

(No Model.)

J. H. WATT.
FLUE THIMBLE.

No. 503,818.

Patented Aug. 22, 1893.

Fig. 1.

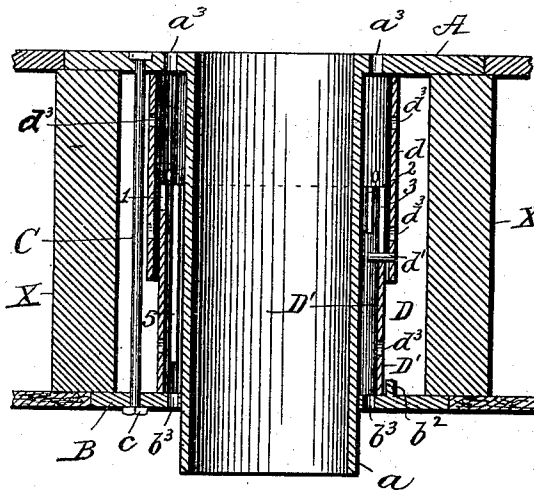


Fig. 3.

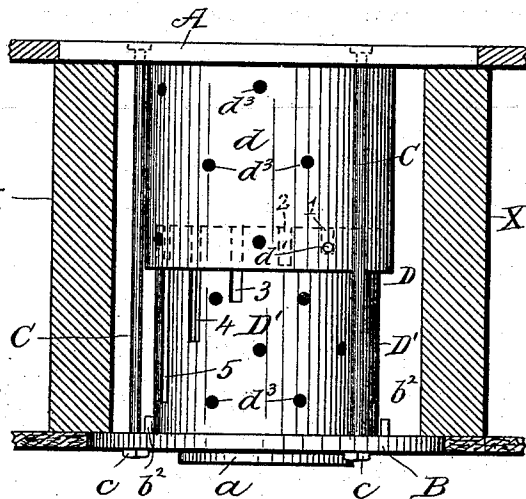


Fig. 2.

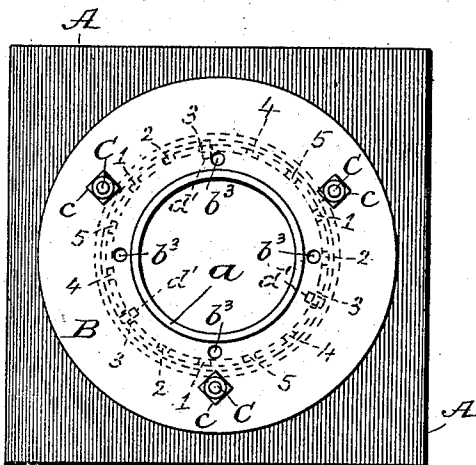


Fig. 4.

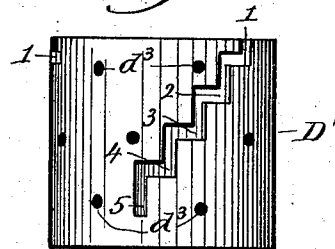
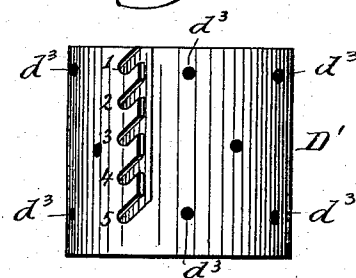


Fig. 5.



Witnesses:
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by
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UNITED STATES PATENT OFFICE.

JAMES H. WATT, OF BARNESVILLE, OHIO.

FLUE-THIMBLE.

SPECIFICATION forming part of Letters Patent No. 503,818, dated August 22, 1893.

Application filed February 27, 1893. Serial No. 463,868. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. WATT, of Barnesville, in the county of Belmont and State of Ohio, have invented certain new and useful Improvements in Flue-Thimbles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form part of this specification.

This invention is an improved flue thimble for use in buildings, where it is desired to convey stove-pipes, or hot air pipes, through the floors, and it is an improvement upon the flue thimble for which I made application for Letters Patent, Serial No. 454,707, dated December 10, 1892.

The object of this invention is to provide means for adjusting the thimble to a greater variety of thicknesses of joists, or of floorings, and to cheapen the construction of my aforesaid thimble, and at the same time improve it, and provide for a thorough circulation of air around the central collar thereby very materially lessening the danger of accidental fires; and the present invention consists essentially in the novel construction of the adjustable two part cylinder or sleeve which surrounds the collar, and in the combination thereof with other parts, as will be hereinafter clearly described and claimed.

In the drawings:—Figure 1 represents a central vertical sectional view through the thimble as applied to a flooring, and as a flue base. Fig. 2 is a bottom plan view thereof, and Fig. 3 is a side view of the same, the cylinder being adjusted to suit a thicker joist or flooring. Figs. 4 and 5 are details.

Referring to the drawings by letters and figures:—A represents the top plate, having a central opening, for the passage of the smoke-pipe (not shown) surrounding which opening is a depending collar *a*, that should be as long as the thickest joist or flooring with which the thimble can be used.

B designates the bottom plate, preferably annular, and fitting loosely on the collar *a*, as indicated in the drawings. This plate is adjustably secured to plate A by means of through-bolts C, and nuts *c*, as indicated in the drawings or in other suitable manner, so

that when plate A is supported upon adjoining joists X, (the collar depending therebetween,) plate B can be brought up against the joists as indicated. The ceiling plastering will surround plate B, and come flush with the surface thereof, making a neat appearance, as indicated in the drawings.

The cylinder D is composed of an upper part *d*, and lower part *D'*, (their positions may be reversed of course) which telescope one within the other, and both may be made of any sheet metal, as tin, or cast, or otherwise produced, as desired. Part *d* has a set of equidistant pins or studs *d'*, attached to it, near its lower edge and projecting radially as shown, by which it is supported on the part *D'*. The upper edge of part *D'*, has a stepped series of vertical slots 1, 2, 3, 4, 5, &c., in it, each successively deeper or longer than the preceding, there being a set of such slots for and co-incident with each pin *d'*. As shown in Fig. 1 pins *d'* are in notches 3, and the cylinder is partly extended; by lifting cylinder *d* and turning it so as to bring pins *d'* over deeper notches, the cylinder can be shortened, and by turning part *d*, so as to bring the pins over shallow notches the cylinder can be shortened. By this means the length of the cylinder can be readily and quickly adjusted to suit the varying widths of joists, on which the thimble is suspended, or varying thicknesses of partitions, floorings, &c.

The cylinder sections may be perforated as indicated at *d*³, if desired, so that air can circulate freely between the cylinder and collar, and thus keep down the temperature of both. I also propose to perforate the bottom plate B, as indicated at *b*³, and if desired the top plate, as indicated at *a*³, so that air can circulate upwardly between the collar and cylinder, as well as laterally around the same.

Instead of the successive series of slots, a stepped-slot, as indicated in Fig. 4, or a notched-slot as indicated in Fig. 5, may be used, which will allow ready adjustment of the length of the cylinder, and will also lock the parts of the same against rotary movements in relation to each other, the essential feature of my present invention being a telescoping two part cylinder, the sections of which can be immediately adjusted, to the

desired length, and locked when adjusted; said cylinder being confined in position between the top and bottom plates. The series of slots provide for lateral ventilation however.

The present invention possesses the following advantages over the thimble shown in my application aforesaid, as in that case the cylinder when the plates are farthest apart, stands considerably above the bottom plate; whereas in the present form, the cylinder always can lay directly on the bottom plate, and is moreover adapted to a much greater variety of thicknesses of floorings, &c. Again casting or securing the stepped lugs on the bottom plate, as in my first application, increased the expense of manufacture, and the weight of the parts, such lugs being dispensed with in the present case.

Small lugs b^2 may be cast on the bottom plate, if desired to "center" the cylinder.

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

1. In a flue thimble the combination of the top plate, the collar, the bottom plate fitted loosely on the collar, and the devices for suspending the bottom plate on the top plate; with the adjustable cylinder supported solely on the bottom plate and surrounding the collar and also confined between the plates, said cylinder being formed of an upper and lower

part adjustably connected together, substantially as described.

2. The combination of the top plate, the imperforate collar rigidly connected thereto and depending therefrom, the bottom plate, the uniting bolts, and the sectional and adjustable cylinder surrounding the collar confined between the plates and supported on the lower plate formed of two perforated cylindrical parts respectively having stepped slots, and pins on their telescoping ends whereby the length of the cylinder can be regulated, substantially as described.

3. The combination in a flue thimble of the top plate, the collar connected thereto, the bottom plate, loosely mounted on the collar and suspended from the top plate and the cylinder interposed between said plates formed in two relatively adjustable, cylindrical parts telescoping together, one part having a series of studs or pins near its inner end, and the other part having sets of stepped slots adapted to engage said pins, the slots in each set being successively longer or deeper, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JAMES H. WATT.

Witnesses:

S. BRASHEARS,
E. B. JONES.