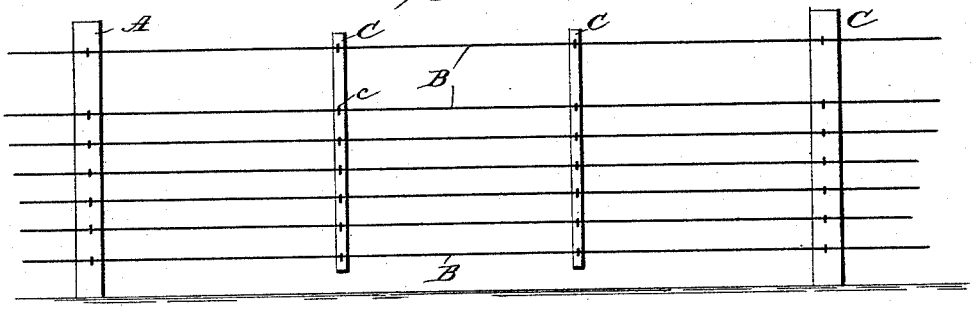
(No Model.) 2 Sheets—Sheet 1.

H. C. PRATT.

FENCE.

No. 456,637. Patented July 28, 1891.

Fig. 1.



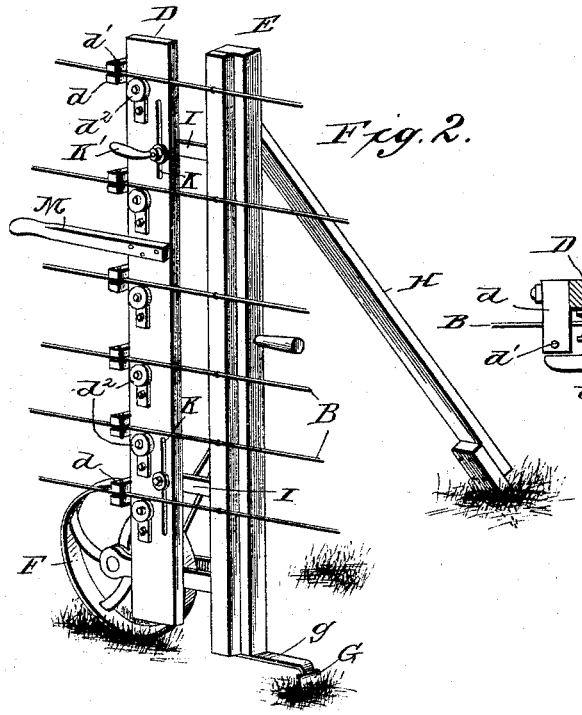
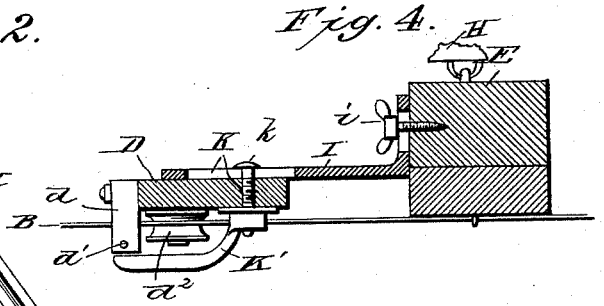


Fig. 2.

Fig. 4.



WITNESSES:

E. L. Smith

Alex. J. Stewart.

INVENTOR

Henry C. Pratt,

(No Model.) 2 Sheets—Sheet 2.

H. C. PRATT.

FENCE.

No. 456,637. Patented July 28, 1891.

Fig. 3.

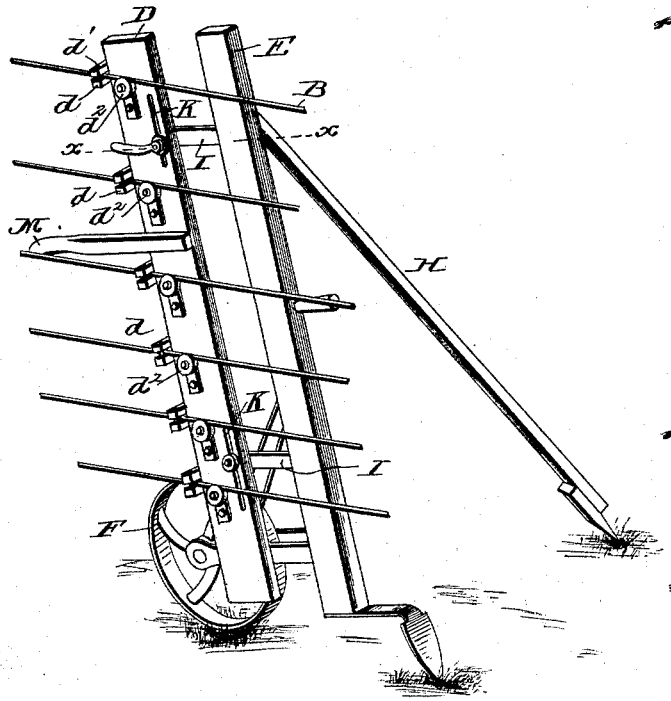
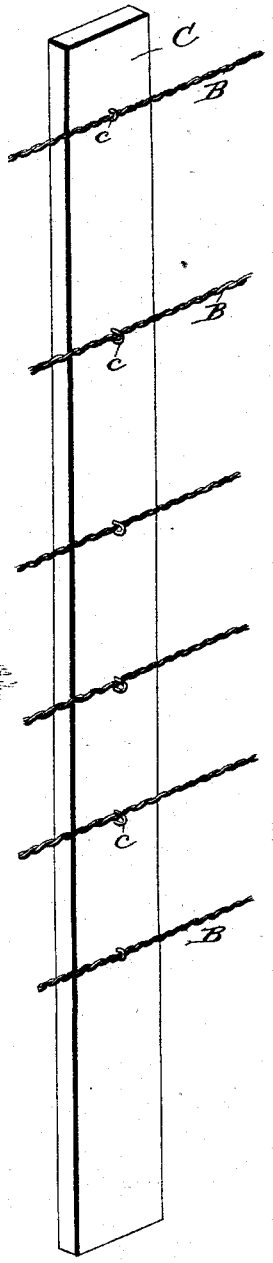


Fig. 5.



WITNESSES:

E. L. Smith

Alex. Stewart.

INVENTOR.

Henry C. Pratt.

UNITED STATES PATENT OFFICE.

HENRY C. PRATT, OF CANANDAIGUA, NEW YORK.

FENCE.

SPECIFICATION forming part of Letters Patent No. 456,637, dated July 28, 1891.

Application filed January 14, 1891. Serial No. 377,714. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. PRATT, of Canandaigua, in the county of Ontario and State of New York, have invented certain new and useful Improvements in Fences; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon.

This invention has for its object the production of a cheap highly-efficient wire fence, the strands of which while supported by stays may be individually tightened from the end of the section, a further object being to provide mechanical appliances to facilitate the application of the stays at proper intervals to all the strands as they are simultaneously unwound from the reel.

The invention consists in certain novel details in the construction of the fence and mechanical appliances employed in the construction of the same, all as will be hereinafter described, and pointed out particularly in the claims at the end of this specification.

Figure 1 is an elevation of a section of fence constructed in accordance with my invention. Fig. 2 is a perspective view showing the manner of constructing the fence. Fig. 3 is a similar view showing the wire-spacer and stay-support being moved from one position to another. Fig. 4 is a sectional view on the line *x x*, Fig. 2. Fig. 5 is a view of a stay and wires on an enlarged scale.

Similar letters of reference in the several figures indicate the same parts.

The fence made in accordance with the present invention resembles, preferably, the ordinary open-panel wire fence—that is to say, a fence having posts some distance apart, the wires being retained in their proper relative positions between posts by two or more intermediate stays. These fences are constructed in sections, and usually special contrivances are employed at the end of a section for tightening the individual strands when necessary, but as heretofore constructed it has been found difficult to attach the stays between the posts directly to the wires, and hence one of two evils is always present—that is to say, loose metallic stays are employed, which are easily moved along the wires, and their usefulness thereby impaired, or the individual strands could not be tightened without breaking the stays when fastened tightly thereto, as the amount of slack in the strands is practically never the same, and it is obvious that if a central wire is loose and the others tight the central one cannot be tightened without straining the others or breaking the stay. With my present method of construction these difficulties are entirely obviated and the stays are held in proper position between the posts, and at the same time the strands are capable of independent movement.

In the drawings, A represents the posts set some rods apart; B, the strands of wire, and C the stays arranged between the posts, preferably two or more in each panel. These stays are ordinary wood-slats of convenient size, and strong enough to bear the strains to which they are subjected. The fastening means consists of staples *c* or other convenient devices; but instead of fastening the stays rigidly to each of the wires but one or two of the wires are clamped fast, preferably the top and bottom wires, the intermediate staples forming loose connections between the stays and wires, all as shown clearly in Fig. 5. This, it will be seen, permits any one of the strands to be tightened individually without affecting the others, and, further, the wires which are clamped hold the stays firmly in place against all ordinary strains.

In building a fence such as above outlined the strands of wire going to make up the fence are mounted on a reel and simultaneously stretched along the fence-line, the ends at the starting-point being secured, of course, to a section-post, and as the reel is moved forward the strands are separated and spaced by an appliance shown in Figs. 2, 3, and 4. This appliance consists, essentially, of an upright D, having a series of wire-spacers *d*, with recesses in which the wires are retained by pins *d'* or otherwise, and a series of grooved rollers d^2, over which the wires travel as the appliance is moved forward. The upright D is adjustably mounted on a second upright E, which for convenience I shall call the "stay-support," and the latter is mounted on a carrying wheel or roller F to facilitate its movement along the line of fence, Fig. 3. When in upright position, the stay-support and wire-spacer are held, first, by a stake-blade G on an arm *g*, and adapted to be thrust into the ground automatically as the device is turned

to upright position, or else by the pressure of the operator's foot, and, secondly, by the diagonal brace H, which is pivotally connected to the back of the stay-support, and is adapted to have its outer end thrust into the ground, Fig. 2, or to trail along behind as the device is moved forward, Fig. 3.

In operating the appliance the wires are placed in the spacers and the device drawn forward, as shown in Fig. 3, by grasping the handle M and upright until the place for the first stay is reached. It is then thrown into upright position, the brace set up, and a stay introduced between the stay-support and the wires, it being an easy matter to then drive the staples in the manner before set forth. The above operations are proceeded with until the second post is reached, when the spacer is moved beyond it and the wires loosely stapled, and so on throughout each succeeding panel.

The tension of the wires during the construction of the fence may be kept by any well-known device or devices, and is great enough to clamp the stays tight and hold them in place during the stapling operation, and if for any reason stays of different thickness are employed the support may be advanced or moved back beyond the line of the wire by loosening the screw *i*, which works in a slot in the ends of the arms I, connecting the spacer and support. The connection with the spacer for vertical adjustment is made by forming slots K therein, through which pass screw-bolts *k* on the arms I, thumb-nuts K′ being placed on the bolts to hold the spacer in place. By these adjustments the wires may be located different distances from the ground and inequalities in the surface of the ground readily compensated for.

The carrying-wheel in the preferred construction is of such diameter as that one or more revolutions indicates the distance from one stay to another, and a mark or indicator of any character desired may be on the wheel to show when it has made a revolution.

A fence constructed in accordance with the present invention will be found to be comparatively cheap and very easily and quickly constructed without the necessity of traveling over the line of fence separately with each strand of wire.

If desired, I may, and in many instances I prefer to, stretch the strands along the line of the fence and secure and space them in approximately in their places by temporary spacers—such, for instance, as described in my prior patent, No. 424,898, dated April 1, 1890. These temporary spacers are removed as the permanent spacers are applied with the device before mentioned and the strands stapled to the posts. Such temporary spacers may be either tied to the regular panel-posts or secured as in said before-mentioned patent.

Having thus described my invention, what I claim as new is—

1. In a wire fence, the combination of the supporting-posts, the series of strands of wire loosely connected thereto, the stays between the posts, clamped tightly to the top and bottom strands of the series and connected loosely to the intermediate strands, whereby any one of the strands may be tightened individually without affecting the others, substantially as described.

2. The combination, with the flat stay-support against which the staples are driven, of the spacer connected thereto and having the series of openings through which the strands of wire pass, substantially as described.

3. The combination, with the stay-support against which the staples are driven and the carrying-wheel connected thereto, of the spacer adjustably connected to said support and having the series of openings for the passage of the strands of wire, substantially as described.

4. The combination, with the stay-support against which the staples are driven and the stake-blade connected to the bottom of said support to hold it upright, of the spacer connected to said support and having the series of openings for the passage of the strands of wire, substantially as described.

5. The combination, with the stay-support against which the staples are driven, the stake-blade at the bottom of the same, and the spacer for the strands of wire connected to the support, of the diagonal brace connected to the back of the support, substantially as described.

6. The combination, with the stay-support against which the staples are driven, the stake-blade at the bottom of the support, and the spacer for the strands of wire connected to the support, of the diagonal brace loosely pivoted to the back of the support, whereby it is adapted to trail behind as the support is moved forward, substantially as described.

7. The combination, with the stay-support against which the staples are driven, the stake-blade at the bottom of the same, the diagonal brace loosely connected thereto, and the carrying-wheel, of the spacer connected thereto, having the recesses therein, the pins for closing the recesses, and the rollers over which the wires pass, substantially as described.

8. The combination, with the stay-support against which the staples are driven and the arms connected thereto, of the spacer having the openings for the passage of the strands of wire, and vertical slots, the bolts in the arms passing through such slots, and the thumb-nuts for clamping the spacer, substantially as described.

HENRY C. PRATT.

Witnesses:
E. H. PARTRIDGE,
ELIZABETH H. PRATT.