

JOHN CHURCHMAN.

Improvement in Grates for Stoves, &c.

No. 114,762.

Patented May 16, 1871.

Fig 1

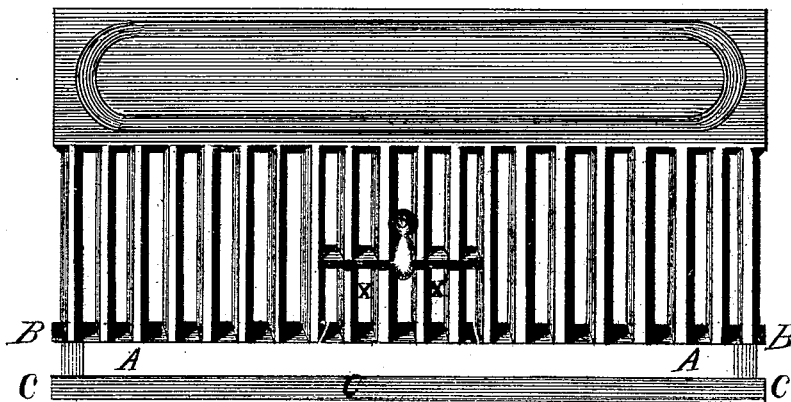


Fig 2~

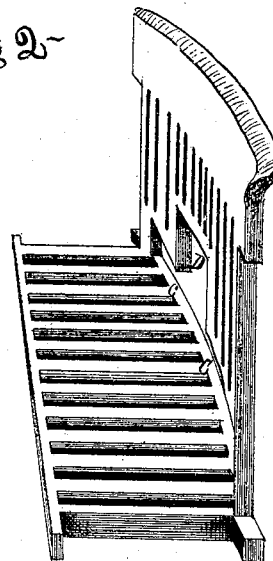
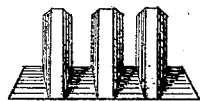


Fig 3~



Witnesses:

W. B. Raymond  
E. Greenaway

Inventor

John Churchman by  
H. G. Beadle, atty.

# United States Patent Office.

JOHN CHURCHMAN, OF BURLINGTON, NEW JERSEY, ASSIGNOR TO  
HIMSELF AND CARBON STOVE COMPANY, OF SAME PLACE.

Letters Patent No. 114,762, dated May 16, 1871.

## IMPROVEMENT IN GRATES FOR STOVES, &c.

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, JOHN CHURCHMAN, of the city and county of Burlington and State of New Jersey, have invented certain new and useful Improvements in Stove, Range, and Parlor-Grates; and I hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a front elevation of a grate with its several parts in place.

Figure 2 is a perspective side view of the same, with the detached or movable portion hereinafter mentioned removed, leaving an opening in the front.

Figure 3 is a detached or removable portion of the grate, forming a gate, slide, or stopper, and which may be made in any other desired form, for purposes and uses hereinafter mentioned.

The nature or essence of my invention consists in an improved method of constructing grates of the kind known as basket-grates, either when formed all of one entire casting or piece or when constructed of several parts, and either as applied to stoves or ranges or to other general purposes and uses.

This mode of constructing grates is such that the upright bars usually forming the front part of the grate, instead of being severally attached to and forming continuous bars with those of the bottom part, as is usual in grates of the class named, are separated

therefrom by a lateral opening, A A, fig. 1, formed by the horizontal bottom bar B of the front portion and the front bar C of the bottom portion of the grate, the object of which, and which I claim as one of my improvements, is to allow of the passage of the poker, in cleaning or dressing the fire, horizontally over and along the top surface of the grate bottom instead of, or as well as, between the bars, as usually practiced, by means of which the fire is much more easily, quickly, and effectually cleaned.

It is also constructed with a detached or removable portion, fig. 3, which may be made of any desired form, and which, when removed, leaves an opening, D, fig. 2, the object and purpose of which are to allow the slag, slate, and other impurities in the fuel to be drawn out from the bottom of the fire without materially disturbing the same or checking the combustion, the said gate or stopper being kept in place during the ordinary poking of the fire.

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

The grate described, provided with openings D and A and the removable part x, the latter being adapted to close the opening D, as described.

JNO. CHURCHMAN. [L. S.]

### Witnesses:

JAS. STERLING,  
DANL. P. NAYLOR.