H. A. STADLER.

DEVICES FOR OPENING AND CLOSING DOORS OF FURNACES, &c.

No. 194,008. Patented Aug. 7, 1877.

Fig. 1.

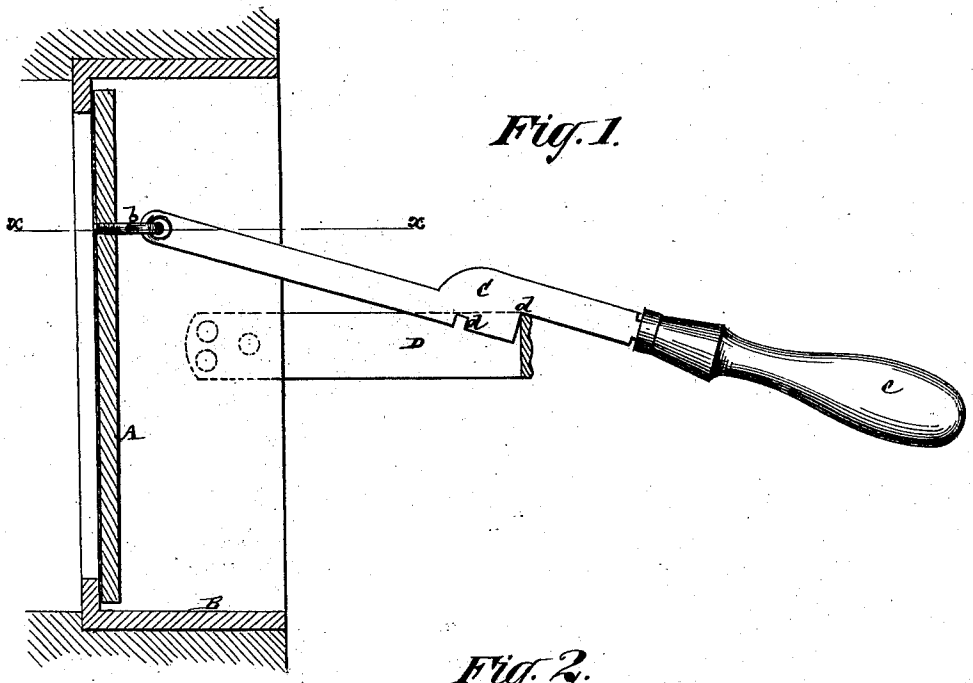
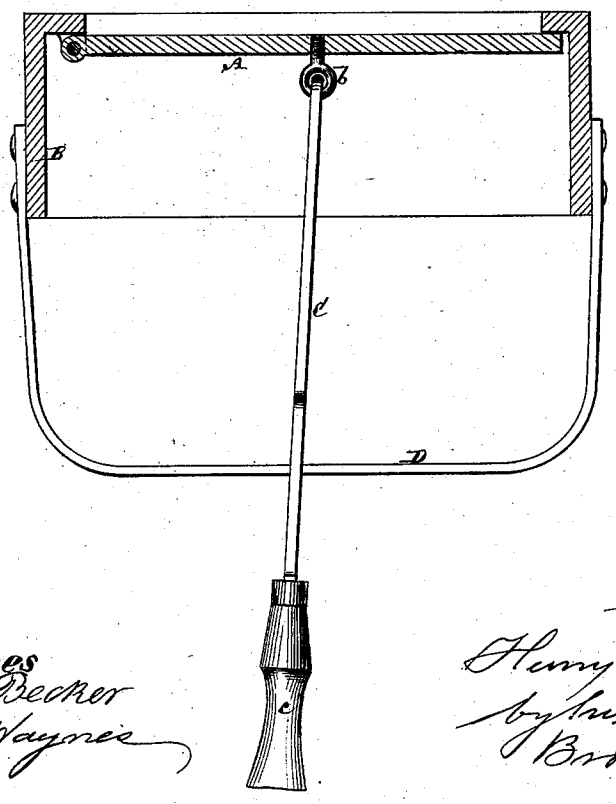


Fig. 2.



Witnesses
John Becher
Fred. Haynes

Inventor
Henry A. Stadler
by his Attorneys
Brown & Allen

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HENRY A. STADLER, OF NEW YORK, N. Y.

IMPROVEMENT IN DEVICES FOR OPENING AND CLOSING DOORS OF FURNACES, &c.

Specification forming part of Letters Patent No. **194,008**, dated August 7, 1877; application filed July 21, 1877.

To all whom it may concern:

Be it known that I, HENRY A. STADLER, of the city and State of New York, have invented a new and useful Improvement in Devices for Opening and Closing the Doors of Furnaces, Ovens, and other Heated Structures or Chambers, of which the following is a description, reference being had to the accompanying drawing, forming part of this specification.

This invention is more particularly designed to be applied to the doors of ovens or furnaces provided with illuminating apparatus, substantially as described in Letters Patent No. 190,637, issued to me May 8, 1877; but it is equally applicable to the doors of other furnaces or heated structures or chambers.

The invention consists in a combination, with the oven or furnace door, of a freely-connected stepped or notched rod or bar, constructed to form a handle, and a fixed guard or rail, arranged to support said bar or rod, and with which the latter (that serves to open and close the door) is made to engage, to hold the door closed, or more or less open, whereby a convenient means is afforded for controlling the opening and closing of the oven or furnace door, and of holding it securely closed or partly closed, as required, without exposing the operator to injury or molestation by the heat of the oven or furnace.

Figure 1 represents a vertical section of an oven or furnace door and mouth-piece thereof with my invention applied, and Fig. 2 a horizontal section of the same on the line *x x*.

A is a hinged door of an oven or furnace, and B its mouth-piece or case. C is a bar, arranged to project from, and connected in a free or jointed manner—as, for instance, by an eyebolt, *b*—with, the outer face or side of the door. This bar, which is constructed to form, or is provided with, an outer handle, *c*, that, when separately fitted, may be of wood, has one or more notches or steps, *d*, in its lower edge. Said bar serves as a convenient means for opening and closing the door without exposing the operator to injury or molestation by the heat of the oven or furnace, and its steps or notches *d*, by their engagement with a fixed outer guard or rail, D, on which said bar rests or is supported, serve to hold the door securely closed or partly open, as required.

I claim—

The combination, with the oven or furnace door, of a freely-connected rod or bar, constructed to form a handle, also provided with one or more steps or notches on its under edge, and the fixed guard or rail, arranged to support said bar, and serving, by the engagement of the steps or notches of the rod or bar with it, to hold the door closed or partly open, as required, substantially as specified.

HENRY A. STADLER.

Witnesses:
HENRY G. GABAY,
CHAS. H. KAREKEL.