W. HAILES.

Stove Damper.

No. 80,476. Patented July 28, 1868.

Fig. 1.

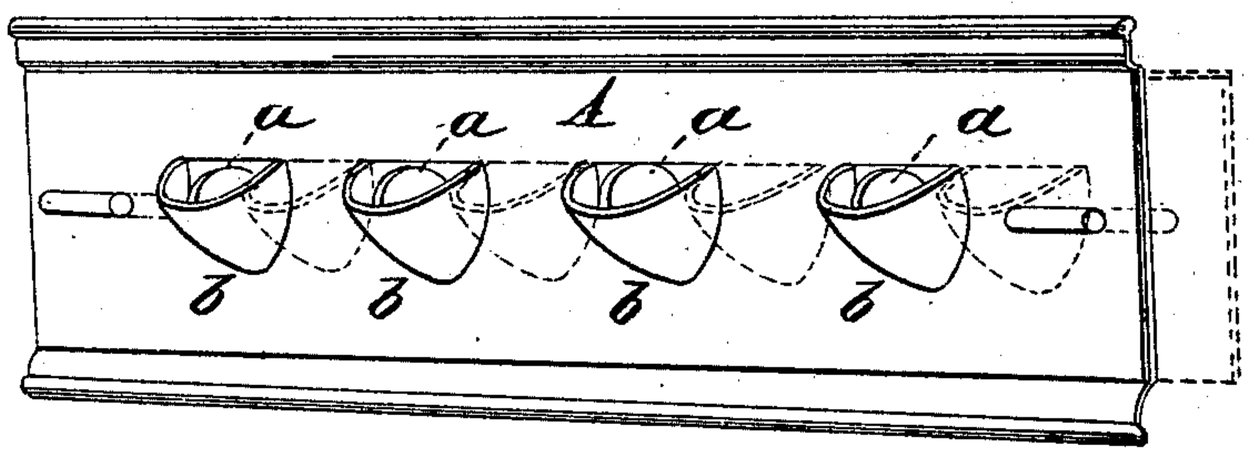


Fig. 2.

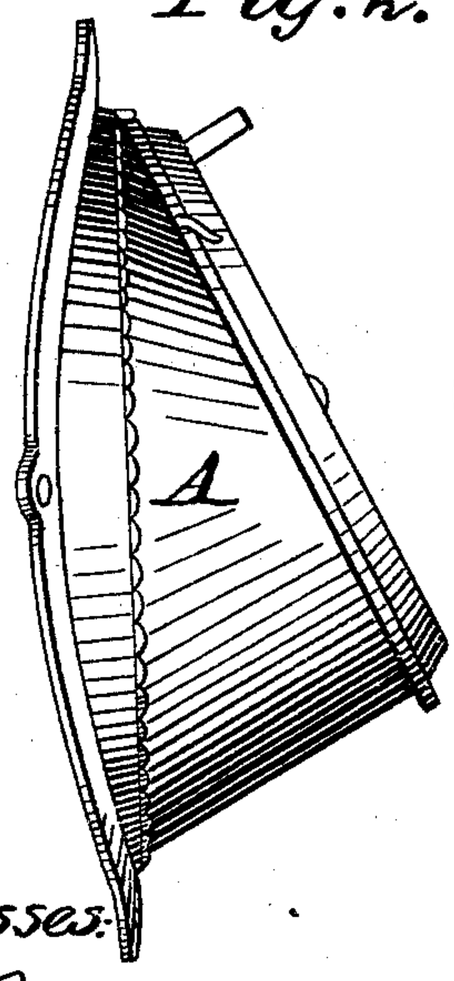
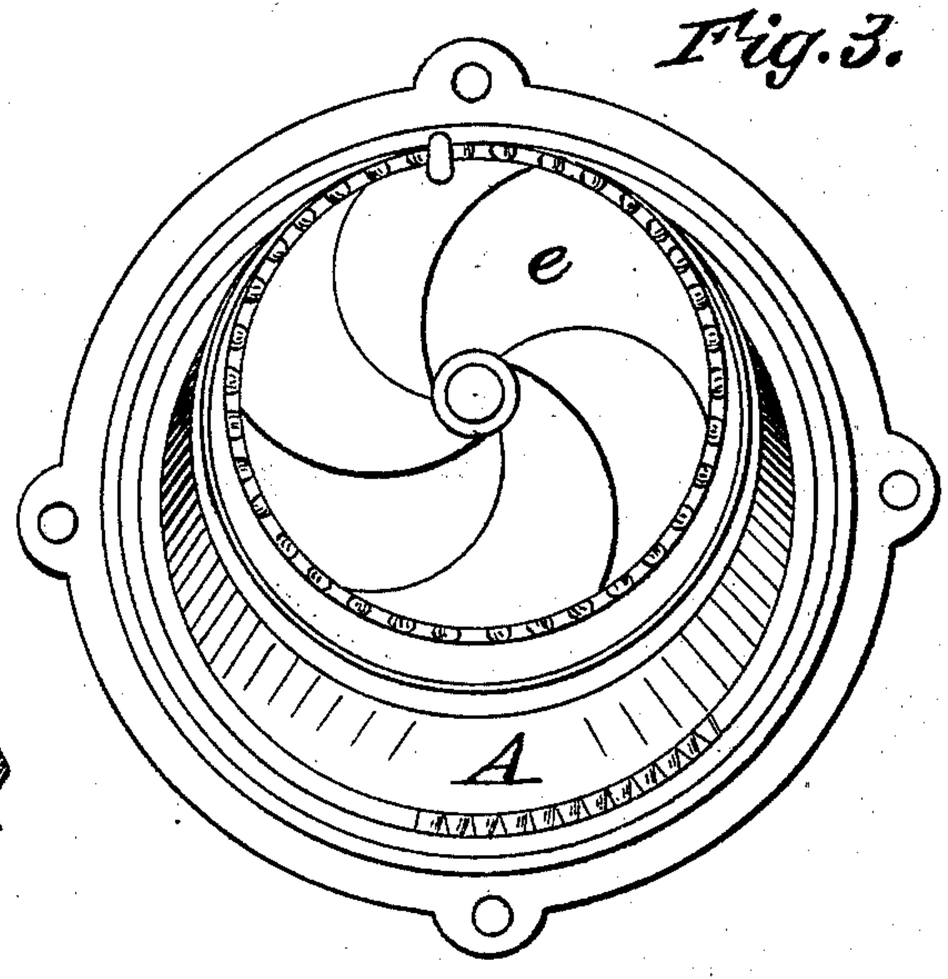


Fig. 3.



Witnesses:

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United States Patent Office.

WILLIAM HAILES, OF ALBANY, NEW YORK, ASSIGNOR TO J. F. RATHBONE AND COMPANY, OF SAME PLACE.

Letters Patent No. 80,476, *dated July* 28, 1868.

IMPROVEMENT IN DAMPERS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM HAILES, of Albany, in the State of New York, have invented a new and useful Improvement in Dampers or Draught-Registers for Stoves; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and letters of reference marked thereon, making a part of this specification, in which—

Figure 1 is a perspective view of one form of my invention.

Figure 2 is a side elevation of another form of the same, and

Figure 3 a front elevation of the same.

This invention consists of a damper or draught-register, to be applied to the bottom or lower part of the fire-chamber of a stove, provided with a guard, inclined on its lower side, for the purpose preventing the escape of ashes and fire from the fire-box, when the damper is opened, into the room containing the stove, as will hereinafter more fully appear.

To enable those skilled in the art to make and use my invention, I now proceed to describe its construction and operation.

Similar letters in the drawings refer to like parts.

In fig. 1, A represents a sliding damper or draught-register, suitably fitted to the lower part of a wood-burning stove. It is desirable that the air, which is supplied to the fire in a stove, should enter at or near the bottom of the fire-box or chamber, in order to produce combustion throughout the entire mass of burning fuel, even to the lowest part thereof; but ashes and fire are liable to escape through the openings if so placed. To remedy this mischief, I apply to each orifice *a* in the slide A an inclined guard, *b*, the top of which is nearly on a level with the top of the orifice, and the sides of which slope inward and downward to the edges of the orifice, thereby preventing the escape of fire and ashes when the damper is opened, the guard being large enough to admit a sufficient supply of air at its top. By this means, I am enabled to effectually accomplish my object.

Fig. 2 represents another form of my invention, the main difference between which and that shown in fig. 1 being that the guard A, instead of being attached to a slide, has a circular damper or register over its mouth *e*, pivoted at its centre, by means of which the draught or supply to the burning fuel may be regulated. This oblique form of draught-damper is made of cast iron, and is intended to be used on that class of stoves composed of cast and sheet iron. It is fastened upon the sheet iron by means of screws or rivets, and completely guards the opening, thereby enabling me to compel air to enter at the bottom of the fire-box, and at the same time preventing the escape of fire and ashes into the room when the draught-register is oponed, a function which the old form of damper, when so located, does not discharge.

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

An inclined guard, so applied to the orifices of a sliding draught-apparatus, when located at or near the bottom of the fire-chamber of a stove, as to prevent the escape of ashes, &c., therefrom, substantially as described.

WILLIAM HAILES.

Witnesses:

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