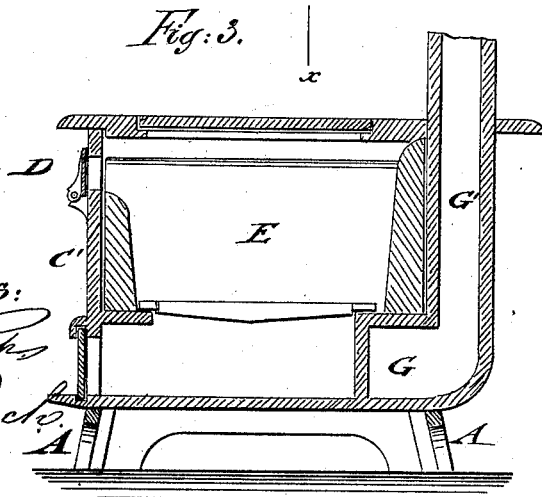
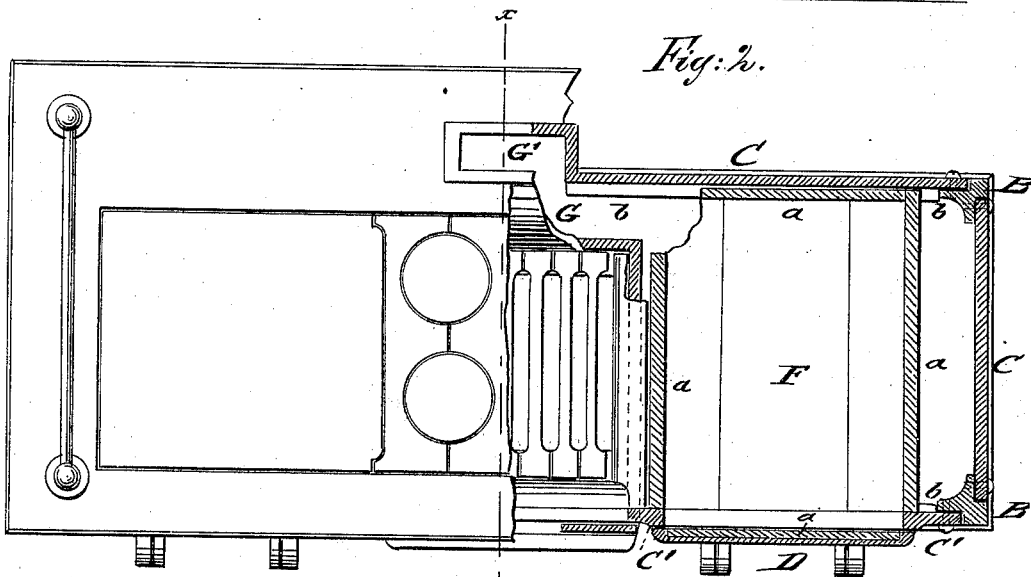
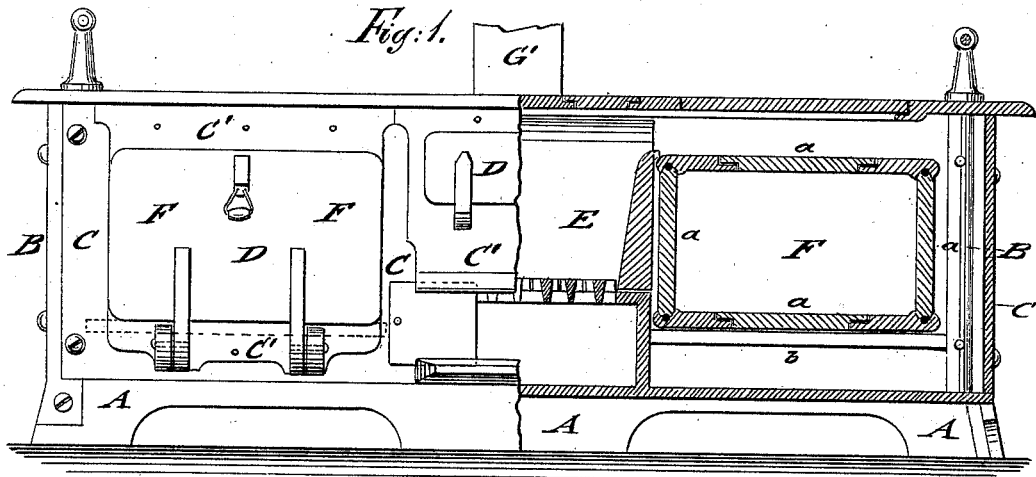


G. H. SHERMAN.
Cooking Stove and Range.

No. 212,751.

Patented Feb. 25, 1879.



Witnesses:

Carl Kays
Otto Puck

Inventor:

George H. Sherman
by Paul Gospel
Attorney

UNITED STATES PATENT OFFICE.

GEORGE H. SHERMAN, OF NEW YORK, N. Y.

IMPROVEMENT IN COOKING STOVES AND RANGES.

Specification forming part of Letters Patent No. 212,751, dated February 25, 1879; application filed January 8, 1879.

To all whom it may concern:

Be it known that I, GEORGE H. SHERMAN, of New York city, county and State of New York, have invented certain new and useful Improvements in Cooking Stoves and Ranges, of which the following is a specification:

In the accompanying drawings, Figure 1 represents a front elevation of my improved cooking stove and range, partly in vertical section; Fig. 2, a top view, partly in horizontal section; and Fig. 3, a vertical transverse section of the same on line *x x*, Fig. 2.

Similar letters of reference indicate corresponding parts.

This invention has reference to an improved cooking stove or range for hotels, restaurants, vessels, and other purposes, which has the advantage of being readily shipped and set up for use, and which furnishes, furthermore, a superior oven for baking purposes, in which the temperature may be perfectly kept under control, so that the process of baking takes place in a more reliable manner and furnishes a superior product.

The invention consists of a cooking stove or range which is constructed of a solid bed-plate, of angular supporting columns or posts, which are secured to the bed-plate, and of sheet-metal walls, which are firmly bolted to recesses of the columns. An oven is arranged at one or both sides of the fire-place, the side, top, and bottom walls of the oven being made entirely of fire-brick, also the end wall, while the door is lined with a plate of fire-brick. The bottom wall of the oven rests on projecting shoulders or strips of the front and rear walls of the stove or range, the side and top walls being secured by suitable fastening devices. The fire-gases pass over the top of the oven, then downward at the side farthest from the fire-place, and then between the bottom wall and bed-plate to a flue at the rear plate of the shortened ash-pit of the fire-place, and then by an exit-pipe to the chimney.

Referring to the drawings, A represents the cast-iron bed-plate of my improved stove or range, which bed-plate is supported by means of corner and intermediate feet, at some distance from the ground. To the corner and intermediate recesses of the bed-plate A are secured vertical columns B, of rectangular

cross-section. These columns are rigidly secured by their enlarged base portions to the recessed bed-plate, as shown in Fig. 1. They are provided with recesses for the sheet-metal side and end walls C of the stove or range, which walls are bolted securely to the columns.

To the sheet-iron front wall are riveted the cast-metal frame C' of the doors D, which latter are hung and locked in any approved manner. The door-frames and doors are secured in position on the front wall, so that the doors are ready for use when the stove or range is put up. The detachable construction of the corner columns or posts and walls facilitates the setting up of the stove or range, especially in the case of ranges for vessels, as all the parts may be readily handled and set up aboard the ship without interfering with the joiner's work at all. This knock-down and set-up feature forms one of the essential points of my improved construction of cooking stoves or ranges, as it greatly facilitates the storing, shipping, and setting of large ranges.

The fire-place E is arranged, in the case of stoves, at the end, and in the case of ranges at the center, of the same. At one or both sides, as the case may be, are arranged ovens F, which are, however, not constructed so as to form an integral part of the iron-work of the stove or range, but which are made of brick-plates *a*, in analogy to a baker's oven, the plates being so arranged as to be readily interchangeable in case they get cracked or otherwise injured. The side walls of the ovens are made of one plate, while the top and bottom plates are preferably made of three sections, that are joined in a suitable manner. The bottom plates *a* are supported on projecting shoulders or strips *b* of the front and rear walls, the strips being firmly riveted to the same. The side walls are retained by transverse corner-rods, guide-strips, or equivalent means, in position, while the top wall rests on the side walls. The oven has also an end wall of brick, that bears against the rear wall of the stove or range, while the front door is lined at the inside with a plate of fire-brick. The bread, meat, or other articles to be baked are thus inclosed entirely by brick instead of metal walls, and thereby the same beneficial influence obtained thereon as that incidental

to a baker's oven, namely: a slower, but safer baking, less rapid changes of temperature, less liability of burning the articles, (which forms one of the main objections to the metal oven,) and, finally, the capacity of absorbing the moisture emitted.

The smoke and fire-gases pass from the fire-place E over the top of the oven, and then down between the end walls of the oven and stove or range, to the bottom of the latter. They are then drawn along the bottom of the oven to a flue, G, which is arranged inside of the walls of the stove or range, said flue being obtained by shortening the ash-pit of the stove, as shown in Figs. 2 and 3. The smoke and fire-gases pass then from the flue G to a pipe, G', that conducts them into the chimney. The heat of the fire-gases is thus utilized for heating up the oven, and imparts, by lapping around the same, a uniform temperature in all its parts, so that the baking process takes place in a more reliable manner.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. As an improvement in cooking stoves and ranges, the combination of a solid bed-plate,

A, having corner recesses, and of vertical angular columns or posts B, secured by enlarged base portions into the recesses of the bed-plate, with sheet-metal side and end walls C, attached to the columns, all the parts being so connected as to be readily knocked down, substantially as set forth.

2. In a cooking stove or range, the combination of a fire-place whose ash-pit is shortened, so as to form a bottom flue inside of the walls of the stove or range, with an oven that extends sidewise of the fire-place from the front to the rear wall of the stove or range, with a flue that extends from the fire-place over the top, side, and along the bottom of the oven to the rear flue of the ash-pit, and with an exit-pipe of the ash-pit, substantially as specified.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two witnesses this 4th day of January, 1879.

GEO. H. SHERMAN.

Witnesses:

PAUL GOEPEL,
ADOLF DENGLER.