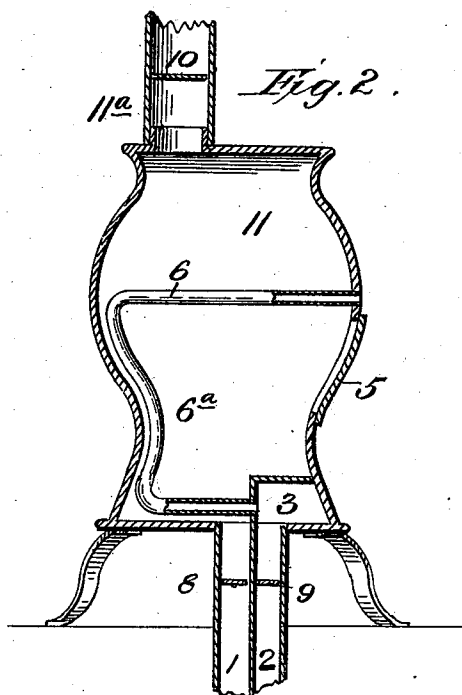
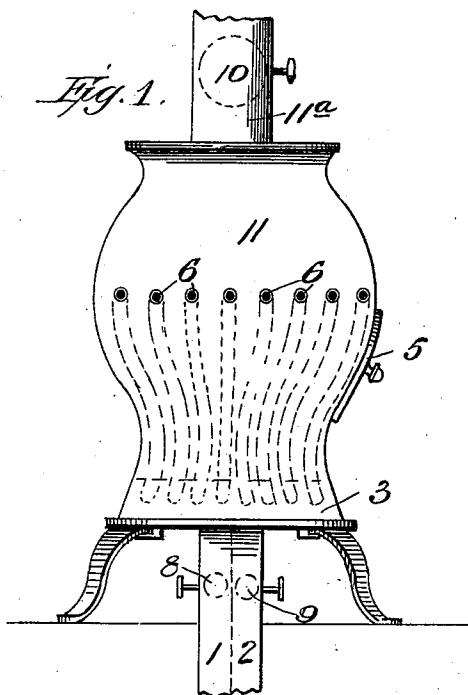


(No Model.)

W. F. & B. G. CAMP.
HOT AIR HEATER.

No. 545,772.

Patented Sept. 3, 1895.



WITNESSES
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UNITED STATES PATENT OFFICE.

WESLEY F. CAMP, OF ROME,, AND BERRY G. CAMP, OF NANNIE, ASSIGNOR
TO CHAS. C. BROWN, OF TILTON, GEORGIA.

HOT-AIR HEATER.

SPECIFICATION forming part of Letters Patent No. 545,772, dated September 3, 1895.

Application filed April 4, 1894. Serial No. 506,326. (No model.)

To all whom it may concern:

Be it known that we, WESLEY F. CAMP, residing at Rome, and BERRY G. CAMP, residing at Nannie, county of Floyd, State of Georgia, citizens of the United States, have invented certain new and useful Improvements in Hot-Air Heaters; and we 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 figures of reference marked thereon, which form a part of this specification.

Our invention relates to hot-air heaters for heating rooms with hot air; and it consists in certain novel and valuable improvements in hot-air heaters, which will be hereinafter fully described and claimed.

Referring to the accompanying drawings, Figure 1 is a side elevation illustrating our invention. Fig. 2 is a vertical sectional view of the same.

Referring to the several parts by their designating - numerals, 11 indicates the outer casing or stove-body of our invention, having the front opening closed by the door 5, through which the fuel is inserted into the grate. In the bottom of the stove-body is arranged the air-reservoir or receiving-chamber 3. Our novel grate is formed of a series of metal tubes 6, which are curved into a practically U shape and are mounted in position in parallel planes, as shown, to form a grate which will hold the fuel, with their open lower ends opening into the hollow reception-box or air-reservoir 3, and their open upper ends opening through the side of the stove above the door 5, through which the fuel is inserted. The central part 6^a of these tubes is curved, as shown in Fig. 2, to conform to the curvature of the stove-body.

1 and 2 indicate air-supply tubes which conduct the pure cold air from outside the building, being run through the back or sides of the fireplace or through the hearth to the outside of the building, the supply-tube 1 communicating with the stove-body below the grate, while the tube 2 leads into and com-

municates with the reception-box 3. These tubes are provided, respectively, with dampers 8 and 9 to control the flow of air through them, and the stovepipe 11^a is provided with the damper 10. It will now be seen that when the fuel is placed in the grate formed by the hollow tubes 6 and the fire begins to burn the air from the tube 1 will give a perfect draft, and thus cause the fire to burn brightly, while as the tubes 6 become heated the cold air from the outside will be drawn through the tube 2 into the reception-box or air-reservoir 3, and will pass from said box through the heated tubes 6, forming the grate in which the fire is contained, and after being thoroughly heated in its passage through said tubes will be discharged directly into the room through the open upper ends of said tubes, thus keeping the room constantly supplied with pure hot air.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

The herein-described improved hot-air heater, comprising an outer casing having an opening therein, a door designed to close said opening, an air reservoir or receiving chamber formed in the bottom of said casing, an air supply-pipe communicating with said air reservoir, a valve or damper therein for regulating the supply of air to said reservoir, approximately U-shape heating pipes or flues arranged to form a grate, said tubes at their lower ends communicating with said air-reservoir and having their upper ends passed through said casing whereby heated air may be discharged therefrom, a second air-supply pipe communicating with the interior of said casing below said grate, and a valve or damper in said latter pipe for regulating the supply of air to said casing, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

WESLEY F. CAMP.
BERRY G. CAMP.

Witnesses:

T. J. HENDRICKS,
HENRY J. HINE.