

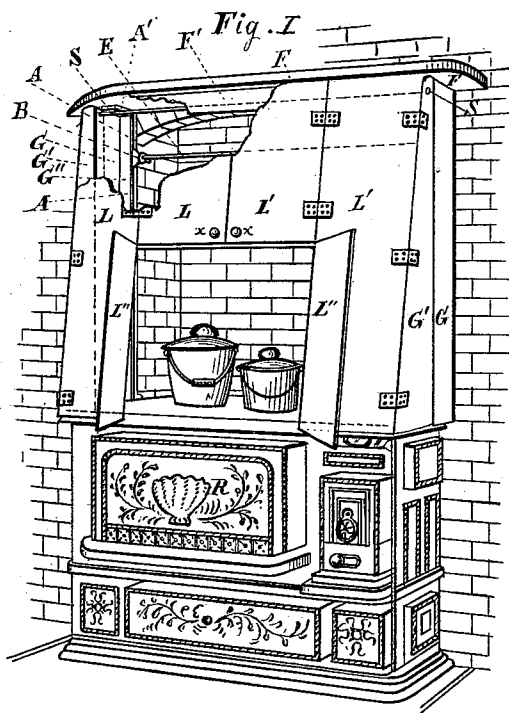
(No Model.)

3 Sheets—Sheet 1.

E. BOOKHOUT.
VENTILATING DEVICE FOR RANGES.

No. 538,997.

Patented May 7, 1895.



WITNESSES:

Edward Bookhout Jr.
Charles H. Bookhout

INVENTOR

Edward Bookhout

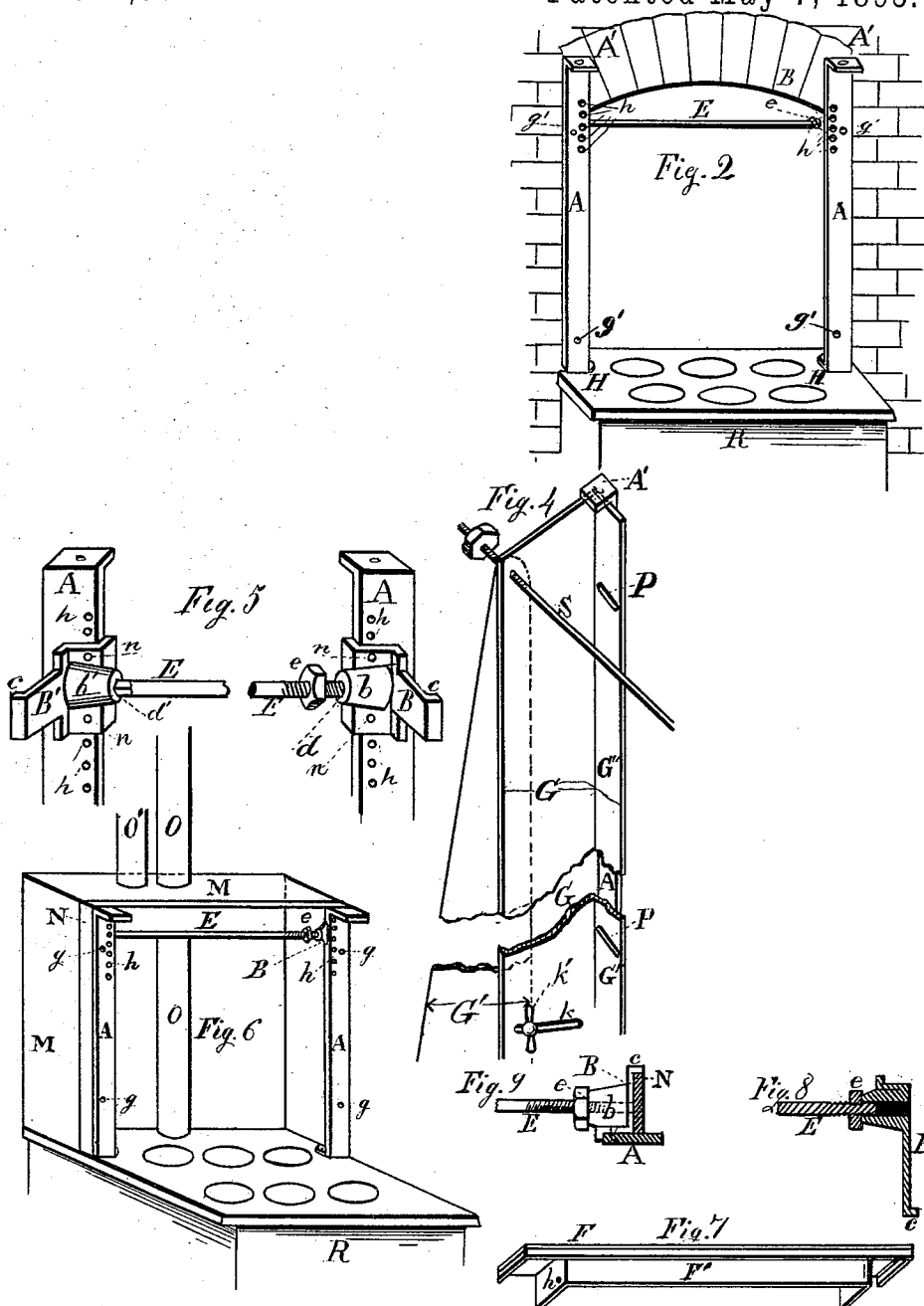
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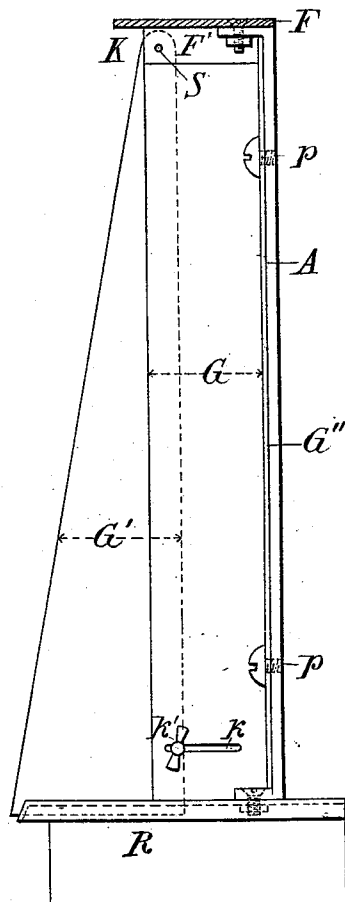
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Fig. 3.



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UNITED STATES PATENT OFFICE.

EDWARD BOOKHOUT, OF CRANFORD, NEW JERSEY.

VENTILATING DEVICE FOR RANGES.

SPECIFICATION forming part of Letters Patent No. 538,997, dated May 7, 1895.

Application filed August 11, 1894. Serial No. 520,089. (No model.)

To all whom it may concern:

Be it known that I, EDWARD BOOKHOUT, a citizen of the United States, residing at Cranford, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Ventilating Devices for Cooking-Ranges, of which the following is a specification.

My invention relates to that class of range attachments, known as "hoods" for carrying away the surplus radiated heat, offensive vapors and odors and smoke from the kitchen and adjoining rooms, thus adding to the comfort and health of those whose duty keeps them near the range or stove.

My invention can either be applied to the portable or brick set range.

My improvements consist, chiefly, first, in making the important parts of the device, adjustable to the various sizes, and conditions, in which ranges and stoves are found, whereby, but one size of said parts need be made, thus obviating the necessity of careful measurements when ordering and, enabling the manufacturer to keep them in stock; second, in simplifying and cheapening the method of putting them up. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the whole device in position for use with the small doors open to enable the cook to work without exposure to the whole radiation of heat. R is the range. Fig. 2 is a chimney-breast, with the two side bars or frame pieces A A, upon which the whole apparatus is built and held up. Fig. 3 is a vertical section cutting off one of the frame pieces A, a piece of the roof along the same line, and the two adjustable members of the side G and G'. R is the range. This view shows the inside. Fig. 4 is a perspective of the parts described in Fig. 3, excepting roof, and with the addition of bar S, which holds adjustable side pieces G' and other parts together. This also shows the inside. Fig. 5 is a perspective view from the inside, looking out into the kitchen, showing how, by means of the small brackets B and B' and rod E, with its nut e, the frame-posts A A are held up; Fig. 6, a perspective view of a portable or detached range with a sheet-metal inclosure upon the back part of it and

frame-posts A A in place; Fig. 7, a perspective view of a mantel-shelf F or roof, showing flange F' at lower side; Fig. 8, plan of bracket B; Fig. 9, small section of bracket and its lug n as it catches behind the stiffening-bar N when applied to the portable range.

This attachment when in place and ready for use, is composed of two or more pairs of metal doors, L L L' L', Fig. 1, hinged to the adjustable side pieces, G', opening outward, inclosing the whole top of the range. These doors have a greater projection from the chimney breast or other inclosure to be ventilated, at the bottom than at the top, Fig. 1. They require no fastening to keep them shut, as their specific gravity carries them against the stove front at bottom and the flange F' under the mantel shelf at top.

Each side or wall of the attachment is composed of two members, G and G',—both sides exactly alike. They may be made of either cast or sheet metal. The inner members, G, are simply pieces of flat metal, about three and one-half feet long and ten inches wide, four inches of their width being bent over at right angles, G'', and slotted, P P, Fig. 4, by which means they may be adjusted to the length of the range, and permanently bolted through the slots, P, to their respective frame posts, A A. The angles G'', may be turned either to the right or left, thus giving a wider range to their adjustment.

The outer members, G', upon which the doors are hinged, are six or eight inches wide at their lower ends, and about three inches wide at their tops, and of about the same length as their accompanying members, G, and hang, one upon each end of a five-eighths inch rod, S, Fig. 4, lapping their accompanying members about one and one-fourth inches. The rod, S, upon which they hang, passes through the front top corner of side members, G, and the flange, F', under the mantel shelf, F, tying the whole together. Should flange, F', be a little short, washers of five-eighths inch pipe are used. In order to adjust the said outer members, G', to the width of the range, the lower ends are moved in or out as the case may require, and bolted, by means of bolt, k', and segmental slot, k, in the lower part of side piece, G, where it is to remain permanently, yet, in case the corners of the

range top, or either of them should be required clear, they may be released and pushed back out of the way.

The frame posts, A A, to which the later-
ally adjustable side pieces, G, are bolted, are
made of three-eighths inch by two inch iron.
Four inches of their upper ends are bent for-
ward, at right angles, to form seats upon
which the mantel shelf, F, is bolted, forming
the roof. Their lower ends are bent inward
and notched to fit, making feet, and are bolted
to the top of range. Near the tops of these
frame posts, about one-half inch from their
inner edges, are several three-eighths inch
perforations, *h, h, h h*, Figs. 2 and 5, for ad-
justing the brackets, B B', to the height of
the opening above the top of the range, where
they are riveted. These brackets project in-
ward, toward the back of the fire place or par-
tial inclosure, and are provided, one with a
square hole about one-half inch deep, *d'*, and
the other with a round hole drilled through,
d, Fig. 5. The brackets may be of any con-
venient shape.

E E is a five-eighths inch iron bar, (round,) a little longer than the distance between the two brackets, when in their places, one end of which is hammered square and the other threaded and furnished with a nut, *e*, Figs. 5 and 8. The round threaded end of rod, E, is placed into the drilled hole, *d*, in bracket B, and the square end is inserted in the corresponding hole in bracket B'. Nut *e*, on the threaded end of bar is turned tight against bracket B, which forces the lugs, *c c*, at the back of the brackets, into holes previously made in the chimney jamb. In portable or detached ranges, the lugs, *c c*, fall behind the stiffening bar N, which runs round the inside edge of the partial inclosure, M, Figs. 6 and 9.

In adjusting the brackets, B and B', above described, to the posts A A, and opening over range, a slot may be made in the posts instead of the holes, or the bracket may be slotted, but I think the drilled post the cheapest and equally as good.

In the brick set range, both the ventilating and smoke pipe, pass through the usual sheet metal throat piece, located one or two inches up the chimney.

In the portable or detached range, they may pass out of the top of the inclosure (Fig. 6) to a stove pipe rim in chimney breast or other flue.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with a cooking range, of a ventilating attachment, the inclosure of which is partly formed by sides or walls, G G', starting from the face of the chimney breast, or other wall or partial inclosure over the top of a range, said walls, G G' projecting out near or beyond the front edge of the range top, said walls, G G', being divided vertically, into two members, G G', one of these members fitted to move edgewise, against the other, for purpose of adjustment to the different sizes of ranges, with means to fasten the same when adjusted, substantially as herein described.

2. The combination, with a cooking range, of a ventilating attachment, comprising sides or walls, G G', standing one at each side of range top, starting from frame posts, A A, on the face of chimney breast, or other partial inclosure or wall over the top of a range, said sides or walls, G G', projecting at their lower ends, out near or beyond the front edge of range top, doors, L L' L', opening outward, hinged to the sloping sides or walls, G', and the whole surmounted by a roof, F, forming a shelf, with the flange F' at its lower side, through which flange and the two sides, G G', the rod or bolt, S, passes and binds the whole together, substantially as described.

3. The combination, with a cooking range, of a ventilating attachment, said attachment made adjustable to ranges of different lengths, by means of flanges, G'', upon the edges of the side walls, G G', contiguous to the frame posts, A A, to which they are bolted, as herein set forth.

4. The combination, with a range, of a ventilating attachment, said attachment completing the inclosure of all of the stove holes in top of the range, and held in its place by means of frame posts, A A, against the chimney breast, or other wall or inclosure over a part of the top of a range, said frame posts, A A, each furnished with an adjustable bracket, B B', as described, and the threaded rod, E, with its binding nut, *e*, or their equivalent, for forcing the brackets, B and B', in their places as and for the purpose herein set forth.

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