C. O. PECK.
Sifter.

No. 209,710. Patented Nov. 5, 1878.

Fig:1.

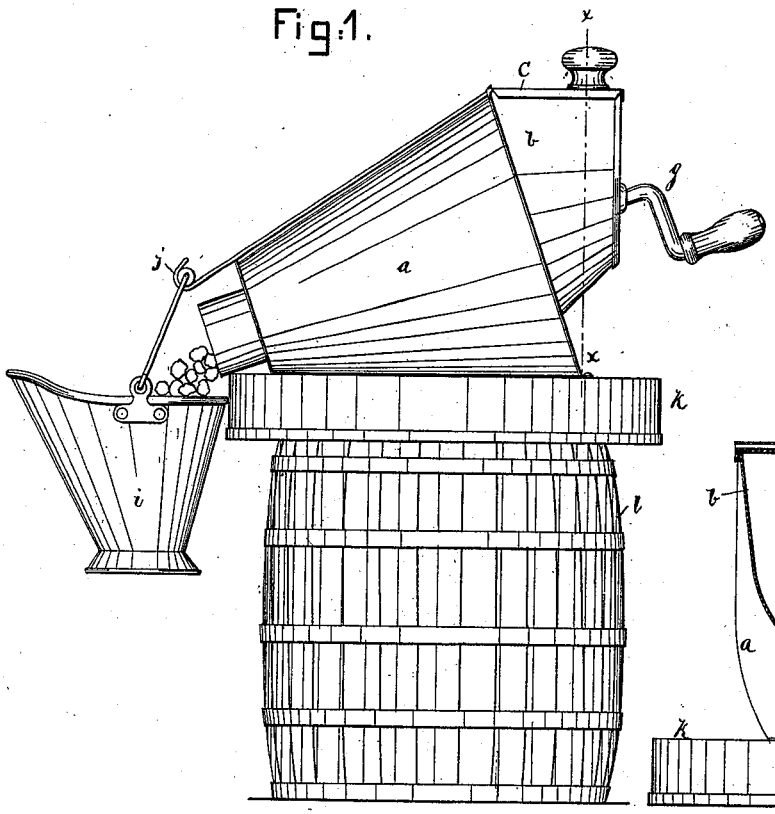


Fig:3.

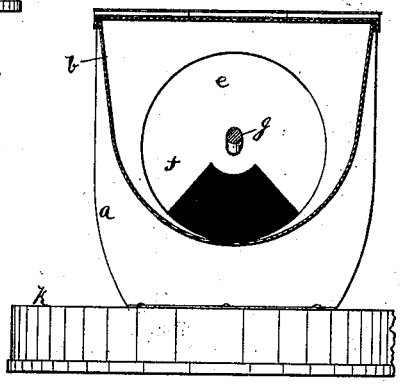


Fig:2.

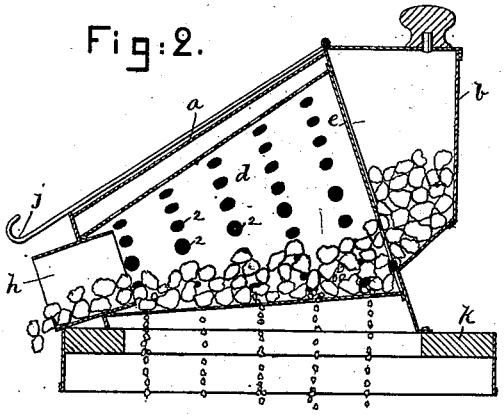
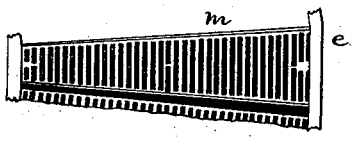


Fig:4.



Witnesses
C. F. Connor.
N. E. Whitney.

Inventor.
Charles O. Peck
by Crosby & Gregory Attys

UNITED STATES PATENT OFFICE.

CHARLES O. PECK, OF PITTSFIELD, MASSACHUSETTS.

IMPROVEMENT IN SIFTERS.

Specification forming part of Letters Patent No. **209,710**, dated November 5, 1878; application filed October 10, 1878.

To all whom it may concern:

Be it known that I, CHARLES O. PECK, of Pittsfield, county of Berkshire, State of Massachusetts, have invented an Improvement in Sifters, of which the following description, in connection with the drawing forming a part thereof, is a specification.

This invention relates to an improvement in ash-sifters; and the invention consists, chiefly, in an inclosing-case and hopper combined with a rotating conical sieve, one end of which is prolonged axially to serve as one of the journals for the sieve, and also as the discharge-outlet, the inclosing-case being adapted to be attached to a barrel, box, or other cover.

Figure 1 represents, in side elevation, one of my improved ash-sifters, the cover to which it is attached being placed upon a barrel, which is to receive the ashes. Fig. 2 is a longitudinal section taken through the sifter; Fig. 3, a cross-section through the hopper on the line *x x*. Fig. 4 shows one of the cast-metal grates of which, in practice, the rotating sieve will be formed.

The inclosing-case *a* and hopper *b*, attached at one end thereof, and provided with a cover, *c*, are made preferably of sheet or galvanized iron; but the ends of the case may be of cast-iron.

The conical sieve *d*, provided with suitable passages for the fire-ashes, has at its larger end a head, *e*, through which is made an opening, *f*, (shown in black,) which, at each revolution of the sieve, is brought opposite the lower inclined bottom of the hopper, as is shown in Figs. 2 and 3, to then receive coal and ashes from the hopper, the size of the said opening *f* graduating the quantity of ashes which can enter the sieve at each rotation.

Attached to the head *e*, and having a bearing in the hopper-case *b*, is a handle, *g*, by which the sieve is rotated.

At the small end of the conical sieve, and made as an axial prolongation thereof, is a tubular spout, *h*, which serves as a journal for the small end of the sieve, and also as the discharge opening or spout, through which the coal, the fine ashes having been removed from it through the passages 2, of any suitable shape, is discharged into a coal-hod, *i*, or other suitable receptacle.

Upon the inclosing-case is secured a hod-holder, *j*, and the case is in this instance shown as attached, as it preferably will be, to a flanged cover, *k*, which may be readily applied to the open end of a barrel, *l*, or box to receive the fire-ashes.

In practice the sieve *d* will be composed of a number of cast-metal screens, as at *m*, Fig. 4, which will be secured to suitable flanges or portions of the head *e* and of the delivering-spout *h*.

By means of this sifter ashes may be easily and quickly sifted, the coal separated therefrom, and fed into a hod without the discharge of ashes in the air.

It will be noticed that the tubular projection *h* is not a conical continuation of the conical sieve, but is a cylindrical apexial termination thereof. By this construction the sieve has a journal of uniform diameter throughout, so that it may turn in its bearing easily, whereas if it were of cone shape the rotary motion and weight of the sieve would tend to crowd it into its bearings and make it work hard.

My sieve is further provided with an annular shoulder, abutting against the casing adjacent to the extension *h*, which serves to prevent longitudinal displacement thereof.

I claim—

1. The conical sieve, terminating at its apex in a shouldered tubular cylindrical axial extension, *h*, substantially as and for the purpose described.

2. The inclosing-case *a* and hopper, combined with the rotating conical sieve, having a head, *e*, provided with an opening, *f*, to admit ashes into the sieve for but a portion of each rotation of the sieve, substantially as described.

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

CHAS. O. PECK.

Witnesses:

G. W. GREGORY,

L. F. CONNOR.