(No Model.)

S. T. ATKIN.

VENTILATING CHIMNEY.

No. 314,309. Patented Mar. 24, 1885.

Fig. 1.

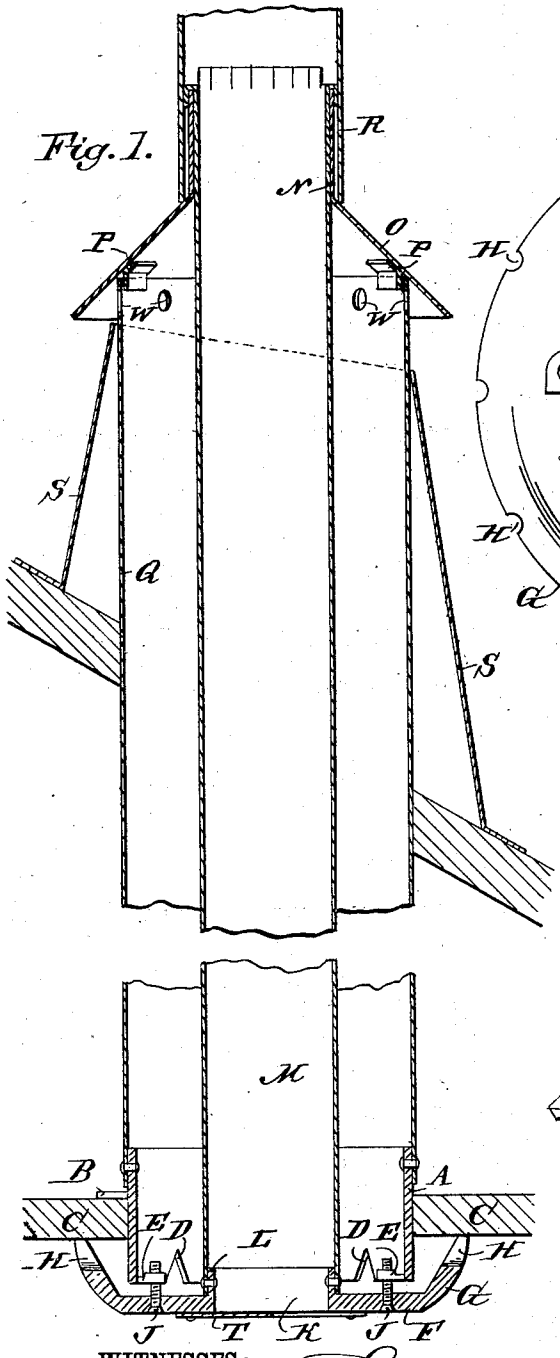


Fig. 2.

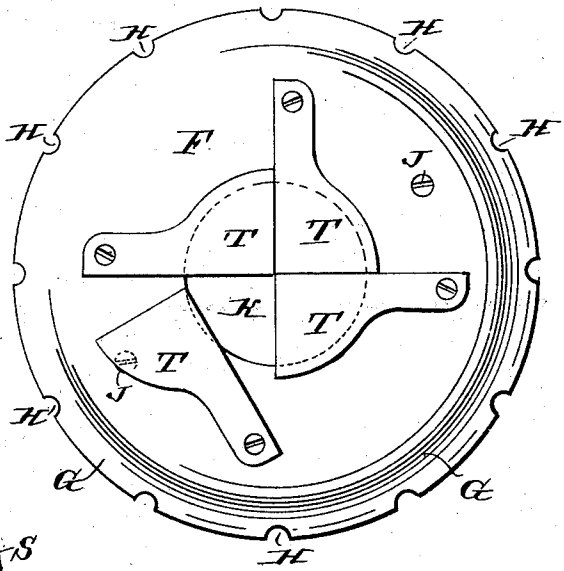
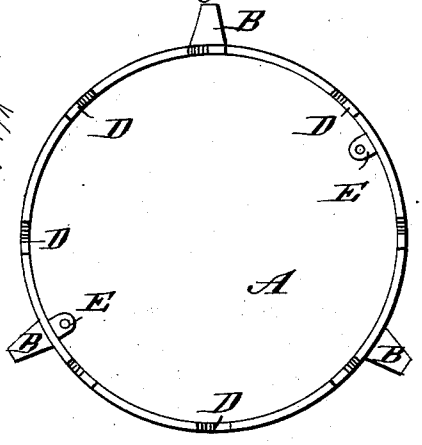


Fig. 3.



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UNITED STATES PATENT OFFICE.

SAMUEL T. ATKIN, OF GEORGETOWN, TEXAS, ASSIGNOR TO HIMSELF AND OLIVER STEELE, OF SAME PLACE.

VENTILATING-CHIMNEY.

SPECIFICATION forming part of Letters Patent No. 314,309, dated March 24, 1885.

Application filed April 30, 1884. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL T. ATKIN, of Georgetown, in the county of Williamson and State of Texas, have invented a new and Improved Ventilating-Chimney, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved ventilating-chimney and flue-stopper which can also be used with brick flues.

The invention consists in various parts and details and combinations of the same, as will be fully described and set forth hereinafter.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal sectional elevation of my improved combined ventilating-chimney and flue-stopper, parts being broken out. Fig. 2 is a plan view of the under side of the flue-stopper. Fig. 3 is a plan view of the bottom edge of the ventilating-pipe.

A thimble, A, or short neck of cast or sheet metal is provided with a series of outwardly-projecting or radial lugs, B, which are formed or secured on the said thimble such a distance from the upper end that when the said lugs B rest on the upper surface of the floor C the bottom edge of the thimble will project a short distance from the ceiling formed by the under surface of the floor. The said thimble A is provided in its bottom edge with a series of notches, D, which can have any desired shape.

From the inner surface of the thimble A two or more lugs, E, project inward, which are provided with screw-threaded apertures. A circular or other plate, F, has its rim bent up to form an annular flange, G, in the edge of which notches H are formed.

Screws J are passed up through the plate F and are screwed into the apertured lugs E, thus holding the plate F to the lower end of the thimble and pressing the edge of the flange G against the ceiling C.

The plate F is provided with a central aperture, K, around the rim of which an upwardly-projecting flange, L, is formed, and to the said flange the lower end of a pipe or flue, M, is riveted, which extends up through the roof and has its upper end, the edge of which is tongued, bent outwardly over the neck N of an annular hood, O, which neck rests closely against the outer surface of the flue M.

The hood O is provided in its inner surface with two or more downwardly-projecting prongs, P, which rest on the upper end of a tube or flue, Q, surrounding the tube or flue M concentrically, the lower end of the tube or flue Q being riveted to the upper end of the thimble or sleeve A.

Outside of the neck end of the hood O a tube, R, is placed, which is to be surmounted by a cowl or like device.

The tube Q is surrounded by a rain-proof, S, secured to the roof, which rain-proof consists of a tapering tube provided at its bottom with flanges secured to the roof. In place of surrounding the tube M by the tube or metal flue Q it can be surrounded by a brick flue which sets on the floor C; but about ten inches of the tube Q and about eight inches of the tube M must remain to make a thimble.

To the under surface of the plate F four gates or wings, T, are pivoted in such a manner that they can cover the opening K in the plate F, the end edge of one gate T resting against the inner side edge of the other, as shown in Fig. 2. When the flue is not being used—that is, when no stove-pipe is passed through the opening K in the plate F into the lower end of the pipe M—the said opening K is closed by means of the pivoted gates T. If the flue is to be used, the gates T are swung from the hole so as to leave the same entirely free. The gates T form the cover for the flue when the same is not in use, and as the said covers or gates are hinged and affixed to the plate F the inconvenience and trouble caused by misplaced and lost flue-covers are avoided by using my improved ventilating-chimney and flue-stopper.

The hot air of the room passes through the notches H, formed in the flange of the plate F, through the notches D, and up through the annular space between the concentric tubes M and Q, and passes off through openings W of the tube Q. The hood O prevents rain and snow from being driven into the openings W, and the rain-proof S prevents the water from being driven down on the outside of the tube Q.

Having thus fully described my invention, I

claim as new and desire to secure by Letters Patent—

1. The combination, with the smoke-flue M, of the ventilating-flue Q, surrounding it, the thimble or sleeve A, to which the lower end of flue Q is secured, the plate F, adjustably and removably connected to the lower end of thimble A and provided with a notched flange, G, and an opening, K, said plate F being secured to the lower end of the smoke-flue M in line with the opening K, whereby the plate F and the smoke-flue M may be readily removed without disturbing the sleeve A or flue Q, and may be adjusted to different thicknesses of ceilings, substantially as set forth.

2. The combination, with the smoke-flue M, of the ventilating-flue Q, the thimble A, provided with outwardly-projecting lugs B and inwardly-projecting apertured lugs E, the plate F, provided with a central aperture and with a flange, G, having notches H, and the screws J, passed through the plate F into the apertured lugs E, substantially as herein shown and described.

3. The combination, with the smoke-flue M, of the ventilating-flue Q, surrounding it, the thimble A, having notches in its lower edge, which thimble is connected with the exterior flue, Q, the notched plate F, held by screws J on the lower end of the thimble A, and provided with a central aperture, K, substantially as herein shown and described.

SAMUEL T. ATKIN.

Witnesses:
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