

E. P. MEREDITH.
 INTEGRAL FLUE BASE.
 APPLICATION FILED JAN. 14, 1908.

922,714.

Patented May 25, 1909.

Fig. 1.

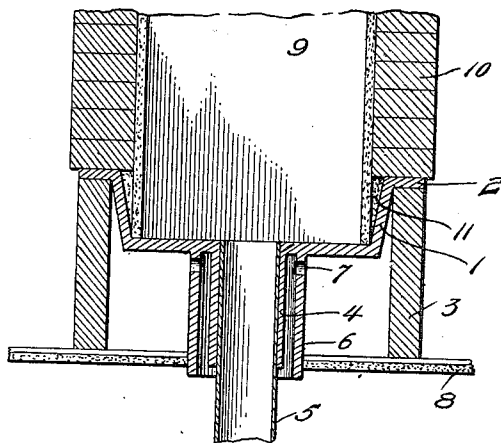


Fig. 2.

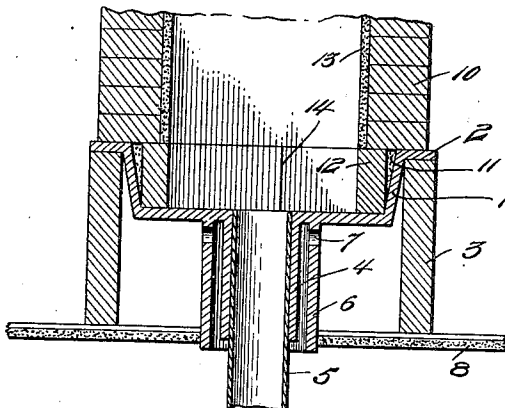
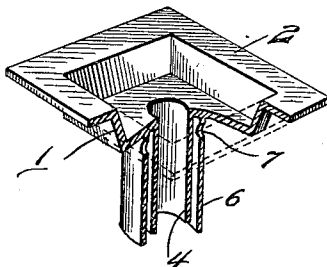


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ERNEST P. MEREDITH, OF TARBORO, NORTH CAROLINA, ASSIGNOR OF ONE-HALF TO GEORGE HOWARD, OF TARBORO, NORTH CAROLINA.

INTEGRAL FLUE-BASE.

No. 922,714.

Specification of Letters Patent.

Patented May 25, 1909.

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To all whom it may concern:

Be it known that I, ERNEST P. MEREDITH, a citizen of the United States, residing at Tarboro, in the county of Edgecombe and State of North Carolina, have invented certain new and useful Improvements in Integral Flue-Bases, of which the following is a specification.

The object of this invention is the provision of a simple and effective integral flue-base, adapted to provide a secure connection between a conduit for heated gases, usually a sheet-metal pipe leading from a stove or furnace, and a flue or chimney of masonry or the like.

Flue-bases as heretofore employed have usually consisted of two or more parts of sheet metal united by riveting or the like or of cast metal parts merely assembled without union, and have been subject in practice to several objections among which may be mentioned the liability to displacement of the parts which is a source of danger even though the displacement be but slight, and the liability through displacement or vibration of the parts to the separation of the flue-base from the masonry, whereby cracks or apertures are often afforded through which the flame or heated gases may have access to the joists, floors or other combustible portions of the building. According to the present invention these objections are overcome by the provision of an integral flue-base of substantial construction, the upper surface of which is recessed in such manner that the masonry or brick work of the flue or chimney may be keyed or secured within the recess and retained thereby under any conditions of vibration or unequal expansion or contraction to which the construction may be subjected. At the same time the construction is such that a portion only of the weight of the masonry is directly carried by the base.

For a full understanding of the invention reference is made to the accompanying drawings, wherein—

Figure 1 is a central vertical section of my improved flue-base, illustrating one mode of securing the flue therein; Fig. 2 is a similar view showing a modified mode of attachment of the masonry flue; and Fig. 3 is a perspective view of the flue-base, parts being broken away.

Referring to the figures, the flue-base com-

prises a hollow box-like body portion 1, the sides of which may flare or taper outwardly to a slight extent, for the purpose of facilitating the separation of the base from the mold and also to provide means for more securely holding the masonry as hereinafter described.

2 represents flanges extending outwardly from the upper margin of the body 1 and adapted to rest upon the joists 3 of the building, the flanges extending between the joists being usually supported by transverse frame members in the usual manner. The body portion is provided in its bottom with a central, integral tubular extension 4 of a size adapted to receive the sheet metal flue 5. Surrounding the extension 4 and spaced therefrom is a depending apron 6, integral with the flue-base and preferably perforated at or near its upper end as shown at 7. The depth of the flue-base between the flanges 2 and the bottom of the apron 6 slightly exceeds the depth of the usual building joists, in order that the apron may extend to or through the lath and plaster facing 8. The annular space between the extension 4 and the apron 6 provides an air space surrounding the flue, and in conjunction with the apertures 7 may afford a circulation of air around the extension and between the joists.

Referring to Fig. 1 the body is indicated as of proper size to receive a fire-clay tile or flue lining 9, which is closely surrounded by brick work 10, the brick work resting upon the flanges 2 and being placed directly above and supported by the joists 3 and transverse frame-members. The wedge-shaped spaces provided by the flaring sides of the body 1 are filled with cement, concrete or mortar 11, forming a rigid and stable union between the flue and base.

Fig. 2 shows a modified mode of uniting the flue with the base when a separate tile or flue lining is not employed. In this construction bricks 12 are laid in mortar or cement within the body 1 of the flue-base and the spaces between these and the sides of the base are filled as before with concrete or the like 11. The masonry or brickwork 10 of the flue rests in part upon the bricks 12 and in part upon the flanges 2, being preferably offset slightly from the interior to provide a seat for a lining of cement or other suitable material 13. In this construction stability is secured by the union of the mortar or other

filling in the vertical joints 14 between the bricks 12 with that of the superposed masonry.

It will be obvious that the weight of the flue-lining only is directly carried or supported by the flue-base, the surrounding masonry resting upon the flanges in such manner that the weight is directly transmitted to the joists or other supporting members. The construction therefore permits the use of castings which are not of undue weight. In most cases the flue-base will be made of cast iron, and it will be noted that the form is such as to permit easy casting in molds of simple form. The base may however be made of cement or a cement composition.

I claim:

1. An integral flue-base for supporting a masonry flue comprising a hollow body portion opening upwardly for the reception of the masonry and having a bottom aperture for receiving the stove-pipe, outwardly extending flanges surrounding said body portion and adapted to support the same, and an integral tubular extension surrounding said aperture and extending downwardly therefrom.

2. An integral flue-base for supporting a masonry flue comprising a hollow body portion opening upwardly and tapering outwardly for the reception of the masonry and having a bottom aperture for receiving the stove-pipe, outwardly extending flanges surrounding said body portion and adapted to support the same, and an integral tubular extension surrounding said aperture and extending downwardly therefrom.

3. An integral flue-base for supporting a masonry flue comprising a hollow body por-

tion opening upwardly for the reception of the masonry and having a bottom aperture for receiving the stove pipe, outwardly extending flanges surrounding said body portion and adapted to support the same, an integral tubular extension surrounding said aperture and extending downwardly therefrom and a depending apron surrounding said extension and spaced therefrom.

4. An integral flue-base for supporting a masonry flue comprising a hollow body portion opening upwardly for the reception of the masonry and having a bottom aperture for receiving the stove-pipe, outwardly extending flanges surrounding said body portion and adapted to support the same, an integral tubular extension surrounding said aperture and extending downwardly therefrom and a depending apron surrounding said extension and spaced therefrom, said apron perforated in its upper portion.

5. In combination, an integral flue-base for supporting a masonry flue comprising a hollow body portion opening upwardly and having a bottom aperture for receiving the stove-pipe, outwardly extending flanges surrounding said body portion and adapted to support the same, an integral tubular extension surrounding said aperture and extending downwardly therefrom, a flue-lining resting upon the bottom of said body, and a flue surrounding said lining and supported by said flanges.

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

ERNEST P. MEREDITH.

Witnesses:

ROBT. M. RAWLS,
J. R. THOMAS.