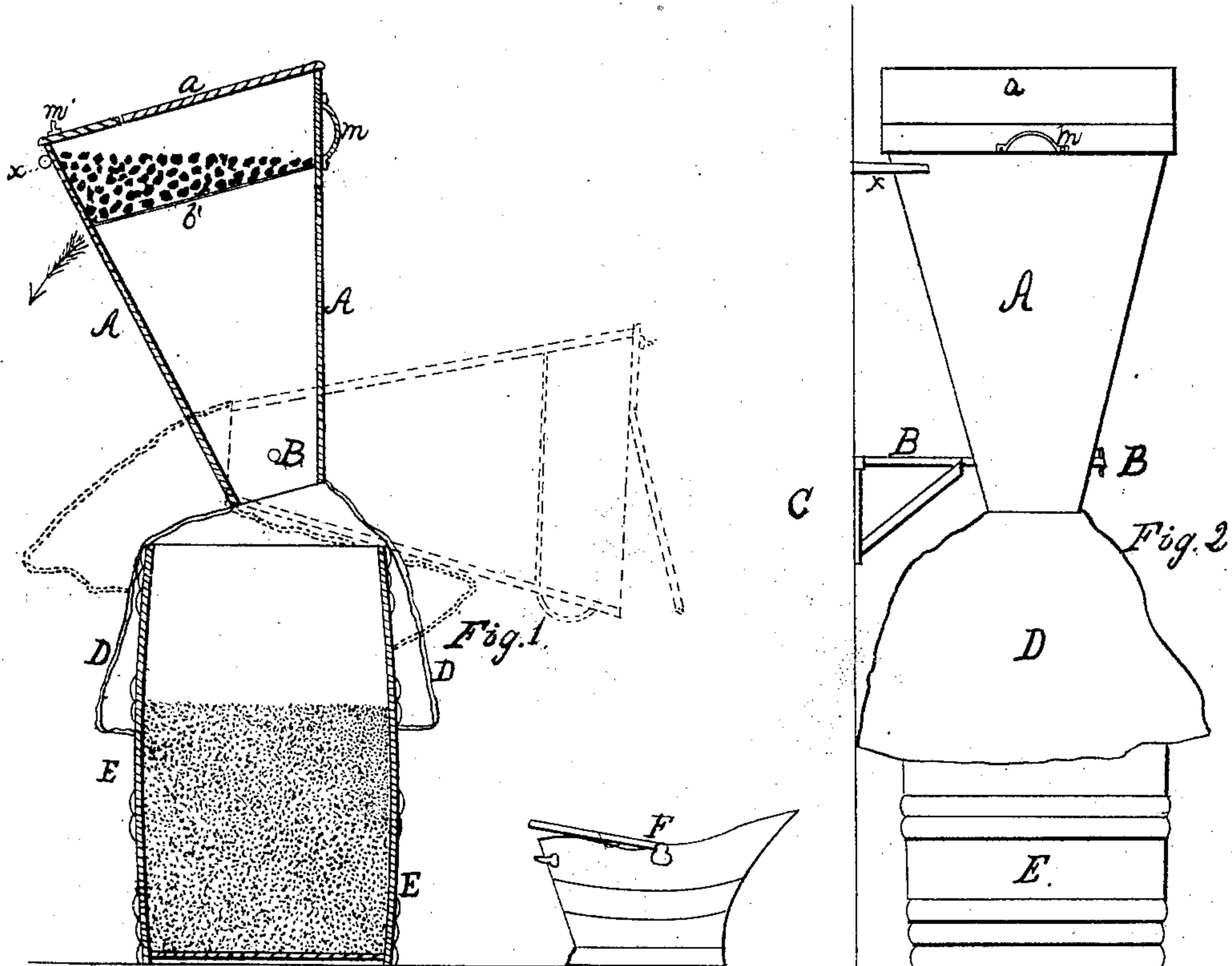


W. Mc Connell,

Ash Sieve.

No 37,174.

Patented Dec. 16, 1862.



Witnesses.

Charles Foster-
Charles Howson.

Inventor

Henry Howson
Atty for W. Mc Connell

UNITED STATES PATENT OFFICE.

WILLIAM McCONNELL, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN ASH-SIFTERS.

Specification forming part of Letters Patent No. 37,174, dated December 16, 1862.]

To all whom it may concern:

Be it known that I, WILLIAM McCONNELL, of Philadelphia, Pennsylvania, have invented an Improved Ash-Sifter; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists of a box or hopper of any suitable form provided with a lid, or its equivalent, and a sieve, the whole being so connected to a permanent bracket, or its equivalent, as to be readily vibrated, and the ashes placed on the sieve thereby thoroughly sifted.

My invention further consists in providing the lower end of the said hopper with a curtain of such dimensions as to inclose the mouth of the receptacle for the waste ashes and prevent the dispersion of the dust without interfering with the free movement of the hopper.

In order to enable others to make and use my invention, I will now proceed to describe its construction and operation.

On reference to the accompanying drawings, which form a part of this specification, Figure 1 is a vertical section of my improved ash-sifter, and Fig. 2 is a side view of the same.

A is a box or hopper, which, in the present instance, is square as viewed transversely, and made of wood, the hopper being furnished at the top with a hinged lid, *a*, and at a suitable distance below the latter with a sieve, *b*, consisting of a perforated plate, or of wire-netting having meshes sufficiently large to allow unavailable ashes to pass through the sieve, and yet so small as to prevent cinders serviceable as fuel from accompanying the ashes. The hopper A is hung near its lower end to a bracket, B, in such a manner that it can vibrate freely thereon, the bracket being secured to such wall or fence, C, in the yard or cellar of a dwelling as may be found most convenient. The hopper is larger at its upper than at its lower end, and to the latter is secured a curtain, D, of suitable fabric, this curtain being of such dimensions as to inclose the upper portion of a barrel, E, or other suitable receptacle for the ashes. A pin, *x*, is driven into the wall at such a point that the hopper can rest against it in the angular position shown in black lines, Fig. 1, beyond which position the hopper cannot be moved in the direction of the arrow. It can be moved in the

opposite direction, however, so far as to assume the position shown by red lines.

Although it is well known that cinders separated from ashes are available as fuel, and, although a variety of ash-sifters have been proposed and patented, they have been very sparingly adopted for several reasons, the most prominent of which are the liability to create such a dust as to be an annoyance to the operator, the delay incurred in adjusting the parts, and abstracting the cinders after they have been sifted, and the fact that they are portable, and are consequently liable to become damaged in moving them about from place to place.

My invention has been designed with the view of producing an efficient ash-sifter, in the use of which the above objections are obviated.

While the hopper is in the position shown in Fig. 1, the lid *a* is raised and the ashes and cinders are deposited in the receptacle above the sieve. The operator then closes the lid, grasps the handle *m* or the handle *m'*, and imparts a vibrating motion to the hopper.

A few rapid vibrations or agitations are all that is necessary to cause the waste ashes to pass through the sieve, and thence into the barrel E or other suitable receptacle.

While the curtain D presents no impediments to the free agitation of the hopper, it closes the mouth of the barrel so effectually as to prevent that dispersion of the finer particles of ashes and dust which are a source of much annoyance in operating other ash-sifters.

After the ashes have been separated from the cinders, the operator tilts the hopper over to the position shown by red lines, Fig. 1, so as to allow the cinders to pass from the hopper into a coal-scuttle or other suitable receptacle.

It will be observed that the barrel E is independent of the sifter, and can be removed and replaced without disturbing the latter, which, being hung to a permanent bracket secured to a wall or fence, remains in a position always ready for use and free from that liability to be damaged to which portable sifters are subjected.

The operation of sifting the ashes from the cinders and the removal of the latter from the sifter require so little exertion compared with that required in operating other ash-sifters,

that no domestic can object to practice the advisable economy of sifting ashes when so simple and efficacious an apparatus is always ready, and in a convenient position for the purpose.

In place of the bracket B, a shaft may be secured to the hopper, and this shaft hung to suitable bearings on the wall or fence.

The hopper A may be made either of wood, sheet-iron, or other suitable material, and either round, square, or of any other form which the constructor may deem most appropriate.

I claim as my invention and desire to secure by Letters Patent—

1. A hopper, A, of any suitable form, pro-

vided with the lid *a*, or its equivalent, and sieve *b*, when the whole is so connected to a permanent bracket, B, or its equivalent, as to be readily vibrated.

2. In combination with the vibrating hopper, a curtain, D, of such shape and dimensions as to inclose the mouth of the receptacle for the ashes without interfering with the free movement of the hopper.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

W. McCONNELL.

Witnesses:

W. ALBERT STEEL,
JOHN WHITE.