2 Sheets—Sheet 1.

J. H. VAN DORN.

Iron Fence.

No. 208,699. **Patented Oct. 8, 1878.**

Fig 1.

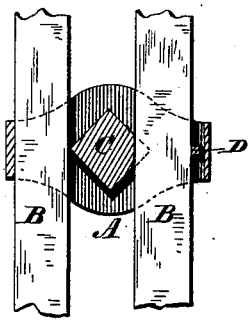


Fig 3.

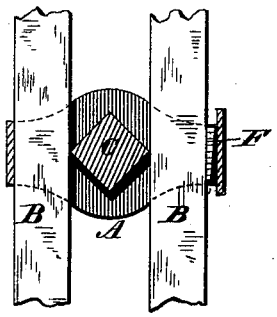


Fig 2.

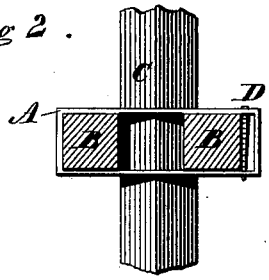


Fig 4.

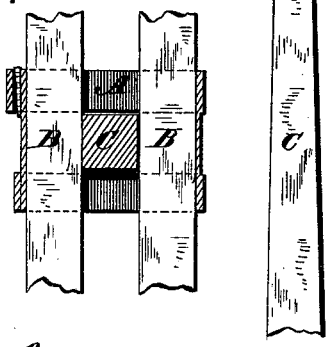


Fig. 5.

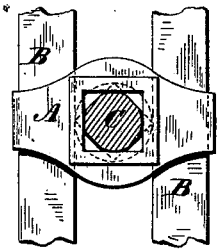


Fig 6.

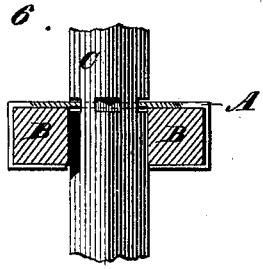
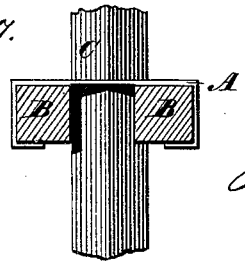


Fig 7.



Witnesses.

Harry King

C. M. Robbins

Inventor.

James H. Van Dorn

By Hill Wellcroft

his attys

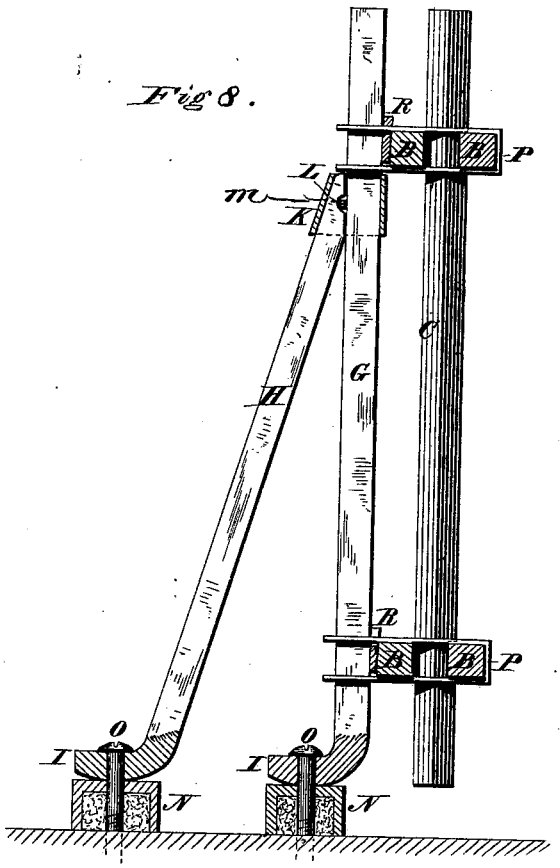
2 Sheets—Sheet 2.

J. H. VAN DORN.

Iron Fence.

No. 208,699. Patented Oct. 8, 1878.

Fig 8.



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES H. VAN DORN, OF CLEVELAND, OHIO.

IMPROVEMENT IN IRON FENCES.

Specification forming part of Letters Patent No. **208,699**, dated October 8, 1878; application filed September 25 1878.

To all whom it may concern:

Be it known that I, JAMES H. VAN DORN, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Iron Fences, Railings, &c.; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figures 1, 2, 3, 4, 5, 6, and 7 are plans and elevations, showing the manner of uniting the pickets and stringers of a fence; and Fig. 8 is a side elevation, partly in section, of the fence-post, by which the stringers and pickets are supported, the base of the post and its brace being shown in section.

Similar letters of reference in the accompanying drawings denote the same parts.

My invention is designed to improve the means for uniting or locking the stringers and pickets of an iron fence, cresting, or railing together and to the posts, and also to improve the method of constructing the posts and attaching the stringers and pickets thereto.

The invention consists, first, in one or more metal bands or sections of bands, embracing the parallel stringers, between which the pickets are placed, with means for locking the parts compactly together.

It also consists in the construction of the posts, as I will presently describe.

It finally consists in the means for attaching the stringers and pickets to the fence-posts, and adjusting them vertically thereon.

In the accompanying drawings, A is the metal band or loop, either made in one continuous piece, as shown in Figs. 1, 2, 3, 5, and 6, or in two continuous pieces, joined together, as shown in Fig. 4, or in a single piece, having bent ends, which are disconnected from each other, as shown in Fig. 7. B B are the iron rails or stringers, placed parallel to each other within the ends of the bands; and C C are the pickets, passed vertically through the bands, as shown. The pickets, stringers, and bands, being thus arranged, are clamped firmly together in any of the following ways:

In Figs. 1 and 2 the picket is notched in one side, and after having been inserted between the rails a key or wedge, D, is driven vertically down through the band outside the stringer, which draws the parts firmly and securely together.

In Figs. 5 and 6 the picket is shown notched, to receive the edges of the band when the picket is turned after its insertion, and it may be either wedged in place by driving a key between one end of the band and the outside of one of the stringers, or the picket may be made of such size that when it is turned in the band it shall spread the stringers apart, and thus lock the parts together.

In Fig. 3 the picket is shown without the notch; but a lateral key, F, is employed to lock the parts together.

In Fig. 4 the picket is shown slightly wedge-shaped or tapering, so that when it is inserted without turning between the stringers it spreads them apart, and thus produces the lock.

In Fig. 7 the picket is shown notched in one side to engage one of the stringers when turned one-quarter round, and may be held with or without the wedge, as above described.

Other modifications may be adopted without departing from the principle of this part of my invention, which consists, essentially, in the employment of the bands, stringers, and pickets, locked or clamped firmly together by a wedging or binding action.

G is the fence-post, and H its brace, each made with broad feet I, having a rounded or convex under-surface, by which the post and brace are adapted to uneven surfaces upon roofs, balconies, &c. The top of the brace is beveled to fit against the side of the post, and the two are held together by a band, K, and a key, L, passing through the band and through a lateral notch, *m*, formed in the bevel of the brace, as shown. The rounded feet of the brace and post rest upon and are secured to hollow washers N N, which are filled in the under side with lead, putty, or other water-proof material, and are intended for use upon balcony-floors, tin and other roofs, and in all other situations where moisture should be excluded from the bolts O O, or other fastenings which secure the brace, post, and washers in place. This is more particularly necessary where the posts are fastened to wood or tin, because it prevents the oxidation of the metal

parts which are in contact with the wood or tin. The rounded feet adapt the brace and post to the washers when the latter rest upon uneven or inclined surfaces.

In securing a fence-panel to the post I employ metal loops P P, the ends of which fit over the post, the main portion receiving the stringers and upright picket in any of the ways hereinbefore described. The panel is adjusted vertically upon the post by means of vertical wedges R, inserted in one or more of the loops next the post, as shown.

I claim as my invention—

1. The combination of the flat iron bands A, the squared parallel stringers B B, and the squared pickets C, substantially as described, for the purpose specified.

2. A fence, railing, or cresting post or brace constructed with a foot having a rounded under surface, substantially as described, for the purpose specified.

3. The post G and brace H, constructed with the convex feet I, and secured together by the band K and lateral key L, substantially as described.

4. The posts of a fence, railing, or cresting mounted upon hollow washers, filled in the under side with lead, putty, or other water-proof material, substantially as described, for the purpose specified.

5. The combination of the post and brace having convex feet with the hollow washer filled with water-proof material, substantially as described, for the purpose specified.

JAMES H. VAN DORN.

Witnesses:

WM. K. SMITH,

D. B. VAN DORN.