

G. H. Clark.

Grate-Bar for Furnaces.

N^o 73436

Patented Jan. 21, 1868.

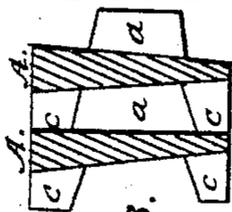


Fig. 3.

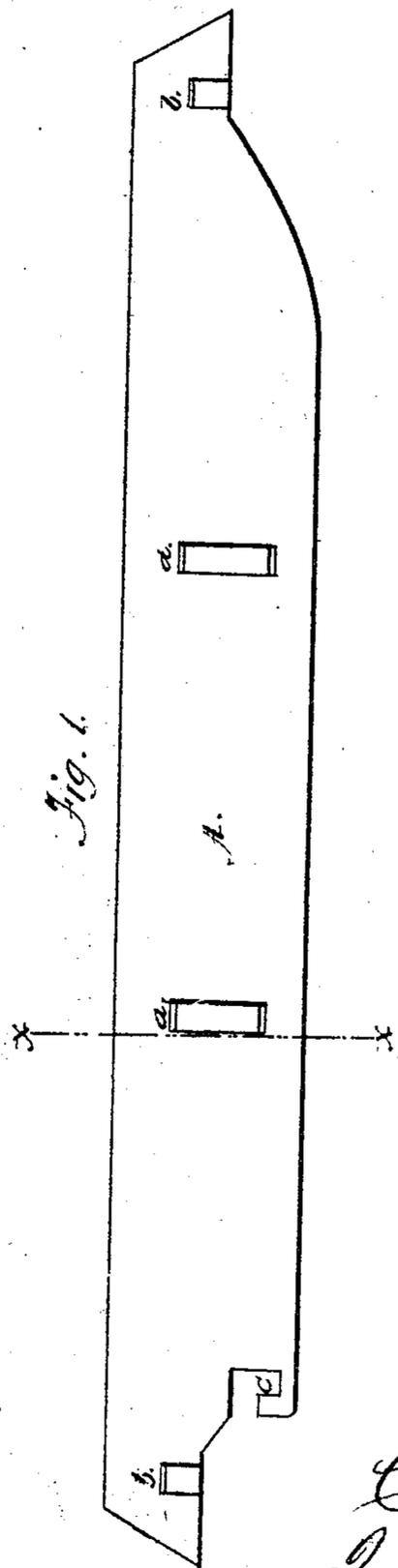


Fig. 1.

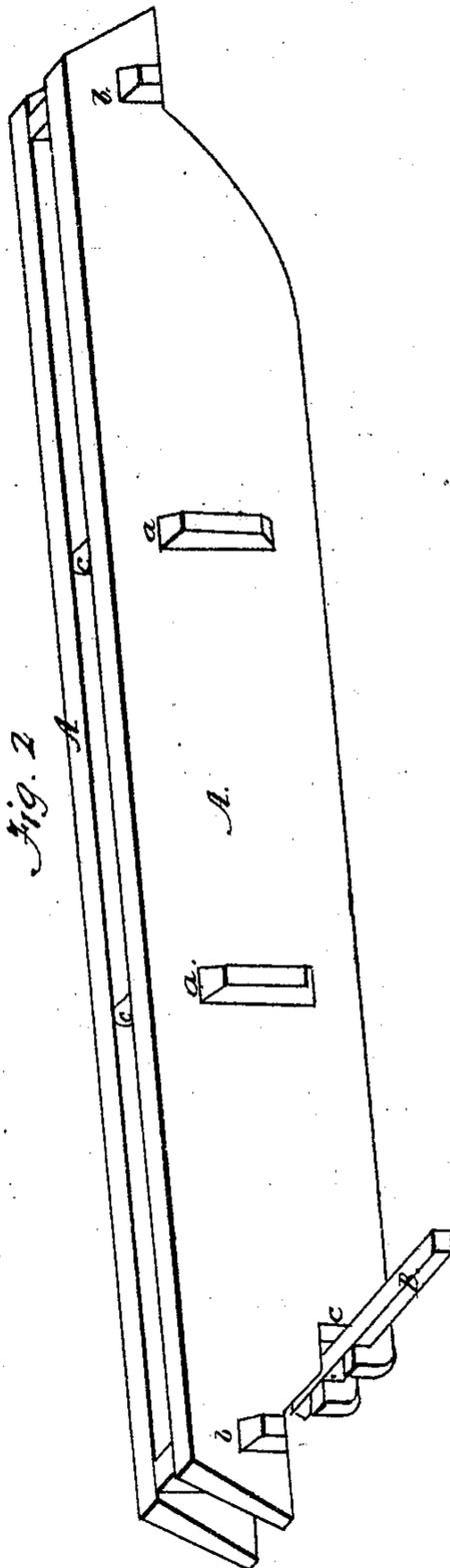


Fig. 2.

Carroll & Morgan
John M. Gally

Inventor:
George H. Clarke

United States Patent Office.

GEORGE H. CLARKE, OF BROOKLYN, ASSIGNOR TO THE SALAMANDER
GRATE-BAR COMPANY, OF NEW YORK, N. Y.

Letters Patent No. 73,436, dated January 21, 1868.

GRATE-BARS FOR FURNACES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, GEORGE H. CLARKE, of Brooklyn, in the county of Kings, and State of New York, have invented certain new and useful Improvements in Grate-Bars for Furnaces; 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, figures, and letters of reference thereon, making part of this specification. Of the said drawings—

Figure 1 represents a side view of the bar.

Figure 2, a perspective view of two of the bars joined together by the connections.

Figure 3, a sectional view through line *xy*, fig. 1.

Similar letters of reference indicate like parts in all the drawings.

My invention is an improvement upon the patent granted to Samuel Vansyckel, October 19, 1855, and which is now owned by the Salamander Grate-Bar Company of New York city, and to whom my invention has been duly assigned.

In the use of the Vansyckel bar, as it is called, much difficulty is experienced when it becomes necessary to remove a broken or defective bar; the system of interlacing being such that all the bars, commencing at the one which was laid last, originally, must be removed in order to reach the defective bar, no matter where it may be located in the furnace. In large furnaces this proves a serious objection.

My improvement completely obviates this difficulty, and enables me to remove a bar wherever it may be located in the furnace, very quickly, and without disturbing the rest of the bars.

To enable others skilled in the art to make and use this, my invention, I will proceed to describe the construction and operation thereof.

A represents a bar, cast with lugs or projections, *aabb*, on one side, and with the projections *cc* on the opposite side, and with a recess, C, on the end, as plainly shown in figs. 1 and 2. The projections *aa*, fitting into the mortises formed on the side of the bar by the projections *cc*, serve to interlock and support the bars firmly in the centre, and the projections *bb* support the ends of the bars one upon the other. In the ends of the bars A, I cast a mortise or recess, C, into which a key-rod, B, fits, which extends the width of the furnace, and by means of which the bars are locked and held in place. By removing this key-rod B, and sliding a bar forward, the distance equal to the thickness of the projections, it can be readily lifted out and removed from any part of the furnace, and a new one inserted with but little loss of time.

Claim.

I claim the arrangement of the locking-rod B and recess C, in combination with the interlocking-bar A, the whole constructed and operating as set forth and specified.

GEORGE H. CLARKE.

Witnesses:

C. A. DURGIN,
JOHN McNALLY.