

J. B. WICKERSHAM.
Fence-Wire Stretcher.

No. 8,793.

Patented March 9, 1852.

Fig. 1.

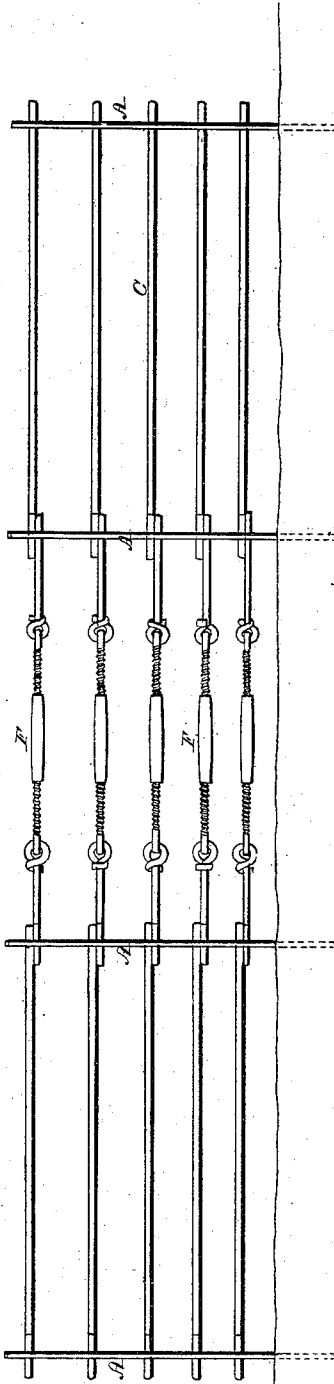


Fig. 2.

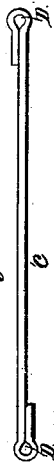


Fig. 3.

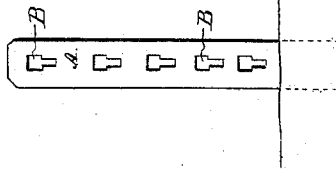


Fig. 4.

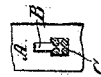


Fig. 5.



Fig. 6.



Fig. 7.



Fig. 8.



UNITED STATES PATENT OFFICE.

JNO. B. WICKERSHAM, OF NEW YORK, N. Y.

IRON FENCE.

Specification of Letters Patent No. 8,793, dated March 9, 1852.

To all whom it may concern:

Be it known that I, JOHN B. WICKERSHAM, of the city, county, and State of New York, have invented certain new and useful Improvements in the Construction of Iron Fences; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to accompanying drawings, making a part thereof, in which—

Figure 1 represents a side view of the fence complete, Fig. 2, represents one of the rails, Fig. 3, represents a portion of one form of post, with the position of the rails therein, Fig. 4, represents a side view of one of the posts, Figs. 5 and 6, represent top views of the position of the rails in the posts, and Figs. 7 and 8, represent modifications of the method of making the posts and rails.

Similar letters in the several figures represent the same parts.

The nature of my invention consists in so forming the mortises and loops upon the posts and rails of iron or other metallic fences, and the putting of the same together, as that they shall form a solid, firm fence, without the use of keys, bolts, wedges, or any other fastenings than those afforded by the shapes of said mortises and loops, and using for this purpose but single posts in each panel thereof.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A represents the posts, which may be made of flat bar iron, having in them any suitable number of T shaped mortises B, and which may have either end of the mortise up, as seen in Figs. 3 and 4; or the mortises may be square or oblong as seen at B, Figs. 7 and 8. The rails C, may be made of round, flat, or any other shaped bars or rods, either in whole, or in part, as seen in Figs. 2, 7 and 8, the latter figures representing it partly round, and partly square, said rails having loops or dead eyes turned upon both of their ends, as in either of the forms seen in said figures, and when the rails are to be inserted in the post holes B, they are to be held in the position indicated in said figures and slipped through the holes far enough to escape the turned end of the loop (as seen at Fig. 2) or to the round part of the rails as seen at Figs. 7 and 8, and then turned half around and drawn back, which will bring

them into the positions seen at Figs. 3 and 5, or Figs. 7 and 8, and in which position the rails cannot be turned to draw them out again, for, as seen in Fig. 3, the loops fill up the entire space, one resting upon the other, and the shoulder in the mortise will not admit of their being raised; or as in the forms represented at Figs. 7 and 8, the square part of the rail so fills up the mortise, as to prevent it from being turned, and in either case they could not be withdrawn, until slipped back and turned half around. To prevent this being done, I bend out the end of the loop D, as seen at Fig. 6, which together with the loop or dead eye, on the other side of the post, entirely prevents the moving of the rail either way.

In the form of rail represented at Fig. 7, the loop could be bent back, and the rail removed; but as shown at Figs. 2, 5, 6 and 8, the end of the loop passes through the mortise and entirely secures it. By this means, I am enabled to make a perfectly rigid and strong iron fence with less labor, fewer pieces, and at less cost, than has heretofore been done, using for the purpose but single posts, and rails, without the use of keys, bolts, wedges, or any other fastening than that which is effected by the peculiar shape of the mortises and loops, and the manner of setting up the fence.

At suitable distances in the line of the fence, say at about every one hundred yards, more or less, I place screw buckles F, for the letting out, and straining up the fence, to compensate for the contraction and expansion of the metal, if found necessary, but would state also, that in practice I have found, that the elasticity of the loop, upon which the horizontal strain alone comes, is of itself almost, if not quite, entirely sufficient, to compensate for such contraction and expansion. The screw buckle however, is of more essential service in putting up the fence, and equalizing the strain upon the posts when up, in fact imparting to the posts, a portion of the strength of the rail, so that any weight or force coming against any particular portion of the fence, will be resisted by a considerable portion of it on each side of said point. In putting up the fence, so much care need not be taken in keeping the rails properly strained up in each separate panel, as when the screw buckle is used all the slack can be taken up by them, and the whole made strong and

rigid. If deemed expedient the posts as they are placed in the ground, may be allowed to incline slightly from the panel containing the screw buckles, and when a
5 sufficient number of them are thus set, they may be drawn up into a perpendicular position, which would equalize the strain, and distribute it throughout the whole length of fence thus operated upon.

10 The posts and rails, with their mortises and loops or dead eyes, are all prepared by machinery, and may be made of any suitable size, shape and material, and from their plain form may be packed up into faggots
15 for easy handling and transportation, and can be set up by any one the least skilled in fence making. The posts are usually set about sixteen inches into the ground, and unless the ground be very soft will require
20 no additional support therein. When the ground is soft a wedge may be driven along-

side the post, or a hole may be dug, and the post set in and rammed with gravel or stone.

Having thus fully described the nature of my invention what I claim therein as
25 new, and desire to secure by Letters Patent is—

So constructing the loops and mortises in the rails and posts of iron fences, as that when in place neither of them can be re-
30 moved, using for this purpose single posts and rails, and neither bolts, wedges, keys, or any other fastening except what is afforded by the peculiar shape of the said loops and mortises, and this I claim whether
35 the same be constructed as herein described, or by any other means essentially the same.

JOHN B. WICKERSHAM.

Witnesses:

WM. H. MOORE,
ALFRED SHUSTER.