F. ANTHES.

Ash-Sifter.

No. 160,807 Patented March 16, 1875.

Fig. 1

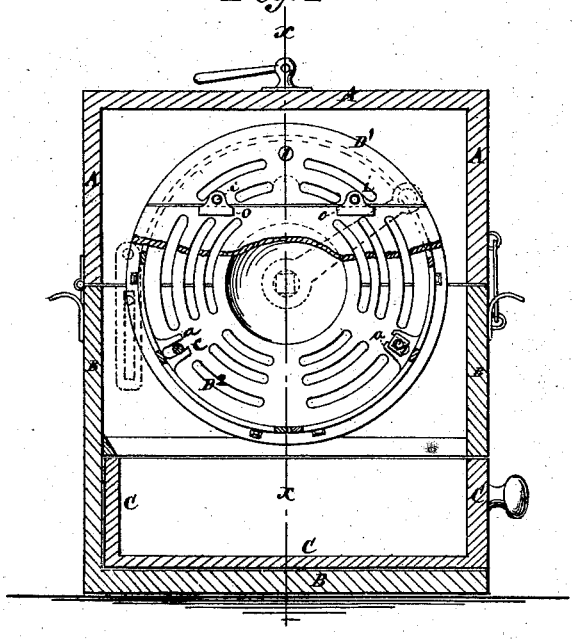


Fig. 2

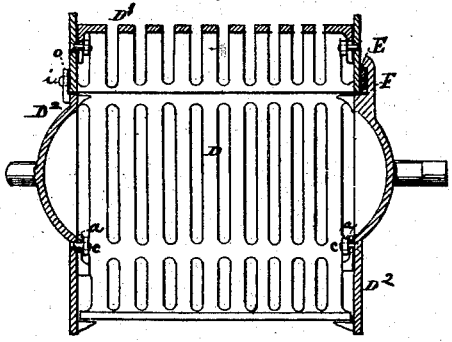
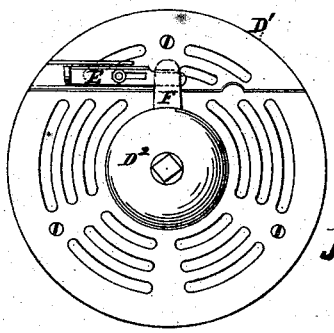


Fig. 3



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRÉDERIC ANTHES, OF NEW YORK, N. Y., ASSIGNOR TO THEODORE WENK AND SAMUEL LEBER, OF SAME PLACE.

IMPROVEMENT IN ASH-SIFTERS.

Specification forming part of Letters Patent No. **160,807**, dated March 16, 1875; application filed November 7, 1874.

To all whom it may concern:

Be it known that I, FRÉDERIC ANTHES, of the city, county, and State of New York, have invented a new and useful Improvement in Coal-Sifter, of which the following is a specification:

Figure 1 is a vertical cross-section of my improved sifter, the sifting-cylinder being shown in end view and with a part of its end broken away. Fig. 2 is a detail longitudinal section of the sifting-cylinder, taken through the line *x x*, Fig. 1. Fig. 3 is an end view of the sifting-cylinder.

Similar letters of reference indicate corresponding parts.

The invention relates to connecting the sections composing the body of the sifter to the circular ends thereof by means of slotted lugs and clamping-bolts. Also, to the construction whereby the removable door-section of the sifter is attached and held in place, as hereinafter described.

The box or case of the sifter is made in two parts, A B, is rectangular in form, and of such a size as to receive the sifting-cylinder and allow space beneath it to contain the pan C, to receive the ashes. The parts A B of the box are hinged to each other at one side, and are provided at the other side with a hook and staple or other convenient fastening. D is the sifting-cylinder, which is made hollow. The ends D^2 of the cylinder D are cast with curved slots, as shown in Figs. 1 and 3, and with gudgeons upon their centers, which work in bearings in the ends of the box A B, and one of which is squared off to receive the crank by which the cylinder is rotated. The body of the cylinder D is cast in sections and with transverse slots. The ends of the sections of the body of the cylinder have inwardly-projecting slotted lugs *a* cast upon them to receive the bolts *c*, by which the said sections are secured to the end plates D^2. The ends of the sections are further secured by points or lugs cast upon the end plates, and against which the ends of the said sections rest. The end plates D^2 are made in two unequal parts, so that the smaller segmental parts and the body-sections D^1 attached to them may be removed for the convenient insertion of the ashes and the removal of the coal sifted out. Upon one end of the removable part D^1 of the cylinder D are formed points or prongs *i*, which enter lugs *o* cast upon the other part of said end. At the other end of the cylinder D the end plate attached to section D^1 is provided with a slotted sliding bolt, E, which shoots through a keeper, F, cast upon the larger part of said end, so that the detachable part D^1 can be readily attached and detached.

By this construction the various parts of the sifting-cylinder can be very easily and quickly put together and taken apart, and the sifter can be very cheaply made.

I do not claim, broadly, a sifter formed of slotted plates or sections made detachable one from another; but

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In an ash-sifter, the slotted or open-work sections provided with slotted lugs *a*, in combination with the circular end parts having clamping bolts and nuts *c*, as shown and described.

2. The combination, with the cylindrical ash-sifter having lugs *o* and keeper F, of the detachable section D^1, provided with projections *i* and the slotted sliding bolt E, as and for the purpose specified.

FRÉDERIC ANTHES.

Witnesses:
JAMES T. GRAHAM,
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