J. A. LAKIN.

Heating Drum.

No. 79,841. Patented July 14, 1868.

Fig. 1.

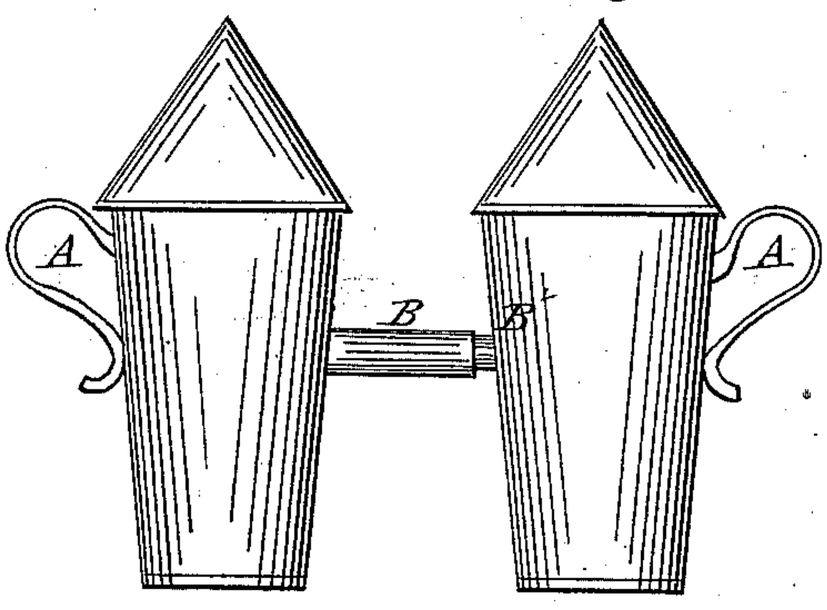


Fig. 3.

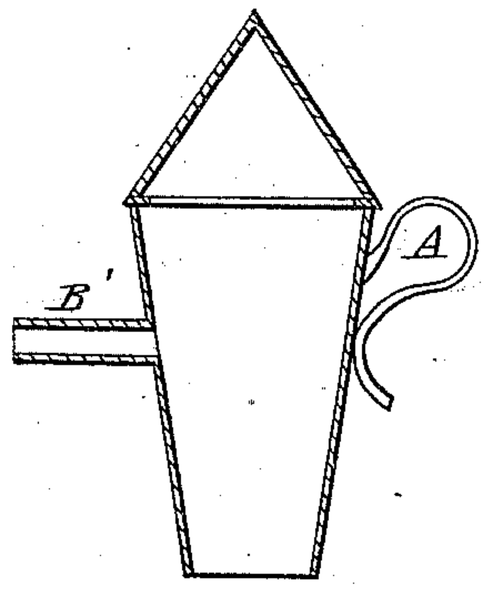
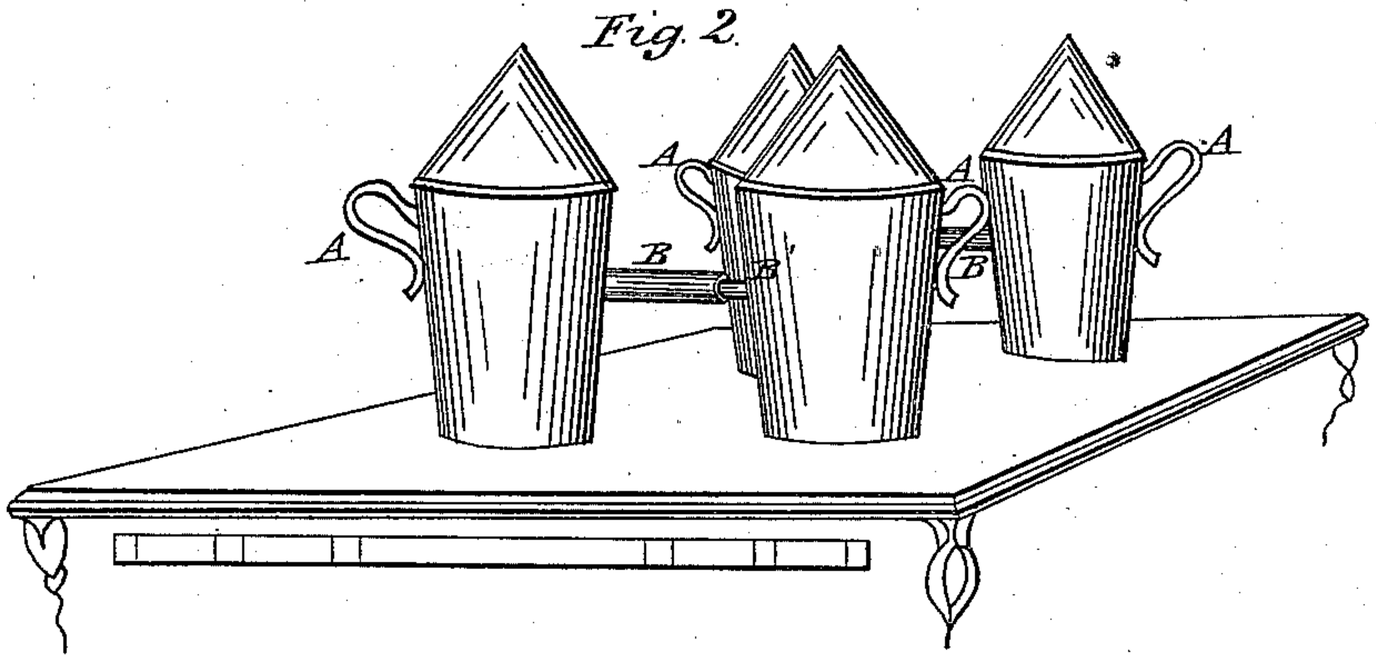


Fig. 2.



WITNESSES:

H. Ballow
W. F. Emerson

INVENTOR:

J. A. Lakin

by Gardner & Hyde attys

United States Patent Office.

J. A. LAKIN, OF THOMPSONVILLE, CONNECTICUT.

Letters Patent No. 79,841, *dated July* 14, 1868.

IMPROVEMENT IN RADIATORS.

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, J. A. LAKIN, of Thompsonville, Hartford county, State of Connecticut, have invented a new and useful Improved Radiator; and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

In the drawings—

Figure 1 is a side view of my invention, and

Figure 2 shows its application,

Figure 3 being a detail view of the device, in part.

This invention consists of a peculiarly-shaped radiator, as hereafter explained, for the purpose of raising the temperature of a house or room, by means of the increased radiating-surface obtained by the application of this device to an ordinary cooking-stove, thus employing the latter as a furnace, and saving a large proportion of heat that would otherwise be lost through the chimney.

In construction, I form my radiators in the form of inverted frusta of cones, surmounted by cones at the top. These are shells of metal, and are open at the lower ends for the heat to enter. They have handles, A, and are connected together by means of pipes, B and B′, projecting from the sides opposite the handles A.

In fig. 1, two of these parts are shown, connected together by means of these pipes, the pipe B′ being made small enough to fit into the pipe B. The object of this arrangement of connecting-pipes will be hereafter explained. In fig. 3, a detailed sectional view of one of the parts of the radiator is shown, and in fig. 2 a complete set is shown applied to a stove, each pair being joined together as heretofore described.

The lower rim of each part of the radiator is made to fit into the holes in the top of the stove, and sets down upon the little ledge running around the under edge of each hole of the stove. By joining the parts together by means of the pipes B and B′, the heat is distributed equally through each pair, although one side of the stove be more heated than the other. Besides this, it makes them less liable to be upset, and the arrangement of one pipe fitting inside the other renders each pair adjustable to any ordinary distance between the holes in the stove.

The shape of these parts of the radiator is made upon the well-known principle of heat crowding from off points or edges, and by forming the lower part in the shape shown, I obtain several advantages, as follows:

By the bulge being near the top, more of a suction is produced, and a better circulation of heated air obtained. Again, by making each side of the maximum diameter of the shell convergent, I obtain greater strength, and besides, expose less surface at the bottom to the action of the fire direct; and again am enabled to use a larger radiator for the size of the stove-hole than could otherwise be obtained without increasing the height of the radiators or forming them with shoulders at the bottom.

These radiators may be used in chambers by themselves, and connected with the fire by means of pipes; in this case the bottom ends are not open.

Now, having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The peculiarly-shaped radiators herein shown, open at the lower ends, and connected in pairs by means of the pipes B and B′, substantially in the manner and for the purpose herein shown.

J. A. LAKIN.

Witnesses:

E. H. HYDE,

J. B. GARDINER.