

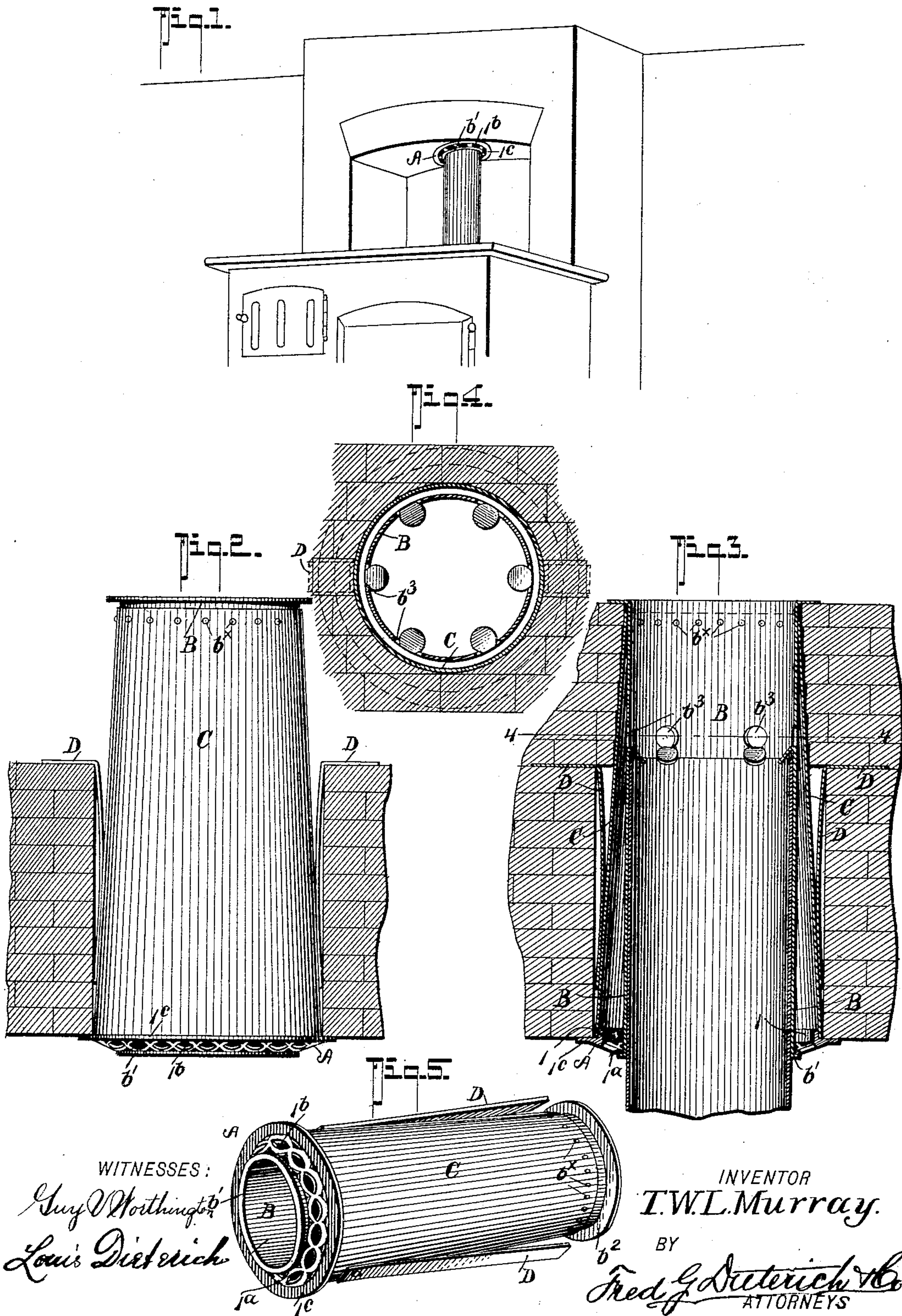
No. 702,879.

Patented June 17, 1902.

T. W. L. MURRAY.
STOVEPIPE VENTILATOR.

(Application filed Oct. 9, 1901.)

(No Model.)



UNITED STATES PATENT OFFICE.

THOMAS W. L. MURRAY, OF NEWBERN, TENNESSEE.

STOVEPIPE-VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 702,879, dated June 17, 1902.

Application filed October 9, 1901. Serial No. 78,065. (No model.)

To all whom it may concern:

Be it known that I, THOMAS W. L. MURRAY, residing at Newbern, in the county of Dyer and State of Tennessee, have invented a new and Improved Ventilator, of which the following is a specification.

This invention relates more particularly to that type of ventilators coöperatively used in connection with smoke-flues and the smoke-offtake pipes that discharge into the flues; and primarily my invention seeks to provide a ventilator of this character of a very simple and inexpensive nature which presents a neat appearance and effectively serves for its intended purposes.

My invention comprehends a cast-metal headpiece having an internal and external rim and intervening skeleton or air-inlet portion, a sheet-metal sleeve or pipe receiving section connected with the inner rim of the headpiece, and a conical casing surrounding the inner sleeve or pipe receiving section having an air-tight connection with the said sleeve at the inner or reduced end and joined with the outer flange of the headpiece, whereby an air-space is provided around the forward end of the sleeve, the inner sleeve or pipe receiving portion having means for limiting the inward thrust of the pipe to be entered therein from the head end, and openings at a point beyond said means to provide for the free escape of the air that enters into the air-space through the head out into the flue.

In its more subordinate features my invention consists in certain novel details of construction and peculiar combination of parts, all of which will hereinafter be fully described, and particularly pointed out in the appended claim, reference being had to the accompanying drawings, in which—

Figure 1 is a view of my improved ventilator as in use. Fig. 2 is a vertical section of a partly-constructed flue, illustrating the purpose of the supporting or side straps. Fig. 3 is a section of the flue and the ventilator. Fig. 4 is a cross-section on the line 4 4 of Fig. 3, and Fig. 5 is a perspective view of the ventilator.

My form of ventilator is especially designed for use at the bottom of a flue, as shown in Figs. 2 and 3; but it may also be conven-

iently used to enter the flue when in a horizontal position, it being designed to surround and receive that end of the pipe near the ceiling and which is usually the hottest.

In the drawings, in which like characters indicate like parts in all the figures, A designates a cast-metal headpiece comprising an outer annular rim 1 and an inner rim 1^a and an intermediate open skeleton portion 1^b to provide for a free air-passage between the two rims 1 and 1^a for a purpose presently explained, and the outer edge of the said headpiece A is extended to form an annular flange 1^c to engage with the adjacent edge of the flue-opening in which the ventilator is fitted to hold said ventilator from being inserted too far into said opening.

B designates a tubular sleeve or pipe section of a diameter approximately that of the inner rim 1^a of the head A, the lower end of which has a turned-out flange b' to engage the outer face of the head A, as clearly shown in Fig. 3, and the opposite end of the sleeve B has a similar outturned flange b², the reason for which will presently appear.

C designates a conical cylindrical casing or sleeve, the outer end of which is of a diameter to snugly engage the outer rim 1 of the head A, and its inner or opposite end is of a diameter to snugly lie against the pipe-section B, to which it is made fast by rivets b^x at a point near its inner end, as shown. By making the member C cone-shaped an air-space is provided about the pipe or sleeve B, which gradually diminishes in area from the entrant end 1^b to the point where the two members B and C are joined. This not alone provides a cooling-space around the sleeve where the smoke-pipe engages it, but also provides for a forced circulation or draft of air from the room toward the inner end of the sleeve and out into the flue, the latter result being provided for by forming a number of air-inlets b³ in the sleeve B near the inner end thereof, as shown clearly in Figs. 3 and 4. The inlets b³ are made by cutting the sleeve B in such manner as to permit the cut portions being turned downward, as best shown in Fig. 3, and the turned-down portions act as stops to limit the inward thrust of the smoke-pipe to prevent said pipe from being pushed in over the air passages or inlets b³.

The inner and outer members B and C are of sheet metal, preferably galvanized iron, and to provide for holding the ventilator in place when building the flue it has two or
5 more oppositely-disposed sheet-metal members or arms D, riveted at the lower end to the member C, the arms being utilized to support the ventilator on the partly-made surrounding flue, as shown in Fig. 2. In com-
10 pleting the flue the same is built close up to the ventilator, and by reason thereof the flange b^2 will also be embedded in the flue-wall and serve as a means for supporting the ventilator in place.

15 While I have described my ventilator as applied for use in a vertical flue, it is obvious the same may also be used in a horizontal position or as a protecting-sleeve and ventilator for joining the ends of offtake-pipes when
20 passed through floors or wooden partitions.

From the foregoing, taken in connection with the accompanying drawings, it is thought the advantages of my invention will readily appear. It will be noticed the same acts both
25 as a cooling or fireproof connection for the end of the smoke-pipe that enters a flue near the

ceiling and a simple means for taking off the foul air within the room.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is— 30

The hereinbefore-described improved ventilator, comprising in combination, the cast-metal headpiece A, having an inner and an outer annular rim, and intermediate air-in- 35 lets, the sleeve or pipe section B, connected at one end to the inner rim of the head A, and having an outturned flange b^2 , at its other end, said sleeve having cut portions bent back to form stops and air-inlets, the casing C, said 40 casing being of conical shape, its large end engaging the outer rim of the headpiece, its smaller end being made fast to the sleeve B, at a point beyond its air-inlets, and the members D, on the casing C, all being arranged 45 substantially as shown and for the purposes described.

THOMAS W. L. MURRAY.

Witnesses:

CHARLES HORN,
DOCK PALUTE.