

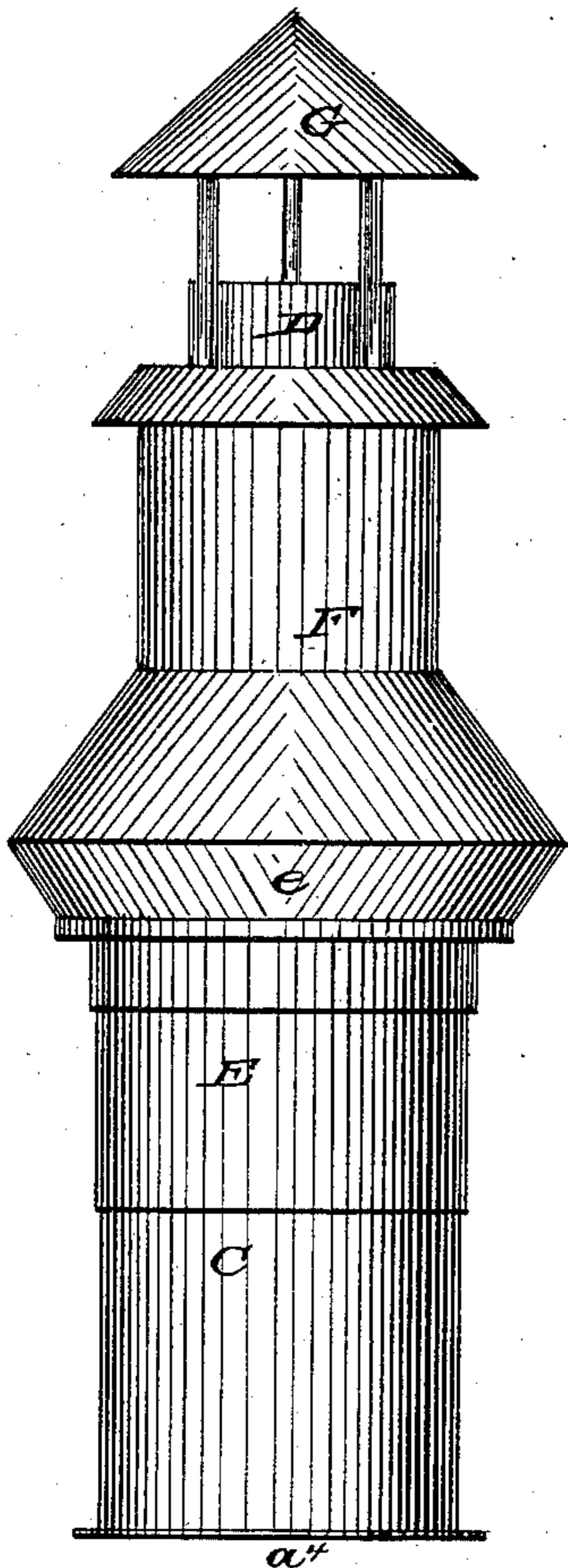
(No Model.)

T. C. HARRY.  
COMBINED CHIMNEY AND VENTILATOR.

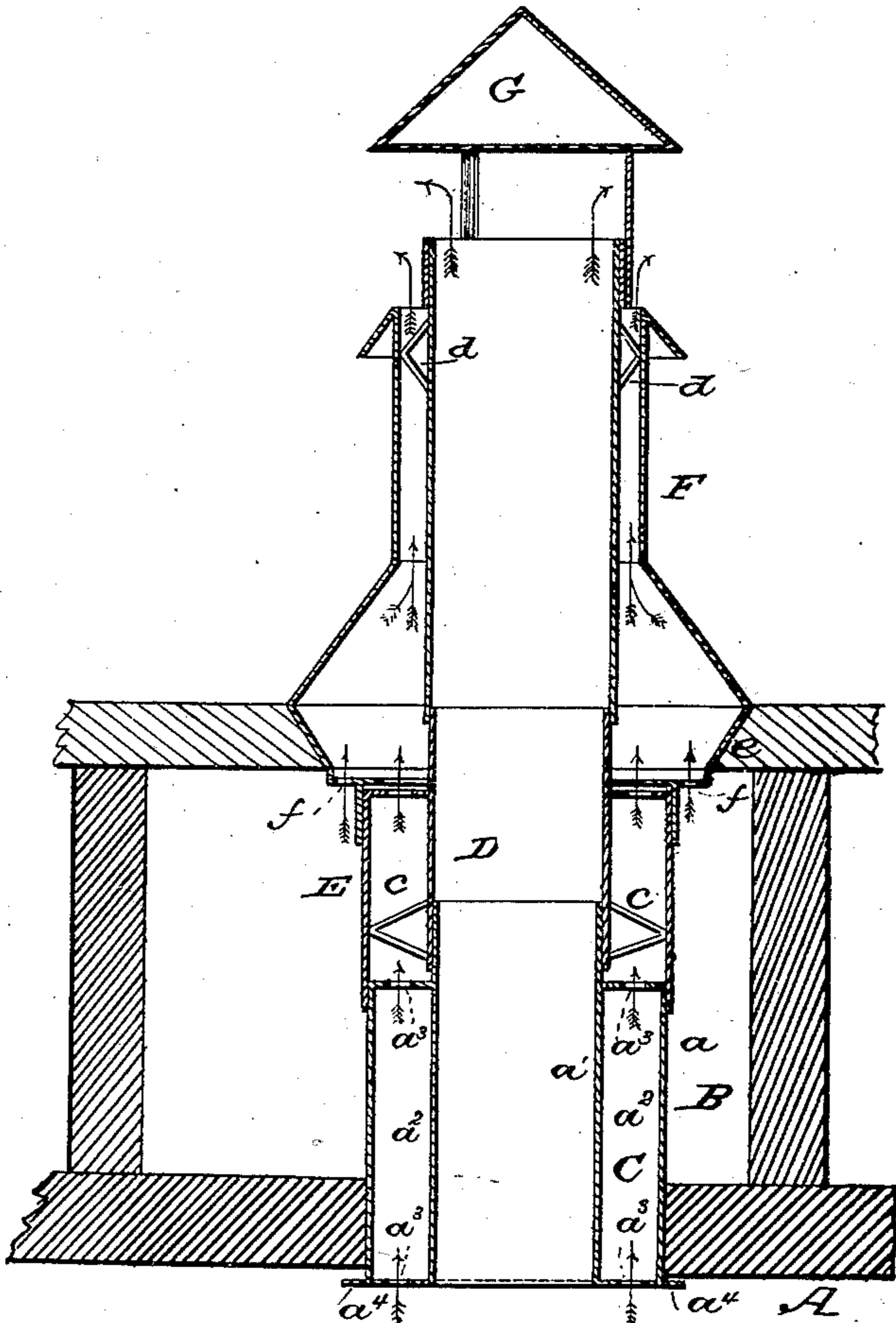
No. 314,238.

Patented Mar. 24, 1885.

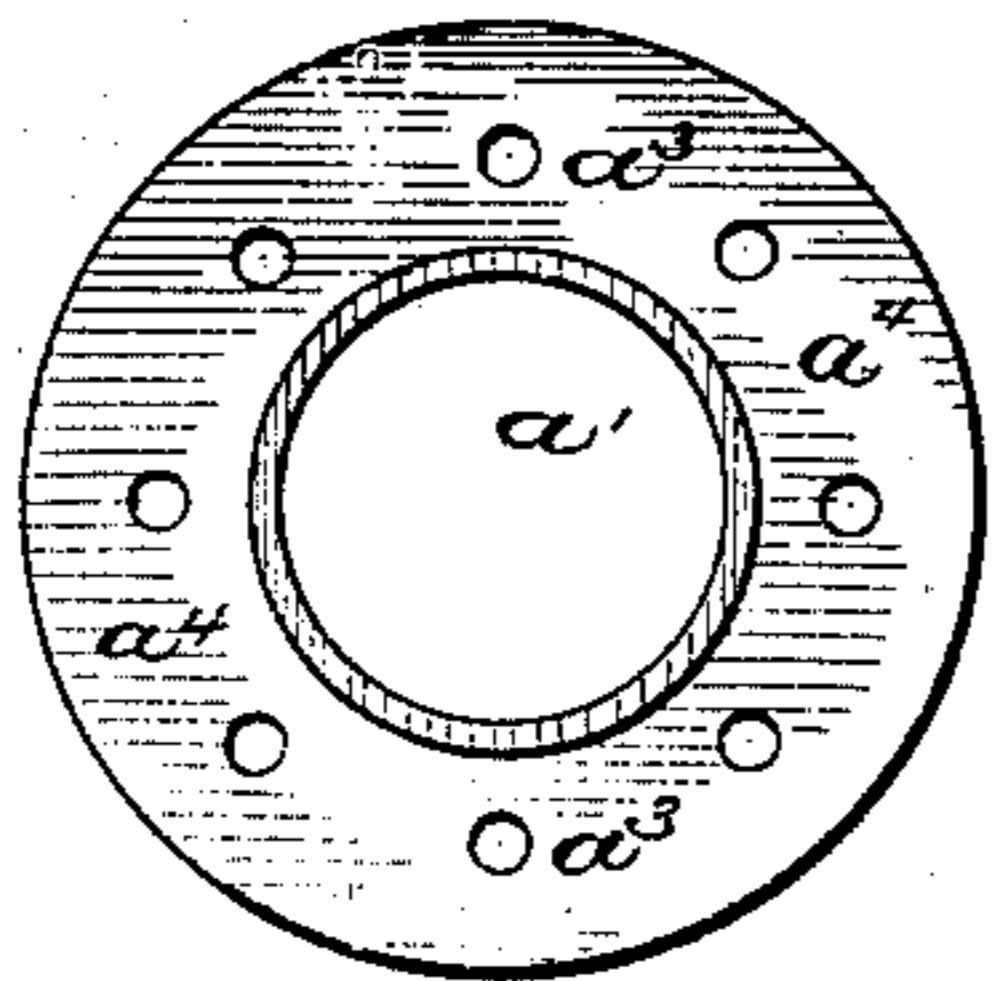
*Fig- 1 -*



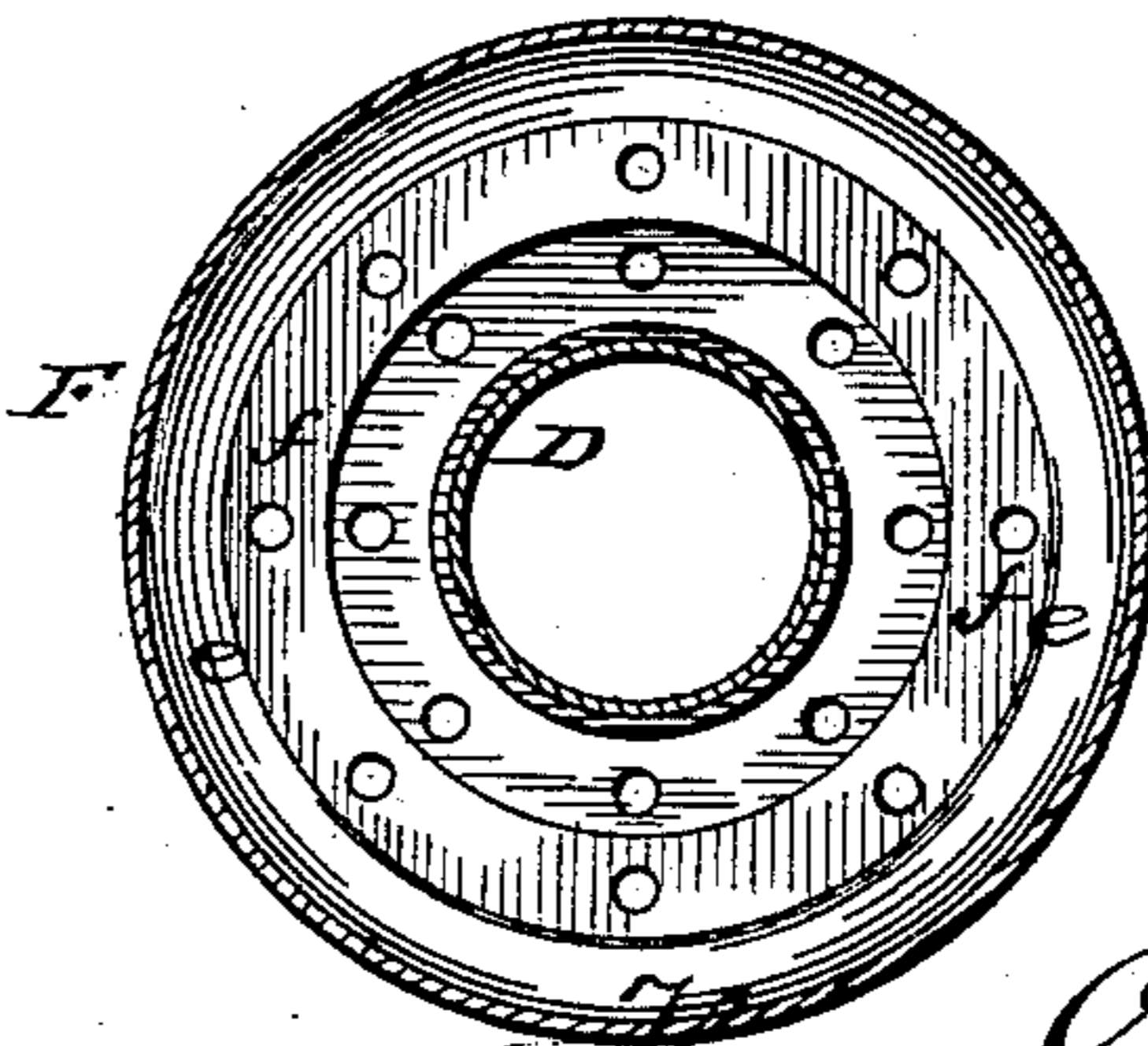
*Fig- 2 -*



*Fig- 3 -*



*Fig- 4 -*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

THOMAS C. HARRY, OF DALLAS, TEXAS.

## COMBINED CHIMNEY AND VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 314,238, dated March 24, 1885.

Application filed May 26, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS C. HARRY, a citizen of the United States, residing at Dallas, in the county of Dallas and State of Texas, have  
5 invented a new and useful Combined Chimney and Ventilator, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to a combined chimney  
10 and ventilator for buildings; and it has for its object to provide a device of this character whereby a room may be thoroughly ventilated and a perfect draft secured.

A further object of the invention is to provide a device of this character whereby the  
15 length of the flue from the room in which the device is located to the roof of a building may be lengthened, if desired or found necessary.

With these ends in view the invention consists in the improved construction and combinations of parts hereinafter fully described,  
20 and pointed out in the claims.

In the drawings, Figure 1 is a side elevation of my improvement applied, the ceiling of the room and roof being shown cut away.  
25 Fig. 2 is a vertical section of the device detached. Fig. 3 is a bottom view. Fig. 4 is a transverse section on the line  $x x$  of Fig. 1.

In the accompanying drawings, in which  
30 like letters refer to corresponding parts in the several figures, A represents the ceiling of a room; B, the space between the same and the roof. The ceiling of the room is provided at the desired point, which is directly over the  
35 stove, with an opening of sufficient size to receive a drum, C. This drum C consists of an outer and an inner casing,  $a a'$ , thus leaving an air-space between them, which, for convenience, I will letter  $a^2$ . These casings  $a a'$  are  
40 connected at their upper and lower ends, and said connected portions are provided with a series of openings,  $a^3$ , for the passage of air. The lower portion of this casing or drum C is provided with an annular flange,  $a^4$ , which  
45 bears against the ceiling adjacent to the sides of the opening, which, as before mentioned, is adapted to receive said drum. The inner casing,  $a'$ , projects a slight distance above the casing  $a$ ; but, if preferable, both of said casings may be of equal height, and a connection,  $b$ , secured to the upper end of said inner casing.

D represents a pipe or flue which is adapted to inclose the upper end or extension of the inner casing, and which extends from said extension or connection to the outer side of the  
55 roof of the building. Upon the lower end of this pipe or flue D is secured a casing or drum, E, the lower end of which is adapted to inclose or fit over the upper end of the outer casing,  $a$ , and is provided with openings or perforations upon its upper side at the point where it is connected to the pipe or flue D. It will thus be seen that an air-passage is provided outside of the pipes or flues, which, as  
60 before mentioned, connect with each other. Between the inner flue, D, and the drum or casing E are provided, near the lower ends thereof, braces  $c$ , to properly support said parts and keep them in their proper position.  
65 70

F represents a casing which is adapted to inclose the upper end of the flue D, which extends beyond the casing E, and which incloses the upper end of the casing E at its lower end. Upon the upper end of the pipe or flue D are  
75 provided braces  $d$ , by which means the upper end of the casing or drum F and the said pipe or flue are held in proper position. The lower half of this drum or casing F is made to flare outwardly, and is larger at its lower end than  
80 at its upper, the point at which it is connected with the upper half. From the outwardly-extending portion, at the lower end thereof, the casing extends inwardly, as at  $e$ , and is provided with perforations  $f$ , as shown. This  
85 perforated portion falls within the building, just below the roof thereof, and the flaring or lower half of the drum is situated outside of the building, its lower end resting upon the roof. It will thus be seen that as this drum is  
90 located between the roof and ceiling of the room below, the air will be cold, and as the air passes up through the casings inclosing the flues the same mingle and are carried out. By this means the flues which connect with  
95 the stove-pipe are kept perfectly cool and all danger of conflagration prevented.

Upon the upper end of the flue D is provided a removable cap, G, which is preferably made conical in form in order that rain or  
100 snow will be readily carried therefrom, and at the same time it thoroughly prevents the entrance of snow or rain within the casings inclosing the flue or pipe.

It will be seen from the above description that by the use of a ventilator and flue constructed in accordance with my invention a room may be thoroughly ventilated, that all  
5 liability of the flues to ignite the wood-work is obviated, and that the draft of the stove is increased and the smoke effectively carried off. It will be further apparent that the different flues and casings above described may  
10 be made of different sizes and shapes. I therefore do not limit myself to the precise construction as regards the form shown and described, but reserve to myself the right to make the same of various shapes and sizes.

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

In a combined ventilator and smoke-flue, a

series of pipes or flues having a sectional inclosing casing extending from the ceiling of a 20 room and adapted to receive a stove-pipe, the lower drum or casing being provided with a series of openings, and having an annular flange, *a*, the top casing being located without the building, having its lower end within the 25 space between the roof and ceiling, and braces *c c*, said upper casing having a downwardly-extending flange at its lower end, substantially as set forth.

In testimony that I claim the foregoing as my 30 own I have hereto affixed my signature in presence of two witnesses.

THOMAS C. HARRY.

Witnesses:

JOHN D. HARRY,  
NATHAN P. DAZEY.