

F. G. Beach,
Ash Sieve.

No 84,986.

Patented Dec. 15, 1868.

Fig: 1.

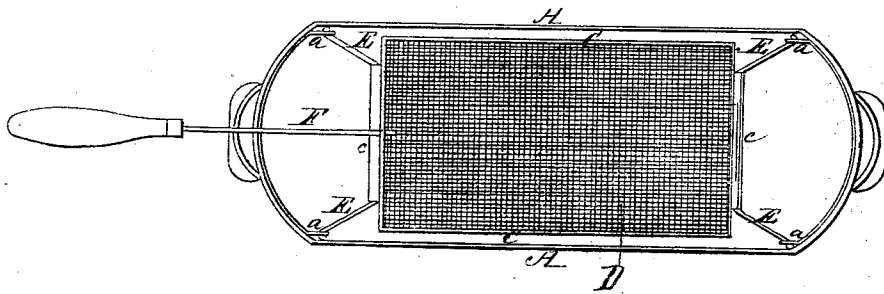
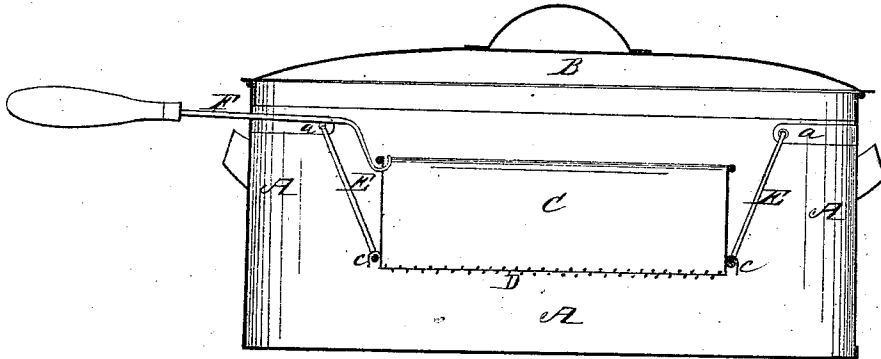


Fig: 2.



Witnesses:

C. H. Bishop.

A. H. Moore

Inventor:

F. G. Beach,

by Prindle and Co
Atty.

United States Patent Office.

F. G. BEACH, OF HARTFORD, CONNECTICUT.

Letters Patent No. 84,986, dated December 15, 1868.

ASH-SIFTER.

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, F. G. BEACH, of Hartford, in the county of Hartford, and in the State of Connecticut, have invented an Improved Ash-Sifter; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure 1 is a top view with the cover removed.

Figure 2 is a vertical longitudinal section.

Letters of like name and kind refer to like parts in each of the figures.

My invention relates to a class of devices known as ash-sifters, and used for separating partly-consumed coal from the ashes taken therewith from a stove or furnace, without allowing the dust arising during the operation to escape; and

It consists in the means used for suspending a sieve within a suitably-enclosed reservoir, so that a reciprocating motion applied to the sieve shall cause an alternate upheaving motion of each end, by which means the coal and ashes are thrown to and from the centre of said sieve, and the ashes speedily and thoroughly separated from the coal, and deposited in the bottom of the reservoir, without permitting any to escape in the form of dust.

In the annexed drawing—

A represents a reservoir constructed of sheet-metal, much in the form of an ordinary clothes-boiler, with a cover, B, closely covering its top.

C represents a sieve, consisting of an oblong box of sheet-metal, open at its top, and with a bottom, D, composed of perforated metal, wire cloth, or any suitable material used for such purpose. This bottom may be made adjustable, if desired, so as to permit it to be removed, and others, with different-sized perforations or interstices, substituted.

Secured to each end of the sieve, near its bottom, is a piece of sheet-metal, *e*, curved outward and downward, so as to form bearings for the lower ends of two loops or links of wire, E, suspended from suitable lugs or ears *a* attached to the inner ends of the reservoir A, near its top, as shown in the drawings.

The links do not hang vertically, but their lower ends are drawn inward, so as to bring them at an angle of thirty degrees, or thereabouts, from a perpendicular line.

It will be readily seen that this method of suspension permits the sieve to be swung lengthwise, and that, when moving in either direction, the forward end will be depressed and the rear end elevated, and that if the sieve is swung quickly back and forth, its contents will be thrown alternately from each end towards the centre.

Motion is imparted to the sieve by means of a rod, F, which passes through an opening made by corresponding slits or notches in the flange of the cover and top of the reservoir. The inner end of this rod is provided with a hook which passes through a hole near the top of the sieve, while upon its outer end is a wooden or other handle.

The operation of this device is so simple as to be readily understood without further description.

The advantages possessed by this invention over all others in use intended for a like purpose are, first, the peculiar motion imparted to the sieve is almost identical with that given to the ordinary hand-sieve, and causes the coal and ashes to be more quickly and thoroughly separated than by any other means; second, while performing the desired operation in a more speedy and thorough manner, its parts are so few and simple that it can be furnished at as low a price as any now in market.

Having thus fully set forth the nature and merits of my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. Suspending a sieve, C, within a suitably-enclosed reservoir, A, by means of the links E E, or their equivalent, so that a reciprocating motion applied to said sieve shall cause an alternate upheaving motion of each of its ends, substantially as and for the purpose herein shown and described.

2. An ash-sifter, consisting of the reservoir A, cover B, sieve C, links E E, and rod F, when constructed in the manner and for the purpose substantially as herein described.

In testimony that I claim the foregoing, I have hereto set my hand and seal, this 22d day of October, 1868.

F. G. BEACH. [L. s.]

Witnesses:

THOMAS MCMANUS,
ELISHA JOHNSON.