

(Model.)

W. S. FOWLER.

ASH SIFTER.

No. 264,681.

Patented Sept. 19, 1882.

Fig. 1.

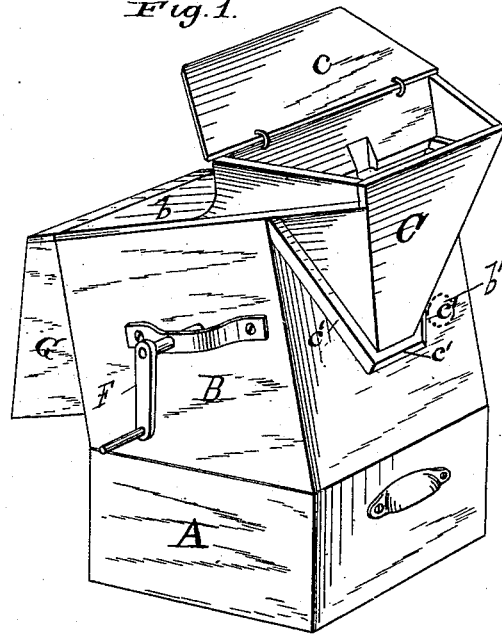


Fig. 2.

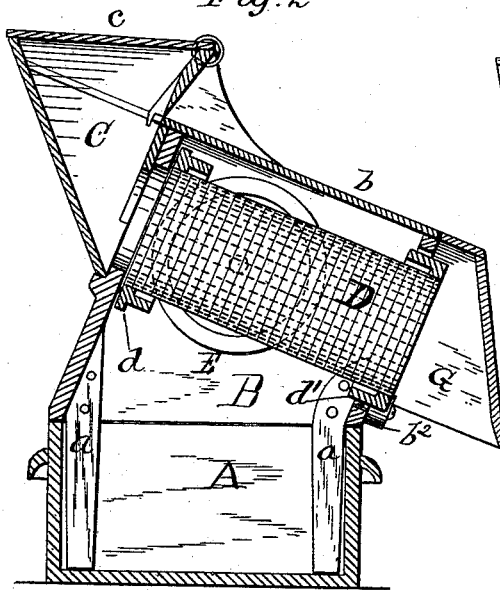
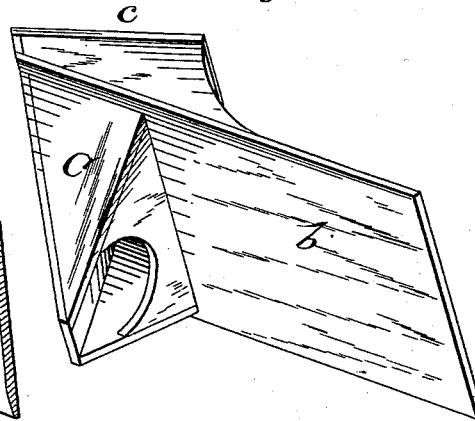


Fig. 3.



Witnesses:
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Att'y.

UNITED STATES PATENT OFFICE.

WALTER S. FOWLER, OF SHERWOOD, NEW YORK.

ASH-SIFTER.

SPECIFICATION forming part of Letters Patent No. 264,681, dated September 19, 1882.

Application filed April 6, 1882. (Model.)

To all whom it may concern:

Be it known that I, WALTER S. FOWLER, a citizen of the United States of America, residing at Sherwood, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Ash-Sifters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to mechanism for separating ashes from cinders and all substances where a finer portion is to be separated from a coarser, such as lime, sand, gravel, coal, &c.; and it consists in certain devices and combinations of devices, as hereinafter fully described, and specifically set forth in the claims.

Figure 1 is a perspective of a sifter embodying my invention; Fig. 2, a central vertical longitudinal section of the same, and Fig. 3 a perspective of the top and receiving-spout detached.

Like letters of reference indicate like parts in all the figures.

A represents the ash-receptacle, upon the upper edges of which the main body of the sifter is retained by four corner-posts, *a a*, (two only of which are shown,) in such manner that it may be lifted from the ash-receptacle and supported upon the ground by said posts to permit the ashes to be emptied therefrom.

If desired, a drawer may be located in the ash-receptacle, so that the ashes may be removed without separation of the parts, as just described.

The main case B of the sifter proper is inclined, as shown, and is provided with a slanted top, *b*, which is extended and forms a support for the receiving chute or spout C, and the cover *c* thereof, which is also slightly slanted, as is the cover or top *b*, whereby the case is adapted to shed rain. The chute C rests in cleats *c'*, attached to the ends of the case B, whereby it and the top *b* are removable as one piece. The chute C communicates with an opening in the end of the case, so that ashes and cinders, or other matter placed therein, may be conducted into the open-ended inclined rotating screen D, which is supported within

the case B on friction-rollers *b'* (shown by dotted lines in Fig. 1) and *b² b²*, one only of the latter being shown. The upper end of the screen, being supported by the single roller *b'*, located on the opposite side to that at which the friction-wheel E is placed, naturally falls or presses against the wheel, and thus the frictional contact of the screen with the wheel is maintained. Said screen is provided with a flanged rim, *d*, at its upper end and a flangeless rim, *d'*, at its lower end, which rims (preferably of metal) rest upon the said rollers or pulleys, the flange of rim *d* resting against a drive-wheel, E, on a shaft provided with a handle or crank, F, outside of the case, whereby the screen is rotated by reason of the friction of the wheel E against the flange *d*, which friction is maintained by the inclination of the screen. The rotation of the screen separates the finer portions of the substances passed therethrough—the ashes from the cinders—and they fall into the receptacle below, while the cinders or coarser portions are conducted to and through the delivery-chute G into any suitable receptacle.

The screen, when made of light material, as wire-cloth, is strengthened by longitudinal ribs; but when of stronger material, as iron rods and wire, these may be dispensed with.

By the arrangement shown a vertical ash-receptacle and inclined-screen receptacle and receiving and delivering spouts are secured, and all parts are protected from the weather, and the dust and dirt are closely confined within and from contact with the operator.

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

1. The combination of the screen D, having flanged rim *d* and flangeless rim *d'*, with the case B, having the rolls *b' b² b²*, crank-shaft F, and wheel E, substantially as shown and described.

2. A sifter consisting of receptacle A, case B, screen D, rolls *b' b² b²*, top *b*, and chutes C and G, crank-shaft F, and wheel E, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

WALTER S. FOWLER.

Witnesses:

JAMES H. PHILLIPS,
CHARLES LAMBORN.