J. L. MOTT.

Heating Stove.

No. 4,247. Patented Nov. 1, 1845.

Fig. 2.

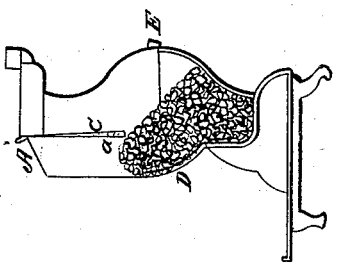
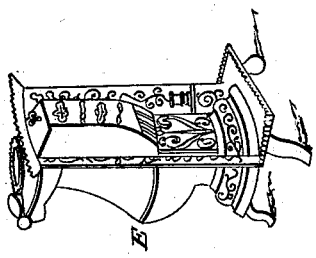


Fig. 1.



UNITED STATES PATENT OFFICE.

JORDAN L. MOTT, OF NEW YORK, N. Y.

COAL-STOVE.

Specification of Letters Patent No. 4,247, dated November 1, 1845.

To all whom it may concern:

Be it known that I, JORDAN L. MOTT, of the city of New York and State of New York, have invented a new and useful Improvement in the Manner of Constructing Stoves for Heating Apartments; and I do hereby declare that the following is a full and exact description thereof.

My stove is principally designed for anthracite coal.

Stoves, that have heretofore been made with feeders in front or a shelf extending out over and above the grate on which the coal is placed that it may slide into the chamber of combustion have either had straight backs or backs that curved or diverged from the fire. The uniform effect of the intense heat from anthracite coal on such stoves is at first to produce a bulging at the back part which gradually increases until they are actually ruptured, an effect which under careless management is sometimes produced in one season. To obviate this breaking and insure durability, also to cause a more equable heat over a much larger surface I give a bulged form to the rear part of my stove substantially like that shown at E, E Figures 1 and 2, in the accompanying drawings. The greatest projection being at that part where the heat in a straight back would act with the greatest force, and where fracture would be most liable to occur; that is at or about the juncture of the upper and lower sections of the main body of the stove which are cast in segments and united by screws or bolts.

For a better description of my stove reference is made to the drawings.

Fig. 1, is a perspective view of the stove showing the front and the bulged back. Fig. 2, is a vertical section through the middle from front to back.

A, *a*, is the feeder, the coal, the fire chamber. D, the shelf extending out above the grate, C, is a plate which serves to guide the coal to the shelf D, and also to gage and regulate the quantity and depth of the coal in the grate. This plate should be so arranged that the coal by its gravity will slide from the shelf D and lay as in Fig. 2, leaving a space between the surface of the coal and the upper segment of the back to give room for the flame to expand. The back being drawn in over the fire, the radiation from the surface of the coal is more direct against it, and the flame impinges with greater force.

The feeder may extend to the full height of the stove as in the drawings or it may be no higher than the shelf D, or at any intermediate height. The lower segment may be lined with fire brick or other bad conducting material, in that case the part below the juncture must be enlarged.

I am aware that stoves have been made with feeders such as I have described, also that stoves have been made in upper and lower segments and much larger at the juncture of the segments than either above or below, as in the globe-stove of W. Hunt. I therefore do not claim either of them separately as new.

What I do claim however is—

1. The combination of the feeder as described with the bulged form of the back.

2. I further claim the drawing-in of the upper segment of the back over the coal in combination with the shelf above the grate and this I do claim without reference to the bulging of the lower segment.

JORDAN L. MOTT.

Witnesses:

LAWRENCE S. MOTT,

AUGUSTUS F. WEEKES.