May 1, 1928. 1,668,488

E. W. N. BOOSEY

GAS VENT T

Filed May 1, 1925

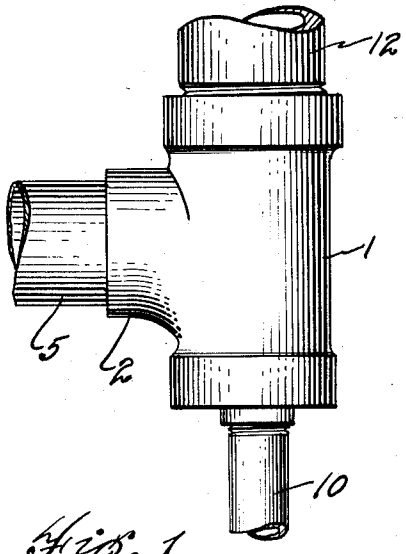


Fig. 1

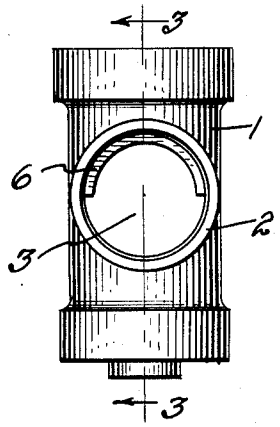


Fig. 2

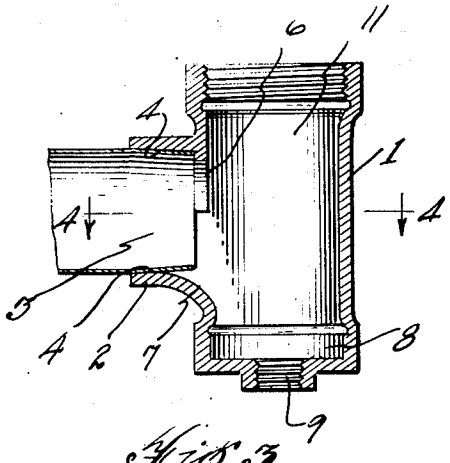


Fig. 3

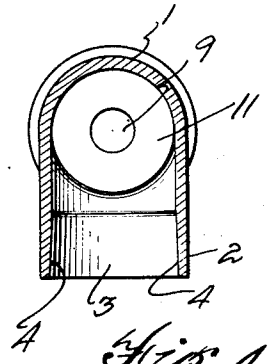


Fig. 4

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GAS-VENT T.

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This invention relates to gas vent T's and the object of the invention is to provide a T elbow through which the steam and gases from a cooking stove are adapted to be discharged, the said T being arranged so that any condensation in the T or stack is prevented from passing into the flue pipe of the stove.

Another object of the invention is to provide an arrangement for draining the water produced by condensation from the T so as to prevent the water from passing into the flue pipe of the stove and rusting the flue pipe and discoloring the wall through which the flue pipe extends.

A further object of the invention is to provide a T of the character described provided with a tapered opening into which the flue pipe is adapted to fit, an arrangement being provided to prevent the flue pipe from extending into the main opening in the T the said arrangement being adapted to prevent water produced by condensation from passing into the flue pipe.

These objects and the several novel features of the invention are hereinafter more fully described and claimed and the preferred form of construction by which these objects are attained is shown in the accompanying drawings in which—

Fig. 1 is a side elevation of a gas vent T embodying my invention.

Fig. 2 is a front elevation thereof.

Fig. 3 is a section taken on line 3—3 of Fig. 2.

Fig. 4 is a section taken on line 4—4 of Fig. 3.

As shown in Fig. 3 the device comprises a body 1 provided with an annular flange 2 on the side thereof and having an opening 3 therein. This flange 2 on the inside is provided with a tapered face 4 so that the sheet metal flue pipe 5 from a cooking stove will fit therein, the flange being tapered on the inside to provide a tight fit. As shown in Figs. 2 and 3 an arcuate rib 6 is provided in the opening 3 formed integrally with the wall of the body 1 and the flange 2 as shown in Fig. 3 is curved downwardly at 7 so that any moisture dropping from the flange 6 falls on the sloping portion 7 and passes into the lower end 8 of the body 1 from which it is drained through the threaded opening 9 into the drain pipe 10. The flange 6 also provides a limit for the sheet metal flue 5 so that it cannot be pushed into the main opening of the chamber 11 in the body 1. The body 1 is usually positioned in the wall of a building so that the flange 2 extends through the wall and provides an opening into which the flue for the cook stove may be fitted and as shown in Fig. 1 a stack 12 is threaded into the upper end of the body 1 so that the steam and gases are discharged upwardly through the stack. The flue pipe 5 is adapted to carry off the burned gases and the steam and odors from cooking foods on the stove and in passing through the body 1 and stack 12 the steam tends to condense on the inside of the stack and will flow down the inside of the stack into the chamber 8 in the bottom of the member 1 from which it is drained through the drain pipe 10 to a suitable drain into which the drain pipe 10 is connected. The flange 6 prevents the water from passing into the flue pipe 5 as the water passing down the inside of the stack and member 1 will pass down over the flange 6 from which it will drip onto the sloping portion 7 from which point it will pass into the bottom 8 of the member 1 and will discharge through the drain pipe 10. This prevents the possibility of any liquid produced by condensation from passing into the flue pipe 5 which would tend to rust the flue pipe through and would also tend to leak out of any sheet metal elbows used in the sheet metal flue pipe. Another disadvantage of the usual type of gas vent T is that the products of condensation may pass out around the flange 2 and will drip down the wall through which the flange 2 extends thus staining the wall as well as discoloring and rusting the flue pipe. With this device the sheet metal flue pipe fits snugly within the flange 2 which should extend about one quarter of an inch through the wall and with this arrangement no thimble is required as there is no unsightly hole in the wall. This type of T is small enough in diameter so that it can be placed without furring within a wall between the studding and the lath on the opposite sides and thus it is not necessary to have a chimney in the kitchen wall for the flue pipe to discharge into.

From the foregoing description it becomes evident that the device is very simple

and efficient in operation, requires no attention, is of low manufacturing cost and provides a device which accomplishes the objects described.

Having thus fully described my invention, its utility and mode of operation, what I claim and desire to secure by Letters Patent of the United States is—

1. A gas vent T comprising a cylindrical body member positioned on its vertical axis, the lower end thereof having a drain opening and its upper end being adapted for connection with a stack, said body member having a side opening provided with an interiorly tapered flange to receive a vent flue and form a tight joint therewith, an arcuate rib at the upper side of the opening having its inner face coextensive with the inner face of the wall of the body member, the said rib extending inwardly of the flange to a distance greater than the thickness of the vent flue, the wall of the flange opposite the arcuate rib being connected with the body member by a curved portion adapted to contact the flue at a point beyond the end of the flue, the said rib providing a means to prevent moisture collecting in the body member on the flange side from passing into the vent flue.

2. A gas vent T comprising a body member having a drain opening at one end and adapted at the opposite end for the attachment of a stack, said member having an opening in the side provided with a flange having a tapered interior for the reception of a sheet metal vent pipe, the said tapered arrangement causing the pipe to be compressed slightly at its end to cause sealed relation with the flange, an arcuate rib formed about the upper half of the flanged opening with its inner surface coextensive with the inner face of the body wall and having a depth greater than the thickness of the inserted pipe wall whereby moisture collecting on the side of the body member is caused to drip from the rib and is prevented from entering the insertible pipe.

3. A gas vent T comprising a cylindrical body member having a drain opening at one end and adapted at the opposite end for the attachment of a stack, the said body member having an opening in the side provided with a flange having a tapered interior for the reception of a sheet metal vent pipe, the said tapered interior causing the vent pipe to be contracted at its inner end to secure sealing relation with the flange, an arcuate rib coextensive with and in the same curved plane as the inner face of the body member at the said opening and extending approximately about the upper half thereof and extending into the opening a distance greater than the thickness of the wall of inserted vent pipe, the said flange having a curved portion connecting the lower side of the flange with the body of the T at the bottom of the opening and directly beneath the rib whereby moisture dripping from the rib may fall on the curved surface, the arrangement further providing that the inner inserted end of the vent pipe is for a distance along the lower side of the inserted portion spaced from the said curved part of the T whereby moisture condensing on the inner face of the body member is prevented from entering the inserted pipe.

In testimony whereof I sign this specification.

EDWARD W. N. BOOSEY.