

W. COMMEANS.
FENCE.

No. 492,784.

Patented Mar. 7, 1893.

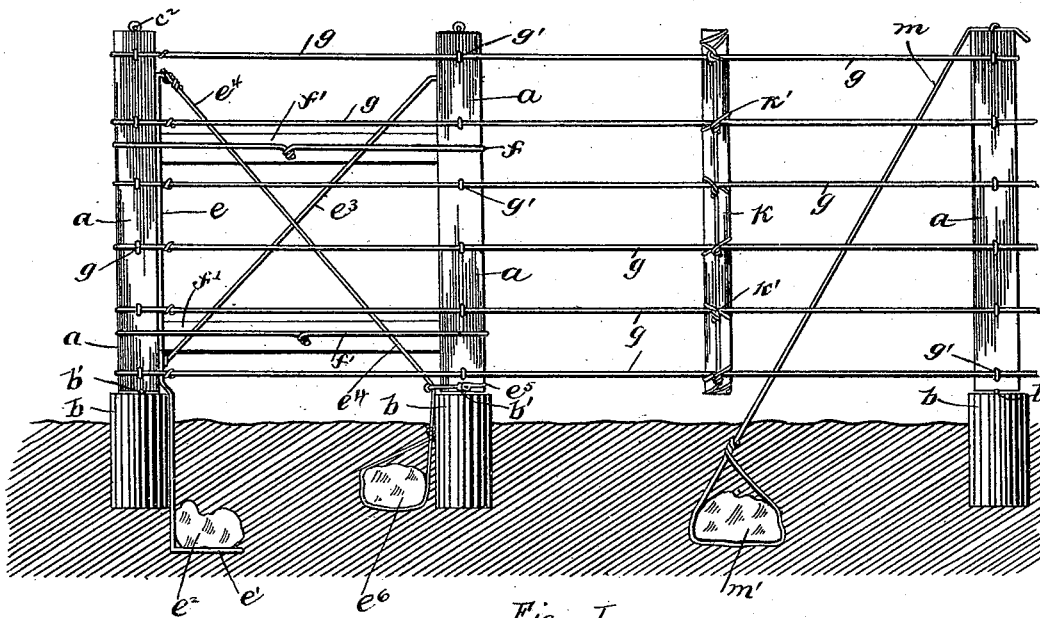


Fig. 1.

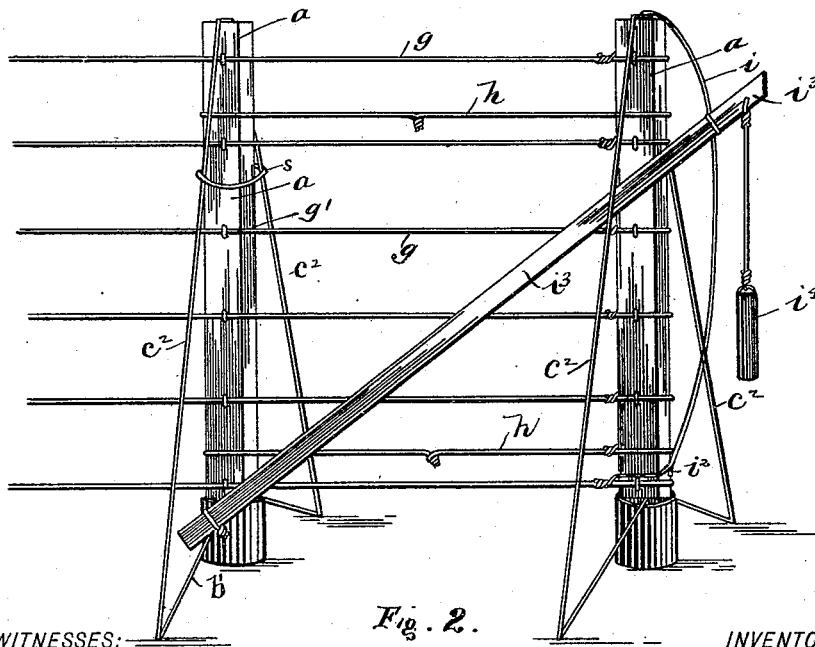


Fig. 2.

WITNESSES:

H. B. Bradshaw
C. E. Holdsworth.

INVENTOR
William Commeans
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ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

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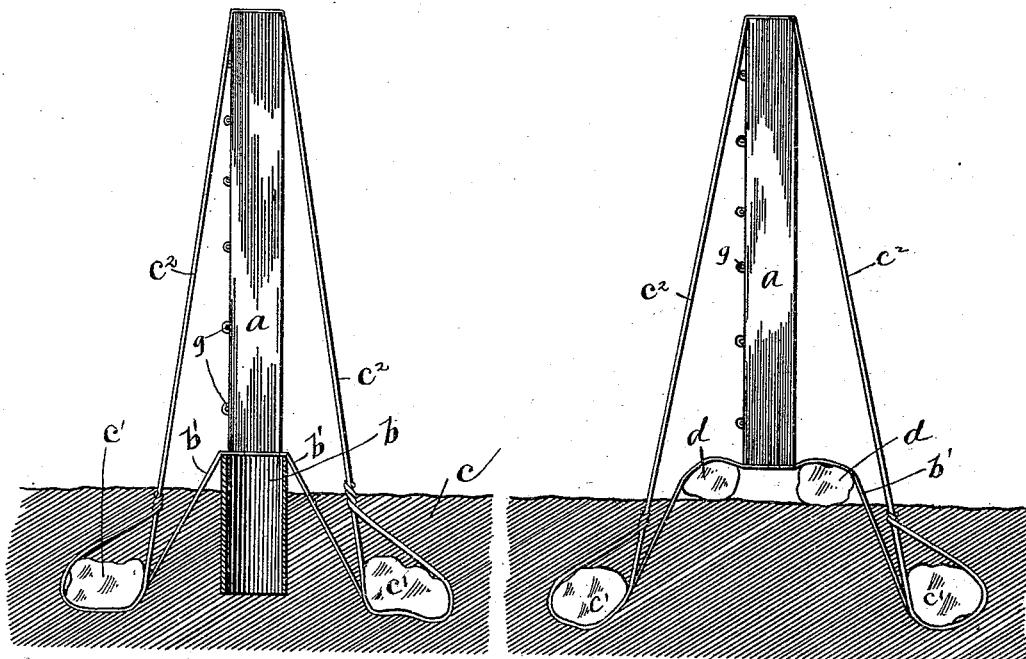


Fig. 3.

Fig. 4.

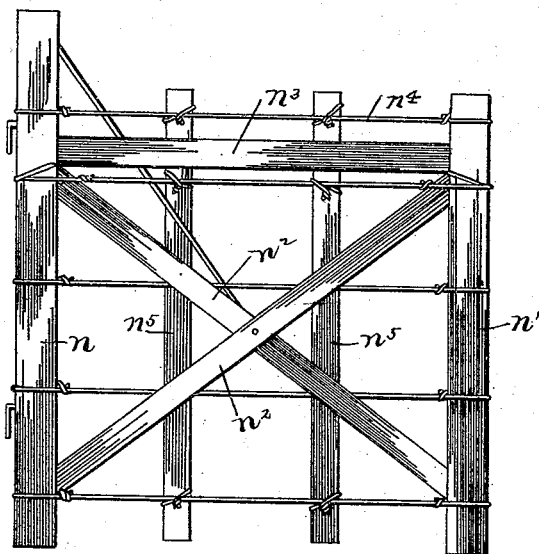


Fig. 5.

WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM COMMEANS, OF LILY CHAPEL, OHIO.

FENCE.

SPECIFICATION forming part of Letters Patent No. 492,784, dated March 7, 1893.

Application filed November 25, 1892. Serial No. 453,115. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM COMMEANS, a citizen of the United States, residing at Lily Chapel, in the county of Madison and State of Ohio, have invented certain new and useful Improvements in Fences, of which the following is a specification.

My invention relates to the improvement of fences and has particular relation to fences for farm use.

The objects of my invention are to provide a substantial, durable and neat fence of this class of such construction and arrangement as to withstand the effects of strong winds and dampness and to produce other improvements which will be more specifically pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawings, in which

Figure 1 is a side elevation of a section of my improved fence. Fig. 2 is a perspective view of the last panel thereof. Fig. 3 is a transverse section of my improved fence showing one of the posts thereof and showing its supporting tile in section and Fig. 4 is a similar view showing a modification in the plan of support for the post and Fig. 5 is a view in elevation of the gate which I prefer to use in connection with my improved fence.

Similar letters refer to similar parts throughout the several views.

a represents the vertical posts of my improved fence which are preferably of wood and which may be arranged at any desired distance, one from the other.

b represents tiles one of which is partially inserted in the earth beneath each of the posts *a*. the upper portion of said tiles projecting vertically from the ground, as shown. Across the top of each of the tiles *b*. I pass horizontally the central portion of a post-supporting wire *b'*, said wire extending downward and outward from opposite sides of the upper end of the tile and having its end portions buried in the ground *c* at any desired depth, said end portions being retained in this position by means of stones or other similar bodies *c'* which rest thereon or to which said supporting wire ends are secured. Upon the upper horizontal portion of the wire *b'* rests the lower end of the post *a* said post being assisted in retaining this position by means of an

anchor wire *c²*. This anchor wire has its central portion passing over the upper end of the post, while its remaining portions extend downwardly and outwardly on opposite sides of said posts and have their ends secured about the sunken stones *c'* within the ground. As shown in Fig. 4 of the drawings, I may however omit the tile *b* in the construction of my improved fence and provide on opposite sides of the lower end of the post, stones or wooden blocks or chunks *d* over which may pass the supporting wire *b'* before the latter is inserted in the ground.

In the construction of the first panel of my improved fence, I provide on the inner side of the first post *a*, a metallic strengthening bar *e* which extends throughout the length of the greater portion of said post, the lower end portion of said bar terminating within the ground at a point directly below the tile *b* in an angular bend indicated at *e'* and upon this bent portion is supported a stone or other heavy body *e²*. From a point on the bar *e* near the lower end of the first post *a* extends a suitable brace rod *e³*, the upper end of the latter being secured to the inner side of the upper portion of the second post *a*. To the upper end of the bar *e*, I connect the upper end of the second brace-rod or bar *e⁴*, which crossing the bar *e³* diagonally is bound to the lower end of the second post *a* by a wire *e⁵* from which point said brace-rod *e³* extends downwardly within the ground and where it is anchored by a stone *e⁶*. I also connect the first and second posts of my improved fence by horizontal tie wires *f*, said wires operating to connect the upper and lower portions of said posts as shown in Fig. 1 of the drawings. As an additional brace connection for said first panel, I preferably employ between the upper and lower portions of the posts, horizontal cross-bars *f'*, said cross-bars being preferably of wood.

g represents the parallel longitudinal fence wires which are arranged at suitable distances, one from the other, and which are connected with the corresponding spaces of the posts by means of suitable staples *g'*.

In the construction of the last panel of my improved fence which is indicated in Fig. 2, I employ the tie-wires *h* which correspond with the tie wires *f* of the first panel. I also em-

ploy in the construction of said last panel a weight-bar or anchor which is constructed as follows.

To the top of the last post *a*, I secure a wire, 5 said wire curving outwardly and downwardly and thence inwardly and being secured to the lower end of the post as indicated at *i*². To the upper portion of this wire on the outer side of said last post, I bind the upper end 10 portion of an inclined weight supporting bar *i*³ the latter extending downwardly and having its rear end bound to one of the wires *b'* at or near the lower portion of next to the last post *a*. From the upper and outwardly 15 projecting end of this weight bar *i*³, I suspend a suitable weight or heavy body *i*⁴, said weight serving as will readily be seen to create a leverage beyond the end of the fence in the direction of the line of extension thereof, and 20 operating to compensate for any rearward or inward pull upon the last post.

In cases where unusually long panels of my improved fence are built and where it is desired to form a connection between the wires 25 of said panel for the purpose of retaining the same in their proper parallel position, I provide one or more intermediate vertical connecting bars *k*, to which the horizontal fence wires *g* are bound as indicated at *k'*.

30 In addition to the anchor wires *c*², I may provide as shown in the second panel of Fig. 1 of the drawings, an additional wire *m*, the center of which crosses the upper side of the post at right-angles with the wire *c*² and the ends of which are as prescribed for said wire 35 *c*² and as shown in the drawings, anchored by means of a stone *m'* within the ground.

The gate which I preferably employ in conjunction with my improved fence and which 40 is shown in Fig. 5 of the drawings consists in the front and rear end posts *n n'*, the crossed braces *n*² which connect said end posts, a horizontal cross-bar *n*³ between the upper portions of said posts, horizontal wires *n*⁴ between the 45 posts and two or more intermediate vertical connecting bars *n*⁵ which as prescribed for the fence bar *k* are secured to the horizontal gate wires.

As shown at *s* in Fig. 2 I may bind together 50 the inclined portions of the anchor wires *c*² by means of a tie wire which encircles the post *a*.

It will be observed that in the construction of my improved fence, I have especially provided for the production of a strong first or end panel which will resist such strain as the 55 fence may be subjected to. It will also be seen that the means which I have described for supporting the posts of my improved fence are such as to prevent any direct contact of the post with the ground, thus overcoming the 60 tendency of the posts to rot at their base or break off from the force of strong winds.

It is obvious that this construction herein shown and described will be exceedingly strong and durable and capable of withstanding great strain or shock. It is also evident 65 that my improved fence may be produced in a neat and reliable form at a low cost of manufacture.

Having now fully described my invention, 70 what I claim, and desire to secure by Letters Patent, is—

1. In a fence, the combination of the posts and horizontal fence wires connecting the same, supporting wires *b'* upon which said 75 fence posts rest, said supporting wires being suspended above the ground and the ends of said wires being anchored, by stones *c'* beneath the ground surface, and anchor wires *c*² passing as described over the tops of said 80 posts and also engaging with said ground stones *c'* substantially as and for the purpose set forth.

2. In a fence, the combination of the posts, horizontal wires *g* connecting said posts, supporting-wires *b'* upon which said posts rest, 85 the central or supporting portions of said wires being elevated from the ground and the ends of said wires being anchored beneath the surface of the ground, a strengthening bar *e* 90 on the inner side of one of said fence posts, the lower end of said bar entering and being anchored as described beneath the ground surface, and crossed braces *e*³ connecting as described said strengthening bar and the next 95 succeeding post, substantially as and for the purpose specified.

WILLIAM COMMEANS.

In presence of—
BARTON GRIFFITH,
C. C. SHEPHERD.