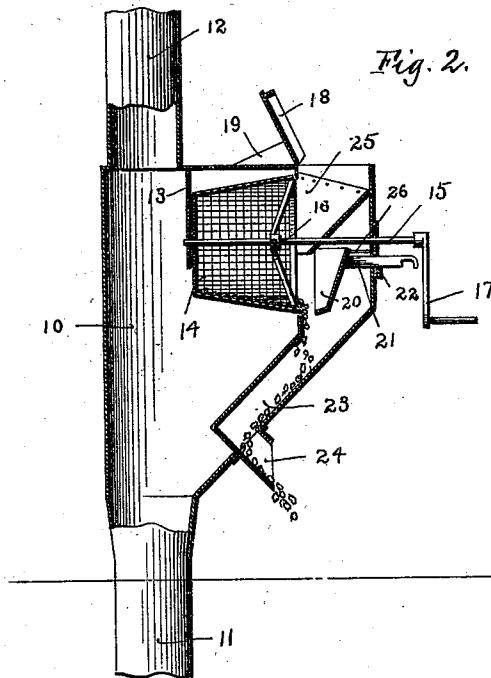
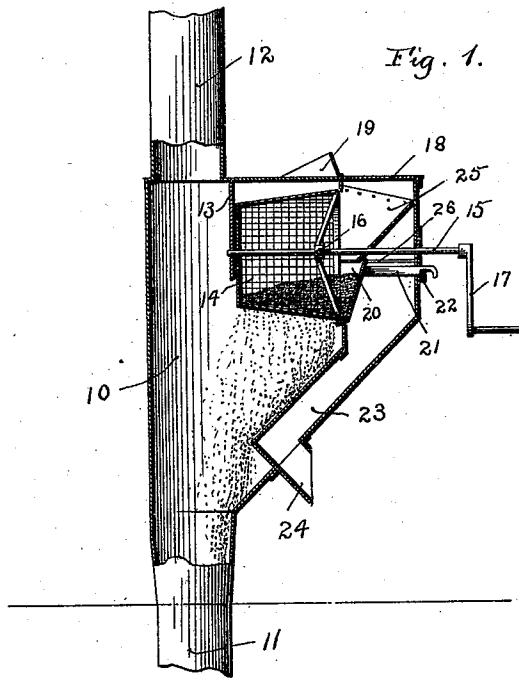


(No Model.)

P. A. WELCH.
ASH SIFTER.

No. 555,593.

Patented Mar. 3, 1896.



Witnesses:

Chas. F. Smith
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UNITED STATES PATENT OFFICE.

PETER A. WELCH, OF WORCESTER, MASSACHUSETTS.

ASH-SIFTER.

SPECIFICATION forming part of Letters Patent No. 555,593, dated March 3, 1896.

Application filed May 18, 1895. Serial No. 549,735. (No model.)

To all whom it may concern:

Be it known that I, PETER A. WELCH, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Ash-Sifters, of which the following is a specification.

My invention relates to an improved ash-sifter, and the object of my invention is to provide a strong, simple, and efficient construction for separating coal and cinders from ashes.

To these ends, my invention consists of the parts and combinations of parts, as hereinafter described, and more particularly pointed out in the claims at the end of this specification.

In the accompanying drawings, Figure is a central sectional view of an ash-sifter constructed according to my invention, and Fig. 2 is a similar view showing the parts in a different relative position.

An ash-sifter constructed according to my invention comprises a rotary screen or sieve journaled in a suitable casing, and a movable section or switch which will direct the ashes into the end of the sieve when in one position, and which will allow the materials to escape from the same end of the sieve when moved into another position.

In its preferred form my ash-sifter is located in a drum or casing, which forms part of a chute or pipe, which may extend to the several stories of a building.

Referring to the drawings and in detail, 10 designates a drum or casing, which is connected at its lower end to a pipe 11, and may be provided at its upper end with a pipe 12 leading to the story above. Extending down from the top of the drum or casing 10 is a partition 13. A shaft 15 is journaled in the partition 13 and in the front of the casing, and carries a rotary sifter or screen 14. The shaft 15 is provided at its outer end with an operating handle or crank 17.

As illustrated, the screen or sifter 14 is of a tapering or truncated form, and is provided with a spider or casting 16, which may be adjustably fastened on the shaft 15.

A hinged cover 18 forms part of the casing 10, and may be thrown back to rest against a stop or abutment 19. Riveted or secured

in the casing below the cover 18 is a chute or hopper 25, which co-operates with a movable section or switch 20. The movable section or switch 20 is mounted to slide upon ways or guides 26, and is provided with an operating-handle 21, which extends to the outside of the casing. The movable section or switch 20 may be locked in position to direct the ashes into the end of the rotary screen or sieve by means of a small catch or stop 22 engaging with a notch in the handle 21, as illustrated in Fig. 1.

When the movable section or switch 20 is moved away from the end of the rotary screen or sieve, as illustrated in Fig. 2, the coals or materials which have been sifted are free to escape or fall down through a chute or discharge-passages 23 formed in the casing 10, and will be delivered by gravity to the outside of the casing through a casting or spout 24.

As illustrated in Fig. 1, it is to be noted that the lower edge of the movable section or switch 20 is preferably constructed so as to lap a short distance past the end of the rotary screen or sieve in order to prevent any of the dust or ashes from escaping through the chute or passage 23.

While I prefer to use a rotary screen or sieve which is slightly tapered or truncated in form, I have found in practice that a straight or cylindrical sieve may be used to advantage.

It is obvious that instead of arranging the casing for my improved ash-sifter to form part of a chute or pipe the casing may be so constructed that it may fit over the top of a barrel or can.

I am aware that other changes may be made in the construction of the device by those who are skilled in the art, and I do not wish, therefore, to be limited to the form which I have shown and described; but

What I do claim, and desire to secure by Letters Patent of the United States, is—

1. In an ash-sifter, the combination of a casing having an outlet-passages for the ashes, and a discharge-passages for the coal or sifted material, a rotary screen or sieve closed at one end and journaled in said casing in position to co-operate with said passages, an operating-handle for said sieve extending to the

outside of said casing, a slidable section or switch mounted on guideways in said casing for guiding the material to be sifted into the open end of the sieve when in one position, and for allowing the material to escape into the discharge-passage from the same end of the sieve when in a different position, substantially as described.

2. The combination of a casing having an outlet-passage for the ashes, and a discharge-passage for the sifted material, a rotary screen or sieve closed at one end, and a movable section or switch having a flanged lower edge arranged to lap past the open end of the screen to form a tight joint to prevent ashes from escaping into the discharge-passage during the sifting operation, substantially as described.

3. The combination of a casing having an outlet-passage for the ashes and a discharge-passage for the sifted material, a rotary screen

or sieve closed at one end, and journaled in said casing, a slidable section or switch mounted on guideways in said casing for directing the material to be sifted into the open end of the screen when in one position, and for allowing the sifted material to escape into the discharge-passage from the same end of the sieve when in a different position, an operating-handle for said switch extending to the outside of the casing, and a latch for locking the switch in position to direct the material into the end of the screen, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

PETER A. WELCH.

Witnesses:

PHILIP W. SOUTHGATE,
LOUIS W. SOUTHGATE.