

(No Model.)

C. F. PURDIE.
METALLIC FENCE.

No. 348,499.

Patented Aug. 31, 1886.

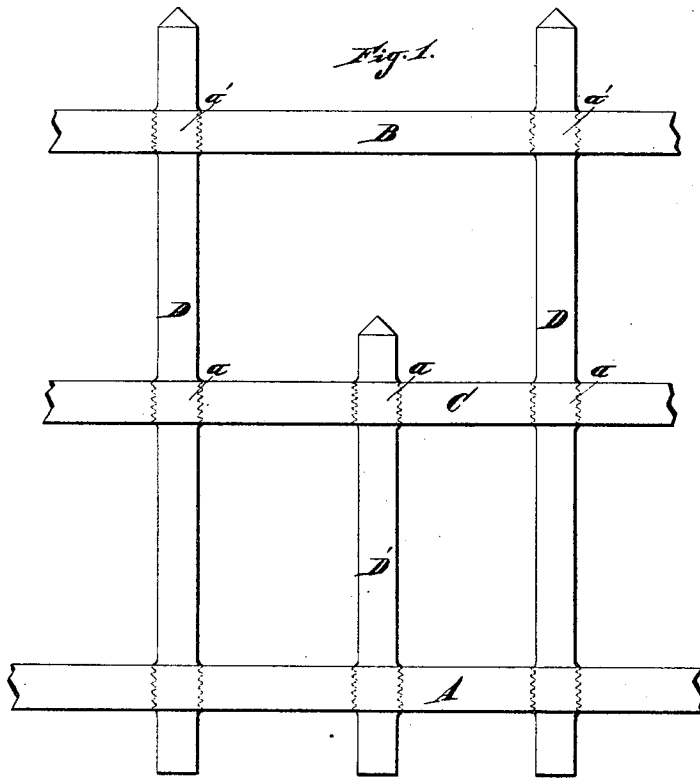


Fig. 3.



Fig. 4.



Fig. 5.



Fig. 7.



Fig. 9.



Fig. 3.



Fig. 6.



Fig. 8.

WITNESSES

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METALLIC FENCE.

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Application filed February 6, 1886. Serial No. 191,053. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. PURDIE, of Detroit, county of Wayne, State of Michigan, have invented a new and useful Improvement in Metallic Fences; and I declare the following to a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in metallic fences, and has for its object the construction of the pickets and rails in such a manner that the pickets will screw into all the rails of the fence to hold them in position.

It has been common heretofore to engage the lower end of pickets into the lower rail by screwing one into the other; but my invention contemplates the construction of the pickets with projecting screw-threads at the points where they pass through the upper rails also, the pickets being enlarged at the points of their intersection in any of various ways, and the enlarged parts screw-threaded so as to be engaged in the upper rails, which may be screw-tapped to receive them. The bottom part of the pickets may be threaded in the usual manner, or may be riveted or secured to the lower rail in any desired manner.

I carry out my invention as follows:

Figure 1 is a side elevation of a portion of a fence illustrating my invention. Fig. 2 represents a modification in elevation. Fig. 3 is a cross-section of the same. Fig. 4 is an elevation of another modification. Fig. 5 is a similar view at right angles to Fig. 4; Fig. 6, a cross-section of the same. Fig. 7 illustrates another modification; Fig. 8, a cross-section thereof; Fig. 9, another separate view.

A represents a bottom rail, B the top rail, and C an intermediate rail.

D represents a long picket adapted for engagement with all said rails; D', one of the shorter pickets. These pickets are all constructed with screw-threads projecting from the outer surface of the picket at the points of their intersection with said upper and intermediate rails, as shown in Fig. 1 at *a a'*.

My invention contemplates, as coming within its scope, any manner of constructing the pick-

ets with said outstanding threads—as, for instance, as shown in Fig. 9. The pickets may be upset at the points where they are to intersect said rails and screw-threads cut upon the exterior of the extended portions of the picket which are caused by upsetting the same at the proper points. This upsetting may be done in the line of the picket, causing a boss upon the same at the place where it is to intersect the rail. This is a simple form of construction and illustrated in Fig. 9. The same effect may be secured in a satisfactory degree by forcing inward a part of the circumference of the picket at the desired points, and thereby forcing outward other parts of said circumference in various forms to constitute a projecting surface sufficient to form a thread upon it by revolving the picket against a suitable die—as, for instance, as shown in Figs. 7 and 8. The points where the picket intersects the rails may be pressed into star shape, as shown in Fig. 8, the projecting points being screw-cut, as shown in Fig. 7, the object being simply to raise sufficient metal upon the surface of the picket outside its general circumference to locate thereon a screw-thread or a fraction of the same, for it is unnecessary, especially in the construction of cheap fences, that the thread should surround the picket, what is needed being simply to provide at such points sufficient threads or fractions thereof to engage with the rails and hold the rails in position. My invention contemplates any engagement of this kind which may be found adapted for the purpose.

In Fig. 5 the intersecting portion of the picket is shown forced into the shape of a flattened ellipse, as shown in cross-section, Fig. 6, the outermost edges being screw-cut, as shown in Figs. 4 and 5, or the metal of the picket at the intersecting points of the upper rails may be shaped into a triangular form, as shown in Fig. 3, and its edges screw-cut, as shown in Fig. 2. Any of these various illustrations embodies the principle of my invention, which contemplates the slipping of the pickets through the holes in the upper rails until the extended screw-cut surfaces come in contact with the rails when the pickets are screwed into place to engage the rails. It is readily seen that such a construction is not expensive. It is evident that the picket will be held sufficiently

firm in the rails; also, even if the thread is im-
 perfect upon the embossed parts of the pickets,
 as shown in various modifications illustrated
 in the drawings. It is evident, also, that it
 5 will not be necessary in all kinds of fences
 that every picket should be thus constructed
 with an outstanding screw-threaded boss at
 the point of its intersection with the rails, as
 it is sufficient that the rails be held moderately
 10 firm, and this is accomplished by constructing
 a portion of the pickets in the manner de-
 scribed. Neither do I confine myself to any
 particular style of rail nor to any definite
 number of them. Any variety of picket may
 15 be used that may be found adapted for the
 purpose. In constructing the fence in this
 manner the pickets may be screwed into place,
 the rails being held in any proper manner in
 their particular position. It will be conven-
 20 ient to make the pickets in this manner of
 malleable metal.
 What I claim is--

1. A metallic fence consisting of the upper,
 lower, and intermediate rails having screw-
 threaded sockets, and the pickets each pro- 25
 vided with raised or laterally-projecting screw-
 threaded parts respectively engaging the
 screw-threaded sockets in the said upper and
 intermediate rails, substantially as shown and
 described. 30

2. A metallic fence consisting of upper and
 lower horizontal rails, the upper rail or rails
 formed with screw-threaded sockets, and pick-
 ets having their lower ends secured to the
 lower rail and their upper portions formed 35
 with raised or laterally-projecting screw-
 threads engaging the screw-sockets in the up-
 per rail or rails, substantially as described.

In testimony whereof I sign this specifica-
 tion in the presence of two witnesses.

CHARLES F. PURDIE.

Witnesses:

N. S. WRIGHT,
 M. B. O'DOHERTY.