

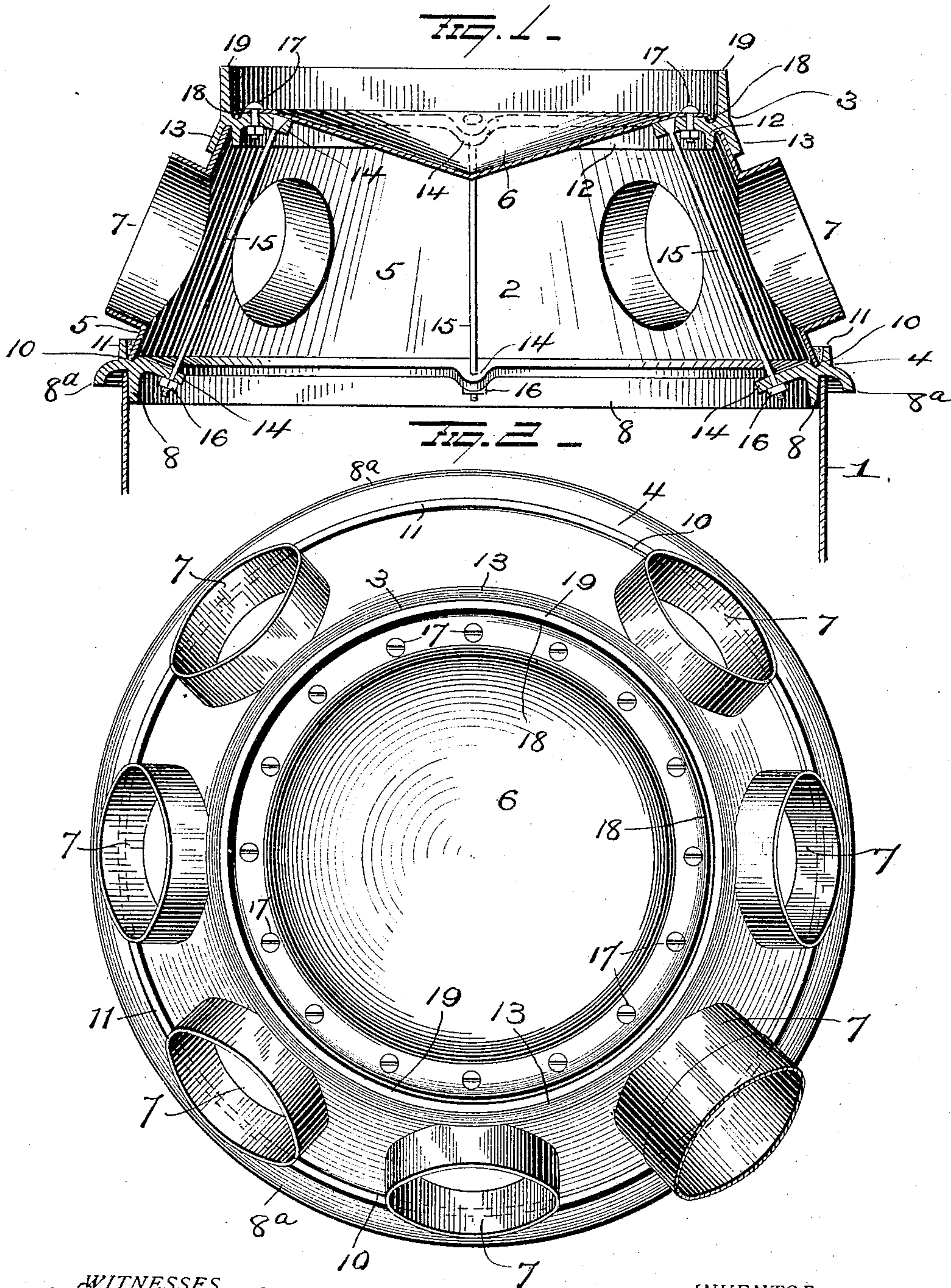
No. 764,857.

PATENTED JULY 12, 1904.

T. J. MARCH.
FURNACE CASING.

APPLICATION FILED DEC. 1, 1903.

NO MODEL.



WITNESSES
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UNITED STATES PATENT OFFICE.

THOMAS J. MARCH, OF POTTSTOWN, PENNSYLVANIA.

FURNACE-CASING.

SPECIFICATION forming part of Letters Patent No. 764,857, dated July 12, 1904.

Application filed December 1, 1903. Serial No. 183,408. (No model.)

To all whom it may concern:

Be it known that I, THOMAS J. MARCH, a resident of Pottstown, in the county of Montgomery and State of Pennsylvania, have invented certain new and useful Improvements in Furnace-Casings; and I do hereby 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.

My invention relates to an improved furnace-casing, and more particularly to the construction of hood or bonnet thereon, the object of the invention being to provide improvements of this character which will insure a strong, durable, and perfectly-tight casing and one which can be easily and quickly assembled by any one of average intelligence.

With this object in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a sectional view illustrating my improvements. Fig. 2 is a plan view.

1 represents the main body of the casing, and 2 my improved hood thereon. The body 1 is composed of sheet metal in the form of a cylinder supported on any suitable base and supports at its upper end the hood 2, which in the main comprises two cast-metal rings 3 and 4 of different diameters, the larger one resting on casing 1 and connected with the ring 3 by a conical hood-casing 5, with which a series of nipples 7 communicate for the attachment of the ordinary hot-air pipes, and a galvanized-iron inverted conical top plate 6 is secured in the upper ring 3 and adapted to contain sand, ashes, or other like material to prevent the radiation and loss of heat. The lower ring 4, as seen most clearly in Fig. 1, has on its lower face a depending annular flange 8, between which and an outwardly-flared annular flange 8^a the upper edge of casing-body 1 is cemented. On the upper face of ring 4 an annular recess 10 is made to receive the lower edge of hood-casing 5, and an annular flange 11 is located around the same, between which and casing 5 sand or other like

material may be placed to prevent escape of heat at this point.

The upper ring 3 is provided on its lower face with annular flanges 12 and 13, the outer flange 13 being preferably the longer, as shown in Fig. 1, and between said flanges 12 and 13 the upper edge of casing 5 is cemented. At regular intervals rings 3 and 4 are provided at their inner edges with inwardly-projecting lugs or ears 14, perforated to receive bolts or rods 15, having their upper headed ends countersunk in sockets in the lugs or ears 14 of ring 3 and their lower ends screw-threaded for the reception of nuts 16, which bear against the lower face of the lugs 14 of ring 4 to effectually clamp the casing 5 between the rings 3 and 4 and make a strong, rigid, and durable casing, as well as one most easily assembled.

The conical top plate 6 is secured near its edge where it overlaps ring 3 by means of screws 17, passed through the top plate and into the ring, and the extreme edges of said top plate 6 are bent down into an annular recess 18 in top ring 3 and sealed therein by suitable cement or like material, and around said recess 18 an upwardly-projecting annular flange 19 is provided to permit the sand or like covering material to be piled as high as desired within the flange 19 and insure a perfect insulation and heat-retaining casing.

Slight changes might be made in the general form and arrangement of the parts described without departing from my invention, and hence I do not restrict myself to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. A hood for furnace-casings, comprising two cast-metal rings, a sheet-metal casing secured to said rings and spacing them apart, a top plate secured to the upper ring and an upwardly-projecting peripheral flange on said upper ring.

2. A hood for a furnace-casing comprising two cast-metal rings and a sheet-metal casing

secured at its respective edges to said rings, a concave top secured to and depending within the upper ring and an upwardly-projecting peripheral flange on said upper ring.

5 3. A hood for furnace-casings, comprising two rings spaced apart and sheet-metal casing secured at its respective edges to said rings, a top plate secured to the upper ring, an upwardly-projecting peripheral flange on the
10 upper ring and an upwardly-projecting peripheral flange on the lower ring cooperating with the sheet-metal casing to form a sand-receptacle.

4. A hood for furnace-casings, comprising
15 two cast-metal rings of different diameters, a conical sheet-metal casing having its edges located in annular recesses in the rings, inwardly-projecting ears on said rings, clamping bolts or rods passed through perforations
20 in said lugs or ears, and an inverted conical top plate secured at its edges to the top ring, and a peripheral flange projecting upwardly from the upper ring.

5. In a hood for furnace-casings, the combination with a cast-metal ring having depending annular flanges on its lower face to receive between them the upper edge of a

main furnace-casing and permit the same to be cemented therein, an upper cast-metal ring of smaller diameter than the lower ring, 30 and having depending annular flanges forming a recess between them, a conical hood-casing having its upper edge cemented between the depending flanges of the upper ring, and its lower edge in an annular recess in the 35 lower ring, an annular flange on the upper face of the lower ring outside of the hood-casing to receive sand or like material, clamping or tie bolts connecting the rings inside of the hood-casing, a conical top plate secured 40 near its edges to the top ring and having its edges bent down into an annular recess therein, and an upwardly-projecting annular flange on the upper ring to confine sand or like material to the desired depth, on the top 45 plate.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

THOMAS J. MARCH.

Witnesses:

H. M. EBERT,

F. C. E. MITHOUSE.