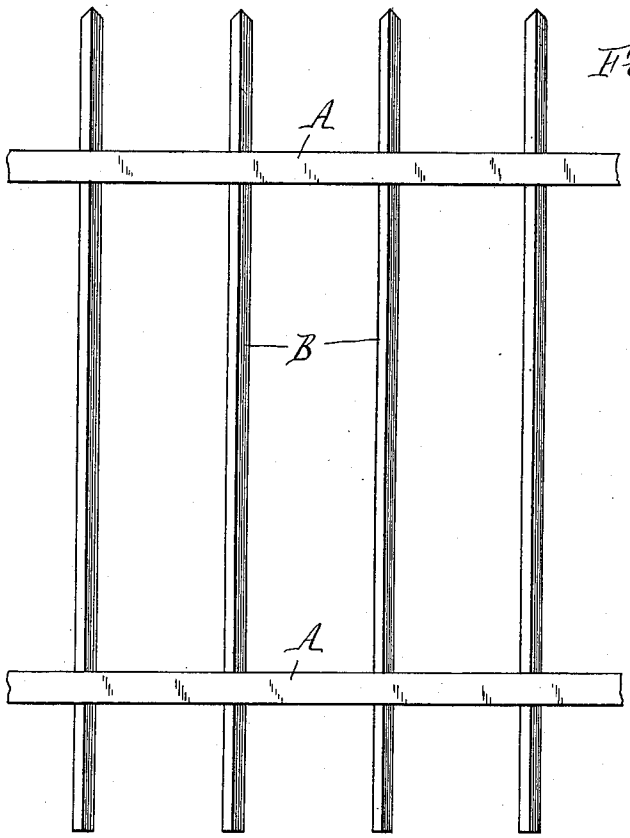
F. R. ROGERS.

FENCE.

APPLICATION FILED DEC. 24, 1909.

1,013,064. **Patented Dec. 26, 1911.**

Fig. 1.



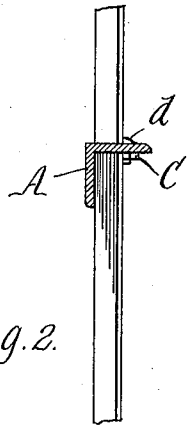


Fig. 2.

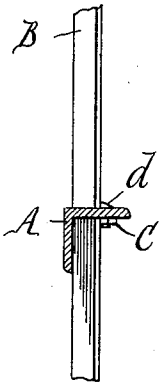


Fig. 3.

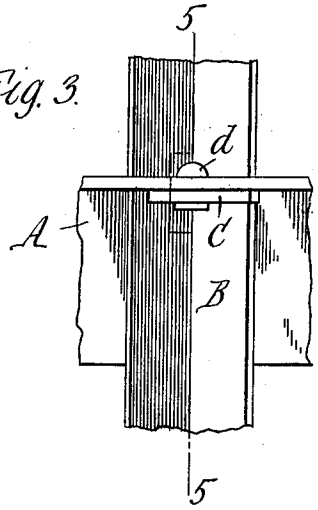


Fig. 4.

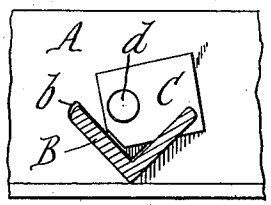
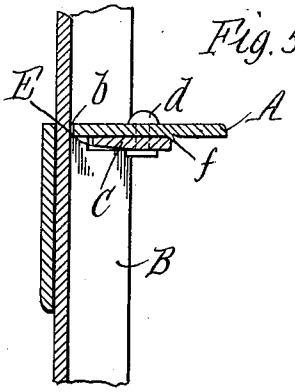


Fig. 5.



Witnesses.
C. H. Bund.
A. G. Dimond.

Inventor.
Frank R. Rogers,
By Wilhelm, Parker & Bund,
Attorneys.

UNITED STATES PATENT OFFICE.

FRANK R. ROGERS, OF BUFFALO, NEW YORK, ASSIGNOR TO EDWARD J. BARCALO, OF BUFFALO, NEW YORK.

FENCE.

1,013,064. Specification of Letters Patent. **Patented Dec. 26, 1911.**

Application filed December 24, 1909. Serial No. 534,826.

To all whom it may concern:

Be it known that I, FRANK R. ROGERS, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Fences, of which the following is a specification.

This invention relates more particularly to metallic fences or grille-work of that sort which is adapted to be shipped or transported in a knock-down condition to the place of destination and there assembled.

The objects of this invention are to produce a light, strong and durable metallic fence of this sort which is of attractive, neat and substantial appearance, and the parts of which can be expeditiously and cheaply manufactured and can be readily assembled at the place of erection by an unskilled person without special tools, and which can also be easily taken apart and moved.

In the accompanying drawings: Figure 1 is a front elevation of a portion of a fence embodying this invention. Fig. 2 is a vertical sectional elevation thereof on an enlarged scale. Fig. 3 is a fragmentary rear elevation showing one of the connections between the fence pickets and the rails. Fig. 4 is a bottom sectional plan thereof. Fig. 5 is a vertical section on line 5—5, Fig. 3.

Like reference characters refer to like parts in the several figures.

A A represent upper and lower horizontal rails or bars of the fence which are preferably made of angle bars, although channel or other suitable shapes could be employed, and B represents the pickets. In the fence shown in the drawings, only two horizontal rails are employed, but where greater strength or stability is required, one or more intermediate rails could be used, and the means hereinafter described for connecting the pickets or rails is also adapted to be used in fences or other structures where only a single rail or bar is employed. The pickets are also preferably made of angle bars, but they can be of other suitable shape and their upper ends are preferably pointed to give a finished appearance to the fence. The horizontal flange of each rail is provided with holes or openings *b* through which the pickets B are inserted. These holes or openings *b* are spaced at desired distances apart and correspond to the shape of the pickets, being of such size that the pickets may readily be inserted therein.

The means for securing the pickets to the rails consist of small metal lock-plates or buttons C which are fastened to the horizontal flanges of the rails A preferably on the undersides thereof, by rivets *d* in such a manner that the lock-plates can be turned on the rivets to engage in slots or notches E in the pickets. The portion of the lock-plate which enters the notch in the picket is preferably tapered slightly, as shown in Fig. 5, so that when the plate is driven into the notch it will wedge tightly therein and be securely held. The lock-plates can be quickly and easily driven into notches in the pickets with a cold chisel, or similar tool, and a hammer, and in using the cold chisel a bur is raised on the rail and on the lock-plate, as indicated at *f* in Fig. 5, which assists in holding the lockplate from turning and thus becoming disengaged from the notch.

A fence of the kind described is cheap to manufacture, since the holes in the rails for the picket and for the rivets can be punched in one operation and the lock-plates can be easily made and riveted to the rail. The slots in the pickets can also be punched, all this work being done in the factory, and the parts of the fence can be tied in bundles, or otherwise secured to facilitate shipment. In assembling the parts, the rails for a length of fence are laid on the ground or on any suitable support and the pickets are slipped into place through the holes in the rails and the lock-plates are then driven into the notches to secure the pickets to the rails in the manner described, after which the assembled length of fence is secured to the fence posts. The fence may be taken down and moved without injuring any of the parts by simply driving the lock-plates out of the slots. By making the lock-plates small, a more secure connection is obtained between the rails and the pickets than by long plates secured at a distance from their ends which are liable to bend or spring out of place. Another advantage of the locking means described is that in driving the lock-plates into the notch, the picket is forced or wedged into the angle of the hole against

the outer edges thereof, which holds the picket firmly from movement in the hole and makes a very secure and rigid connection between the rail and the picket and also improves the appearance of the fence by leaving no space between the outside edges of the hole and the picket. The holes can be made sufficiently large to permit the pickets to slide easily into them and yet the pickets, when secured, will have no play therein. The rails are preferably so arranged and punched that the vertical flanges of the rails and the corners of the pickets face toward the outside of the fence. Thus when the fence is seen from the outside, the rails and pickets appear like solid bars, which gives the fence a very solid and substantial appearance. The securing devices are not visible from the outside since they are located on the lower sides of the horizontal flanges of the rails and the heads of the rivets are behind the pickets.

I claim as my invention:

1. In metallic fencing, the combination of a plurality of parallel rails provided with holes for pickets, pickets extending through the holes in said rails, each picket being provided adjacent to each rail with a notch, and lock plates which are permanently secured to said rails adjacent to said pickets and are adapted to be moved into engagement with the notches in said pickets, said lock plates being located behind portions of said fencing which hide the lock plates from view from the front side of the fencing, substantially as set forth.

2. The combination with a rail having a horizontal flange and a depending flange and provided with holes in said horizontal flange, pickets which pass through said holes in the rails and are provided with notches adjacent to the rail, the pickets and holes being of a shape to prevent the pickets from turning in said holes, and lock plates which are permanently riveted on the under side of the horizontal flange of said rail in rear of the pickets and are adapted to be turned on the rivets into locking engagement with the notches in the pickets, substantially as set forth.

Witness my hand, this 20th day of December, 1909.

FRANK R. ROGERS.

Witnesses:

T. H. TURNER,

CHARLES VALLONE.