

(No Model.)

J. S. SACKETT.
COAL AND ASH SIFTER.

No. 262,697.

Patented Aug. 15, 1882.

Fig. 1.

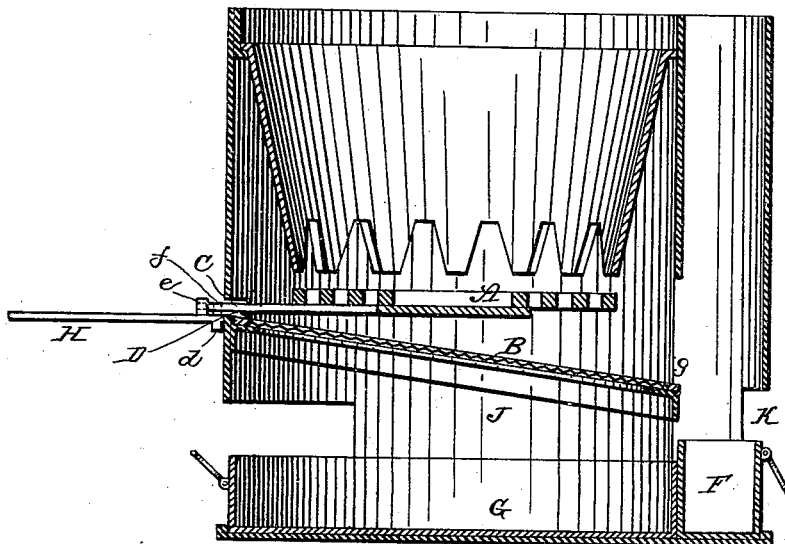


Fig. 2.

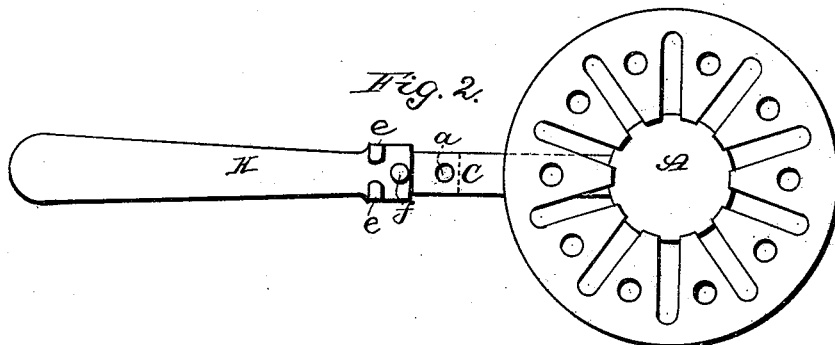


Fig. 5.



Fig. 3.

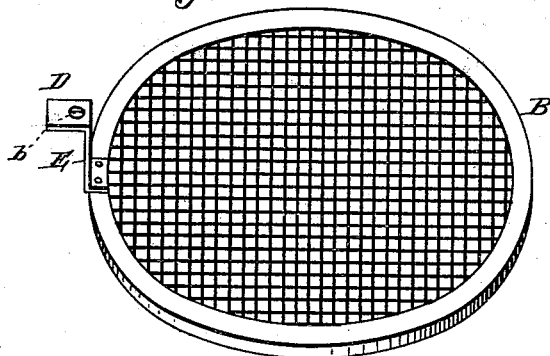
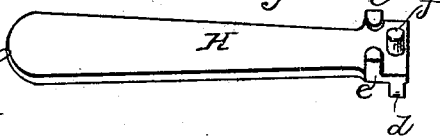


Fig. 4.



Witnesses:

J. B. Garner
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UNITED STATES PATENT OFFICE.

JOSEPH S. SACKETT, OF PLATTSBURG, NEW YORK, ASSIGNOR OF ONE-HALF TO WILLIAM E. CHATTERTON, OF SAME PLACE.

COAL AND ASH SIFTER.

SPECIFICATION forming part of Letters Patent No. 262,697, dated August 15, 1882.

Application filed May 5, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH S. SACKETT, a citizen of the United States, residing at Plattsburg, in the county of Clinton and State of New York, have invented a new and useful Coal and Ash Sifter and Separator Applicable to Stoves, Furnaces, and Heaters, of which the following is a specification.

My invention relates to improvements in stoves, furnaces, and heaters in which an oscillating wire sifter beneath and operated in connection with the grate sifts and separates the coal from the ashes; and the object of these improvements is to cause a separation of the coal from the ashes before they are removed from the stove, furnace, or heater, and at the same time and with the same movement used in shaking the grate. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section of a stove, furnace, or heater containing the improvements, and shows the relative position of the grate, sifter, ash and coal receptacles. Fig. 2 is a detailed view of the grate with attachment for shaking. Fig. 3 is a detailed view in perspective of the sifter with connecting attachment to the shaking-arm. Fig. 4 is a perspective and sectional view of the handle or shaker with its post and flanges. Fig. 5 is an end view of the same.

Similar letters refer to similar parts throughout the several views.

To the stove, furnace, or heater J, at a proper distance beneath the grate A, are attached flanges, upon which the wire sifter B rests, the rear end of which is depressed, so as to allow the wire sifter to oscillate at an angle sufficient to cause the coal to move readily toward the receptacle F in the rear and lower part of the stove, furnace, or heater. To the front side of the oscillating sifter B is attached a perpendicular post, E, extending up to the projecting arm C of the grate A, having a horizontal arm, D, extending to the outside of the stove, furnace, or heater, beneath the arm C of the grate A, sufficiently near to allow the handle or shaker H, with its flanges *ee* and post *f*, to grasp and set into the arm C of the grate A and arm D of the oscillating sifter B. The handle or shaker H, is a bar of iron, having on the upper side two flanges, *ee*, and a perpendicular post, *f*, so constructed as to allow the

flanges *ee* to grasp both the arm C of the grate A and the arm D of the rotary sifter B, while the perpendicular post *f* passes through the two orifices *a* and *b* of the arms C and D of the grate A and sifter B, the object of which is to impart motion to the grate A and sifter B at the same time. On the reverse side of the shaker H are two curved flanges, *dd*, so constructed as to closely grasp the arm C of the grate A when it is desired to impart motion to the grate alone, or the arm D of the sifter B when it is desired to impart motion to the sifter only. The rear portion of the base of the stove, furnace, or heater is extended sufficiently to admit the receptacle F through the opening K to receive the coal passing from the sifter B through the orifice *g*.

The manner of operation of my improvements is as follows: The handle or shaker H is adjusted to the arm C of grate A and arm D of the sifter B by means of the flanges *ee* grasping both arms, while the perpendicular post *f* passes through the orifice *a* of the arm C and orifice *b* of the arm D. The motion imparted shakes the grate A, causing the loose coal and ashes to drop upon the sifter B, which receives an oscillating motion at the same time. The oscillating motion causes the ashes to pass through the meshes of the sifter B into the receptacle G below, while the sifter B, being inclined, as shown, propels the coal through the opening *g* into the receptacle F in the rear part of the base of the stove, furnace, or heater.

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

1. The combination of grate A, inclined sifter B, adapted to be operated together by a single handle, the ash-pan G, and the coal-receptacle F, as shown and described, and for the purposes specified.

2. The combination of the inclined oscillating sifter B, having the perpendicular post E, arm D, and orifice *b*, with the grate A, having the arm C and orifice *a*, substantially as set forth.

3. The handle or shaker H, having the curved grasping-flanges *dd* and *ee* and the post *c*, as shown and described, and for the purposes set forth.

JOSEPH S. SACKETT.

Witnesses:

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