F. J. MOORE.

VENT PIPE.

APPLICATION FILED JULY 20, 1914.

1,137,778.

Patented May 4, 1915.

2 SHEETS—SHEET 1.

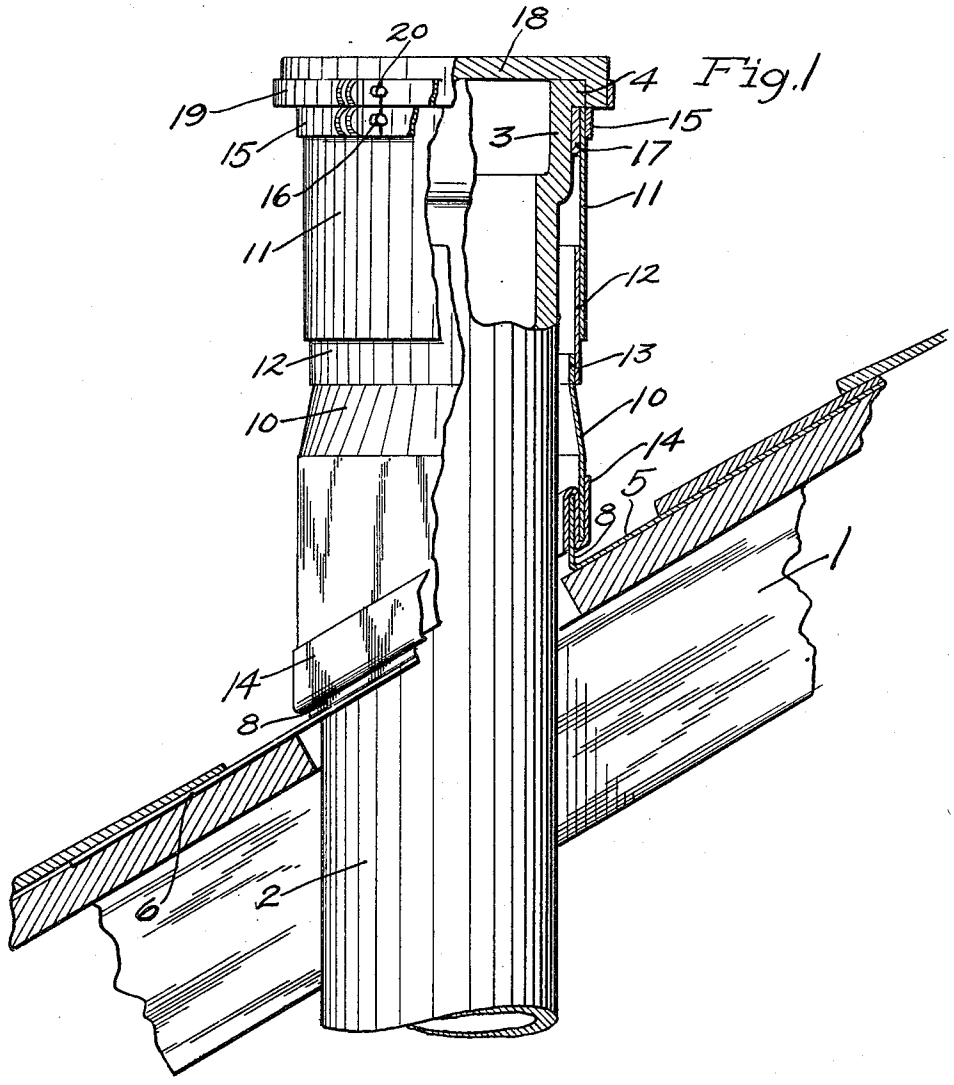


Fig. 1

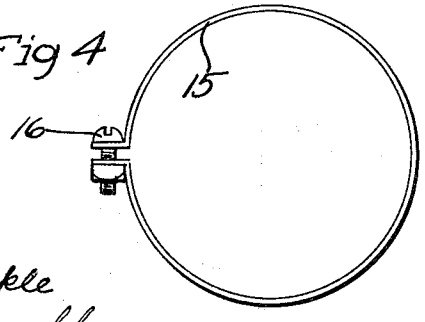


Fig 4

WITNESSES

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2 SHEETS—SHEET 2.

Fig. 2

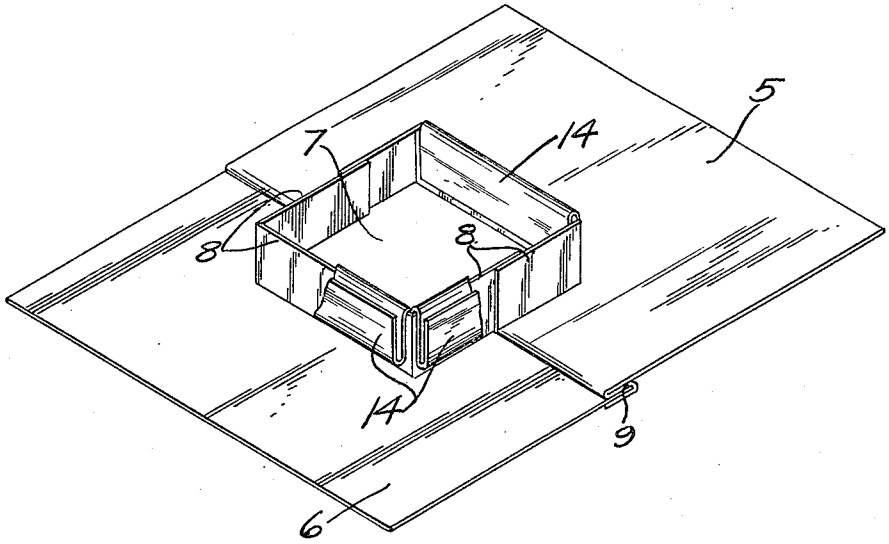
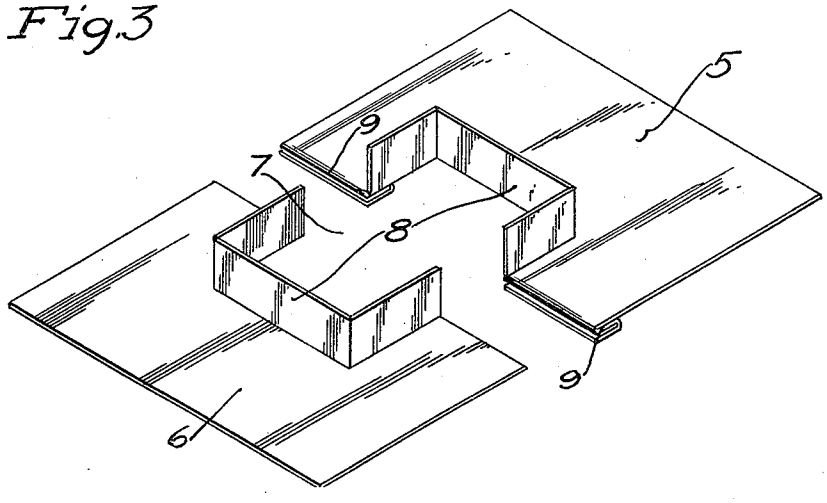


Fig. 3



WITNESSES

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UNITED STATES PATENT OFFICE.

FRANCIS J. MOORE, OF MINNEAPOLIS, MINNESOTA.

VENT-PIPE.

1,137,778. Specification of Letters Patent. Patented May 4, 1915.

Application filed July 20, 1914. Serial No. 851,939.

To all whom it may concern:

Be it known that I, FRANCIS J. MOORE, citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Vent-Pipes; 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 improvements in vent pipes and has for its object to provide an improved cap and combined casing and flashing.

To the above end, generally stated, the invention consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

In the accompanying drawings, which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings, Figure 1 is a view partly in side elevation and partly in vertical section showing the invention applied in working position to a roof structure and a vent pipe; Fig. 2 is a perspective view of the flashing and portions of the joint strips which connect the casing with said flashing; Fig. 3 is a perspective view of the flashing, showing the sections thereof separated; and Fig. 4 is a plan view of one of the clamping rings.

The numeral 1 indicates, as an entirety, a shingled roof structure, and the numeral 2 indicates a vent pipe or soil stack, projecting through an opening in the roof structure. Said soil stack has at its upper end the customary hub 3, terminating in a horizontally extended annular flange 4. Surrounding the vent pipe 2 is a flashing comprising upper and lower plates 5 and 6, respectively, which have, in their inner edges notches, that afford a rectangular opening 7, through which said pipe projects when the flashing plates are in assembled relation. This opening 7 is surrounded by upwardly extending flanges 8. The flashing plates 5 and 6 are detachably connected one with the other by a lap joint 9. This joint, as shown, is preferably formed by bending the lower edge of the upper plate 5 into approximately S-shape, with the inner fold thereof pressed tightly against the body of said plate. The upper edge of the lower plate 6 is inserted between the intermediate and lower folds of said joint. By this arrangement the two connected plates 5 and 6 will shed water. It will also be noted that the inner edges of the flanges 8 are overlapped so as to shed water. After the flashing is assembled around the vent pipe 2, the same is secured to the roof by nails, or otherwise. Surrounding the vent pipe 2 above the flashing and extending from said flashing to a point just below the flange 4, is a sheet metal casing. This casing comprises a base section 10 and a top section 11, connected by a slip joint 12. The top section of said casing is telescoped over the base section thereof so as to shed water. The base section 10, at its lower portion, is rectangular in cross section, telescoped over the flanges 8, and is spaced apart therefrom on all sides. The upper portion of this base section 10 is drawn upward and inward to form an annular collar 13, onto which is telescoped an annular extension of said base section. This annular extension is secured in position on the collar 12 by solder, or otherwise. An S-shaped joint strip 14 is provided for detachably connecting the casing to the flanges 8. The flanges 8 are inserted between the inner and intermediate folds of the joint strip 14 and the upper edges thereof engage the transverse portion of said joint strip and thereby support the casing slightly above the flashing. The lower edge portion of the base section 10 is trimmed to the same pitch as the roof structure 1 and inserted between the outer and intermediate folds of the joint strip 14. The said lower edge portion rests directly on the outer transverse portion of the joint strip 14 and thereby supports the casing from the flashing.

The upper section 11 is supported from the vent pipe 2 and is frictionally secured thereto by a transversely divided clamping band or collar 15, and a set screw 16. This set screw is mounted in perforations formed in the outwardly and laterally bent ends of the collar 15. A pliable packing 17 is interposed between the casing section 11 and the hub 3 to form a tight joint therebetween. Obviously, the slip joint 12 permits the casing to be readily adjusted longitudinally to fit the vent pipe to which the same is applied. By trimming the lower edge of the

base section of the casing, the same may be very quickly fitted to the flashing on roofs of different pitch.

For temporarily closing or sealing the upper end of the vent pipe 2 while the system is being tested to determine whether or not all joints are perfectly tight, and that there are no leaks of any kind, a cap 18, preferably of heavy rubber, is telescoped over the upper end of said pipe. A transversely divided clamping band 19 is placed around the flange of the cap 18 for frictionally clamping the same onto the flange 4 of the vent pipe. The ends of the band 19 are bent laterally and perforated to receive a set screw 20 for drawing said band onto the cap 18. As previously stated, the cap 18 is for temporary use only and must be removed after the proper tests of the system have been made by an official or inspector. As the flange of the cap 18 telescopes over the upper end of the vent pipe, it may be readily seen from the outside of a building thus facilitating an inspection.

What I claim is:

1. The combination with an oblique roof structure and an upright vent pipe projecting through an opening therein, of a flashing secured to said roof structure and having an opening through which said pipe projects, a casing surrounding said pipe above said flashing and a joint strip carried by said flashing, extending in a plane substantially parallel to said roof structure and arranged to telescopically receive and removably support said casing.

2. The combination with an oblique roof structure and an upright vent pipe projecting through an opening therein, of a flashing secured to said roof structure and having a flanged opening through which said pipe projects, a casing surrounding said pipe above said flashing and a joint strip detachably and removably seated on the flange of said flashing, extending therearound in a plane substantially parallel to said roof structure and arranged to telescopically receive and removably support said casing.

3. The combination with an oblique roof structure and an upright vent pipe projecting through an opening therein, of a flashing secured to said roof structure and having a flanged opening through which said pipe projects, a casing surrounding said pipe above said flashing and a joint strip S-shaped in cross section, arranged to telescopically receive the flange of said flashing and the lower edge of said casing, said joint strip extending around said flange in a plane substantially parallel to said roof structure.

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

FRANCIS J. MOORE.

Witnesses:
B. G. WHEELER,
HARRY D. KILGORE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."