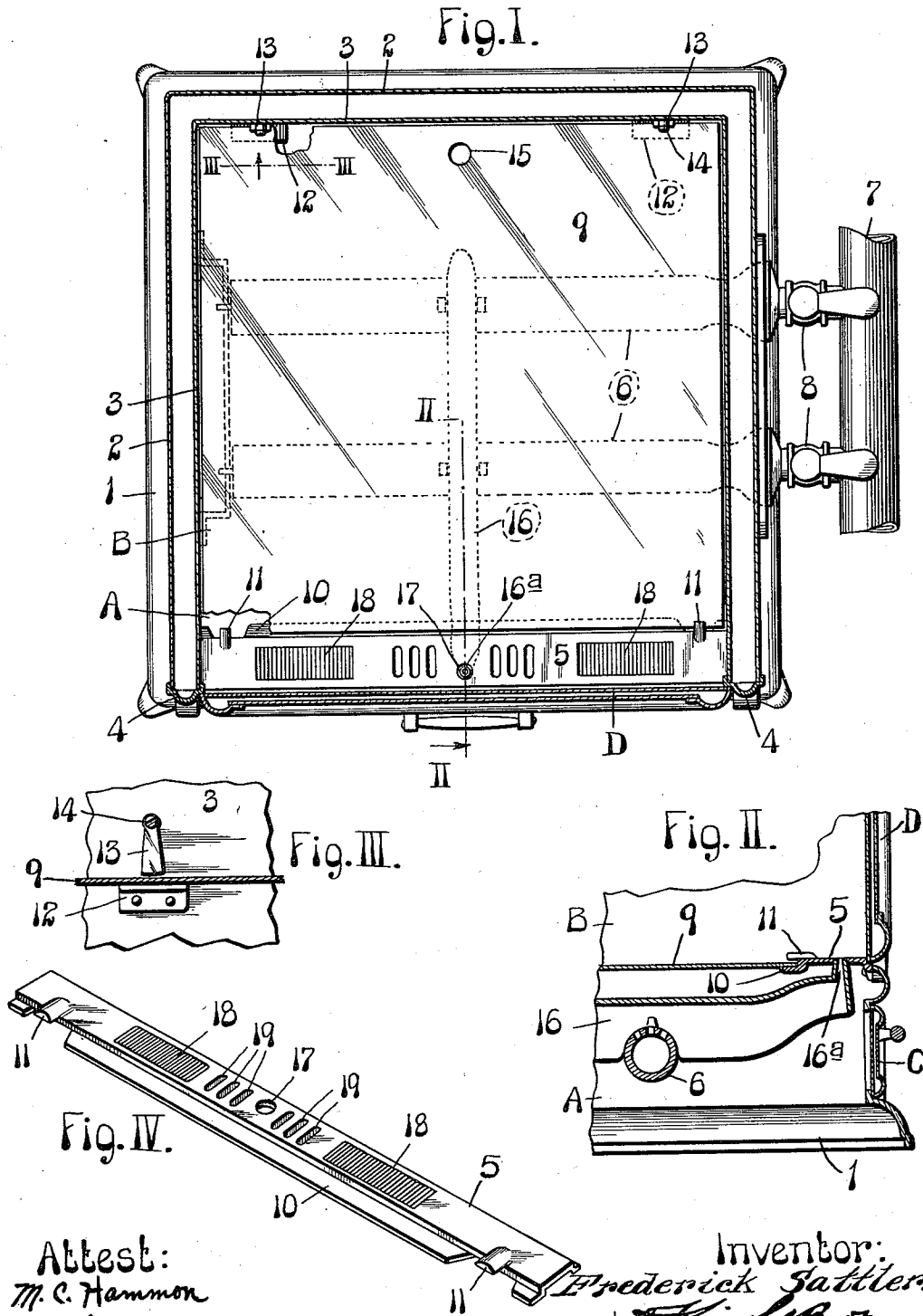


F. SATTLER.
GAS STOVE.

APPLICATION FILED NOV. 25, 1910.

1,013,224.

Patented Jan. 2, 1912.



Attest:
M. C. Hammon
J. B. Megowan

Inventor:
Frederick Sattler.
by *Thompson*
Attys.

UNITED STATES PATENT OFFICE.

FREDERICK SATTLER, OF BELLEVILLE, ILLINOIS.

GAS-STOVE.

1,013,224.

Specification of Letters Patent.

Patented Jan. 2, 1912.

Application filed November 25, 1910. Serial No. 594,008.

To all whom it may concern:

Be it known that I, FREDERICK SATTLER, a citizen of the United States of America, residing in Belleville, in the county of St. Clair and State of Illinois, have invented certain new and useful Improvements in Gas-Stoves, of which the following is a specification.

This invention relates to gas stoves, and has for its primary object to provide an improved construction, combination and arrangement of parts by means of which gas stoves may be simply and durably constructed and rendered serviceable in use.

One of the objects of the present invention is to provide an improved construction for oven bottoms, such as is illustrated and described in the present specification, exemplifying one application of my invention.

A further object is to provide an improved construction which will obviate in a large degree the corrosive effects caused by the moisture in the burned gases.

Another object is to provide an improved removable bottom for the oven of a gas stove, and improved means for holding said bottom in position in such manner as to prevent buckling thereof.

Other and further objects will appear in the specification, and will be specifically pointed out in the appended claims, reference being had to the drawings exemplifying the invention, and in which—

Figure I is a transverse horizontal section of a gas stove constructed in accordance with the principle of this invention. Fig. II is a section on line II—II, Fig. I. Fig. III is a section on line III—III, Fig. I. Fig. IV is a perspective view of the threshold plate or front strip employed for the purposes to be hereinafter made clear.

Referring more specifically to the drawings, and more especially to the embodiment shown therein: a stove base 1 is surmounted by an outer shell 2 and an inner shell 3 which provide spaced inner and outer walls on three sides of the stove, *i. e.*, the back and two sides, the front of the stove being closed in a well-known manner by the usual oven and fire-box doors. At the front of the stove, the spaced side walls on either side are closed by a beading strip 4.

Rigidly secured to the lateral walls of the shell 3 in any suitable manner, is a front strip or threshold plate 5, below the level of which and between it and the rear wall

of the shell 3, are disposed a pair of tubular burners 6 which receive their fuel supply from a manifold 7, mounted on one side of the stove and having a flow therefrom into the burner tubes 6 controlled by a pair of valves 8 of usual and well-known construction. Interposed between a fire compartment A and an oven compartment B is a floor plate 9 of the oven compartment, said plate, together with the threshold plate 5 forming a partition which separates the fire compartment A from the oven compartment B. The front strip or threshold plate 5 is provided with a depressed rearwardly extending flange 10 which supports the floor plate 9 along its front edge. Disposed above the flange 10 and spaced therefrom are a pair of alined lugs 11 forming integral projections from the threshold plate 5, said lugs 11 being disposed, respectively adjacent the lateral walls of the shell 3. Rigidly mounted on the rear wall of the shell 3, and having their upper supporting surfaces in the same plane with the upper supporting surface of the flange 10 are a pair of brackets 12 upon which rest the rear edge of the plate 9. The floor plate 9 is, therefore, securely supported along its front and rear edges, and in order to make allowances for expansion and contraction, said floor plate is made somewhat smaller than the space between the walls of the inside shell 3. In order to releasably lock the floor plate 9 in position, a pair of locking fingers 13 are swingingly mounted on the rear wall of the shell 3 by means of pivots 14. When the locking members 13 are swung around into positions above the pivot 14, the removable floor plate 9 is adapted to be removed by having an aperture 15 for the reception of a finger for lifting said floor plate.

A "lighter" 16 which rests on the burners 6, and has a nipple 16^a at its forward end projecting into an opening 17 in the threshold plate 5 is of a substantially inverted channel cross section, whereby it is adapted to convey a small portion of the gas from the burner 6 to the nipple 16^a. Arranged on either side of the opening 17 and some distance therefrom, is a friction plate 18 for striking matches, while between the touch hole 17 and each of the friction plates 18 are disposed a plurality of sight openings 19 through which the fire within the fire compartment A may be inspected. In this

manner, it is unnecessary to open the door C of the fire compartment A, ignition being brought about by applying a lighted match to the opening 17 after the door D of the

oven B has been opened.

By making the threshold plate of cast iron, and having the sheet metal floor plate 9 removably supported by the side walls of the furnace and by said threshold plate, not only are the advantageous mechanical features already pointed out secured, but the several parts are made more durable, since that portion of the oven floor, which is adjacent the door D and which is exposed to the moisture of condensation more than other parts, is thereby better adapted to resist the corrosive effects of moisture. Moreover when sheet metal floor plates are rigidly connected to the inner side walls of a stove, considerable disadvantage is encountered by reason of the buckling and warping due to expansion. In the present invention, however, these disadvantages are obviated by having the floor plate 9 loosely mounted within a space sufficient to permit expansion, and having its edges loosely held to permit expansion. At the same time, however, said plate is supported above and below to prevent displacement.

What I claim is:

1. In a gas stove, the combination with an inner shell comprising spaced lateral walls and a rear wall, of a threshold plate secured to the lateral walls and extending across the front of the stove, a floor plate supported along its front edge by said threshold plate, means mounted on the rear wall of said inner shell for releasably locking said floor plate to the rear wall, burners disposed within the inner shell below said floor plate, and a lighter for conveying gas from said burners, said lighter being provided with a nipple opening through said threshold plate.

2. In a gas stove, the combination with an inner shell comprising spaced lateral walls

and a rear wall, of a threshold plate secured to the lateral walls and extending across the front of the stove, a floor plate supported along its front edge by said threshold plate, means mounted on the rear wall of said inner shell for releasably locking said floor plate to the rear wall, burners disposed within the inner shell below said floor plate, and a lighter for conveying gas from said burners, said lighter being provided with a nipple opening through said threshold plate, said threshold plate being provided with sight openings therethrough on either side of said nipple.

3. In a gas stove, the combination with an inner shell comprising spaced lateral walls and a rear wall, of a threshold plate secured to the lateral walls and extending across the front of the stove, a floor plate supported along its front edge by said threshold plate, burners disposed within the inner shell below said floor plate, and a lighter for conveying gas from said burners, said lighter being provided with a nipple opening through said threshold plate.

4. In a gas stove, the combination with an inner shell comprising spaced lateral walls and a rear wall, of a partition extending across between said lateral walls and comprising a threshold plate at the front of the stove and a floor plate supported by said threshold plate, burners disposed within the inner shell below said floor plate, and a lighter for conveying gas from said burners, said lighter being provided with a nipple, and said threshold plate being provided with a central opening through which said nipple extends and sight openings on either side of said nipple.

In testimony whereof, I have hereunto affixed my signature.

FREDERICK SATTLER.

In the presence of—

J. B. MEGOWN,

M. C. HAMMON.