

No. 877,214.

PATENTED JAN. 21, 1908.

G. E. MIRFIELD.  
SECTIONAL STAY WIRE FENCE.  
APPLICATION FILED JUNE 10, 1907.

Fig. 1.



Fig. 2.



Fig. 3.

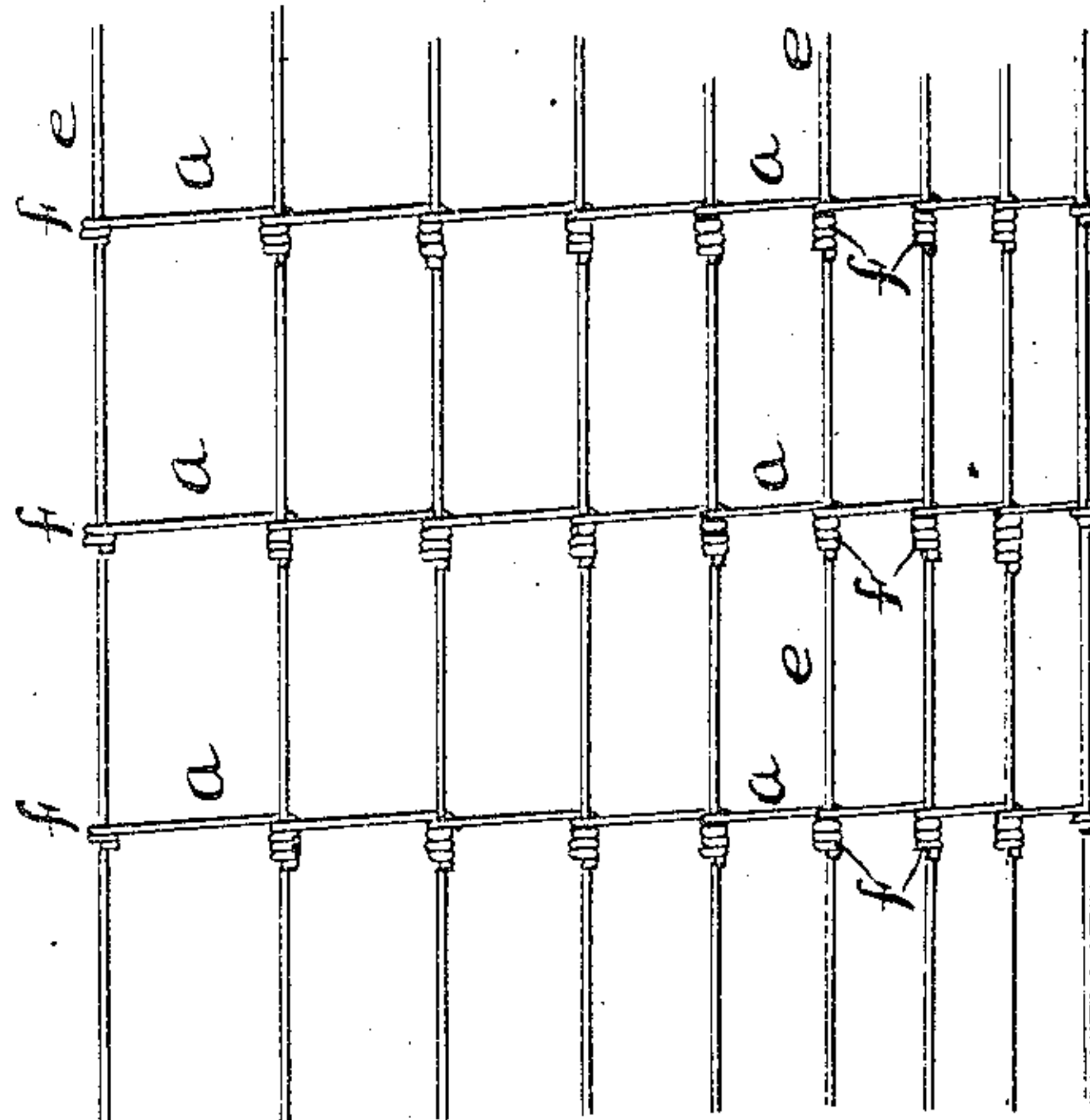


Fig. 4.

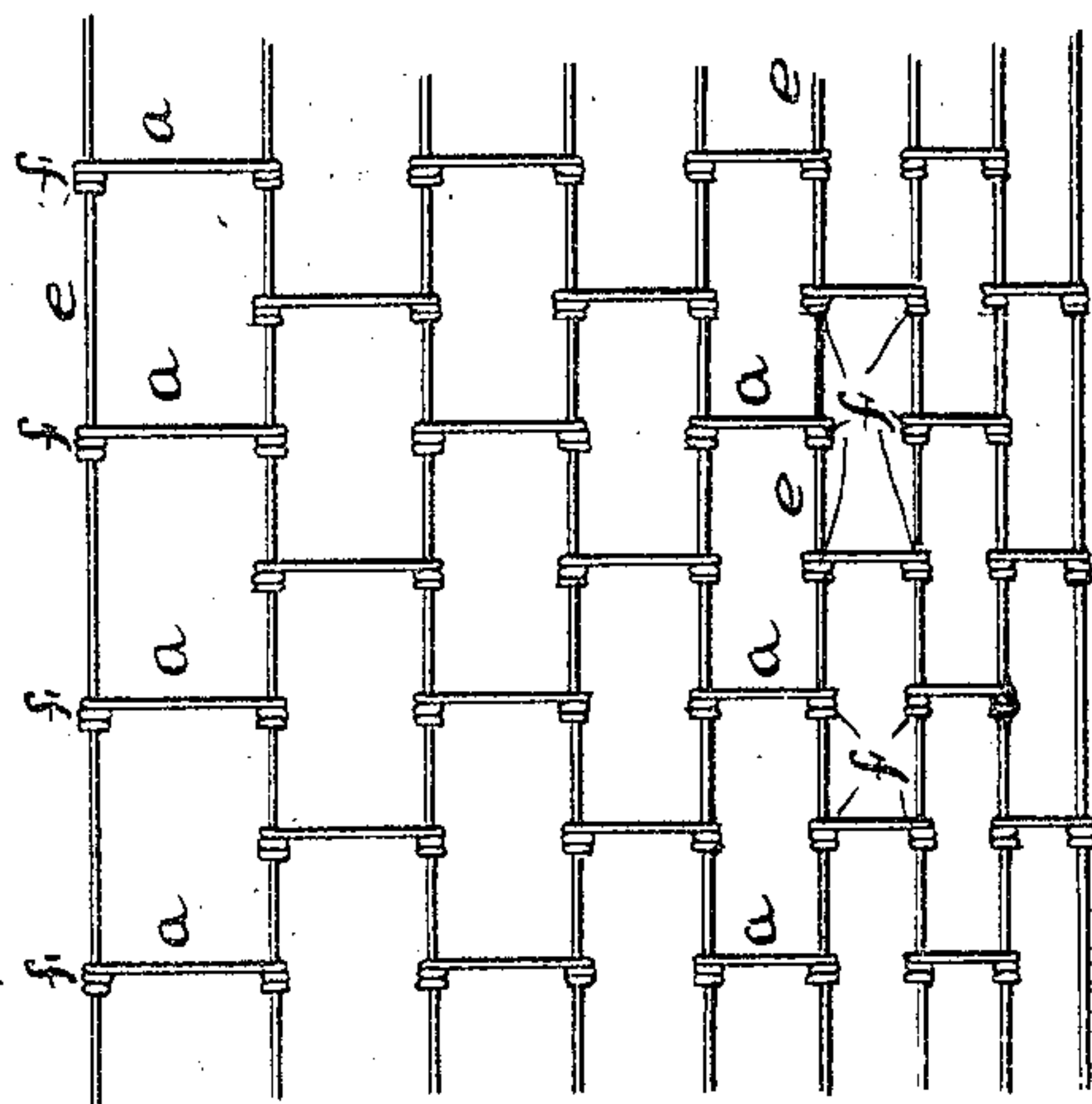


Fig. 5.

Witnesses.

*Wm. P. Bond*

*Pearson W. Banning.*

Inventor:

*George E. Mirfield*

by *Banning & Banning*  
Attys.



# UNITED STATES PATENT OFFICE.

GEORGE E. MIRFIELD, OF JOLIET, ILLINOIS.

## SECTIONAL-STAY WIRE FENCE.

No. 877,214.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed June 10, 1907. Serial No. 378,162.

*To all whom it may concern:*

Be it known that I, GEORGE E. MIRFIELD, a citizen of the United States, residing at Joliet, in the county of Will and State of Illinois, have invented certain new and useful Improvements in Sectional-Stay Wire Fences, of which the following is a specification.

It is the practice to construct what is termed a square mesh fence in which the strand wires are connected together by stay wires, and in some instances the stay sections are in line, one with the other, and their ends are coiled and intercoiled around the strand wires, so as to form, in effect, a continuous stay between the upper and lower border strand wires of the fence; and another type of square mesh fence is one in which the stay sections are arranged in staggered relation from the top or upper border wire to the bottom or lower border wire, and each stay section has its ends coiled around two strand wires. Either type of square mesh fence is open to the objection that in use, when subjected to moisture and atmospheric changes, the ends of the stay sections will rust and in course of time destroy the spelter or other protective coating for the wire coiled around the strand wire, and with the spelter or protective covering destroyed, the coil will become rusted and will, in time, transmit rust to the strand or longitudinal wires, destroying the body of such wire, and causing serious and injurious effects on the fence. This rusting or oxidizing of the coil of the stay sections arises from the fact that the end of the stay section is not protected by the spelter, or other protective coating for the wire, but is left open to the effects of moisture and atmospheric changes.

The object of the present invention is to construct stay sections in such manner as to prevent rust or oxidation from taking place after the fence is in position, and to this end the invention consists in a stay section having the body and each end entirely covered and protected by the spelter, or other coating of protective material; and the invention further consists in a fence having the stay sections thereof made of wire, with the body and both ends of each section covered and protected against moisture and atmospheric changes by a coating or covering of spelter, or other suitable protective material.

In the drawings illustrating the invention Figure 1 is an elevation of a stay section of

the present invention; Fig. 2 a longitudinal section of the same, with the body and both ends of the wire covered and protected by spelter, or other suitable protective material; Fig. 3 a cross section of the stay of Figs. 1 and 2; Fig. 4 an elevation, showing a portion of a wire fence having longitudinal or strand wires united, one to the other, by the stay sections of the present invention, with the stay sections in line, one with the other, forming, in effect, a continuous stay; and Fig. 5 an elevation, showing a portion of a fence in which the stay sections are arranged in staggered relation, connecting the strand or longitudinal wires.

The stay section of the present invention is to be made from a continuous reel of wire, or otherwise, so as to be of varying lengths to suit the spaces between the strand wires, where the strand wires are arranged with varying distances between them.

Each stay section *a* is formed of a wire *b* of the desired length; and this wire has its body covered or coated with spelter, or other protective material *c*, and has its ends likewise coated or covered with spelter, or other protective material *d*, as shown by the heavy black lines in Figs. 2 and 3. The spelter, or other protective material, is preferably applied to the wire by the electro or electric coating process, in which a current of electricity is passed through the wire from end to end, and by its actions deposits the spelter, or other protective material, onto the wire, drawing the spelter, or other material, into the pores of the wire, so that in reality the wire and the coating or covering of spelter, or other material, are continuous, one with the other, making the union between the two one which cannot be broken or destroyed in coiling the ends of the stay sections around the longitudinal or strand wires.

The form of square mesh fence, shown in Fig. 4, consists of a plurality of longitudinal or strand wires *e*, and the upper stay section and the lower stay section are united or attached to the upper border wire and the lower border wire, by a coil *f* produced by coiling the end of each stay section *a* around the border wires, and for the intermediate longitudinal or strand wires the stay sections *a*, at their overlapping ends, are intercoiled around the longitudinal or strand wires, so as to form a double coil *f* instead of a single coil *f*, as for the upper and lower border wires. The type of square mesh



fence shown in Fig. 5 also consists of a plurality of longitudinal or strand wires *e*, which are connected together by stay sections *a*, with the stay sections arranged in staggered relation, and with each end of each stay section coiled around a strand wire so as to form a coil, *f* by which the stay section is attached to the strand wires.

The stay sections *a*, with the form of fence shown in Fig. 4, and with the form of fence shown in Fig. 5 each have a coating *c* over the body, and a coating *d* at each end of the stay section, so that when the ends of each stay section is coiled around the longitudinal or strand wires, either in the form of a single coil or of an intercoil, the body of each stay section and each end of each stay section will be protected by the spelter, or other coating of protective material *d* against the effect of moisture and atmospheric changes, with the result that the rusting or oxidation of the ends of the stay section is prevented, and the destroying of the coils and of the stay sections and the longitudinal or strand wires is likewise prevented.

The coating or covering of the body and both ends of the stay section, by spelter or

other protective material, is of great utility in the manufacture of wire fences, as with the entire stay section protected over its body and at each end by the spelter, or other protective material, the liability of rust or oxidation is overcome, and the fence will not be destroyed by the rusting or oxidizing of the wire.

What I claim as new and desire to secure by Letters Patent is:

1. A stay section for a wire fence, having the body and both ends thereof covered by a protective material against the effects of moisture and atmospheric changes, substantially as described.

2. A fence, consisting of a plurality of strand wires and connecting stays, each section of the stay having a coating of protective material applied to its body and both ends, for preventing oxidation by moisture and atmospheric changes, substantially as described.

GEORGE E. MIRFIELD.

Witnesses:

OSCAR W. BOND,  
THOMAS A. BANNING.