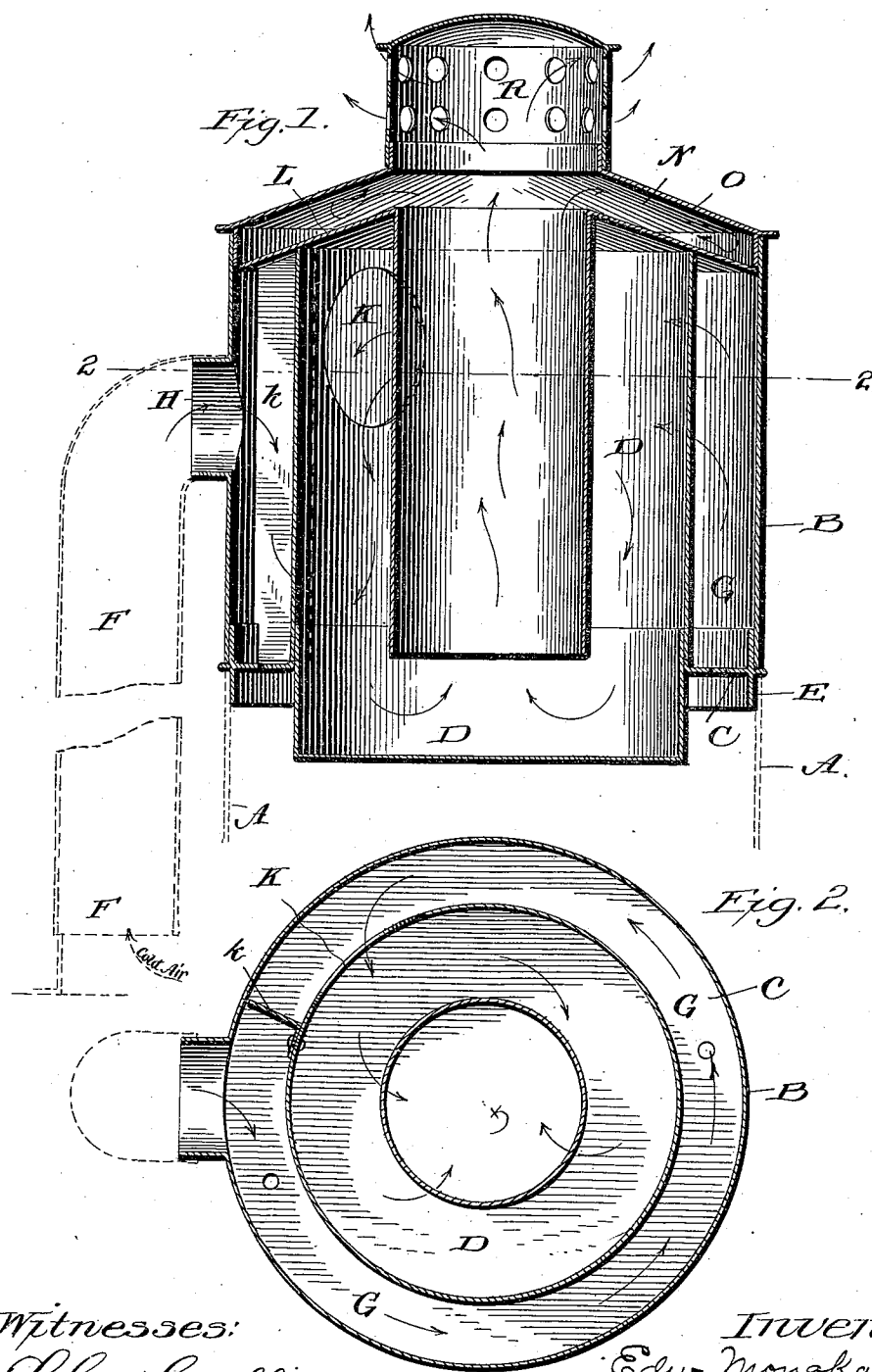


(No Model.)

E. MONAKAY.
HEATER FOR STOVES.

No. 565,495.

Patented Aug. 11, 1896.



Witnesses:
L. C. Hills
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UNITED STATES PATENT OFFICE.

EDWARD MONAKAY, OF MINEVILLE, NEW YORK.

HEATER FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 565,495, dated August 11, 1896.

Application filed February 7, 1896. Serial No. 578,435. (No model.)

To all whom it may concern:

Be it known that I, EDWARD MONAKAY, a citizen of the United States, residing at Mineville, in the county of Essex and State of New York, have invented certain new and useful Improvements in Heaters for 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 the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful heaters, and especially to a heater which will utilize a great amount of heat and can be attached to any ordinary construction of stove, and in my illustration I show the heater attached to an upright stove, in which either coal or wood may be used as fuel. By my improved heater I construct a drum which is attached to the stove at a location just above the attachment of the stovepipe, and provide interior circular chambers, receiving the cold air from near the floor of the room, conveying it into the outer chamber, and is caused to circulate through an aperture into the next chamber, and from the latter chamber down in proximity to the bottom of the drum, which is in proximity to the fire, and then, after being superheated, is allowed to pass up through the central chamber into the chamber at the top of the drum, from which the supply may be conducted to a register or allowed to escape in a room through a perforated cap.

To these ends and to such others as the invention may pertain the same consists, further, in the novel construction, combination, and adaptation of the parts, as will be hereinafter more fully described, and then specifically defined in the appended claims.

I clearly illustrate my invention in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which drawings similar letters of reference indicate like parts throughout the several views, in which—

Figure 1 is a vertical sectional view through the heater as attached to a stove. Fig. 2 is a cross-sectional view through the heater.

Reference now being had to the details of

the drawings by letter, A designates the upper portion of a stove, and B the outer circular wall of the heating-drum, which is supported on a rim C, securely riveted to the inner drum D at any suitable location from its lower end, so as to allow the said lower end to come as near as possible to the fire. The said rim has secured to its circumference the flange E, extending above and below the said rim and at right angles thereto, the lower portion of the said flange being designed to fit over the edge of the stove and the upper portion of the flange to be riveted to the outer wall of the drum B, suitable means being provided to hold the drum to the stove, as by bolts passed through the said rim. A cold-air duct or pipe F has communication with the chamber G through the aperture H. This cold-air pipe receives the air from near the floor, and when once inside the outside air-chamber is caused to pass around outside of the drum D before it can pass through the aperture K and gain access to the chamber within the said drum D. A partition *k* is riveted in a vertical position to the outer wall of the drum D between the aperture H and the aperture K, which causes the air to make its circuit, above referred to, before it can enter the interior of the drum D, as the flange L forms a top to the chamber between the two drums, and cuts off the escape of the air at the top.

The partially-heated air, upon entering through the aperture K, comes in contact with the wall of the inner cylindrical tube, which communicates with the chamber surrounding only at a location near the bottom of the said chamber, so that any air that would pass up through the inner tube must necessarily descend near the bottom of the inner chamber, which bottom, owing to its proximity to the fire, is heated to a high degree of temperature, and as the air comes in contact with the heated bottom it becomes superheated and passes up through the inner pipe or tube and into the hot-air chamber N, formed between the top O and the flange L. From this chamber the hot air passes through the aperture at the top, which has a perforated cap R held thereover. When it is desired to convey the hot air from the heater

to a register in a room above, a pipe may be attached to the outlet of the hot-air chamber, after removing the said perforated cap.

From the foregoing it will be seen that a heater embodying my invention may be easily and quickly applied to an ordinary upright stove, which is of a standard size, and a greater amount of heat obtained from the same fuel than with other heaters commonly is use.

I am aware that it is common to construct heaters for stoves, in which cold air is conveyed from the room into the drum, and I do not make a broad claim for any such construction.

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

1. A heater for adjustment to stoves, consisting of a cylinder having a widened rim about its circumference above its lower end, a double flange vertically disposed about the circumference of said rim, the latter being adapted to be bolted or otherwise held to a stove-body, an outer drum or cylinder resting on said rim and secured to the flange, a vertical partition between the said cylinders, a cold-air inlet opening into the chamber between the cylinders on one side of said partition, and an aperture leading into the interior of the inner chamber, on the opposite side of the partition, and an inner tube hav-

ing its upper end secured to a flange, which forms a top to the chamber between the cylinders, its free end opening near the bottom of the heater, combined substantially as shown and described.

2. In a heater for attachment to stoves, the cylinder having a widened circumferential rim at any desired location from its bottom, a double flange about the circumference of the said rim, an outer cylinder or drum seated on said rim and riveted to the upper portion of the flange, a partition between the outer and inner cylinders, a cold-air duct leading into the chamber between the said chambers, an inlet-passage to the interior of the inner cylinder near its top, combined with an inner hot-air flue open at its bottom a short distance from the lower end of the hot-air drum, a flange secured to the top of the said hot-air flue which forms a top to the said chamber between the cylinders, thus forming a hot-air chamber between said flange and the cover to the outer cylinder or drum, and a perforated cap fitted over the aperture in the outside cover, all substantially as shown and described.

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

EDWARD MONAKAY.

Witnesses:

COLIN J. PHILLIPS,
EDSON TART.