

J. H. GOODFELLOW.
Ash-Sifting Device.

No. 159,667

Patented Feb. 9, 1875.

Fig. 1.

Fig. 2.

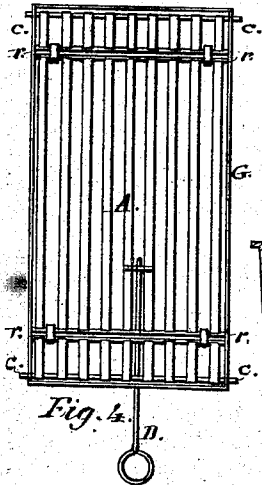
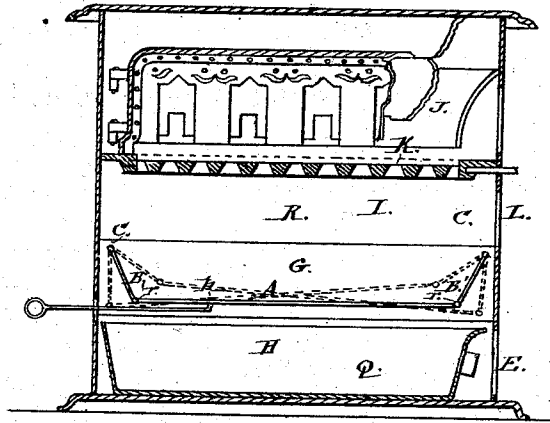
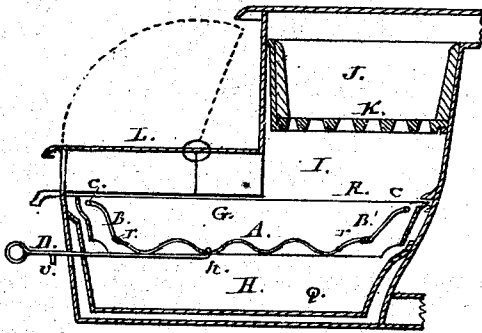


Fig. 3.

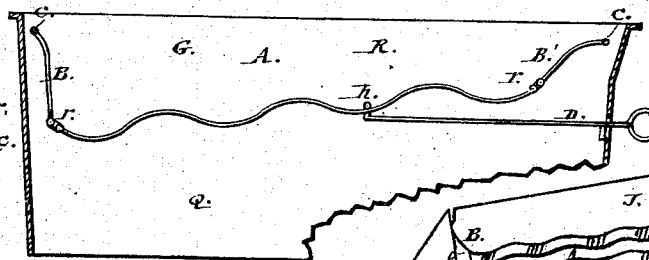


Fig. 5.

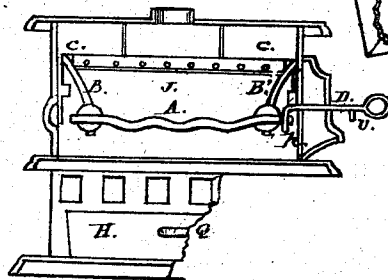
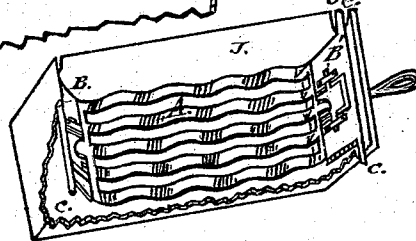


Fig. 6.

Witnesses:

Edw. W. Dunn

Inventor:

John H. Goodfellow.

UNITED STATES PATENT OFFICE.

JOHN H. GOODFELLOW, OF TROY, NEW YORK.

IMPROVEMENT IN ASH-SIFTING DEVICES.

Specification forming part of Letters Patent No. **159,667**, dated February 9, 1875; application filed January 6, 1875.

To all whom it may concern:

Be it known that I, JOHN H. GOODFELLOW, of the city of Troy, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Ash and Coal Sifting Devices for Stoves, Ranges, &c., of which the following is a specification, reference being had to the accompanying drawing, in which—

Figure 1 is a central vertical section view, from front to rear of the forward portion of a cooking-stove, which embodies most of the distinguishing features of my improved sifting device. Fig. 2 is a front elevation, partly in section, of a range, having my invention applied thereto, the sifting-bars being hereshown as straight and not corrugated, as shown in Fig. 1. Fig. 3 is a vertical longitudinal section of the sifting device, as seen at Fig. 1, removed from the stove. Fig. 4 is a plan view of the ash-sifter, as shown in Fig. 2, in its usual position when not in use; but may be left in the same position shown in Fig. 4. Figs. 5 and 6 show my improved sifting device, having a corrugated dumping-grate for its bottom arranged in the fire-chamber over a cinder-chamber and hearth-pit, hereafter more fully described.

Like parts are marked by similar letters in the different figures.

My invention consists of an improved sifter for use in stoves or elsewhere, composed of a bottom and ends formed of parallel bars, either corrugated or not, (preferably corrugated,) the ends being pivoted or hinged to the bottom and hung from a pivotal point on the ash-pan or other frame within which it is to be used, and provided with a suitable handle or shank by which it may be manipulated, as will be hereinafter more fully set forth.

To enable those skilled to more readily understand my invention, I will proceed to describe its construction and operation, referring by letters to the accompanying drawings.

A is the bottom, and B B' the ends, composed of parallel corrugated bars, as shown at Fig. 1, or plain bars, as seen at Fig. 2. The end walls, B B', are hinged to either end of the bottom A by suitable lugs or a continuous hinge, *r*, and also pivoted to the frame of the

ash-pan or other receptacle, in which it may be located by a suitable hinge-rod or pintles, *c c*. D is an operating-rod or handle, secured by an eye to a suitable cross-bar, *h*, cast with the bottom. Said handle protrudes through an opening in the front of the pan, and is provided with one or more lugs or stops, *v*, which may bear against the inside or outside surface of the front of the ash-pan, and thus hold the sifter in any desired position.

I have shown at Figs. 5 and 6 a modification of my invention as applied to dump. In this case the bottom, instead of being pivoted to the ends, has its shank passing through a ball-hinge, which is pivoted to the ends and permits the bottom to be turned over. It will be observed that the sifting device, being composed of end walls and a bottom pivoted, as shown, the vibration of the handle or rod D raises and lowers the ends of the bottom A alternately, and at the same time vibrates it a distance about equal to the movement of the handle, thus giving to it a sort of waving motion, and as the ends B B' necessarily swing in the arc of a circle, and being connected with the bottom they each alternately form an extension of the bottom, so that the surface upon which the contents of the pan or stove rests is constantly being changed, or other words, at one moment it rests against the ends B B' as lateral supports, and then upon them as horizontal supports, or nearly so. By this construction and operation the contents are sifted and, as it were, tossed about, which would not be the case were the end walls rigidly secured to the bottom and the whole sifter swung upon independent hangers, as in this case the relative position between the sifter and the coal and ashes resting upon it would not be disturbed, the bottom always remaining or moving in a perfect horizontal plane.

Another advantage arising from my invention is that when the handle D is forced toward the back of the pan the rear wall B' swings down into a position nearly vertical, while the front end, B, has its lower end lifted with the front end of the bottom until they are about in the same plane, which is at an acute angle to the front, thus increasing the space at the front between the bottom of the

grate and the bottom of the ash-pit, which facilitates the removal of the contents of the ash-pit.

This position of the sifter may be maintained, as hereinbefore described, by one of the lugs on the handle resting against the outside surface of the front of the ash-pan.

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

1. An ash-sifter, composed of a bottom and two ends hinged together and adapted to be hung or pivoted within the chamber of a stove or pan, substantially as described, so

that when vibrated the ends shall alternately form an extension of the bottom and induce to the agitation or tumbling of the body of coal, &c., resting thereon, substantially as hereinbefore set forth.

2. In combination, with an ash-sifter hung as described, so that its bottom shall swing upon pivoted end walls, the handle D, provided with a lug, *v*, for holding the sifter in an elevated position, substantially as described.

JOHN H. GOODFELLOW.

Witnesses:

A. MOORE,
H. S. MILLER.