



Witnesses. Of. C. Ashkettles

Inventor. J. L. Reilly per Muniff attorneys

## JOSEPH L. REILLY, OF CHESTER. PENNSYLVANIA.

Letters Patent No. 75,053, dated March 3, 1868.

## IMPROVEMENT IN FURNACE-DOOR LATCHES.

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

## TO ALL WHOM IT MAY CONCERN:

Be it known that I, Joseph L. Reilly, of Chester, in the county of Delaware, and State of Pennsylvania, have invented a new and improved Furnace-Door; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a front view of my improved furnace-door.

Figure 2 is an inverted horizontal section of the same, the plane of section being indicated by the line x x, fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to a new furnace-door for marine boilers, and its object is to facilitate the firing of the furnace while the vessel labors in a heavy sea.

The invention consists in the use of a latch, which is pivoted to the door, and which, when the door is opened, springs into a catch that is provided on the furnace-door frame or front of boiler, so that the door will remain open as long as required.

A, in the drawing, represents a furnace-door, of ordinary or suitable description, hinged to the furnace-front in the ordinary or suitable manner. B is the latch pivoted to the front of the door, so that its two ends project beyond the sides of the door, as shown. When the door is closed one end of the latch B fits into a hook or catch, C, so as to hold the door closed, as in fig. 1. When the door is opened the other end of the latch B fits into a recess which is cut into the lower face of a block, D, that projects from the front of the furnace or boiler, as shown, and the latch thus keeps the door open, as indicated by red lines in figs. 1 and 2.

This invention will be of great advantage on all vessels, as the furnace-door will remain open of itself, and will not have to be held open by another person, which has heretofore been a source of much inconvenience. As the bolt projects with its two ends beyond the door, it will be easy to release it from the block D when it is desired to close the door. It may be unnecessary to have that end which is to lock into the catch D project beyond the door, as the same object can be obtained if the end projects somewhat from the face of the door. The recess in the block D may be in any direction, so that the door may be held more or less wide open.

I claim as new, and desire to secure by Letters Patent-

1. Providing a furnace-door with a latch, B, which can be locked into a catch, D, for the purpose of holding the door open, substantially as herein shown and described.

2. The bolt B of a furnace-door, when arranged as described, so that it serves to hold the door open and to keep it closed, substantially in the manner herein set forth.

JOSEPH L. REILLY.

Witnesses:

JOHN C. PRICE, H. H. LINDSAY.