

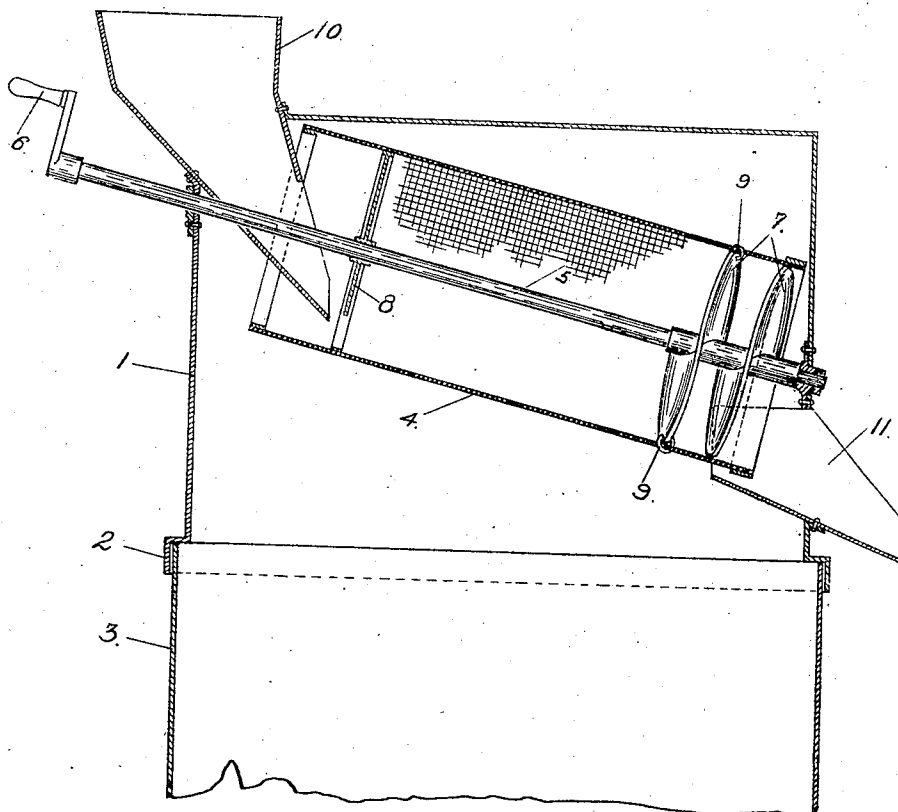
No. 848,270.

PATENTED MAR. 26, 1907.

P. M. STANTON.

ASH SIFTER.

APPLICATION FILED OCT. 16, 1906.



WITNESSES

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UNITED STATES PATENT OFFICE.

PATRICK M. STANTON, OF TROY, NEW YORK.

ASH-SIFTER.

No. 848,270.

Specification of Letters Patent.

Patented March 26, 1907.

Application filed October 16, 1906. Serial No. 339,180.

To all whom it may concern:

Be it known that I, PATRICK M. STANTON, a citizen of the United States, residing at Troy, county of Rensselaer, and State of New York, have invented certain new and useful Improvements in Ash-Sifters, of which the following is a specification.

The invention relates to such improvements, and consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings, and the reference characters marked thereon, which form a part of this specification.

Similar characters refer to similar parts in the drawings.

The single figure of the drawings is a central vertical longitudinal section of my improved rotary ash-sifter, with the central shaft and worm shown in side elevation.

The principal object of the invention is to control the escape of the cinders from the sifter and to provide for accumulating the cinders within the sifting-cylinder until it is desired to remove the accumulation of cinders therefrom. This I am able to accomplish by locating in the lower end of an inclined sifting-cylinder a worm adapted when the cylinder is rotated in one direction to feed out from the lower end thereof the contents of such cylinder, but when the cylinder is rotated in the opposite direction to act as a stop to prevent the escape of such contents and cause the same to accumulate within the upper portion of the cylinder, which constitutes the sifting-chamber.

Referring to the drawings, wherein the invention is shown in preferred form, 1 represents an inclosure or box-like structure provided on its lower end with a cylindrical flange 2, adapted to receive the upper end of an ash can or barrel 3.

Within the inclosure 1 is rotatively mounted, in inclined position, a sifting-cylinder 4, fixed upon the shaft 5, having bearings in the walls of the inclosure, and provided with an operating crank-handle 6. Fixed upon the shaft 5 just within the lower end of the sifting-cylinder is a worm 7 approximately of the same diameter as the interior of the cylinder. The cylinder is supported near its upper end by a spider 8, fixed upon the shaft 5, and at its lower end by the worm 7, the periphery of which may be connected at intervals with the wires of the cylindrical

sieve or screen, as shown at 9. The cylinder, worm, spider 8, and shaft 5 are all adapted to rotate in unison. A feed-hopper 10 projects within the upper end of the screen-cylinder and is apertured to permit the passage of the shaft 5 therethrough. A delivery-chute 11 extends from a point just below the lower end of the hopper in a downwardly-inclined direction exteriorly of the inclosure. Between the worm 7 and the feed-hopper 10 the main body of the sifting-cylinder forms a sifting-chamber, into which ashes are deposited, as desired, through the feed-hopper, the dust and finer particles of ashes escaping through the meshes of the cylinder and falling down through the open body of the inclosure into the barrel or can 3.

When it is desired to sift the ashes, the cylinder is rotated in a direction the reverse of that which will impart a feed movement to the worm, in which case the worm acts as an obstruction or stop at the lower end of the cylinder to prevent the escape of the contents of the cylinder therefrom. So long as this direction of rotation of the cylinder be continued the cinders will be retained within the sifting-chamber and will accumulate therein as fresh quantities of ashes are introduced through the feed-hopper until the desired quantity of ashes has been sifted and the desired quantity of cinders has accumulated within the sifting-chamber, after which the direction of rotation of the cylinder is reversed, whereupon the worm 7 will cause the contents to be fed out from the lower open end of the cylinder into the delivery-chute 11.

By the use of my improved sifter the sifting operation can be continued as long as desired, so that it is possible to secure cinders with a minimum of dust mixed therewith, and it is also possible to permit the cinders to accumulate within the cylinder until they are required for use.

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

1. In an ash-sifter, the combination with a sifting-cylinder rotatively mounted in inclined position and having in its upper end a sifting-chamber; of a worm occupying the lower open end of the cylinder; and means for rotating the cylinder in opposite directions.

2. In an ash-sifter, the combination with an inclosure; of a sifting-cylinder rotatively mounted in inclined position within the inclosure, and having in its upper end a sifting-

chamber; a worm occupying the lower open end of said cylinder; and means for rotating the cylinder in opposite directions.

3. In an ash-sifter, the combination with
5 an inclosure; of a sifting-cylinder rotatively mounted in inclined position within the inclosure, and having in its upper end a sifting-chamber; a worm occupying the lower open end of said cylinder; means for rotating the
10 cylinder in opposite directions; a feed-hopper extending interiorly of the inclosure and with-

in the open upper end of the cylinder; and a delivery-chute extending from a point below the lower open end of the cylinder, exteriorly of said inclosure.

In testimony whereof I have hereunto set my hand this 6th day of October, 1906.

PATRICK M. STANTON.

Witnesses:

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