top and the other at the bottom. These marginal or lock wires 6 and 7 are preferably single-strand wires running always parallel with each other and disposed one thereof directly adjacent to the horizontal sections of the reverse loops formed in the main wires 1 and 2 when in the process of manufacture, as shown in Fig. 6. The said horizontal sections of the loops in said main wires 1 and 2 and the directly-adjacent portions of said lock-wires 6 and 7 are then twisted together exactly in the same way as before described for the vertical strands of the loops in the main wires, and as clearly shown in Figs. 4 and 5. The twists, however, formed by the lock-wires 6 and 7 and the horizontal sections in the loops of the main wires all run in a common direction. With this modified structure illustrated in Figs. 4, 5, and 6 it is obvious that the loops in the main wires 1 and 2 are all interlocked with the marginal or lock wires 6 and 7 and hence that a more rigid structure is afforded than with the form illus-

trated in Figs. 1, 2, and 3. This modified structure, however, employs more wire and requires more work to make it. This modified structure has also been put to the test of actual usage and found to operate with success.

It will be understood, of course, that this fence is made by machinery.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. A wire fence composed of suitable filling line-wires and a pair of main wires, reversely looped in opposite directions to form, in succession, the top and bottom strands of the fence and afford pairs of vertical strands embracing said filling-wires, and with said pairs of vertical strands twisted together between the filling-wires embraced thereby to afford the vertical stays of the fence, substantially as described.

2. A wire fence composed of filling line-wires 3 of cable form and a pair of main wires 1 and 2 reversely looped in opposite directions, to form in succession top and bottom strands of the fence and afford pairs of vertical strands embracing said filling-wires, with said pairs of vertical strands twisted together reversely between the successive filling-wires embraced thereby, substantially as and for the purposes set forth.

3. A wire fence composed of suitable filling line-wires, a pair of marginal or lock wires, and a pair of main wires reversely looped, in opposite directions, to form horizontal sections at the top and bottom of the fence, in succession, and vertical sections embracing said filling-wires, with the horizontal sections of said loops and the adjacent portions of said lock-wires twisted together between said vertical sections and said pairs of vertical sections reversely twisted together between the successive filling-wires embraced thereby, substantially as and for the purposes set forth.

4. The wire fence composed of the filling-wires 3 of cable form, the marginal or lock wires 6 and 7, and the main wires 1 and 2, with said main wires looped in opposite directions to afford horizontal sections, at the top and bottom of the fence, in succession, and vertical sections embracing said filling-wires, and with said horizontal sections and the adjacent portions of said lock-wires twisted together between said vertical sections and said vertical sections twisted together in reverse order between the successive filling-wires embraced thereby, substantially as and for the purposes set forth.

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

MAURICE D. PENDERGAST.

Witnesses:

L. C. ELMORE,

F. D. MERCHANT.