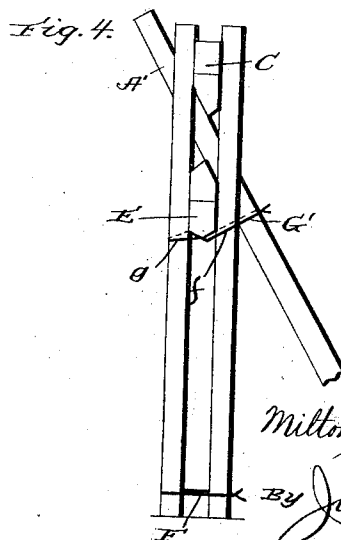
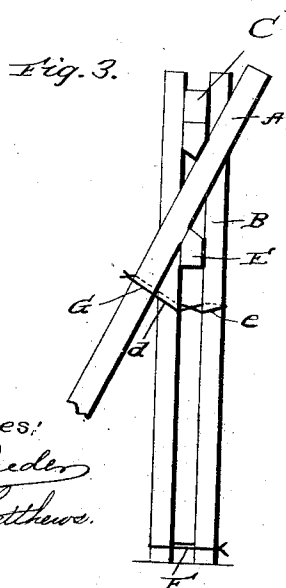
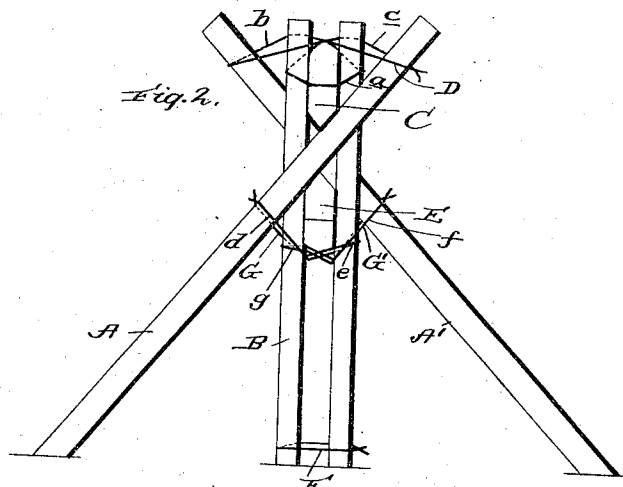
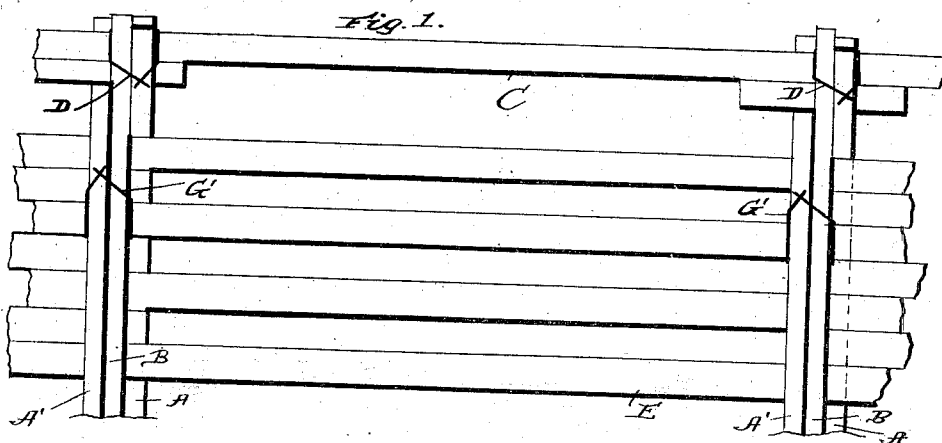


(No Model.)

M. S. SMITH.
RAIL FENCE.

No. 513,344.

Patented Jan. 23, 1894.



Witnesses:

C. A. Raeder
W. F. Matthews.

Inventor
Milton S. Smith
By James J. Sheehy

UNITED STATES PATENT OFFICE.

MILTON S. SMITH, OF ROLLING PRAIRIE, INDIANA.

RAIL FENCE.

SPECIFICATION forming part of Letters Patent No. 513,344, dated January 23, 1894.

Application filed July 8, 1892. Serial No. 439,727. (No model.)

To all whom it may concern:

Be it known that I, MILTON S. SMITH, a citizen of the United States, residing at Rolling Prairie, in the county of La Porte and State of Indiana, have invented certain new and useful Improvements in Fences; and I do 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 has relation to improvements in fences, and it consists in arranging and connecting the upright posts, the rails, and the brace stakes, in such a manner, that the weight of the fence in settling, through the medium of the brace stakes which act as levers, will cause the upright posts to tightly clamp the rails between them.

Other objects and advantages will appear from the following description and claim when taken in connection with the annexed drawings in which—

Figure 1, is a side elevation of a section of fence constructed in accordance with my invention. Fig. 2, is an end elevation of the same. Fig. 3, is a detail view illustrating the manner of connecting the left hand brace stakes and the upright posts, and Fig. 4, is a similar view illustrating the manner of connecting the right hand brace stake and the posts.

Referring by letter to said drawings: A, A', indicate the brace stakes which intersect each other, as shown.

B, indicates the parallel upright posts which are arranged between the brace stakes, and C, indicates the crown rails or riders which have their lapped ends resting between the upright posts and upon the brace stakes at the point of intersection of said stakes, as illustrated. These crown or rider rails C, are connected to the posts and brace stakes and are held in position by the tie wire D, which comprises the loop *a*, which rests beneath the upper rail C, in front of the upright posts and takes around said posts and over the rail C, in rear of the posts, the loop *b*, which takes around the left hand post and the upper portion of the stake A', and the corresponding loop *c*, which takes around the right hand post and the upper portion of the stake A.

E, indicates the rails of my improved fence

which rest between the upright posts B, below the point of intersection of the brace stakes and have their ends lapped as shown; and F, indicates a wire loop which surrounds the posts B, below the lowermost rail of the series of rails E, and serves to support the said series of rails.

G, G', indicate the lower tie wires which rest beneath the two upper rails E, and connect the posts B, and the respective brace stakes at a point below the point of intersection of said stakes as illustrated. The wire G, as better shown in Fig. 3, of the drawings, comprises the loop *d*, which surrounds the stake A, and the left hand post B, and the loop *e*, which surrounds the right hand post B, while the wire G', comprises the loop *f*, which surrounds the stake A', and the right hand post B, and the loop *g*, which surrounds the left hand post B.

By reason of the wires D, G, G', being arranged in the manner set forth, it will be readily perceived that as the fence settles, the upper ends of the brace stakes moving away from each other will draw the upper portions of the posts B, toward each other so that said posts will tightly clamp the rails, while the lower portions of the brace stakes spreading apart will also draw the posts together so that said posts will tightly clamp the rails E, between them and take the greater part of the strain off the loop F. Thus it will be seen that as the fence settles and the brace stakes spread apart in use, the connection of the parts of the fence will be tightened and the fence constantly rendered more rigid and strong.

It will be seen from the foregoing description that I have provided a fence which embodies but very little wire in its construction, and one that may be quickly and easily constructed without the employment of skilled labor or wire stretchers or other expensive tools, which is an important desideratum.

I am well aware of the construction of fence disclosed in the Letters Patent granted to one Warner under date of January 15, 1889, and numbered 396,249, and I make no claim to the same, but

What I claim, and desire to secure by Letters Patent, is—

In a fence, substantially as described, the

combination of the parallel, upright posts, the crossed brace stakes resting upon either side of the upright posts, the crown rails or riders having their lapped ends resting between the upright posts and upon the brace stakes, the rails E, having their lapped ends resting between the upright posts below the brace stakes, the wire loop surrounding the upright posts below the rails E, and adapted to support said rails, the tie wire D, comprising the loop *a*, which rests beneath the upper crown rail in front of the upright posts and takes around said posts and over the crown rail in rear of said posts, the loop *b*, which takes around the left hand post and the upper portion of the adjacent stake, and the loop *c*, which takes around the right hand post and the upper portion of the adjacent stake, the

tie wire G, arranged below the point of intersection of the stakes A, and comprising the loop *d*, which surrounds the stake A, and the left hand post B, and the loop *e*, which surrounds the right hand post B, and the tie wire G', also arranged below the point of intersection of the brace stakes and comprising the loop *f*, which surrounds the stake A', and the right hand post B, and the loop *g*, which surrounds the left hand post B, all substantially as and for the purpose set forth.

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

MILTON S. SMITH.

Witnesses:

WILLIAM HEALD,
E. L. PRESTON.