

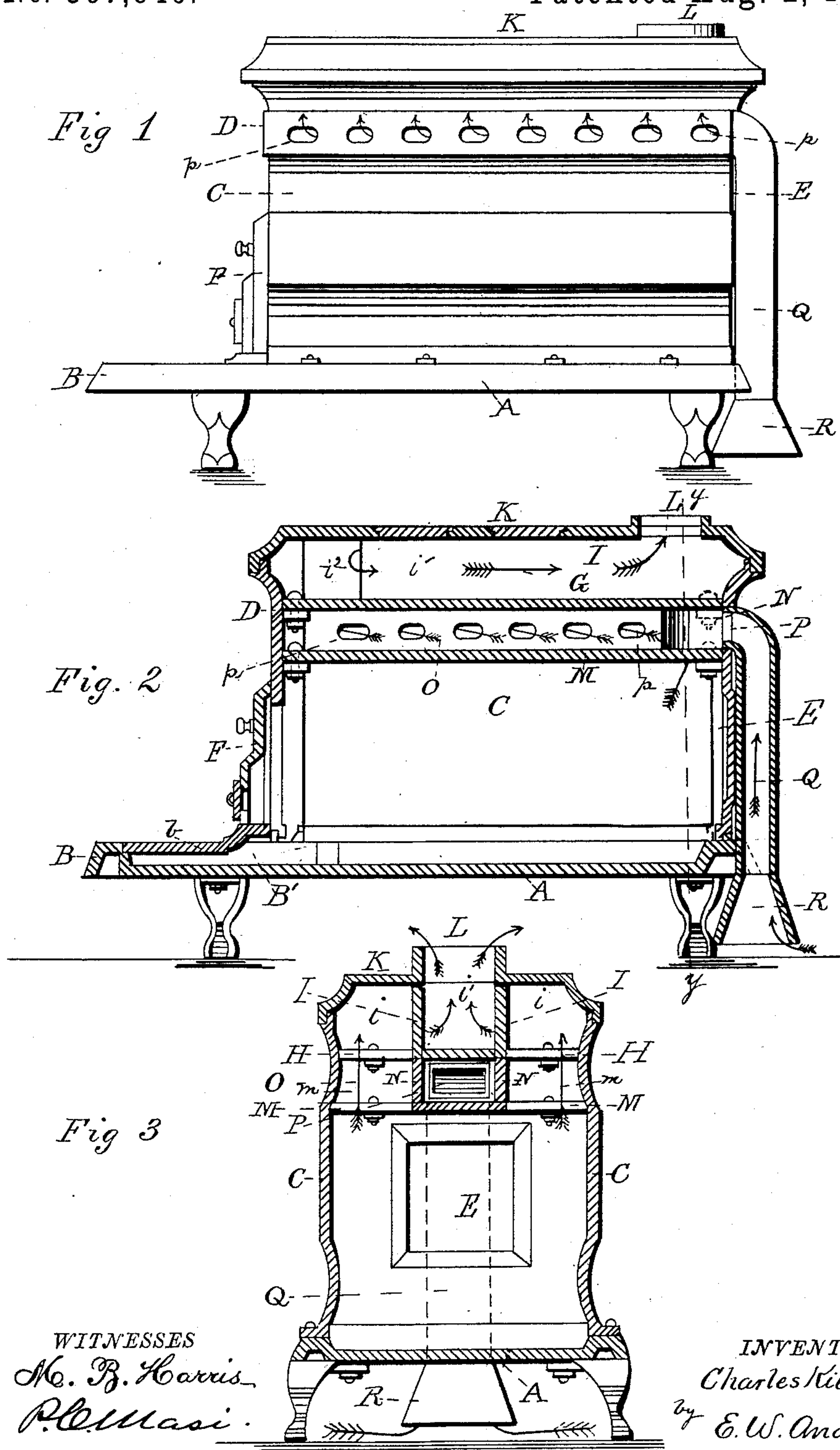
(No Model.)

C. KIBLER, Jr.

STOVE.

No. 367,640.

Patented Aug. 2, 1887.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

CHARLES KIBLER, JR., OF NEWARK, OHIO.

## STOVE.

SPECIFICATION forming part of Letters Patent No. 367,640, dated August 2, 1887.

Application filed March 30, 1887. Serial No. 233,068. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES KIBLER, Jr., a citizen of the United States, resident at Newark, in the county of Licking and State of Ohio, have invented certain new and useful Improvements in Stoves; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a side elevation of a stove with my improvement attached. Fig. 2 is a vertical longitudinal section. Fig. 3 is a cross-section on line *y y*, Fig. 2.

The invention, which is an improvement on a patent granted to me on the 15th day February, 1887, and numbered 357,961, relates to stoves; and it consists in the construction and novel combination of parts, as hereinafter set forth.

Referring to the accompanying drawings, A designates the base-plate of the stove, supported on suitable legs properly secured thereto.

B is the front of the base-plate, having the ash-pit B' covered by the removable plate *b*. C C are the sides of the stove, D the front plate, and E the rear or back plate thereof.

F is the door, closing by a catch of ordinary construction, and K is the top plate of the stove, provided near its rear edge in its central line with the pipe-collar L.

G is a horizontal plate retained in place in the stove by bolts passing through proper openings in the rear and front plates.

H H are flue-openings made in the plate G at its rear corners, and I I are vertical longitudinal partitions rising from the upper surface of said plate and dividing the space between it and the top plate of the stove into three longitudinal flues, *i i* and *i'*, the flues *i i*, which are the side flues, communicating with the fire-box through the openings H H and with the central flue, *i'*, through the openings *i' i'*, between the front ends of the partitions I and the front plate of the stove. The pipe-collar L communicates at the rear end of the stove with the flue *i'*, but is cut off from the flues *i i* by the partitions I I.

The smoke and other products of combustion pass through the rear face openings, H, then forward through the flues *i i*, and thence rearward through the flue *i'* to escape out of the pipe-collar into the stove-pipe.

So far the parts are identical with those in my patent hereinbefore referred to; but these parts, combined with the elements hereinafter described, perform new and useful functions; and such combinations are what I desire to secure by Letters Patent.

M is a horizontal partition or plate secured within the stove in a similar manner to the plate G, a short distance below the same, and provided at its rear corners with cut-away portions or flue-openings *m m*, similar and equal to the openings H in the plate G. The openings H and *m* are connected by the vertical curved plates N N, which, together with the plates G and M, form a chamber, O, within the stove, having an opening, P, at its rear in the back plate of the stove, and the two longitudinal series of small openings, *p p*, in the side plates thereof. The plate M constitutes the roof of the fire-box, and the smoke and other products of combustion have no communication with the interior of the chamber O, being shut off therefrom by the plates N, which close all entrance therein from the fire-box.

Q is an air-flue formed upon or secured to the outside of the back plate of the stove and communicating at its upper end with the opening P in said plate, and R is an inverted-hopper-shaped metal box or shell having its smaller upper end secured within the lower end of the flue Q and its open mouth near the floor of the room.

From the above description it is evident that the colder air near the floor of the room will flow in a current through the box R and up the flue Q into the chamber O, and, being heated therein by being immediately over the fire-box and under the flues *i i* and *i'*, will become heated, and, passing out of the openings *p p*, will ascend to the ceiling, displacing the warm air in the upper part of the room, and so causing a gradual equalization of the temperature within the room.

It should be observed that the air-current is first heated in the flue Q immediately in rear of the fire-box, and passes over the pro-



ducts of combustion as they first issue from the fire-box.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. In a stove, the combination of the plate M, forming the roof of the fire-box, the plate G a suitable distance above the plate M, the partial partitions I I on the upper surface of the plate G, and forming with the top plates of the stove the flues *i i* and *i'*, the plates N N forming with the plates G and M the air-chamber O, having the rear opening, P, and the series of side openings, *p p*, and the vertical air-flue Q, communicating at its upper end with the air-chamber through the opening P, substantially as specified.

2. In a stove, the combination of the box R and vertical air-flue Q with the stove-body,

the plate M, secured within the stove-body and provided with the flue-openings *m*, the plate G, secured within the stove-body a suitable distance above the plate M and provided with the flue-openings H, the plates N N connecting the openings *m* and H on each side and forming with the plates G and M the air-chamber O, having the air-escape openings *p p*, the flue Q, communicating with the air-chamber through the opening P, and the partial partitions I I, forming with the top plate of the stove the flues *i i* and *i'*, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES KIBLER, JR.

Witnesses:

FRANK KIBLER,

C. A. SWISHER.