(No Model.)

W. H. HENDERSON.

STOVE PIPE SHELF.

No. 306,396. Patented Oct. 14, 1884.

Fig. 1.

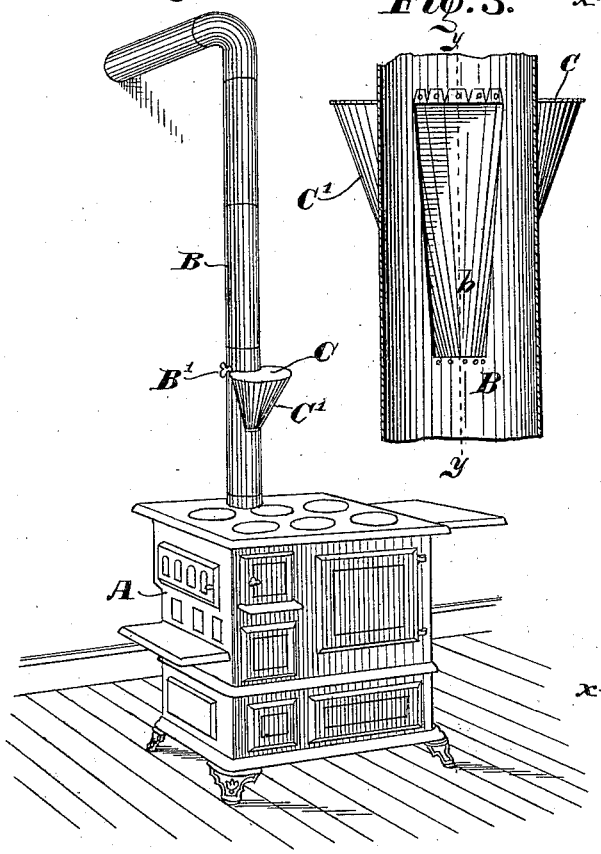


Fig. 3.

Fig. 2.

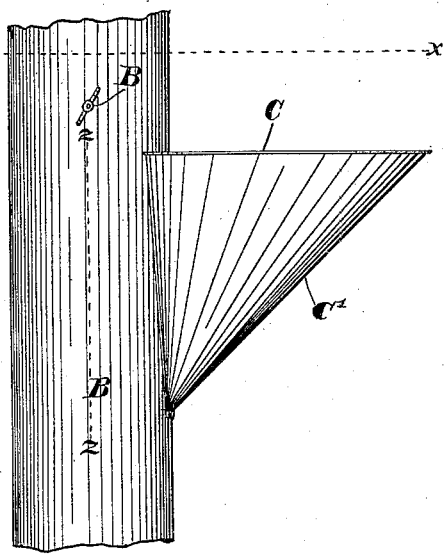


Fig. 4.

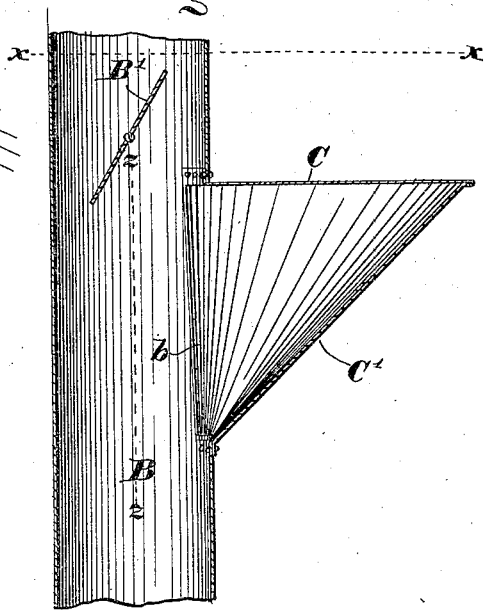
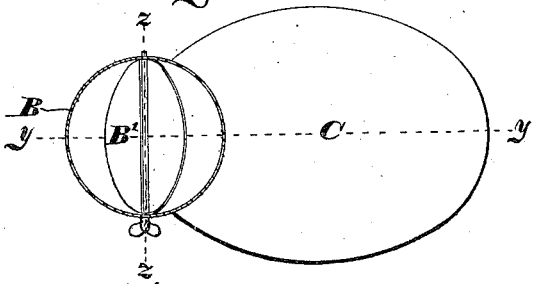


Fig. 5.



WITNESSES.

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STOVE-PIPE SHELF.

SPECIFICATION forming part of Letters Patent No. 306,396, dated October 14, 1884.

Application filed July 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. HENDERSON, of the town of Greenwood, county of Johnson, and State of Indiana, have invented certain new and useful Improvements in Stove-Pipe Shelves, of which the following is a specification.

The object of my said invention is to provide an improved shelf for stove-pipes, which may be heated by the products of combustion during their passage through the pipe whereto said shelf is attached. This object is accomplished by constructing a hollow shelf by mounting a shelf-plate on a sheet-iron bracket, and forming an opening in the pipe at the desired position for said shelf, and mounting said shelf on said pipe over said opening, as will be presently more fully described.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a perspective view of a stove with a pipe embodying my said invention; Fig. 2, a side elevation of a portion of a stove-pipe with my improved shelf attached thereto; Fig. 3, a vertical sectional view, looking toward the right from the dotted line *z z;* Fig. 4, a central vertical section thereof on the dotted line *y y;* and Fig. 5, a horizontal sectional view, looking downwardly from the dotted line *x x.*

In said drawings, the portions marked A represent the stove, B the stove-pipe, and C my improved shelf. The stove A forms no part of this invention, and therefore needs no further description. The pipe B is not dissimilar to ordinary stove-pipes, except that a portion of its front is cut away, forming an opening, *b*, in this side thereof at the desired elevation for a shelf. It is also provided with a damper, B′, preferably located just above or directly in front of the shelf, in order that the heat may, by turning said damper properly, be more effectually driven under the shelf, and thereby regulate the heating capacity of the shelf to some extent. The shelf C is preferably of sheet metal, and is mounted on the top edge of the bracket part C′. Said bracket is inclined back from the outer edge of the shelf to the stove-pipe, bringing its rear edges even with the rear edge of the shelf, thus forming what is in effect a hollow shelf with one side open. This side is then attached to the stove-pipe over the opening *b* therein, said opening being usually made of substantially the same size as the open side of the shelf, so that the corresponding edges of shelf and opening can be attached directly to each other, especially at the bottom, and thus allow the soot and cinders that become lodged within said shelf to fall back down the stove-pipe, instead of filling up the shelf, as is the case with other constructions of hollow shelves.

The operation of my invention is as follows: The shelf (one or more) being attached to the pipe, as shown, the products of combustion, in passing up the pipe B, will pass through the opening *b*, and thus heat the shelf C and the vessel or vessels thereon much more quickly than they otherwise would. By means of the damper B′ the degree of heat may be varied considerably, as when it is turned so as to nearly stop the flue the heat will of necessity be more intense under the shelf than when the flue is open and a free passage for the products of combustion thus afforded.

I am aware that hollow shelves have before been attached to stove-pipes, and an opening formed in the side of the stove-pipe for the passage of heat from said stove-pipe into said shelf; but I am not aware that a hollow shelf has been constructed by having the shelf part mounted upon a bracket which is inclined back from the edge of said shelf part, and an open side thus formed, nor that the edges of said open side have ever been attached directly to the edges of a corresponding opening in one side of the stove-pipe in the manner shown and described herein.

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

1. The combination of the stove-pipe B, having a portion of its front side cut away, forming an opening, *b*, the shelf C, attached to the upper edge of said opening and supported by the bracket C′, and said bracket C′ attached at its edges to the sides of the opening in the stove-pipe B, and having the shelf C attached to its top, all substantially as shown and specified.

2. The combination of the stove-pipe B,

having a portion of its front side cut away, forming an opening, *b*, the shelf C, attached to said stove-pipe above said opening and supported by the bracket C′, said bracket C′ attached to the stove-pipe at the sides of the opening therein, and having the shelf C attached to its top, and the damper B′, located in the pipe B at a point above the shelf C, substantially as shown and described, and for the purposes set forth.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 30th day of June, A. D. 1883.

WILLIAM H. HENDERSON. [L. S.]

In presence of—
E. W. BRADFORD,
CHAS. L. THURBER.