

A. J. LOVEJOY.
 Adjustable Damper for Heating-Drums.
 No. 132,913. Patented Nov. 12, 1872.

Fig. 1.

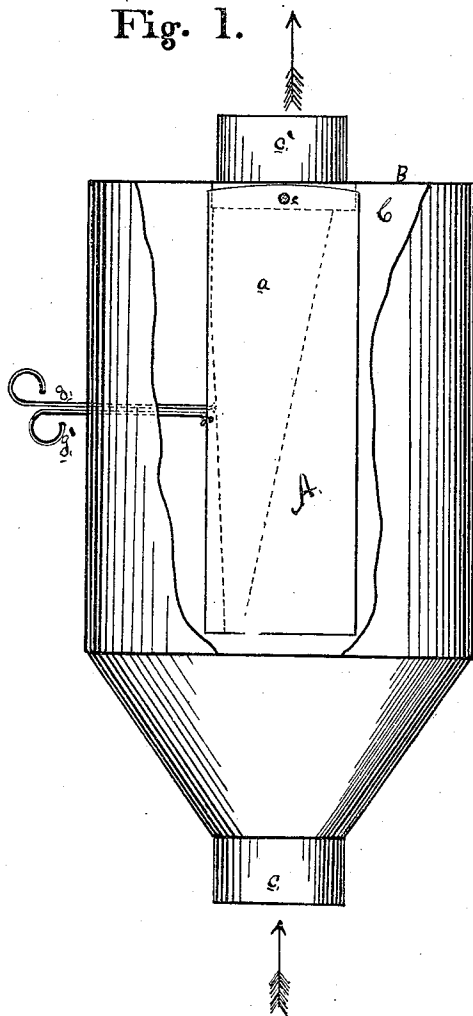
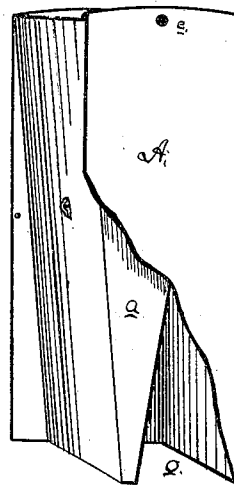


Fig. 2.



WITNESSES:

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IMPROVEMENT IN ADJUSTABLE DAMPERS FOR HEATING-DRUMS.

Specification forming part of Letters Patent No. 132,913, dated November 12, 1872; antedated November 9, 1872.

To all whom it may concern:

Be it known that I, ADONIRAM J. LOVEJOY, of Augusta, county of Kennebec and State of Maine, have invented a new and useful Improvement in Adjustable Damper and Radiator; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing and letters of reference marked thereon making a part of this specification.

Figure 1 is a view of the device with a part of the side torn away. Fig. 2 is a view of the interior damper A.

The object of this invention is to furnish the best possible escape for smoke in the pipe or funnel connected with a stove or other heating apparatus, at the same time retaining all the heat in a drum, from which it is thrown out or radiated through the adjoining air and rooms. The invention consists in a damper composed of a pair of boxes, each locking one side and both ends, one of said boxes inclosing the other, the two being jointed together and hung inside the drum at the mouth of the exit-flue thereof, as hereinafter described.

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 drawing refer to like parts.

B represents the drum. A a represent the adjustable damper composed of two parts, A a, of iron or other metal, of the shape and form indicated. C represents the space inside the drum and outside of the damper in which the heated air is received. The drum B is of suitable size, with its upper end flat and its lower end gradually sloping in the shape of a cone, its apex downward, until it reaches a thimble, c. There is a like thimble, c', upon its upper end. These thimbles are of sufficient size to fit the pipe or funnel of a stove or other warming apparatus to which the drum is to be applied. Inside of the drum B, and connected with thimble c' in the upper end of the drum, are the two iron or metallic parts of the dam-

per A a, which are hung upon a pivot, e, and are adjustable. The size of the top of the damper a A is equal to that of the thimble at its upper end; at its lower it slopes off to almost a point. The two parts A a are composed of metallic boxes, with the ends and one side taken off, and, being adjustable, are made to open or close together by means of handles g g', one being pushed in and the other pushed out, which causes the box to open or close as the hand directs. If it is opened it allows the smoke to pop off, if there be much of it; if closed, or partly closed, it allows the smoke to pass off through aperture o, thus keeping the heat back in drum B; and thus it may be radiated or thrown off into the adjoining room.

Being simple in its construction, and being constructed upon the plan that smoke in passing off through a pipe always seeks the center, while the heated air takes the outside, it furnishes a good chance for the escape of the smoke, and at the same time retains the heat; and being easily adapted to any pipe or funnel by the simple process of taking out a section and inserting this in its place, it furnishes a cheap, desirable damper and radiator, being adjustable at any desired position. The sides of the boxes A a prevent the escape of heat even when the boxes are fully open.

I am aware that half cones have been used for a similar purpose, but the sides of these do not lap like the sides of my boxes, and therefore do not prevent the escape of heat when open.

I claim as my invention—

The combination, with the drum B, of the boxes A a, lapping at the sides, jointed together at the top, hung at the mouth of the thimble c', and provided with handles g g', all arranged as explained.

ADONIRAM J. LOVEJOY.

In presence of—

E. W. WHITEHOUSE,
J. L. ADAMS.