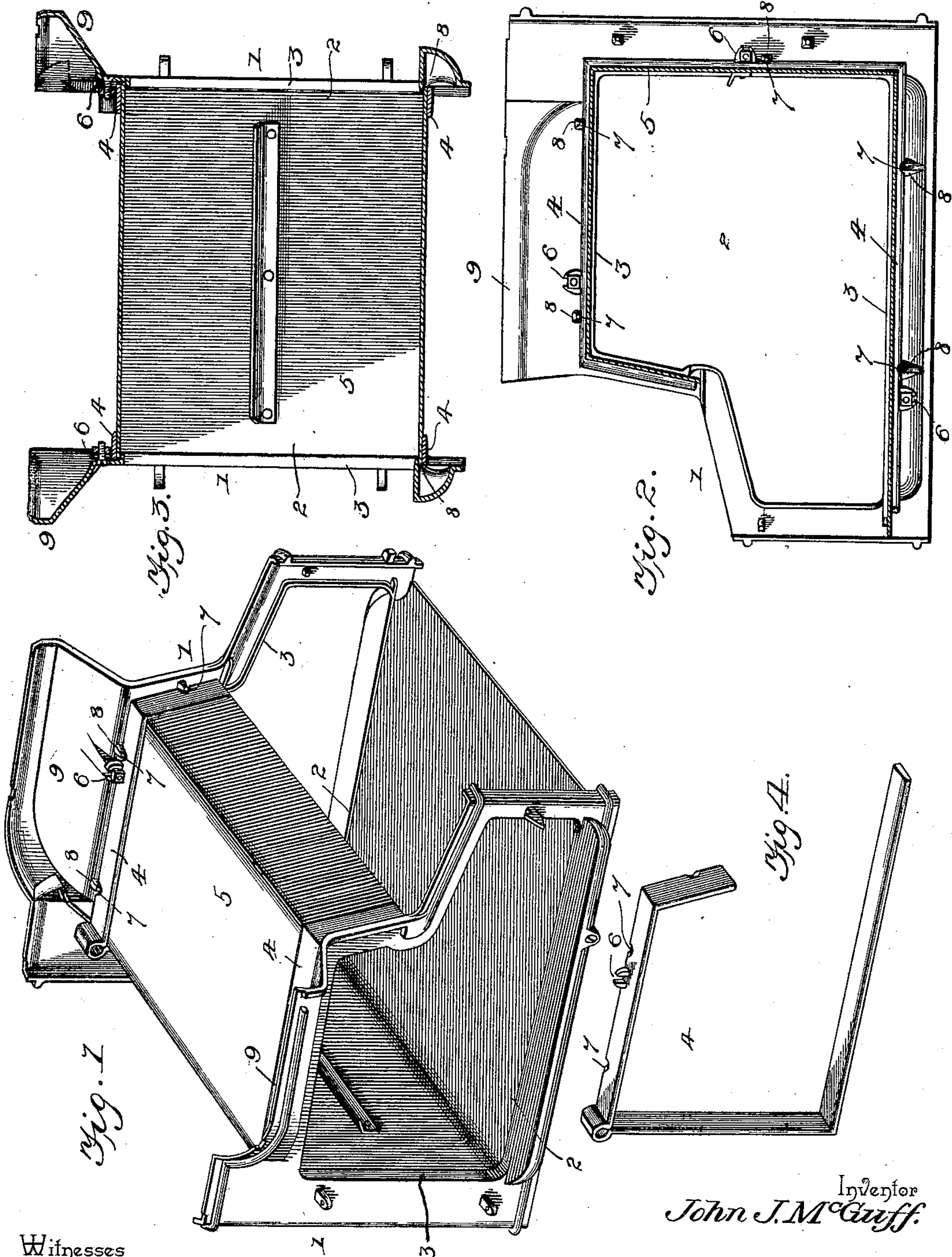


(No Model.)

J. J. McGUFF.
COOKING STOVE OR RANGE.

No. 605,897.

Patented June 21, 1898.



Witnesses

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JOHN J. MCGUFF, OF LEXINGTON, KENTUCKY, ASSIGNOR OF ONE-HALF TO
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COOKING STOVE OR RANGE.

SPECIFICATION forming part of Letters Patent No. 605,897, dated June 21, 1898.

Application filed June 10 1895. Serial No. 552,262. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. MCGUFF, a citizen of the United States of America, residing in Lexington, in the county of Fayette, in the State of Kentucky, have invented new and useful Improvements in Cooking-Stoves or Cooking-Ranges, of which the following is a specification.

This invention relates to an improvement in cooking stoves and ranges, and has for its object to simplify and improve the construction thereof with a view to reducing the cost of manufacture, while at the same time increasing the life and durability of the stove.

The principal object of the present invention is to connect the opposite edges of a sheet-metal oven with the frame of the stove in such manner as to provide for the expansion and contraction of the oven.

The invention also contemplates binding the edge of the oven between an integral flange of stove-frame and a separable frame, which partially surrounds the oven-plate adjacent to its edge and is bolted to the said stove-frame.

The invention also contemplates expanding the frame-pieces of the stove adjacent to their upper ends in such manner as to widen the flue and afford increased area and heating-surface to the top of the oven.

Other objects and advantages of the invention will appear in the course of the subjoined description.

The invention consists in certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and finally incorporated in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a cooking-stove, the top plate and other parts thereof being removed to show the interior construction. Fig. 2 is a vertical section through the same. Fig. 3 is a vertical sectional view showing the manner of securing the edges of the oven-plate. Fig. 4 is a detail perspective view of the detachable binding-frame of this invention.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

The improved cooking-stove contemplated

in this invention comprises two similar end frames 1, substantially rectangular in form, but having their upper forward corners correspondingly cut out for the purpose of providing for the introduction of the fire-grate, &c. One or both of the said frames are also provided with a door-opening 2, corresponding in shape to the general configuration of the frame and either partially or wholly surrounded by an integrally-formed flange 3, which extends inwardly and has its outer edge or face beveled, as shown.

4 designates a pair of frames which may be either of wrought or cast iron and which approximate closely the configuration of the flange 3 referred to, said frames being, however, made of greater width than said flanges and of a size which will adapt them to extend around said flanges and leave an intervening space constituting a groove, in which the edge of the oven sheet or plate may be inserted. The oven 5 is formed from a single piece of sheet steel or iron or may be cast, if preferred, and is formed to correspond with the shape of the integral flange 3 on the frame-pieces of the stove, and the opposite side edges thereof are inserted into the space between the flange 3 and the separable frame 4, as shown in Fig. 2. Each of the binding-frames 4 is provided at suitable intervals with integral twin lugs 6, arranged in pairs and adapted to receive between them suitable bolts, which pass through corresponding openings in the stove sides or ends, whereby the said frame may be drawn tightly against the interior surface of the stove, as shown in Fig. 3. Each of the binding-frames 4 is further provided at suitable intervals with beveled notches 7, which register with a corresponding series of inwardly-projecting tapering spurs 8, so that as the binding-frame 4 is drawn against the inner face of the stove it is simultaneously pressed inward toward the integral flange 3 referred to for more firmly binding the edge of the oven sheet or plate in place. The construction above described thus permits the opposite edges of the oven to have a slight sliding movement between the flanges 3 and binding-frames 4 and provides for the necessary expansion and contraction of said oven.

The side or end frame-pieces of the stove are extended laterally in opposite directions, as indicated at 9, for the purpose of increasing the width of the flue-space immediately above the oven and also for the purpose of affording increased area, capacity, and heating-surface to the top of the stove.

In putting the oven in place and connecting the end frames 1 thereto the binding-frames 4 are first attached loosely to said frame-pieces and the edges of the oven-plate then inserted into the grooves or spaces between the integral flanges and said binding-frames. The frame-pieces 1 are now forced toward each other with the required pressure and the stove-bolts tightened, thereby causing said binding-frames to press inward and confine the edges of the oven tightly between them and said integral flanges, after which the usual top, sides, and bottom of the stove may be applied in a manner well understood. It will thus be seen that ample provision is made for the expansion and contraction of the oven, and this will add greatly to the life and durability of the stove. The binding-frames at the same time prevent ashes, soot, &c., from getting into the oven. By making the binding-frames independent of and separable from the frame of the stove and the oven the stove may be set up in a shorter space of time and the cost of manufacture is correspondingly cheapened. The increase in the width of the flue-space above the oven also affords an enlarged heating-surface to the stove-top and increases the capacity and utility of the stove correspondingly.

It will be apparent that any desired material may be employed in the construction of the several parts of the stove hereinbefore described and that the same may be either cast or wrought or formed from sheet metal.

Changes in the form, proportion, and minor details of construction may be resorted to

without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a stove, the side or end frame-pieces thereof provided with inwardly-extending flanges corresponding approximately to the configuration of the oven, in combination with an oven sheet or plate disposed around said flanges, and separable binding-frames surrounding said oven, said frames being arranged in approximal relation to the edges of said oven sheet or plate and secured to the stove-frame, substantially in the manner and for the purpose described.

2. In a stove, the end frame-pieces thereof provided with integral inwardly-projecting flanges corresponding to the configuration of the oven, in combination with an oven plate or sheet extending around said flanges, and separable binding-frames extending around said oven and removably secured to the stove-frame, said binding-frames being formed with tapering notches which cooperate with beveled or inclined inwardly-projecting spurs on the stove-frame, substantially in the manner and for the purpose specified.

3. The combination with a cooking-stove having its side plates provided with bolts adjacent to the oven-space, of a sheet-metal oven composed of a single sheet of metal corresponding to the contour of the oven-space, and binding-frames extending continuously about the exterior of the oven on each edge thereof, said binding-frames being formed with lugs to take over the bolts of the side plates, substantially as set forth.

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Witnesses:

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