

J. B. WICKERSHAM.
IRON FENCE.

No. 183,613.

Patented Oct. 24, 1876.

Fig. 1.

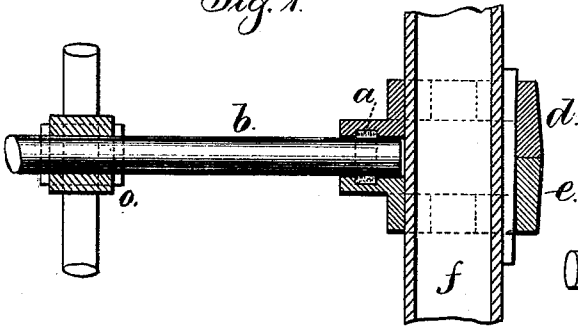


Fig. 2.

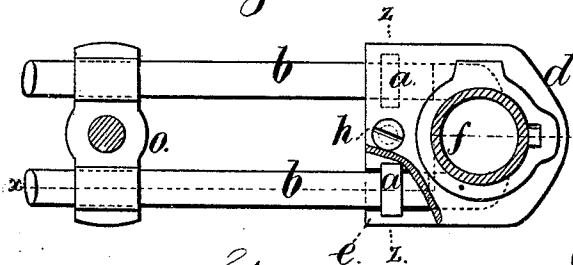


Fig. 8.

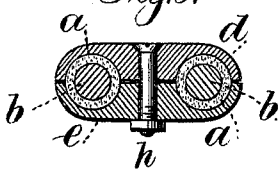


Fig. 4.

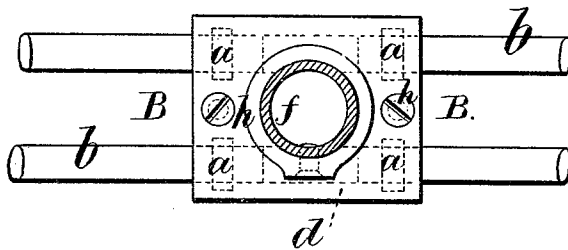


Fig. 5.

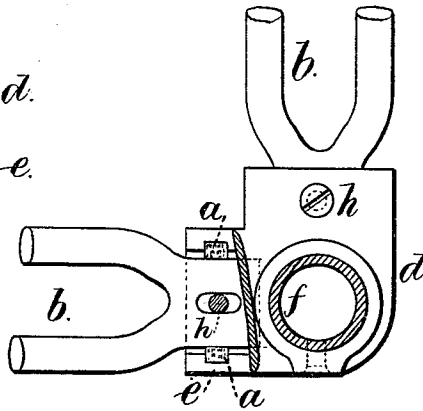
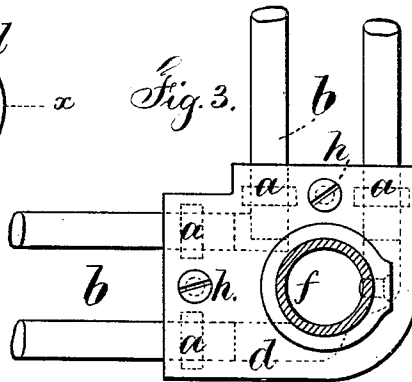


Fig. 3.



Witnesses

Chas. H. Smith
Harold Ferrell

Inventor

John B. Wickersham
per Lemuel W. Ferrell

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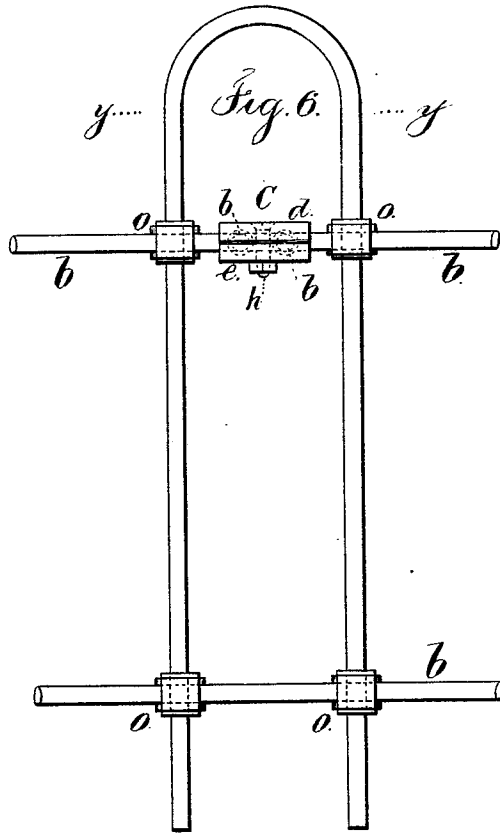
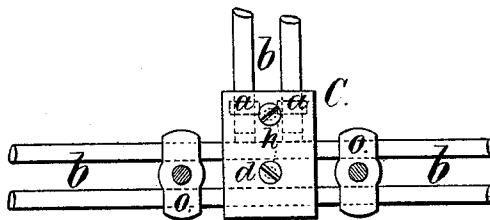


Fig. 7.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN B. WICKERSHAM, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN IRON FENCES.

Specification forming part of Letters Patent No. **183,613**, dated October 24, 1876; application filed April 22, 1876.

To all whom it may concern:

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

My present improvements relate to means for securing the ends of the horizontal rails.

In constructing iron fences, it is generally preferable to secure the posts in position before the intermediate railing is connected to the posts. In these cases it is difficult to insert the horizontal bars into openings, and properly secure them.

By my improvement each end of the rail or horizontal bars is received into a two-part clamp, when it is open, and secured by screwing the parts together, and these clamps unite the intersecting fences or surround the posts, and are adapted to the corner or intermediate posts or joints.

In the drawing, Figure 1 is a vertical section of part of a post with the joint applied thereto, the section being at the line *x x* of Fig. 2, which is a plan view of an end clamping block and post. Fig. 3 is a similar view of a corner clamp. Fig. 4 shows the clamp as double for an intermediate post. Fig. 5 shows the clamp as adapted to a different-shaped horizontal bar. Fig. 6 is an elevation representing part of a panel with the clamping-blocks applied to the bars thereof. Fig. 7 is a sectional plan of the same at the line *y y*, and Fig. 8 is a section at the line *z z* of Fig. 2.

The expansion and contraction of the bars of an iron fence often tend to displace the structure, because the connections are unyielding.

I overcome this difficulty by the use of a projecting collar or rubber band, *a*, around the bar *b*, near the end thereof, such collar being received into recesses in the faces of the two-part clamps *d* and *e*, so that when said clamps are pressed together by a bolt or bolts, *h*, the parts will be clamped sufficiently to prevent the bar becoming displaced; but they will yield to the powerful force of the bar, as it expands or contracts lengthwise.

The two-part clamps *d e* are adapted to

grasp the ends of the bars *b* where they come together, as at B, Fig. 4, or to connect the end of a division-fence with the bars of the fence crossing the same, as at *c*, Figs. 6 and 7. These clamps will, however, be more generally used upon the posts, said clamps having holes through them so as to pass over the post *f*, which post is usually of gas-tubing, and the clamp is to be secured in its proper vertical position upon the post, by nails driven into key-seats, as set forth in my Patent No. 135,188, dated January 21, 1873; but any other desired means may be employed to hold the clamps to the posts.

These clamps *d e* are constructed so as to be adapted to connect the rails or bars at the angles of the fence, as in Fig. 3, at the ends of the fence, as in Fig. 2, or at an intermediate post, as in Fig. 4; or where the rails are bent toward each other, as in Fig. 5, the clamps can be made smaller, and if the rails are welded together, or to an intermediate block, the bolt *h* can be passed through them, and in such cases the hole is to be elongated to allow of expansion and contraction, as aforesaid.

It will be apparent that, if a metal or other collar, nut, or washer, is secured permanently upon the rails, near their ends, in place of the rubber bands, the recesses in the clamps may be made large enough to allow of the motion due to the expansion and contraction of the rails.

The connecting-blocks *o* are not made with key-seats, as in aforesaid patent, but they have holes through them that allow of the insertion of the rails and pickets.

Thin wedges or keys driven in between the block *o* and rail or bar serve to prevent the connecting-block moving.

I claim as my invention—

1. The combination, in an iron fence, of a two-part grasping-clamp, the horizontal rails, and elastic material between the rails and clamps, substantially as and for the purposes set forth.

2. In an iron fence, the two-part clamp *d e*, connected by a bolt and provided with openings, in combination with the post passing through such openings, and the rail received

and secured by the clamps, substantially as set forth.

3. The two-part 'grasping-clamps with recesses for receiving the ends of the rails, in combination with the rails, and projections or collars entering the recesses in the clamps, substantially as set forth.

Signed by me this 21st day of April, A.D. 1876.

JOHN B. WICKERSHAM.

Witnesses:

GEO. T. PINCKNEY,
CHAS. H. SMITH.