

No. 617,596.

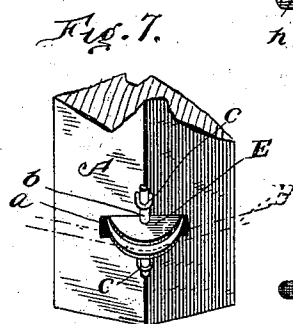
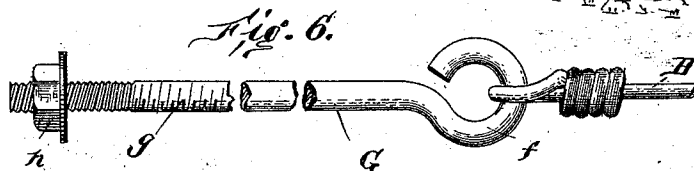
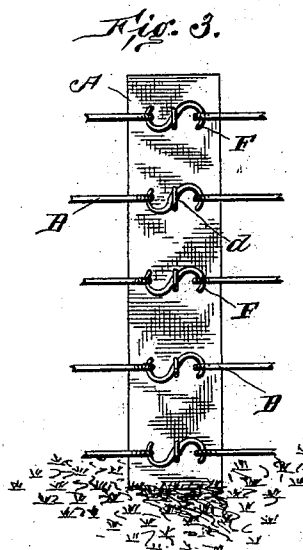
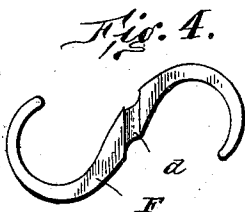
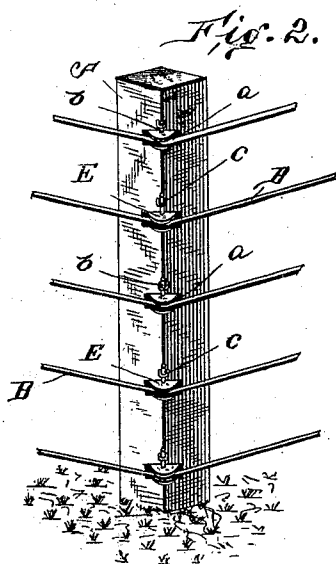
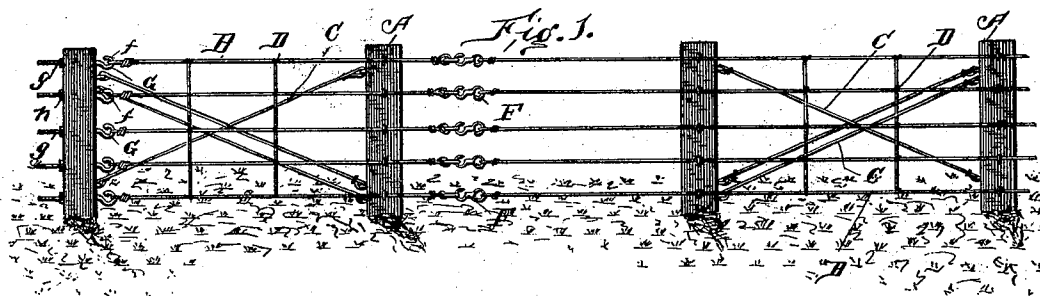
Patented Jan. 10, 1899.

J. A. McDANIEL.

WIRE FENCE.

(Application filed Apr. 30, 1898.)

(No Model.)



Witnesses  
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# UNITED STATES PATENT OFFICE.

JAMES ALFORD McDANIEL, OF SLOANVILLE, TENNESSEE.

## WIRE FENCE.

SPECIFICATION forming part of Letters Patent No. 617,596, dated January 10, 1899.

Application filed April 30, 1898. Serial No. 679,350. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES ALFORD McDANIEL, of Sloanville, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Fences; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

This invention has relation to the class known as "wire" fences, and has for its object to build fences cheap, neat, and substantial.

A further object of the invention is to construct the fence so that an outlet may be had at any portion of its length without forming a gate and without the danger of causing the wire to loosen or slacken while doing so.

A further object is to take up the slack and tighten the wire of the fence without the use of the usual wire-stretcher, and, further, in means of holding the wire in position after tightening by means of an S-shaped fastening and staple, and, lastly, in facilitating the tightening and securing the wire to the fence-posts.

I am fully aware that many devices have been used for economically building wire fences and for stretching the wire thereon and for rigidly securing the wire to the posts, and therefore desire not to claim any of the forms heretofore known and to avoid all such structures.

To this end my invention consists in stringing wires on the fence-posts in such manner that openings or gateways may be formed without gates, and the wire, where a panel is removed, will not slacken, and, further, in stretching the wire, as will hereinafter more fully appear, be illustrated in the drawings, and specifically pointed out in the claims.

In the drawings, Figure 1 is a section in elevation of my improved fence, the middle panel being designed for an opening or gateway. Fig. 2 shows a corner-post with anti-friction-rollers on which the wire passes around a corner of the fence. Fig. 3 also shows a post with my improved S-shaped link-

fastenings. Fig. 4 is an enlarged and detached view of my S-shaped link-fastening. Fig. 5 is a modification thereof; and Fig. 6 is the eyebolt wire-stretcher, partly broken away. Fig. 7 is an enlarged view of a post with roller in position.

The same letters will indicate like parts throughout all the figures.

A in the drawings are the posts, and B the fence-wires; C, the cross brace-wires; D, the upright spreaders or binder-wire.

E are anti-friction-rollers having grooves in which the wire runs when to be carried around a corner or curve. Heretofore when pulling wire on the wood the friction was very great. The wire sticking and not working smoothly it is hard to stretch it taut, and therefore slack is left; but when pulled on these rollers it readily passes over the roller, saving both labor and getting the wire taut. To mount these rollers, I simply make a slit in the corner of the post, put the roller in the slit and the spindle against the post, and secure it with staples, one staple below and the other above the wheel. I thus in a cheap and simple manner hold the roller in position. This wheel or roller E also holds the wire in its proper horizontal position without slipping up or down. When building fence on steep inclines, the roller may be set at a suitable angle. The roller-slot is marked *a*, the spindle *b*, and the staple *c*.

F is the S-link, each end being adapted to hold the end of the wire.

*d* is the notch for holding the staple in position.

The S-link is thicker in the middle than at each end for two purposes—viz., to make it stronger, and when applied to the fence-post the middle will throw the ends out sufficiently far from the post to permit the wire to hook over its ends. It is obvious that when the post is small and the S-link larger than the diameter of the post the S-link may be flat. The object of the notch *d* is to hold the S-link in position, so that when the wire is pulled in either direction the link cannot slip. These S-links are generally placed on posts where openings or gateways are to be made; but it is obvious that they may be placed on any post or between the posts, as shown at the middle panel, Fig. 1. It will be observed that when the

wire is secured by means of the **S**-link on the post there is no slipping or slacking of the wire from that particular post. Fig. 3 shows a series of these **S**-links on the post, and where the opening or gateway is to be formed no stay-wires are necessary. However, the upright bindless wires may always be used with good results. Thus it will be seen that when gateways are to be made the wires do not have to be cut. Simply unhooking them from the **S**-links will be sufficient, replacing them after having passed through, and thus gateways may be made at any portion of the field without loosening the wires on the adjacent panels.

**G** is the eyebolt-stretcher, which passes through holes previously made in the post. The wire is fastened in the eye *f* of the bolt. The shank *g* is then passed through the hole, and the nut *h* is screwed up. The bolt may have a washer for the nut to screw against and being eighteen inches or two feet long will stretch the wire taut as the nut is screwed on, thereby absolutely having no slack.

The modification of the **S**-link shown at Fig. 5 is designed for very wide posts. It is also ornamental and makes a very neat and pretty finish when such is desired.

The mode of erecting the fence is as follows: The posts are preferably placed in the ground. The ends of the wires are fastened in the eyebolt, the nut *h* being at the other end of the bolt. The bolt is passed through the hole in the post. The wire is then pulled, and as each post is reached the wire is properly secured by the staples in the well-known manner; but when the wire reaches a post where a gate-opening is to be made then the **S**-links are put on that post and the wire fastened by putting the staples in the notches prepared for them in one of the hooks and driving them home. The nuts on the shanks *g* of the eyebolts are then screwed up, tightening and stretching the wires until all the slack is taken up. When a corner or curve is to be wired, the wires pass over the anti-friction-rollers and are pulled and fastened

where desired. The cross stay-wires and upright spread-wires are then put on, when the fence is complete. Of course the stay and spread upright wires are twisted or fastened in the usual manner to each wire.

It is obvious that modifications may be made in the several parts without departing from the spirit of my invention. I do not therefore desire to be confined to the exact form shown, but consider myself entitled to all such changes as come within the scope of my invention.

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

1. The combination in a fence of the corner-posts having anti-friction-rollers therein, the wire-stretchers loosely secured in one or more of the fence-posts and connected to the fence-wire, the free ends of said wire having loops and extending beyond the next adjacent post, and adapted to be secured to the wires of the adjoining panel by means of a link whereby the wire when stretched will yield sufficiently to be joined and again regain its position by means of the stretchers, substantially as set forth.

2. The combination with a post-and-wire fence of the **S**-link having a depression at or near its center, said link being adapted to be secured to the post by means of a staple driven across and into the said depression whereby the wire secured to the link will retain its position on the post substantially as set forth.

3. As an article of manufacture for fences the **S**-link provided with the holding notch or depression at or near its center as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JAMES ALFORD McDANIEL.

Witnesses:

W. R. BARKSDALE,  
W. B. DENTON.