

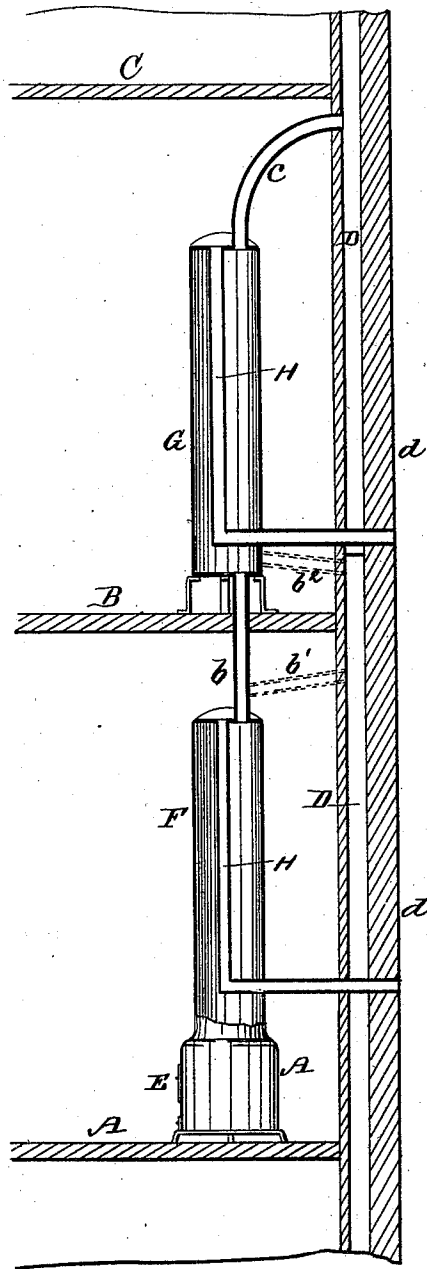
(No Model.)

A. M. HICKS & A. DISHMAN.

HEATING AND VENTILATING DEVICE FOR BUILDINGS.

No. 300,075.

Patented June 10, 1884.



WITNESSES:

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BY

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UNITED STATES PATENT OFFICE.

AMANDA M. HICKS, OF CLINTON, AND ALONZO DISHMAN, OF PADUCAH, KY.

HEATING AND VENTILATING DEVICE FOR BUILDINGS.

SPECIFICATION forming part of Letters Patent No. 300,075, dated June 10, 1884.

Application filed July 16, 1883. (No model.)

To all whom it may concern:

Be it known that we, AMANDA M. HICKS, of Clinton, Hickman county, State of Kentucky, and ALONZO DISHMAN, of Paducah, McCracken county, Kentucky, have invented a new and useful Improvement in Heating and Ventilating Devices for Buildings, of which the following is a full, clear, and exact description.

10 The invention consists in certain novel combinations of fresh-air-supply pipes with the chimney or flue of a building, also with a stove-grate or fire-place in one of the lower rooms, and with drums arranged in the upper
15 rooms of the building, substantially as herein described, and whereby the desired results are obtained in a much more perfect and simple manner than has heretofore been done.

Reference is to be had to the accompanying
20 drawing, forming part of this specification.

The figure represents a sectional elevation of a building in part with my improved heating and ventilating apparatus applied.

In the drawing, A B C represent the lower
25 and certain of the upper floors of a building, each of which is designed to be heated and ventilated, as may also an additional number of upper floors, by extension of the apparatus for the purpose. D is an ordinary chimney.
30 E is a stove, which may be of ordinary construction, adapted to burn either coal or wood, and which has mounted on it a drum, F. This stove, which is arranged on the lower floor, A, has its drum connected at top by a pipe, b,
35 with a drum, G, on the second floor, B, or by a suitable partition in the chimney D. The drums F and G may be connected with each other by branch pipes b' b² and the flue or
40 chimney D, it only being necessary that the top of one drum should be connected with the lower end of the drum above it. This arrangement may be continued for a succession of drums arranged on the different floors above. The drum G, however, will here be referred
45 to as the upper final one. This drum is connected at its top by an escape-pipe, c, with

the chimney D. Each drum is fitted with a fresh-air-supply pipe, H, opening through the top of the drum, and arranged to project down within it and out at right angles, or thereabout, 50 through it and through the outer wall, d, of the building, to supply air from the exterior thereof.

The operation of the apparatus is as follows: A fire being built in the stove E, the
55 gaseous products of combustion pass up through the drum F and pipe b, or by branches b' b² and chimney D, into the drum G, and from thence by the escape-pipe c into the chimney and out to the external air. As soon
60 as the drums become heated an upward current is established in the air-pipes H, and warm pure air is delivered from these pipes into the rooms with which they communicate. In this way a fourth or fifth story room
65 could be well heated and ventilated, only using the products of combustion from a single fire below.

This heating and ventilating apparatus has the following advantages over other devices
70 for accomplishing like results. It is devoid of all complication, being exceedingly simple, does not necessitate any particular construction of the chimney or flue, and may be applied to the chimney of any stove or fire-place.
75 It is cheap, may be used in connection with a stove of ordinary construction, introduces pure air, thus becoming a ventilator as well as a heater, and utilizes the heat in any desired number of rooms one above the other.
80 Furthermore, the pipes which are used to supply the air to be introduced do not pass down through the floor and out through the sill, or draw their supply from or near the surface of the ground, but from a point or line on
85 a level with the drum on each floor, and each floor is both warmed and ventilated by the admission of pure warm air, subject to the control of a single heater.

Having thus described our invention, we 90 claim as new and desire to secure by Letters Patent—

The combination of the stove E, with its drum F on the lower floor, A, of a building, one or more upper drums, G, on the floor or floors above, pipes or ducts connecting the
5 upper portion of each under drum with the lower portion of the drum on the next floor above it, the escape-pipe c for the gaseous products of combustion, the chimney D of the building, and the independent air-supply
10 pipes H, arranged one above the other within the drums and through the chimney to the external atmosphere, and open at their upper or

inner ends to the rooms containing the drums, essentially as shown and described, and for the purposes set forth.

AMANDA M. HICKS.

Witnesses:

JACOB WHITE,
W. G. WINTER.

ALONZO DISHMAN.

Witnesses:

W. D. GREEN,
C. DISHMAN.