

(No Model.)

C. W. McCUTCHEN.

PORTABLE GAS HEATER FOR STOVE OR RANGE OVENS.

No. 531,739.

Patented Jan. 1, 1895.

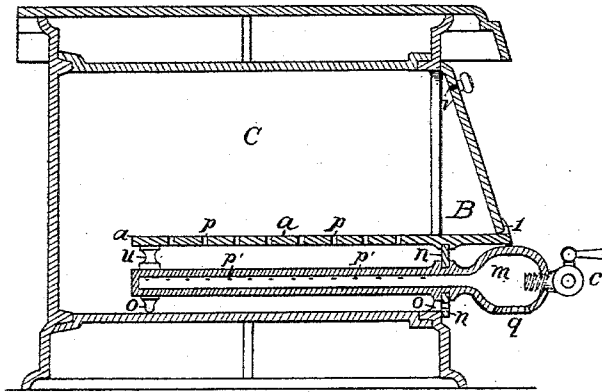


Fig. I

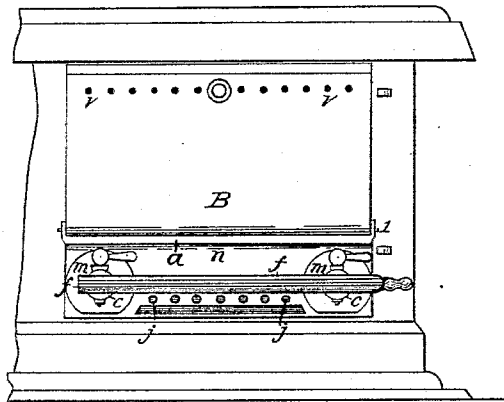


Fig. II

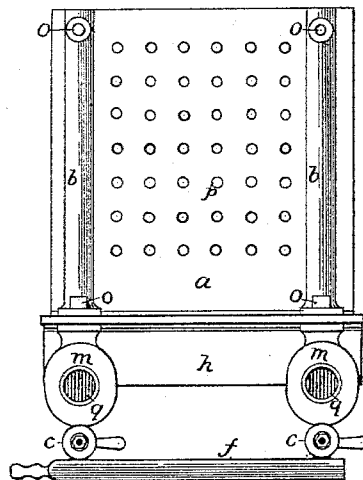


Fig. III

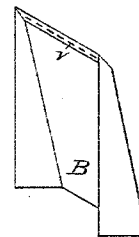


Fig. IV

WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES W. McCUTCHEN, OF PEEKSKILL, NEW YORK.

PORTABLE GAS-HEATER FOR STOVE OR RANGE OVENS.

SPECIFICATION forming part of Letters Patent No. 531,739, dated January 1, 1895.

Application filed November 18, 1893. Serial No. 491,357. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. McCUTCHEN, a citizen of the United States, and a resident of Peekskill, in the county of Westchester and State of New York, have invented a certain new and useful Portable Gas-Heater for Stove or Range Ovens, of which the following is a specification.

This invention relates to gas heating devices attachable to common coal or wood burning stoves and ranges, and has for its object means for directly heating the ovens of such stoves and ranges without resort to the employment of the fire boxes for the purpose. The object is attained by the means herein set forth and as illustrated by the accompanying drawings, which taken together, constitute a full and exact description of my invention, such as will enable others skilled in the art to which it appertains to make and use the same.

In the drawings similar letters of reference indicate like parts throughout the several views.

Figure I is a cross-sectional view of a stove oven containing one of my heaters. Fig. II is a front elevation of the same. Fig. III is a bottom view of the heater. Fig. IV is a view of the hood for closing the oven.

In Fig. I C represents the oven of a stove or range, to which my heater has been applied. It consists of a burner plate *a*, to the under side of which gas burners are attached. The plate extends outside of the oven forming a hearth *h*, the hearth being extended at the sides so as to afford stops against the face of the oven, as in Fig. III. Perforations *p* are made through the plate to admit of circulation, and it may be ribbed on its upper surface for the same purpose. Pipe burners *b* may be of a requisite number; but only two are herein shown. They contain perforations *p'* for gas jets, and their outer ends are provided with enlargements *m*, constituting the usual form of air mixers. Gas cocks *c* connect the mixers with the gas supply pipe *f*. I use the pipe form of burners in order to ob-

tain an extended distribution of gas flames; but it is obvious that almost any form of burner may be employed under the plate. A front plate *n* attached to the plate *a* supports the front ends of the burners, the burners and plate being united at the inner ends by pieces *u*, and being supported by the rest *o*.

As the plate *a* is adapted to nearly fit the oven, space around the edges being left for air circulation, the insertion of the heater in an oven practically divides the oven into two compartments, a heating chamber beneath the plate, and a cooking or baking oven above it. A hood B, Fig. IV, is placed on the hearth *h*, as shown in Figs. I and II. It may have perforations *p* in its upper edge for the purpose of ventilation and free air circulation.

The heater as shown is applicable to any oven without any special preparation of the oven therefor. The regular oven door may be left to swing open, or it may be removed.

In Fig. II the hood is shown to be hinged at *l*, to the plate *a*. It may thus be secured to the plate, or it may be used as a removable hood.

In the construction of my heater I do not wish to be limited to the forms herein shown, so long as I adhere to the principles of my invention.

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

In combination with a stove or range oven, a portable gas heater comprising a rectangular burner plate having an extension to reach outside the oven to afford support for a hood, burners attached to the under side of said plate and connected with air mixers outside the oven, and a hood for closing the oven above the burner plate, substantially as herein shown and described.

Signed at Peekskill, in the county of Westchester and State of New York, this 30th day of October, A. D. 1893.

CHARLES W. McCUTCHEN.

Witnesses:

F. R. MANSEY, Jr.,
FRANK SOUTHARD.