J. L. Gilbert,

Ash Siere.

No. 46,894. Patented Mar. 21, 1865.

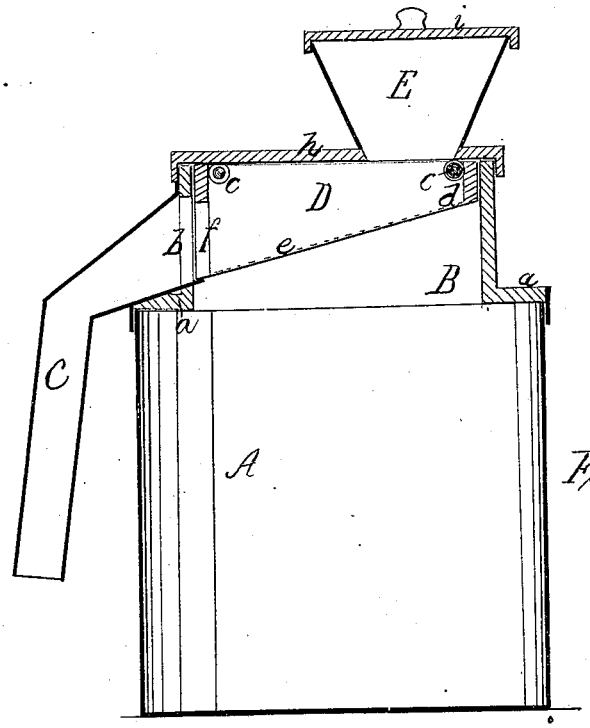

Fig: 1.

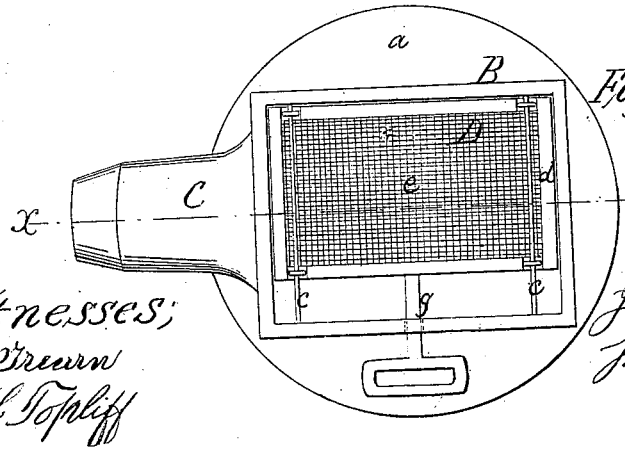

Fig: 2.

Witnesses;
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UNITED STATES PATENT OFFICE.

J. L. GILBERT, OF BOSTON, MASSACHUSETTS.

COAL AND ASH SIFTER.

Specification forming part of Letters Patent No. **46,891**, dated March 21, 1865.

To all whom it may concern:

Be it known that I, J. L. GILBERT, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and Improved Ash-Sifter; 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 a part of this specification, in which—

Figure 1 is a vertical central section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a plan or top view of the same with the hopper removed.

Similar letters of reference indicate like parts.

This invention relates to a new and improved device for sifting coal-ashes without allowing the ashes to escape during the sifting operation; and it consists in the employment or use of a box provided with a flange at its lower end to fit over the top of a barrel or other ash-receptacle, and provided with a discharge-spout, and having within it a reciprocating screen, and upon it a lid provided with a hopper, all being arranged as hereinafter fully shown and described, whereby ashes may be sifted and the cinders separated therefrom without allowing the ashes to escape into the compartments in which the device is placed.

A represents a barrel or other suitable device to receive the ashes, and B is a box of rectangular form, the lower part of which is provided with a flange, *a*, to fit over the top of the ash-receptacle A, and effectually close the same. This box and flange may be of wood or metal, and the receptacle A may be made of sheet metal, if desired. This material, at least, would be a safeguard against fire.

The box B has a spout, C, extending down from one side of it, as shown clearly in Fig. 1, said spout communicating with the interior of box B by means of an opening, *b*.

In the upper part of the box B there is fitted two horizontal parallel rods, *c c*, said rods being at the upper part of the box, and having a screen, D, suspended on them by means of staples $c^{\times}$. This screen is composed of a rectangular box, *d*, having an inclined sieve, *e*, at its bottom, and the side of the box *d* which is opposite or next to the side of box B having the opening *b* in it has an opening, *f*, made in it, the lowest or most depressed end of sieve *e* being at the lower edge of opening *f*. (See Fig. 1.)

The screen-box *d* is somewhat narrower than the box B, in order to allow a certain movement of the former in the latter on the rods *c c*, and said box *d* has a rod, *g*, attached to it, which projects horizontally through one side of box B, to serve as a handle to operate the screen. (See Fig. 2.)

The box B is provided with a closely-fitting cover or lid, *h*, on which a hopper, E, is secured, said hopper communicating with the interior of B, and also provided with a closely-fitting lid, *i*.

The operation is as follows: The ashes to be sifted are poured into the hopper E, and the lid *i* carefully placed on it, and the screen D moved back and forth in the box B, which is done with ease and facility on account of being suspended on the rods *c c*. The ashes pass directly within the screen-box *d* and upon the sieve *e*, and by the movement of said box *d* pass through the sieve and down into the receptacle A, while the cinders which cannot pass through the sieve pass down over the latter through the opening, *f b*, into spout C, and thence into any proper receptacle placed under C to receive them.

By this arrangement it will be seen that the ashes are closely confined while being sifted. None can escape from the device, which may, in consequence, be used in a house or apartment without any annoyance whatever.

In taking the ashes from the ash-receptacle A the box B is removed from the top of A.

By having the hopper E on box B the ashes and cinders are allowed to fall gradually on the sieve *e*, or about as rapidly as they can be sifted. It would not be advisable to pour the ashes directly into the screen D, not only for the reason above stated, but also for the reason that the box B and screen-box *d* would require to be much larger in order that *d* might receive an ordinary hod or scuttle of ashes and cinders.

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

1. The box B, provided with a spout, C, and

flange *a*, and fitted over a proper ash receptacle, A, in connection with a reciprocating screen, D, placed within B, and having an inclined sieve, *e*, to discharge into spout C, and with the hopper E upon the box B, all arranged substantially as described.

2. Suspending the screen D upon parallel guide-rods *c c*, to admit of the ready working of the screen, as set forth.

J. L. GILBERT.

Witnesses:
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