(No Model.)

J. T. WILSON & W. J. HALLARN.

CINDER SIFTER.

No. 262,526. Patented Aug. 8, 1882

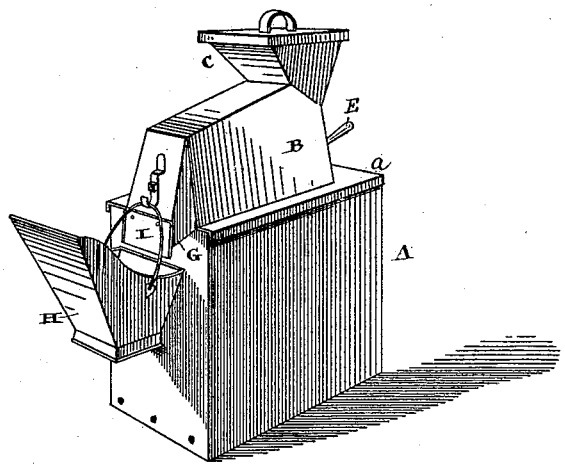

Fig 1.

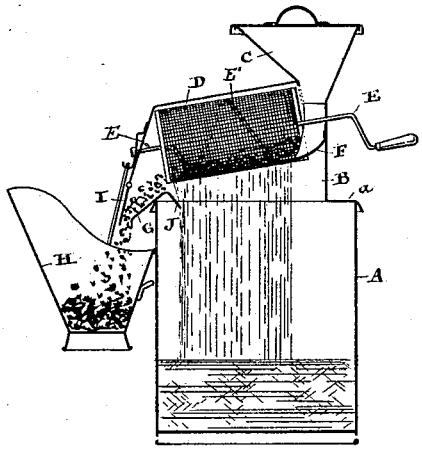

Fig. 2.

Witnesses.

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CINDER-SIFTER.

SPECIFICATION forming part of Letters Patent No. 262,526, dated August 8, 1832.

Application filed April 25, 1882. (No model.)

To all whom it may concern:

Be it known that we, JOHN THOMAS WILSON and WILLIAM JOSEPH HALLARN, both subjects of the Queen of Great Britain, residing at the city of Toronto, in the county of York, in the province of Ontario, in the Dominion of Canada, have invented a certain new and useful Cinder-Sifter, of which the following is a specification.

The object of the invention is to devise a cinder-sifter which can be cheaply constructed, and is both effective and easy in its operation; and it consists in the peculiar construction, arrangement, and combination of parts, as more fully hereinafter described and claimed.

Figure 1 is a perspective outside view of our improved cinder-sifter set upon an ash-box. Fig. 2 is a longitudinal section of the cinder-sifter and ash-box.

In the drawings our sifter is exhibited applied to a square ash-box; but of course it will be understood that it may be designed to be applied to a circular or otherwise shaped ash-box without affecting the principle of our invention.

A is the ash-box, of any ordinary form of construction.

B is the outer casing of the sifter, provided with a flanged base-plate, *a*, to fit over the top of the ash-box A.

C is a hopper formed at one end of the casing B. A wire or perforated cylinder, D, is journaled within the casing B, inclining slightly from the end at which the hopper is situated.

E is the spindle of the cylinder D. While the ends of the spindle E project from the center of the cylinder ends instead of passing through the center of the cylinder, it is bent, as represented in the drawings, to form a worm or screw, E′, on the inside of the cylinder-surface. One end of the spindle E extends from the casing B immediately below the hopper, and its end is bent so as to form a crank-handle, by which the cylinder may be caused to revolve.

It will be noticed that one end of the cylinder D is immediately below the opening at the bottom of the hopper, and that a skirt, F, is placed within the bottom edge of this end of the cylinder, so that the cinders and ashes thrown into the hopper C will be directed by the skirt F into the cylinder as the cylinder is caused to revolve. The worm formed by the twisted spindle E carries the cinders from this end to the opposite end, where they are discharged onto the inclined guide or chute G, which conveys them into the scuttle H, hung upon this end of the casing, as represented, a hinged door, I, being placed over the opening made in this end of the casing B. This door will be opened by the pressure of the escaping cinders, but will keep sufficiently closed to retain the dust created by the sifting of the cinders within the casing. The ashes thrown into the cylinder with the cinders are discharged therefrom through the perforations made in the bottom of the cylinder. Should any of the ashes reach the end of the cylinder through which the cinders are discharged, they will fall onto the skirt J and be conveyed into the ash-box A.

Although our sifter is specially designed for sifting cinders, it will of course be understood that it may be used for other purposes—for instance, sifting coal, separating the earth from newly-dug potatoes, and for many other purposes not necessary to enumerate.

What we claim as our invention is—

1. In a cinder-sifter, the spindle E, bent to form a spiral, E′, in combination with the screening-cylinder D, secured around said spindle and spiral, as and for the purpose specified.

2. The combination, with the screening-cylinder D and the spiral E′, having its ends extended to form journals, of the supporting-case B, and means, substantially as described, for conducting cinders from the case to the interior of the screen and out of the screen and cylinder, as set forth.

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