G. ASMUS.

Damper.

No. 50,216. Patented Oct. 3, 1865.

Fig 1.

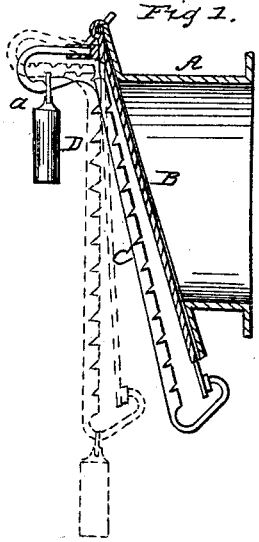
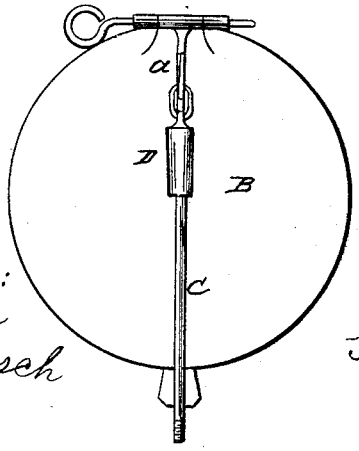


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

GEORGE ASMUS, OF PORTAGE, MICHIGAN.

IMPROVEMENT IN STOVE-DAMPERS.

Specification forming part of Letters Patent No. **50,216,** dated October 3, 1865.

To all whom it may concern:

Be it known that I, GEORGE ASMUS, of Portage, in the county of Houghton and State of Michigan, have invented a new and Improved Adjustable Damper for Stoves, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a vertical central section of this invention. Fig. 2 is a front elevation of the same.

Similar letters of reference indicate like parts.

This invention consists in the arrangment of a hinged damper and slip-weight, in combination with the inclined face of the draft-hole of a heat-generator, in such a manner that the draft of the air rushing into the fire-place of a heat-generator has a tendency to close said hinged damper, whereas the gravity of the damper, combined with the slip-weight, has a tendency to keep the same open, and that by adjusting the position of said slip-weight the quantity of air admitted to the fire-place can be regulated at pleasure.

A represents the draft-channel of a heat-generator, through which all the air required to support combustion of the fuel in the heat-generator is admitted, all other channels being hermetically closed. This channel is formed by a flanged pipe, the outside face of which is inclined, as clearly shown in Fig. 1 of the drawings, and hinged to the upper edge of this inclined face is the damper B. When this damper is left to follow its own gravity it assumes the position shown in red outlines in Fig. 1, and the channel A is wide open. The draft of the air rushing into the channel A has a tendency to close the damper, and if left to itself it would soon close, and the fire in the heat-generator would be extinguished.

In order to regulate the position of the damper, a notched bar, C, is secured to the outside of said damper, and a slip-weight, D, is combined with said notched bar, so that the same can be adjusted up or down. The upper end of the bar C is curved out, as shown, and if the weight D is raised to said curve *a* it counteracts the gravity of the damper and closes the came; but if it is adjusted on the rectilinear portion of the bar C it acts in the same direction as the gravity of the damper and enables the same to open against the draft of the air rushing into the channel. By adjusting the slip-weight up or down on the bar C the quantity of air admitted to the fire can be regulated. The damper assumes an oscillating motion, and if more air is to be admitted the weight is moved down, but if the draft is to be diminished the weight is moved up, on the bar C. If it is desired to close the damper completely the weight is placed into the curve *a* of the bar. The draft can thus be accommodated at all times to the quantity of fuel used and to the intensity of the fire which is required.

Having thus described my invention, I claim and desire to secure by Letters Patent as a new article of manufacture—

1. The hinged damper and slip-weight adjustable on the bar C, in combination with the inclined face of the draft-channel A of a heat-generator, constructed and operating substantially as and for the purpose set forth.

2. The curve *a* in the bar C, in combination with the weight D, hinged damper B, and draft-channel A, constructed and operating substantially as and for the purpose described.

GEORGE ASMUS.

Witnesses:
JOHN PRYOR,
JOHN MILDON.