Bagley & Mason.

Stove Pipe Shelf.

No. 94,859. Patented Sept. 14, 1869.

Fig: 1.

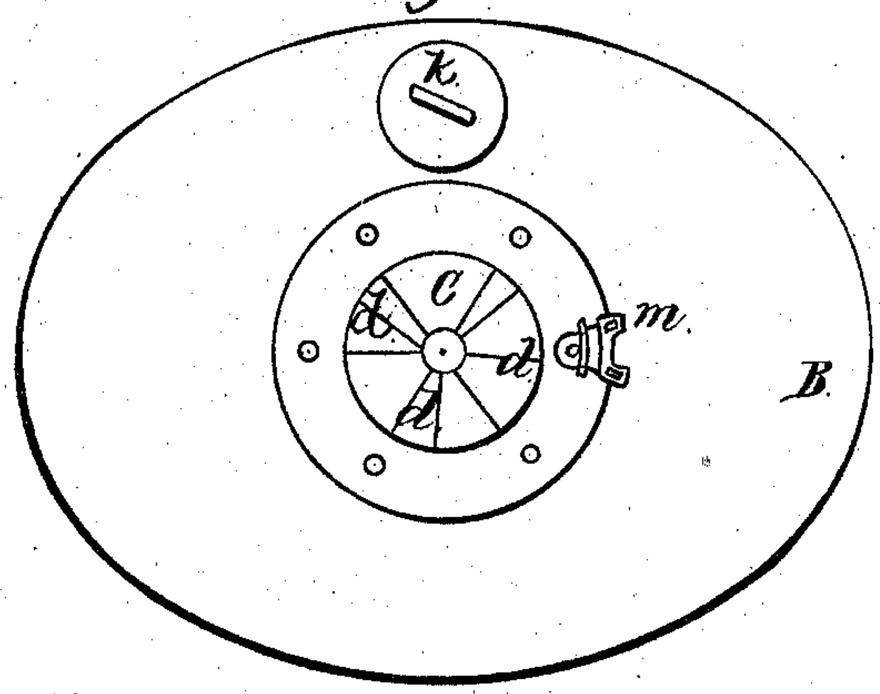
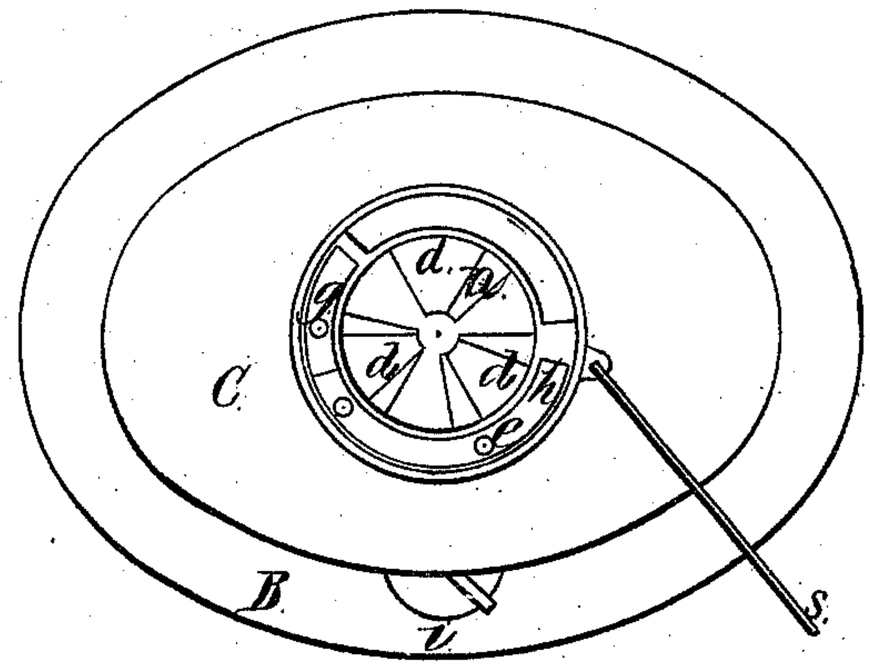


Fig: 2.



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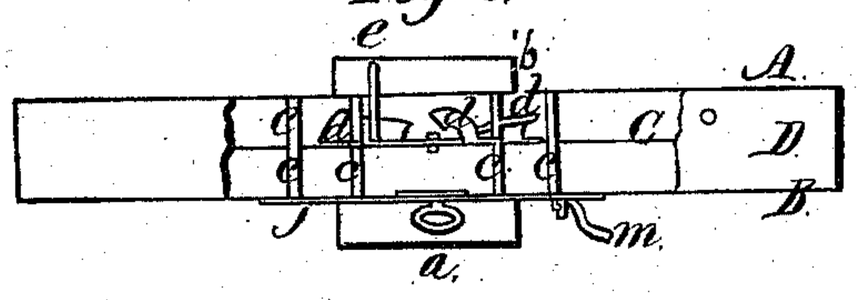
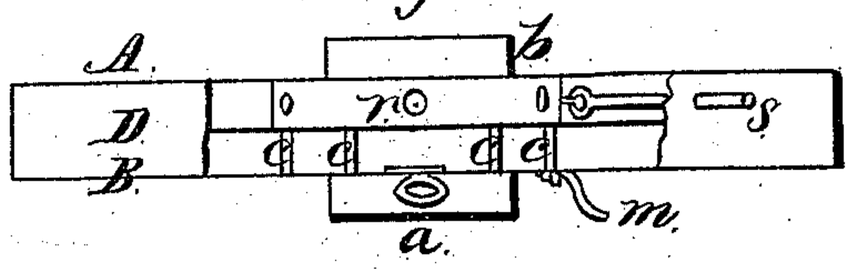


Fig: 10.



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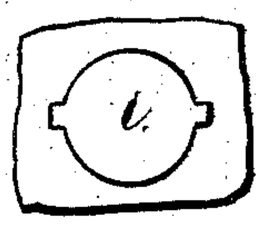
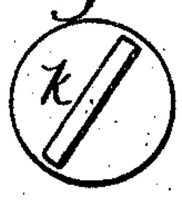


Fig: 5.



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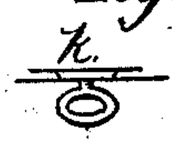

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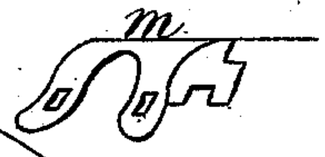

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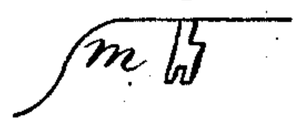
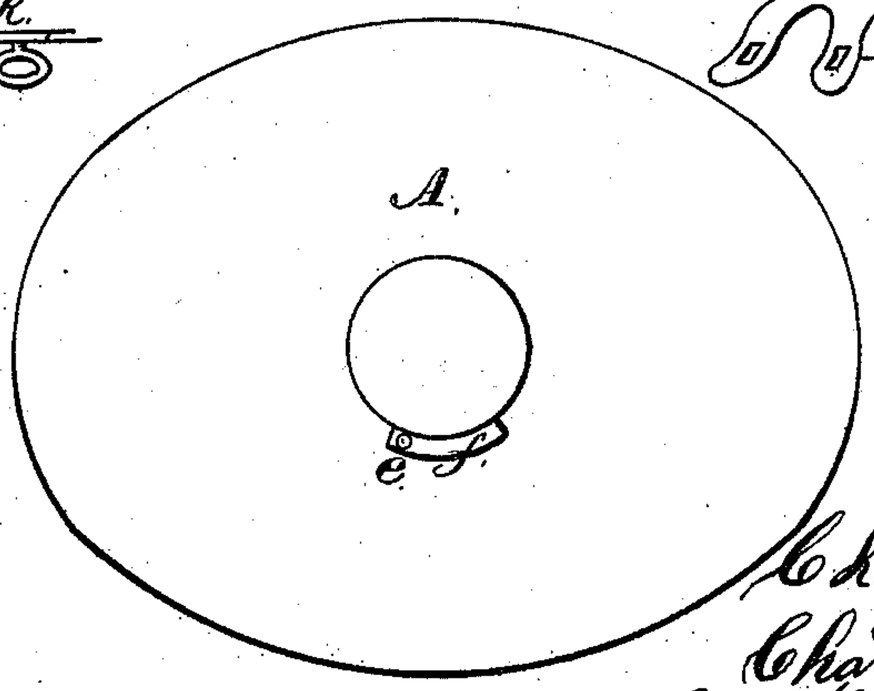


Fig: 9.



Witnesses:

E. B. Sherman.

L. S. McIntire.

Inventor:

Chas A. Bagley.

Chas E. Mason.

By West & Bond.

Their Attys.

United States Patent Office.

CHARLES H. BAGLEY AND CHARLES E. MASON, OF ELGIN, ILLINOIS.

Letters Patent No. 94,859, *dated September* 14, 1869.

IMPROVEMENT IN STOVE-PIPE SHELVES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, CHARLES H. BAGLEY and CHARLES E. MASON, of Elgin, in the county of Kane, and State of Illinois, have invented a Warming-Shelf, to be attached to a Stove-Pipe; and we do declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a bottom view;

Figure 2, an inside top view, the upper plate and side being removed;

Figure 3 is a side view, a portion being cut away;

Figures 4, 5, 6, details of opening;

Figures 7 and 8, details of drying-attachment;

Figure 9, a top view;

Figure 10, a side view, with part removed, but showing damper *r*.

The object of our invention is to construct a shelf, to be attached to a stove-pipe, in such a manner that the shelf shall be heated by the heat which passes from the stove into the pipe, and also operate as a radiator.

To enable others skilled in the art to make and use our invention, we proceed to describe its construction and operation.

In the drawings—

A represents the top plate or piece, and B, the bottom or under piece of my shelf.

D is the side.

C, a deflector, placed between A and B, and is not quite as large as these, a space being left between its edge and the side D for the passage of the smoke, and other products of combustion, through the shelf. This deflector C is supported in place by the posts *c*.

In the centre of the deflector, I provide an opening, so that the smoke may, if desired, be caused to pass directly through the deflector instead of over its edge, which opening may, when desired, be closed by a suitable damper.

As shown in the drawings, there are three small openings at or near the centre of the deflector, made by cutting the material on three sides of the opening, and bending up the parts so partially cut out, thus forming wings or small deflectors, *d*, the effect of which is partially to check the direct current of the products of combustion.

These openings can be closed by a register or damper, *n*, operated (as shown) by the pin *e* moving in the slot *f*, and in a corresponding slot in the flange or collar *g*, which rests on the posts *c*, and to which the part *b* is connected.

A small piece of sheet-metal, *h*, may be attached to the pin *e*, resting on the flange *g*, for the purpose of preventing the passage of smoke into the room through the slots mentioned.

The red lines in fig. 2 show the movement of the damper and thin piece *h*. The damper is shown closed in both figs. 1 and 2.

The shelf is provided with two pipe-connections, *a b*, by means of which it is connected to the pipe of the stove, surrounding the same.

j is a flange, extending from *a*, and secured to the bottom B.

i is an opening, closed by a cover or slide, *k*, through which soot which accumulates in the shelf may be removed.

To the bottom B we connect a device, *m*, to which arms may be attached, upon which to hang articles to be dried.

For ordinary purposes we make the shelf oval, about eighteen inches in diameter, or across one way, and about two feet across the other way, and about three inches thick, leaving a space of about one and a half inch between the deflector C and each plate A B. We make the shelf of sheet-iron.

For the purpose of more perfectly controlling and regulating the draught, we place a circular damper between the deflector C and the top plate A, and surrounding and enclosing the damper *n*. This circular damper is shown in figs. 2 and 10, and is constructed as follows:

A band or hoop of metal is secured between C and A, outside of the damper *n* and wings *d*, in which band are several holes. Fitting somewhat loosely over and around this band, is another band or hoop, *r*, also provided with the same number of holes as are placed in the first-mentioned band, and so placed that the holes in one may be brought opposite the holes in the other. The outer band *r*, being loosely fitted, as aforesaid, may be moved partially around by means of the rod *s*, connected thereto and passing through the side D, or in some other suitable manner, thereby closing or covering the opening in the fixed band.

One of these bands is to be provided with a stop, so placed as to control the movement of the outer band *r*, so that in opening and closing the openings in the fixed band, it will not be moved beyond the proper point.

When the damper *n* is closed, the draught through the pipe may be regulated and controlled by means of the damper or register *r*, the openings therein being partially closed to the extent which may be desirable, depending on the state of the atmosphere and other circumstances.

When both dampers are opened there will be a direct draught through the damper *n*, while, at the same time, a portion of the heat passing off will be carried through all parts of the shelf.

This shelf has been found to be a very useful attachment, especially to dining-room stoves, as upon

it quite a number of articles may be placed which it is desirable to have warmed or kept warm; and, at the same time, it is an excellent radiator, as, from its peculiar construction and compact form, a large portion of the heat which passes into it must be radiated therefrom.

In use, the shelf is placed horizontally upon the pipe of the stove, being connected thereto at *a* and *b*.

The course of the products of combustion will be understood from the above description.

Having thus fully described our invention,

What we claim as new, and desire to secure by Letters Patent, is as follows:

1. The shelf A, when provided with a heating-chamber beneath it, constructed substantially as and for the purposes specified.

2. The device *m*, for holding drying-bars, in combination with a hollow warming-shelf, constructed substantially as described.

3. The deflector C, when provided with the curved wings *d*, in combination with the register *n*, plates A B, and side D, of a warming-shelf, substantially as and for the purpose specified.

4. The warming-shelf herein described, when provided with the damper or register *n*, placed in the deflector C, and the circular damper *r*, enclosing the damper *n*, substantially as and for the purposes specified.

CHARLES H. BAGLEY.
CHAS. E. MASON.

Witnesses:
A. T. LEWIS,
JOHN S. WILCOX.