

C. HILTON.

Combined Registers and Stove-Pipe Thimbles.

No. 137,203.

Patented March 25, 1873.

Fig. 1

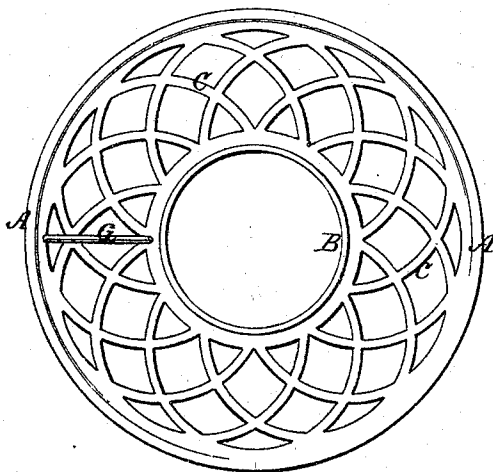


Fig. 2.

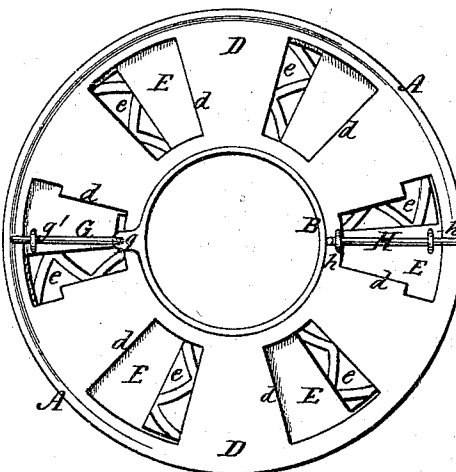
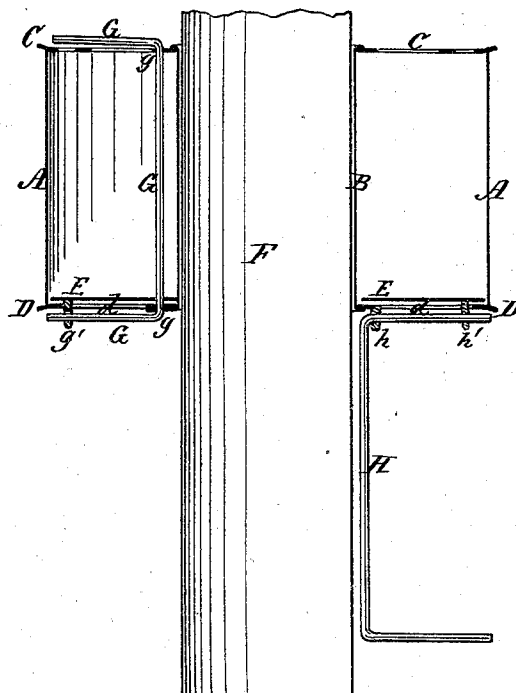


Fig. 3.



Witnesses.

Edmund Masson
John R. Young

Inventor.

Carlton Hilton, by
Prindle & Co. his Attys

UNITED STATES PATENT OFFICE.

CARLTON HILTON, OF LOCKPORT, NEW YORK.

IMPROVEMENT IN COMBINED REGISTERS AND STOVE-PIPE THIMBLES.

Specification forming part of Letters Patent No. 137,203, dated March 25, 1873.

To all whom it may concern:

Be it known that I, CARLTON HILTON, of Lockport, in the county of Niagara and in the State of New York, have invented certain new and useful Improvements in Combined Register and Stove-Pipe Thimble; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a plan view of the upper side of my device. Fig. 2 is a like view of the lower side of the same, and Fig. 3 is a vertical central section of said device as applied to a stove-pipe.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is to enable the surplus heat from one room to be conveyed to the room above, and at the same time to furnish a safe and convenient protection for a stove-pipe opening within a floor; and it consists, as a new article of manufacture, in the combined stove-pipe thimble and register, provided with the operating-rods, substantially as and for the purpose hereinafter specified.

In the annexed drawing, A and B represent two sheet-metal cylinders, the inner of which, B, has an interior diameter corresponding to the exterior dimensions of an ordinary stove-pipe, while the exterior cylinder A may have any dimensions deemed best. At their upper ends the cylinders A and B are connected together by means of an open-work metal head, C, while to or upon their lower ends is secured a sheet-metal head, D, within which is provided a series of openings, *d*, that are placed at equidistant points around the same, and have their sides and inner and outer ends formed respectively upon radial and circular lines. The solid portion of the head D between the openings *d* are slightly wider than the latter. Upon the upper side of the head D is placed an annular metal plate, E, which loosely fills the space between the inner and outer cylinders, and is provided with openings *e*, that correspond in size, shape, and relative radial position to the openings *d* within said head. The plate E thus constructed forms a damper which may be rotated so as to bring its solid parts opposite to the openings *d* and close the same, or may be turned until its openings *e* coincide with said open-

ings *d* and render unobstructed the passage between the inner and outer cylinders. The device, constructed as described, is placed within a suitable opening passing through the ceiling of one room and the floor of the room above, and the pipe F of a stove passed upward through the interior cylinder, when, by opening or closing the register E, the heated air from the lower room may be permitted to pass upward into or be excluded from the upper room. In order that the register may be easily manipulated, a rod, G, passes downward along the outer side of the inner cylinder B, and is journaled within suitable bearings *g* attached to the ends of the same. Above and below the heads the rod G extends horizontally outward, and at the lower side passes through a perforated lug, *g'*, which is attached to the outer edge of the register E, and extends vertically downward through one of the openings *d* within the head D. The horizontal arm upon the upper end of the rod G serves as a handle, by moving the outer end of which in either direction laterally a corresponding movement of the register is produced. From below the register is opened or closed by means of a second rod, H, (shaped like the rod G,) the upper arm of which is pivoted within a lug, *h*, secured to the lower end of the inner cylinder, and extends outward through a lug, *h'*, which latter is attached to the outer edge of said register in the same manner as the lug *g'*.

The device thus constructed is simple, efficient, and costs but little more than the ordinary metal thimble used for protecting the wood-work of a floor from the heat of a stove-pipe.

Having thus fully set forth the nature and merits of my invention, what I claim is—

As a new article of manufacture, the combined stove-pipe thimble and register shown, consisting of the cylinders A and B, the heads C and D, the sliding plate E and the operating-rods G and H, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of February, 1873.

CARLTON HILTON.

Witnesses:

W. B. WARREN,
A. J. MORSE.