No. 843,375. PATENTED FEB. 5, 1907.

E. E. THOMPSON.

STOVE FLUE.

APPLICATION FILED NOV. 8, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

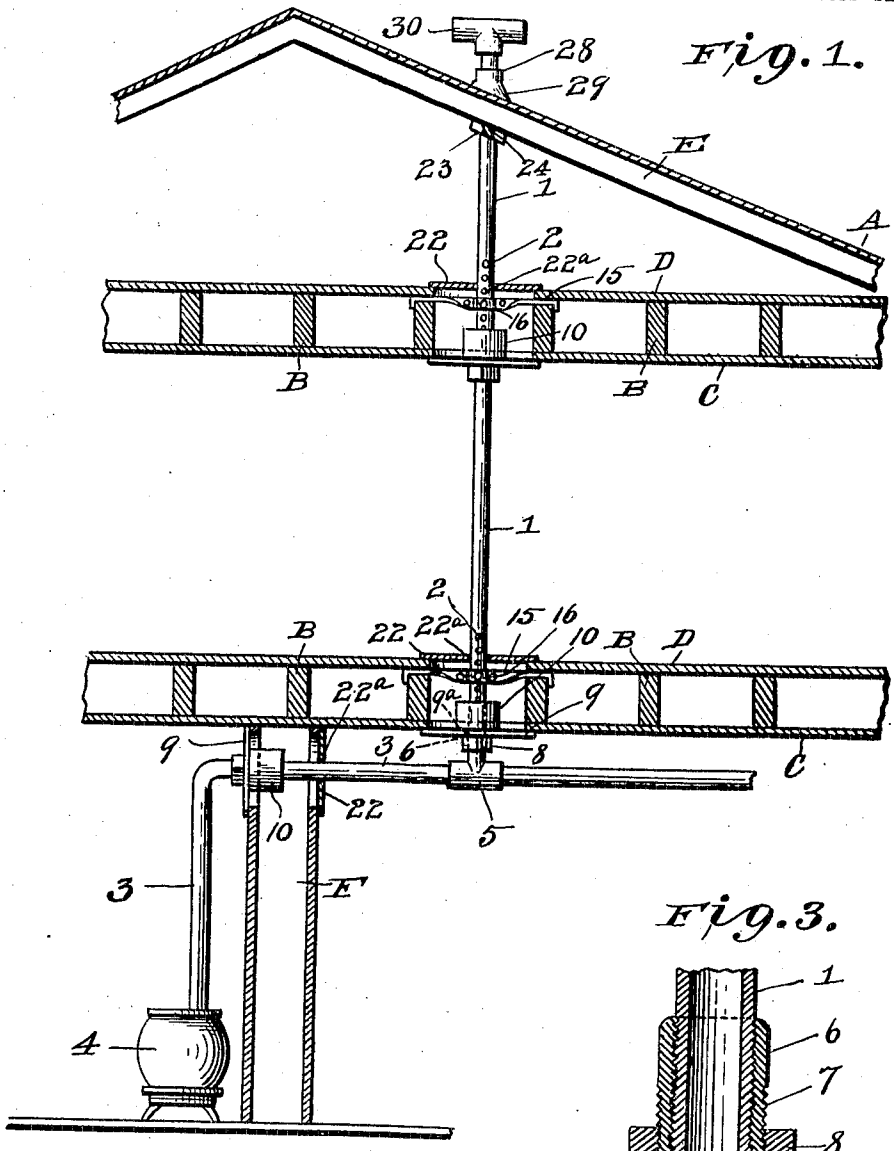
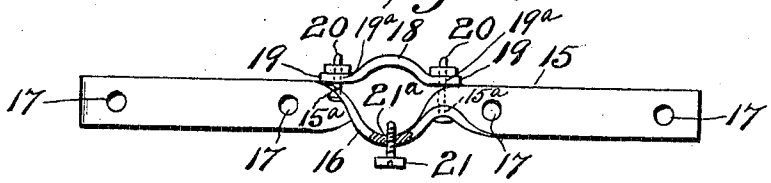


Fig. 3.

Fig. 4.



Witnesses

Jas. N. Blackwood,

W. E. Blackwood.

Inventor

Everett E. Thompson

By James K. Polk

Attorney

THE NORRIS PETERS CO., WASHINGTON, D. C.

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2 SHEETS—SHEET 2.

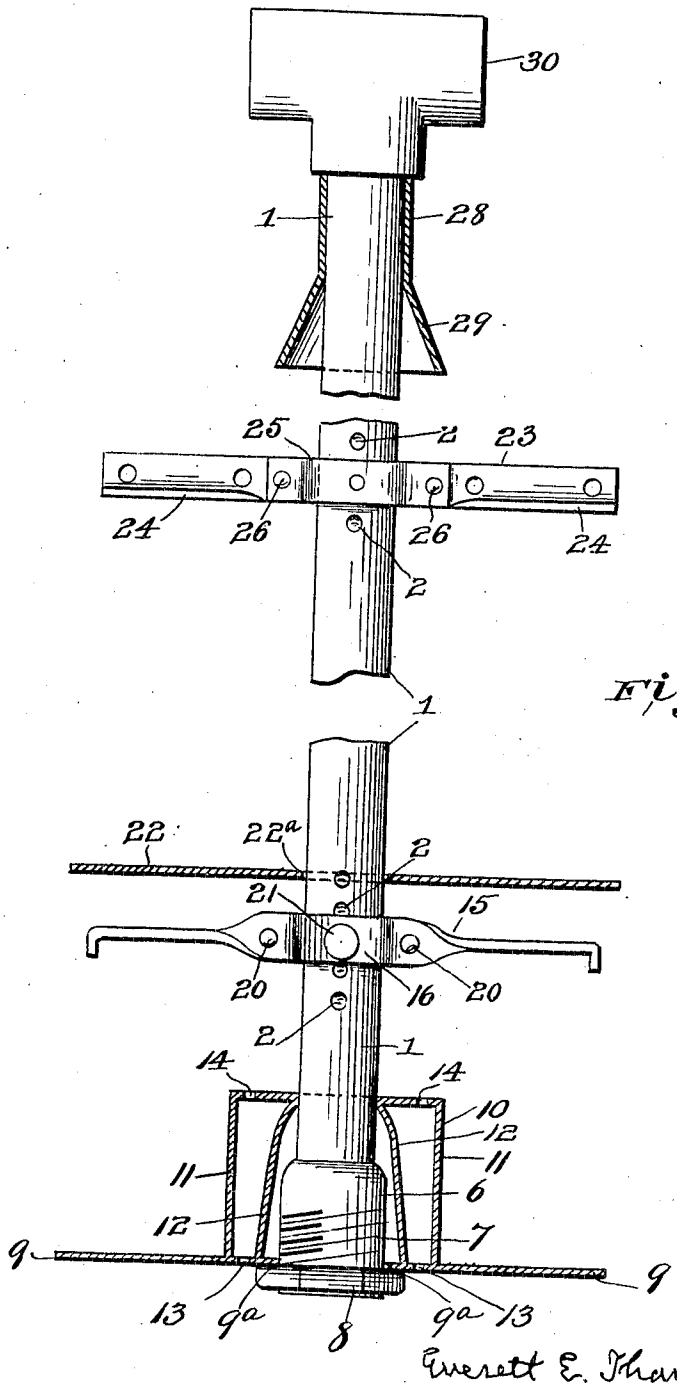


Fig. 2

Witnesses

Jas. A. Blackwood

W. O. Blackwood.

Inventor

Everett E. Thompson

By James K. Polk

Attorney

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EVERETT E. THOMPSON, OF KAUFMAN, TEXAS.

STOVE-FLUE.

No. 843,375. Specification of Letters Patent. Patented Feb. 5, 1907.

Application filed November 8, 1905. Serial No. 286,370.

To all whom it may concern:

Be it known that I, EVERETT E. THOMPSON, a citizen of the United States, residing in Kaufman, in the county of Kaufman and State of Texas, have invented certain new and useful Improvements in Stove-Flues, of which the following is a specification.

My invention relates to devices for securing stove-flues and to fireproof casings therefor to prevent the heat of the products of combustion passing through the flue from burning or charring the woodwork between the ceilings and floors of buildings.

My invention will be particularly described hereinafter and illustrated in the accompanying drawings, in which—

Figure 1 is a sectional view of a building, showing the application of my invention; Fig. 2, an enlarged view of the flue and its appurtenances, the fire-casing being shown in section; Fig. 3, a detail of the screw-threaded sleeve for securing the parts of the flue together, and Fig. 4 a detail view of one of the hangers.

In the drawings similar reference characters indicate corresponding parts throughout the several views.

A represents a building in which my improved flue is installed; B represents the floor-joists; C, the ceilings; D, the floor; E, the rafters, and F a partition-wall.

1 represents the flue, which may be made of any desired material—such as metal, terra-cotta, &c.—having a series of notches 2 therein for the purpose to be hereinafter described.

3 represents the pipes connected with stoves 4 and connected with the lower end of flue 1 by means of a T-joint 5, which is secured to said flue 1 by means of an interiorly-threaded coupling 6. The exterior of coupling 6 is also screw-threaded, as shown at 7, to receive a nut 8 to support the plate 9, which is provided with a hole 9^a to receive the flue 1.

In installing my flue in position a large hole is cut in the floor and ceiling slightly smaller than the size of plate 9, which when in position completely covers said hole. On the upper side of plate 9 is secured a fireproof casing consisting of a hollow annular box 10, having its outer wall 11 cylindrical, while its inner wall 12 is conical in cross-section, as shown in Fig. 3.

The plate 9, inclosed by the box 10, is provided with a number of holes 13, while the upper side of the box 10 is also provided with holes 14, said holes 13 and 14 being provided to secure ventilation through the box to prevent it becoming heated sufficiently to burn the woodwork between the floors and under the roof.

15 represents a collar-brace made of strap-iron, having its middle portion curved, as shown at 16, to half surround the smoke-flue 1 and its ends provided with a series of holes 17 to receive the nails or screws to secure the brace to the tops of the adjacent joists B.

18 represents a half-circular strap to mate with the half-curved portion 16 and having ears 19 extending from its ends, with holes 19^a therein to receive screw-bolts 20, run through holes 15^a in brace 15 to draw the two parts 15 and 19 together to clasp the flue 1.

21 represents a set-screw secured in a hole 21^a in curved portion 16, which seats in one of the notches 2 and serves to support the flue.

22 represents a top plate to cover the opening in the floor made for the passage of flue 1, and it is provided with a central hole 22^a, through which the flue extends.

The construction of plates 9 and 22 and fireproof casing, consisting of the annular hollow box 10, is repeated in passing through each ceiling and floor and is also used in passing the smoke-pipes 3 through each partition-wall F, as shown in the drawings.

23 represents a collar-brace similar in construction to the brace 15, having its extended ends 24 bent so as to fit the top or bottom edges of the roof-rafters E and with a mating portion 25, secured by means of bolts 26 to the part 23.

27 represents a set-screw to secure the brace to the flue 1 in one of the notches 2.

28 represents a sleeve mounted on the part of the flue 1 extended outside of the roof of the building and having a conical-shaped lower portion 29 to shed water and prevent it from following the flue down into the building A, the lower edge of the lower portion 29 being soldered or otherwise secured to the tin or other covering of the roof. The upper edge of the sleeve 28 is also made water-tight in its relation to the flue by means of solder or other agent. The top of the flue is provided with a chimney-cowl of any desired construction, the T construction indicated by the character 30 being used for illustration only.

My improved flue is designed to be used to the exclusion of the ordinary construction of brick flue and is superior thereto in that the

brick flue is subject to cracking and disintegration and is difficult to keep clean because of its permanent nature, while my flue is adapted to dismemberment and removal for cleaning and does not disintegrate in use.

Having thus described my invention, what I claim is—

1. A smoke-flue comprising a pipe having notches therein, said flue being adapted to extend through openings in the floors of buildings, collar-braces having extended ends secured to the rafters and joists of the building, said collar-braces surrounding said flue, and set-screws secured in said collar-braces and adapted to seat in one of the notches in the flue, substantially as shown and described.

2. A smoke-flue comprising a pipe having notches therein, said flue being adapted to extend through openings in the floors of buildings, collar-braces made of strap-iron having their middle portion bent to partly surround the flue, and having extended ends secured to the rafters and joists of the buildings, and mating members to fit around the balance of the flue, and secured to the first-named member of the collar-brace by means of bolts, and set-screws secured in the collar-braces and adapted to seat in the notches in the flue, substantially as shown and described.

3. A smoke-flue for buildings comprising a pipe extended through enlarged holes in the ceilings and the floors of the building, plates to cover said holes in the floors and ceilings, the plate covering the hole in the ceiling having secured to its upper side a hollow annular box, the inner surface of said box being conical-shaped, the plate and upper surface of said box provided with air-holes, and means to secure the plate in position, substantially as shown and described.

4. A smoke-flue for buildings comprising a pipe extended through enlarged holes in the ceilings and floors of the building, plates to cover said holes in the floors and ceilings, the plate covering the hole in the ceiling having secured to its upper side a hollow annular box, the inner surface of said box being conical-shaped, the plate and upper surface of said box provided with air-holes, collar-braces for securing the flue in position consisting of two mating members shaped to surround the flue and secured together by screw-bolts, and set-screws to secure said braces to said flue, substantially as shown and described.

In witness whereof I have hereunto set my hand in presence of two subscribing witnesses.

EVERETT E. THOMPSON.

Attest:

ED R. BUMPASS,

JOEL P. BOND.