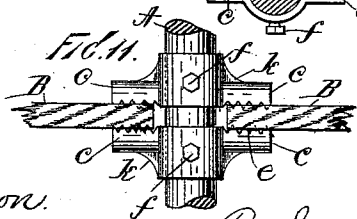
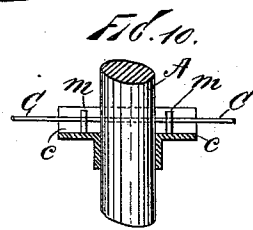
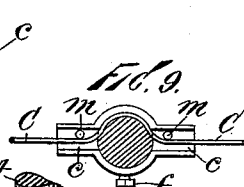
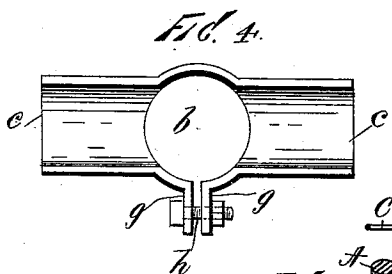
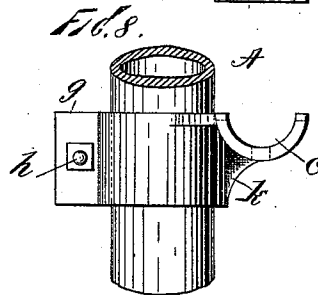
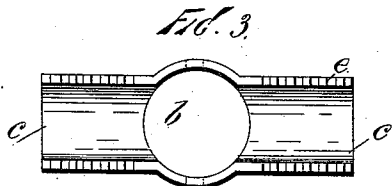
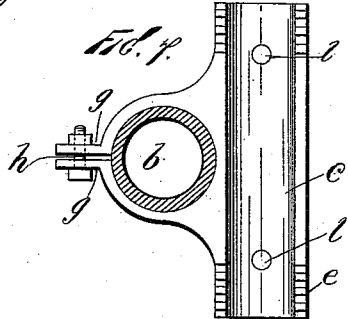
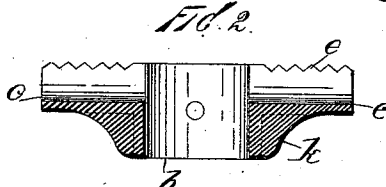
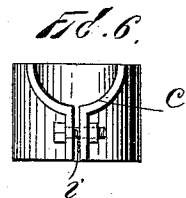
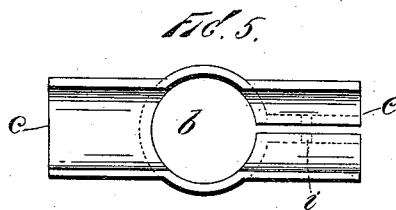
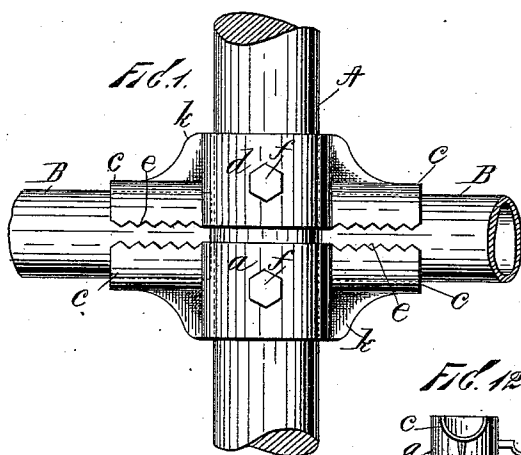


(No Model.)

J. F. WILLIAMS.
IRON FENCE.

No. 540,936.

Patented June 11, 1895.



Witnesses:
John Buckler
Charles Patterson.

Inventor:
John F. Williams

By Simonds & Frothingham
his Attorneys.

UNITED STATES PATENT OFFICE.

JOHN F. WILLIAMS, OF WASSAIC, NEW YORK.

IRON FENCE.

SPECIFICATION forming part of Letters Patent No. 540,936, dated June 11, 1895.

Application filed November 24, 1894. Serial No. 529,804. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. WILLIAMS, a citizen of the United States, residing at Wassaic, in the county of Dutchess and State of New York, have invented certain new and useful Improvements to be Used in the Construction of Fences and the Like, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to improvements especially adapted for use in the construction of fences and the like, and its object is to provide a simple, cheap and efficient means for securing the horizontal rails or wires of a fence to the upright posts.

It is obvious that the device may be used as a step for telegraph poles as hereinafter set forth.

The invention consists of the novel features of construction hereinafter set forth and more particularly pointed out in the claims hereto appended.

Referring to the drawings, Figure 1 is a side view of my device attached to an upright post, showing the manner of securing the ends of the horizontal rails when made of pipe-tubing. Fig. 2 is a vertical section of the clamps of Fig. 1. Fig. 3 is a plan view of one of said clamps. Fig. 4 is a similar view of a modification of clamp. Fig. 5 is a similar view of another modification. Fig. 6 is an end elevation of the same. Fig. 7 is a plan view of another modification. Fig. 8 is an end elevation of the same. Fig. 9 is a plan view showing clamp used in connection with wire. Fig. 10 is a vertical section of the same. Fig. 11 is a side view showing the clamps of Fig. 1 in connection with the ends of board rails. Fig. 12 is a view showing the set-screw having a hook shaped end for holding wire.

Like letters refer to like parts throughout the several views.

A denotes the upright post of a fence and B the horizontal rails consisting of tubing as shown in Fig. 1 or of boards as shown in Fig. 11.

C denotes the rails when made of wire.

a denotes a clamp made preferably of cast iron having a circular opening or collar b adapted to fit over the post A, and having a

trough-like projection c into which the rail B is laid.

d denotes an iron casting similar in construction to the casting a; in fact it is substantially the casting a in an inverted position.

e denotes notches or teeth for the purpose of more firmly holding the ends of the rails when made of wood as shown in Fig. 11, and when the clamp is used as a step on a telegraph pole are for the purpose of giving a firmer foot-hold on the step.

f denotes set screws passing through a hole in the clamps for the purpose of securing the clamps to the upright posts in any desired position.

The collar b may be made as shown in Figs. 4 and 8, split through one side and provided with lugs g, g through which a clamping bolt h is passed for the purpose of securing the rail clamp to the post, or the trough-like projection c may be split as shown in Figs. 5 and 6 through the lower part of which the clamping bolt i passes for the purpose of securing the rail clamp to the post. When the rail-clamp is made like the device shown in Figs. 4 to 8 inclusive, it is made preferably of cast or wrought metal.

It is obvious that the trough-like projections c instead of being in line with each other as shown in Figs. 1, 2, 3, 4, 5 and 6 may be at right angles to each other, as for example, when used upon a corner post, or instead of having two projections there may only be one continuous piece as shown in Figs. 7 and 8.

k denotes braces made integral with the clamp for the purpose of supporting the trough-like projection.

l denotes holes through which screws may be inserted for the purpose of more firmly binding the rails in the clamp or through which bolts or hooks m may be inserted when it is desired to make the fence of wire as shown in Figs. 9 and 10.

The outside end of the set screw may terminate in a hook f' as shown in Fig. 12 for the purpose of holding a wire.

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

1. A clamp for iron fences, comprising the semi-circular trough c, split collar b for clasp-

ing the upright or post A, and a clamping bolt, in combination with the inverted counterpart *d*, for embracing and firmly securing the horizontal member B to the upright A, substantially as shown and described.

2. The herein described clamp for iron fences consisting of the semi-circular trough *c*, split collar *b* for embracing the upright A, and a clamping bolt, as *h*, substantially as shown and described.

3. The clamp for fences and like structures, consisting of the semi-circular trough *c*, split collar *b*, clamping bolt, notches *e*, and integral

braces *k*, substantially as shown and described.

4. The clamp for fences and like structures, consisting of the semi-circular trough *c*, split collar *b*, clamping bolt, as *h*, and hooked stay bolt *f'*, substantially as shown and described.

In testimony whereof I have hereto set my hand, this 20th day of November, 1894, in the presence of two witnesses.

JOHN F. WILLIAMS.

Witnesses:

CHARLES F. PATTERSON,
N. L. FROTHINGHAM.