

CLARK & HARRIS.

Heating Stove.

No. 22,277.

Patented Dec 14, 1858.

Fig: 2,

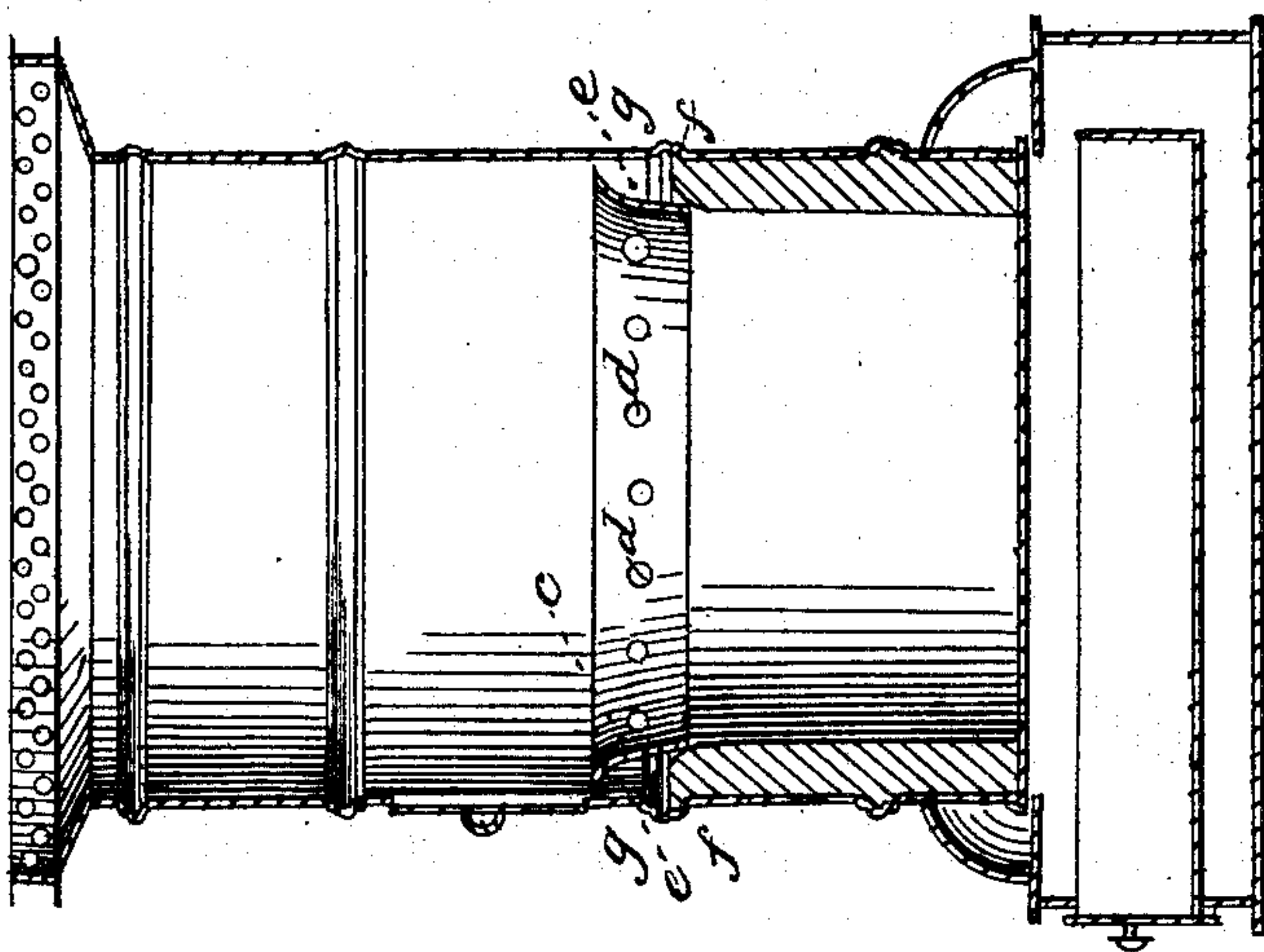
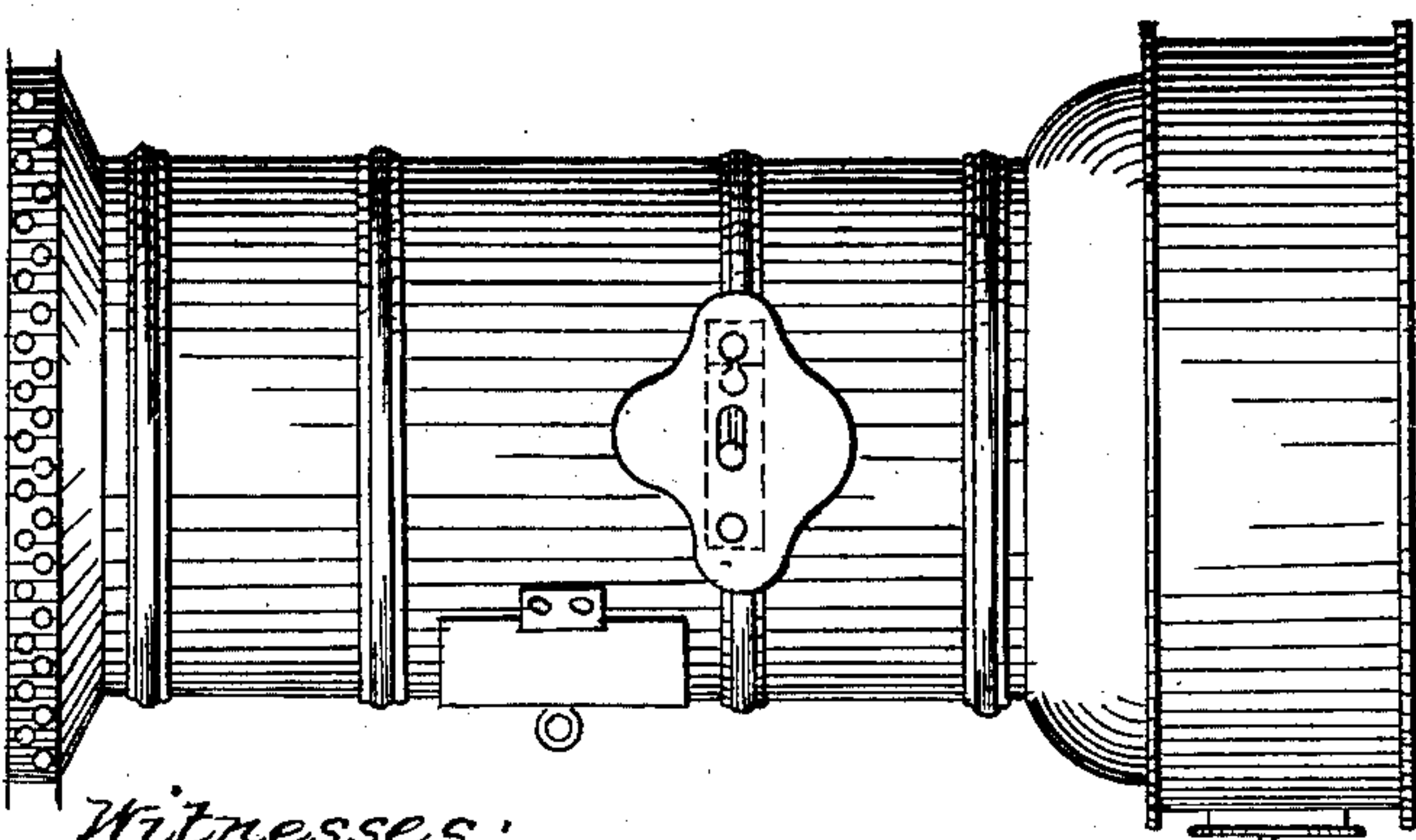


Fig: 1,



Witnesses:

Wm. Mansfield
Peter Conrad

John J. Clark Inventor.
Washington Harris

UNITED STATES PATENT OFFICE.

JOHN S. CLARK AND WASHINGTON HARRIS, OF PHILADELPHIA, PENNSYLVANIA.

STOVE.

Specification of Letters Patent No. 22,277, dated December 14, 1858.

To all whom it may concern:

Be it known that we, JOHN S. CLARK and WASHINGTON HARRIS, of the city of Philadelphia, in the State of Pennsylvania, have invented a certain new and useful Improvement in Parlor-Stoves; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters and marks thereon.

Our invention relates to means for the introduction of heated air into and among the gaseous products of combustion evolved upon the burning of anthracite and other coals in parlor stoves; and it consists in combining with adjustable air passages through the shell of the stove as the upper end of the interior cylinder or lining of the fire surface, a section of a hollow annulus, with perforations for allowing the heated air to pass through and among the products of combustion, the hollow annulus resting upon the top of the lining by its one edge, the other edge being against the shell of the stove and thus forming a chamber.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

Figure 1 of the drawings is a side view of an ordinary cylindrical parlor stove, and Fig. 2, a vertical central section of the same with our improvements added thereto.

In Fig. 1, is shown the adjustable passages for the entrance of atmospheric air, the passages being marked (*a*, *a*) and the pin for moving the sliding plate (*b*). This sliding plate has holes through it and being interposed between the shell of the stove and the ornamental plate on the exterior of the shell, in both of which are also holes, whenever the holes in the sheets or plates are in line with each other the air has free admission and whenever the holes are entirely out of line the air is shut off. By placing the sliding plate so that its holes are more or less in line with the holes in the

other plates the amount of opening for the admission of air is regulated. This arrangement of means for the admission of air, as is shown by the drawings, is placed at the upper termination of the interior cylinder or fire lining of the stove.

The section of the hollow annulus is marked (*c*), the holes in it (*d*). Its lower edge rests upon the interior edge of the lining and its upper edge against the inner surface of the shell of the stove. (*e*) indicates the chamber formed by the lining, the bottom of this chamber being the upper surface of the lining (*f*), its outer side formed by the shell of the stove (*g*), its inner side being arched and made up entirely by the section of the annulus. This sectional plate is designed to be made of cast iron. It will be noticed that in case of injury or being warped or burned out that it can be easily detached and replaced.

Air entering into the chamber (*e*) is readily heated and finds its way into and among the products of combustion, being distributed from the entire circumference toward the central portion of the stove and thus has full and free commingling with all the atoms of combustible matter.

Having thus fully set out the construction and operation of our invention what we claim as new and desire to secure by Letters Patent is—

Combining with the adjustable air passages at the top of the interior cylinder or lining, the section of the hollow annulus with perforations, its lower edge resting upon the inner edge of the lining and its upper edge against the shell plate and thus forming an air chamber as herein set forth.

This specification signed this 23d day of October 1858.

JOHN S. CLARK.
WASHINGTON HARRIS.

Witnesses:

JOHN THOMPSON,
JAMES ROBINSON.