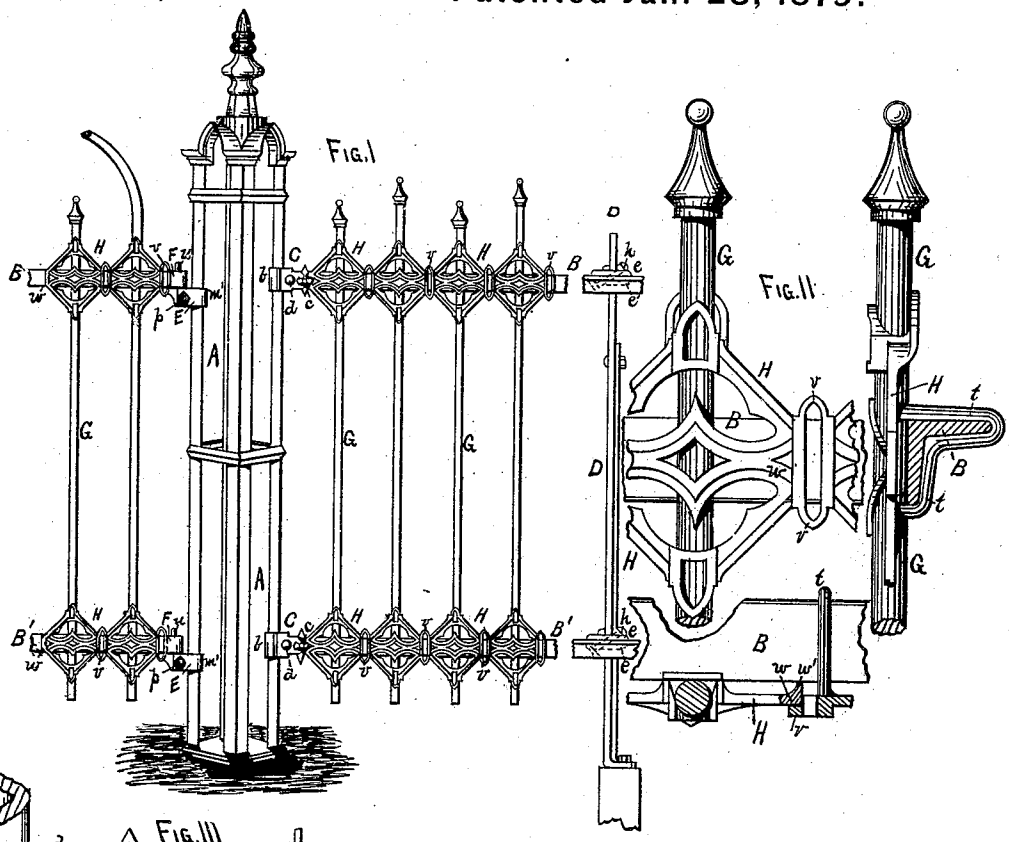
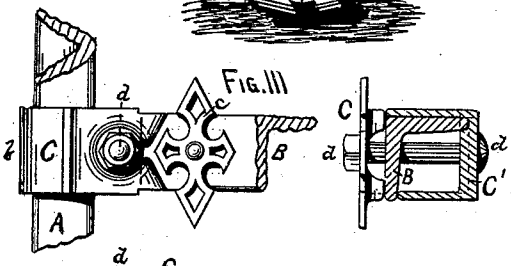
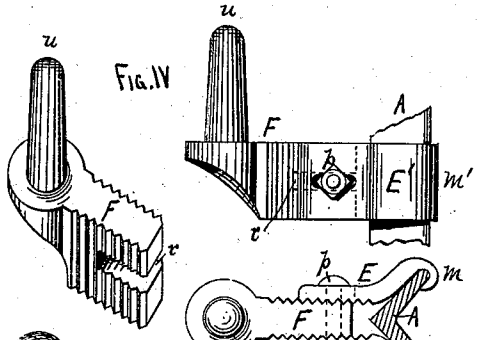
P. HERZOG.

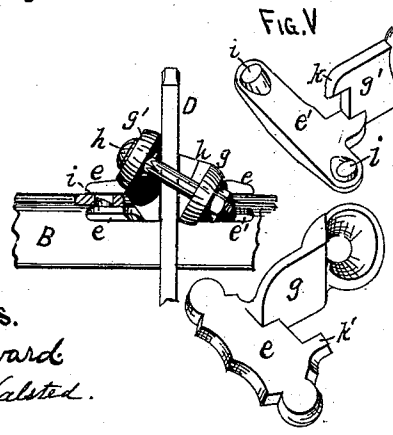
Fence.

No. 211,657. Patented Jan. 28, 1879.









WITNESSES.
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UNITED STATES PATENT OFFICE.

PHILIP HERZOG, OF MINNEAPOLIS, MINNESOTA.

IMPROVEMENT IN FENCES.

Specification forming part of Letters Patent No. **211,657**, dated January 28, 1879; application filed September 20, 1878.

To all whom it may concern:

Be it known that I, PHILIP HERZOG, of Minneapolis, in the county of Hennepin and State of Minnesota, have made certain new and useful Improvements in Fences, which improvements are fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a front elevation of a portion of a fence and gate, showing my improvement attached thereto; Fig. 2, enlarged detail views of the picket-clamp, &c.; Fig. 3, enlarged detail views of the clamp for securing the rails to the gate and corner posts; Fig. 4, enlarged detail views of the adjustable hinge-clamp; Fig. 5, enlarged detail views of the clamp for securing the intermediate posts to the rails.

This invention consists in the arrangement of a double-acting metal clamp, whereby the intermediate posts of fences and the rails may be secured together with one bolt, as hereinafter specified.

The invention further consists in the arrangement of a gate-clamp, whereby the gate may be adjusted higher or lower, or nearer to or farther from the post, as hereinafter specified.

The invention further consists in the arrangement of the ornamental picket-clamps, whereby the pickets and rails are secured together by one single casting for each picket, as hereinafter specified.

A is the fence-post, the uprights of which may be made in any desired form, though preferably of angle-iron; and B B′, the upper and lower rails, also made of angle-iron, as shown. C C are two malleable-iron castings, having hooked ends at *b*, to inclose the edges of one of the angle-iron uprights of the post A, (see Fig. 3,) while the rear ends, *c*, are adapted to inclose and hold the ends of the rails B, the two plates being secured together by a bolt, *d*.

One of the jaws C will be provided with a small projection in its rear part, over which a small notch in the edge of the angle-iron fits, to prevent the rail being pulled out.

In this style of fence, besides the large posts A at the gates and corners, small intermediate posts D are placed at intervals of five or seven feet, to support the fence. These are usually secured to the fence by clamps riveted or bolted to the rails; but I use a double-acting adjustable clamp, consisting of upper and lower plates, *e e′*, inclosing the upper flange of the rail, (see Fig. 5,) and provided with arms *g g′*, one upon each plate *e*, and running backward upon either side of the post D, and through the rear ends of which a bolt, *h*, passes diagonally, as shown.

The lower plate, *e′*, is provided with small spurs *i i*, which enter holes in the top flange of the rails B, and aid in holding the clamp thereto, while a small lug, *k*, upon the arm *g′*, and another, *k′*, upon the plate *e′*, assist the clamp in holding its proper place upon the rail and post.

By passing the bolt *h* diagonally through the arms *g g′*, I am enabled to secure the clamp to both the rail and post with one bolt, as it pulls equally upon the plates *e e′* and arms *g′ g*. This clamp is also adjustable, like the main-post clamps C C, to enable the fence to be adjusted higher or lower.

Fig. 4 shows an adjustable gate-hinge clamp, consisting of two plates, E E′, with hooks *m m′*, adapted to clasp the edges of one of the uprights of the post A, as shown, and provided with serrated teeth upon the inside faces, which mesh into similar serrations upon a plate, F, (which also carries the pintle *u*,) the whole being secured together by a bolt, *p*, passing through slots in the plates E E′, and an open-ended slot, *r*, in the rear end of the plate F. By this simple arrangement the loosening of the bolt *p* enables the gate to be adjusted higher or lower, or, by means of the serrations on the plates, set nearer to or farther from the post A.

The pickets consist of upright iron rods G G′, secured to the rails B by ornamental castings H. These castings are usually attached to the rails B by bolts or auxiliary clips, secured to the rails by stirrups or loops, and interposed between each pair of castings; but I avoid the necessity for this by attaching the loop *t* directly to one edge of each casting H and a lip or projection, *v*, which projects over the flat edge *w* of the next casting. By this means the pickets are secured to the rails by the ornaments themselves, without the interposition of any other agency.

Upon the back of the flat edge *w* of each

ornament H is a small rib, *w'*, which rests against the flat side of the rails B, to keep the ornaments parallel therewith by compensating for the extra thickness of metal upon the opposite side of the ornament, which is necessary to strengthen the lip *v*.

By using one single loop, *t*, upon each ornament, they may be turned at a slight angle to the rails B, to allow the pickets to be kept "plumb" when the fence is set on a hill-side or other incline. This is a great advantage, as it does not require extra castings with loops formed at an angle, as when two loops are used.

I am aware that it is not new to secure the pickets to the rails by loops upon the ornaments H; but such I do not claim, broadly.

In the intermediate post-clamp the diagonal bolt *h* may be placed between the rail B and post D, if desired.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The double-acting adjustable intermediate-post clamp, consisting of the plates *e e'* and arms *g g'*, having the bolt *h*, running diagonally through the latter, and adapted to inclose the upper flange of the rail B and the post D, whereby the post and rail may be secured together by one bolt, substantially as hereinbefore specified.

2. The double adjustable gate-hinge clamp consisting of the plates E E', adapted to be secured to the post A, and provided with teeth, and the slotted plate F, also provided with teeth and carrying the pintle *u*, the whole being secured together by the bolt *p*, whereby the gate may be adjusted higher or lower, or set farther from or nearer to the post A, substantially as hereinbefore specified.

3. The ornamental clamps H, provided at one side with a loop, *t*, and on the opposite side with a flat overlapping lip, *v*, in combination with the pickets G G and rails B B, arranged and operating substantially as specified.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

PHILIP HERZOG.

Witnesses:
C. N. WOODWARD,
JOHN T. HALSTED.