

W. H. Pulrer,  
Furnace Grate.  
N<sup>o</sup> 5,232. Patented Aug. 7, 1847.

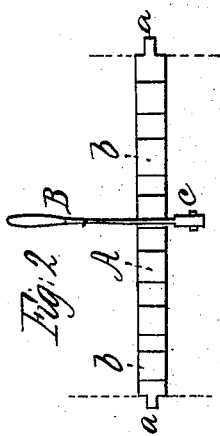


Fig. 1

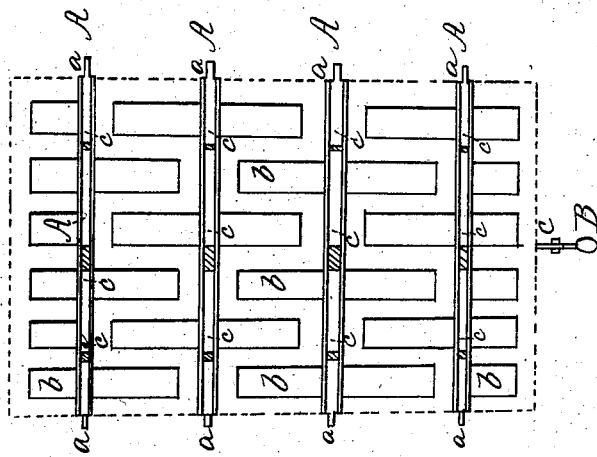
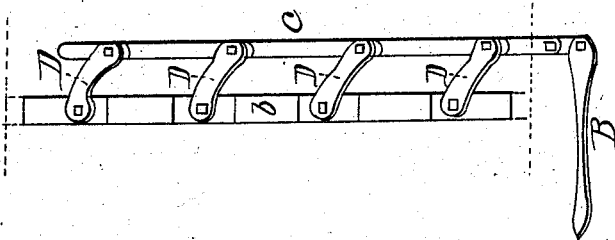


Fig. 3.



# UNITED STATES PATENT OFFICE.

WILLIAM H. PULVER, OF TROY, NEW YORK.

## FIRE-GRATE.

Specification of Letters Patent No. 5,232, dated August 7, 1847.

*To all whom it may concern:*

Be it known that I, WILLIAM H. PULVER, of the city of Troy, in the county of Rensselaer and State of New York, have invented a new and useful Machine to Facilitate the Consumption of Fuel in All Kinds of Furnaces; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification, in which—

Figure 1 is the plan or horizontal projection. Fig. 2, is the elevation or vertical projection and Fig. 3, a transverse section.

The dotted lines, in the drawing represent the inner walls or side of the furnace, fire place, stove, &c. The grate is constructed by bars, A, A, running transversely and dividing it into independent sections. These bars are to be cast, with the connecting parts *c, c*, and being open between said connecting parts. They are fixed in a side plate, by the journals *a, a*, on which they oscillate.

The bars, or teeth, *b, b, b*, are cast with, or affixed to, the transverse bars A, A, and interlock with each other as represented.

The form of the teeth is not material; those in the drawing are made oblong and flat.

The oscillations of the grate are made by the action of the lever B, acting on the rock shaft C, (see Fig. 3,) and through that, by means of the connections D, D, on each one of the transverse bars. When it is desired to extinguish the fires, the bars may receive a semi-revolution, and the cinders, coal, ashes, &c., will fall through the interstices. The lever may operate in the center, as in the drawing, or at the side or rear.

What I claim as my invention, and desire to secure by Letters Patent, is—

The manner of dividing the grate into compartments by means of serrated or interlacing bars or teeth, having an oscillatory or semi-revolving motion with the transverse bars, of which they form a part, or to which they are united; and this in combination with the rock-shaft, through which the said motion is propagated, from the lever.

W. H. PULVER.

Witnesses:

H. A. WILSON,  
ARCHIBALD BULL.