

J. B. WICKERSHAM.
Iron-Fences.

No. 135,188.

Patented Jan. 21, 1873.

Fig. 1.

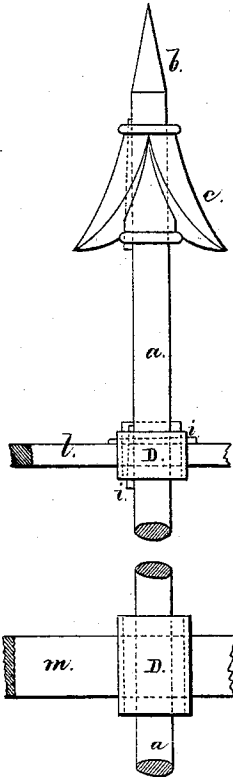


Fig. 3.

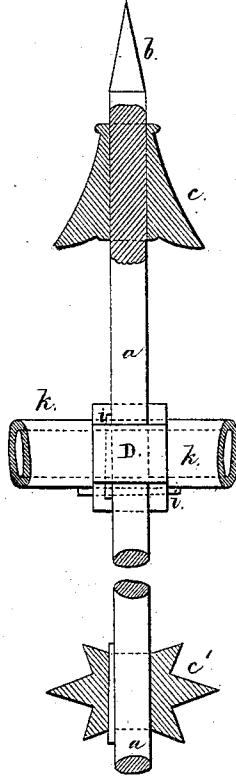


Fig. 2.

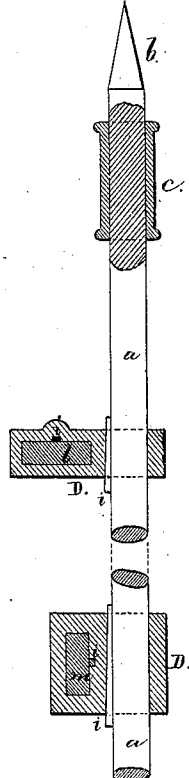


Fig. 7.

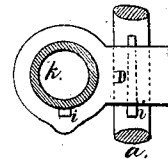


Fig. 4.

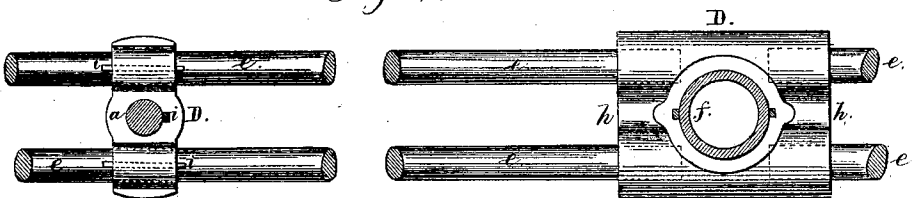
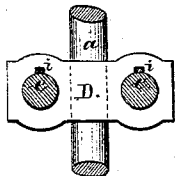


Fig. 6.



Witnesses,

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Geo. D. Walker.

Inventor,

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Lemuel W. Serrell
Atty.

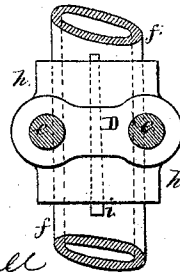


Fig. 5.

UNITED STATES PATENT OFFICE.

JOHN B. WICKERSHAM, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN IRON FENCES.

Specification forming part of Letters Patent No. 135,188, dated January 21, 1873.

To all whom it may concern:

Be it known that I, JOHN B. WICKERSHAM, of Philadelphia, in the State of Pennsylvania, have invented an Improvement in Iron Fences, of which the following is a specification:

Iron fences have been made with vertical bars or pickets with cast-iron ornaments forming the upper ends, but these are liable to be broken. To avoid this I make the end of the wrought-iron bar or rod itself form the top of the ornament, and apply the cast-iron composing the other portion of the ornament around the bar or picket near the upper end, the entire ornament being above and separate from the horizontal bars. Iron bars have been united to form a fence by casting iron at the points of intersection; this contracting around the bars forms an immovable union.

When the railing is being put up there is frequently difficulty in making the sections join to each other or conform to the grade of the street. I avoid all these difficulties by making the railing with cast-iron connecting-blocks, with holes for receiving the horizontal and vertical or inclined bars, so that the parts can be slipped together to form sections, or to build the iron fence progressively; and these iron connecting-blocks are made with key-seats, so that the parts of the fence will be permanently secured together by driving in tapering keys, which, for convenience, may be cut-nails; and these, together with the paint, asphalt, or other material used to cover the fence, will effectually prevent any slipping of one part upon the other, or the accidental dropping out of any of the keys; and these keys are preferable when sufficiently long to pass entirely through the ornament, and be turned up or riveted at the point.

In the drawing, Figure 1 is an elevation of a picket and the connecting-blocks. Fig. 2 is a partial section transversely of the fence. Fig. 3 is a partial section of the picket and ornaments. Fig. 4 is a sectional plan. Fig. 5 is a sectional elevation of a connecting-

block at the post, and Fig. 6 is a similar view of the picket.

The pickets *a* are of suitable size, and their upper ends *b* form part of the top ornaments, the remainder of such ornament being composed of cast-iron, as at *c*—that is, either keyed on or cast around the picket. The rails or bars are either horizontal or inclined; and *D* is the connecting-block, of cast metal, with holes or openings into or through it, running at right angles or inclined to each other, and the respective openings have slots or key-seats for the reception of keys or nails, as at *i*.

Where the horizontal and vertical bars are both round, they are to pass each other, as shown in Figs. 4 and 6, the connecting-block being shaped accordingly.

Where the bars *e* are united to the post *f* the connecting-block *D* is to be made similarly to that shown at *h*, Figs. 4 and 5.

The post may be polygonal or round, and tubular or solid. I have shown it tubular.

The horizontal rail may be a tube, as at *k*, and the connecting-block *D* will be similar to that shown in Figs. 3 and 7.

Where the rails of the fence are composed of flat metal bars *l m* the connecting-blocks *D* are to be made as shown in Figs. 1 and 2.

When flat metal bars are used for fences they have sometimes been placed with the longest sectional measurement vertically. In this position the fence is not sufficiently stiff. I therefore employ bars, some of which are laid flatwise, as at *l*, to stiffen the fence horizontally; and others, as at *m*, are placed up edgewise to support the weight of the parts between the posts.

Fences made in the aforesaid manner can be compactly boxed for shipment, and put together with facility; and the parts are adapted to the varying circumstances that arise in the manufacture of fences.

The ornament *c'*, Fig. 3, may be connected to the picket *a* by a key in the same manner as the blocks *D* are secured in place.

By the use of key-seats cast in the connecting-blocks the cost is not increased, and

the keys, when driven into the seats, form very firm and reliable connecting devices.

I claim as my invention—

1. The metal connecting-blocks *D*, made with seats for the wedges or keys, and binding the bars of the fence, in the manner set forth.

2. The ends to the pickets, formed of the upright bar and of the collar thereon, as set forth.

3. An iron fence made with the pickets *a*, connecting-blocks *D*, rail *l*, placed flatwise, and rail *m*, placed edgewise, as and for the purposes set forth.

Signed by me this 29th day of October, A. D. 1872.

JOHN B. WICKERSHAM.

Witnesses:

GEO. D. WALKER,
GEO. T. PINCKNEY.