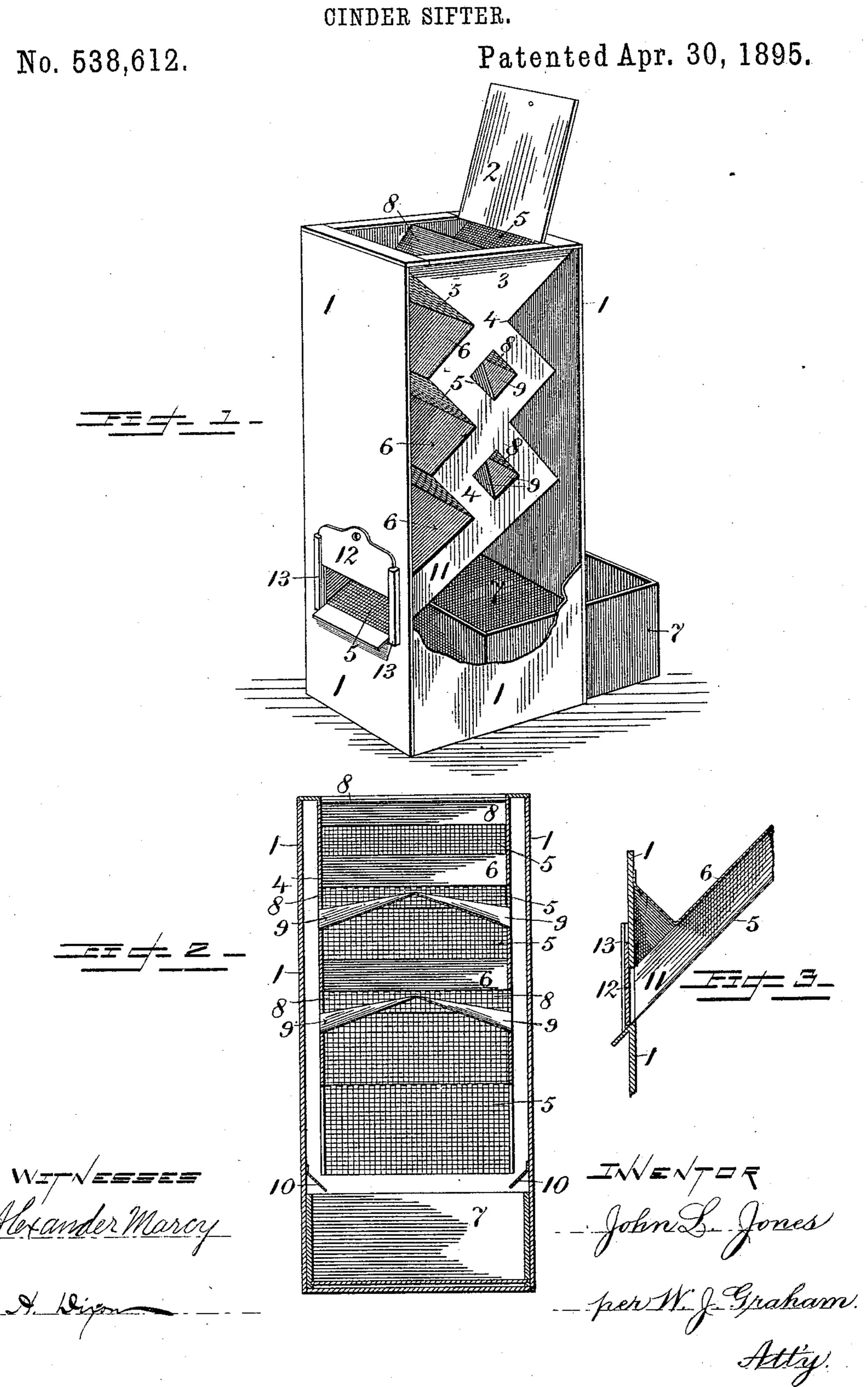
J. L. JONES.

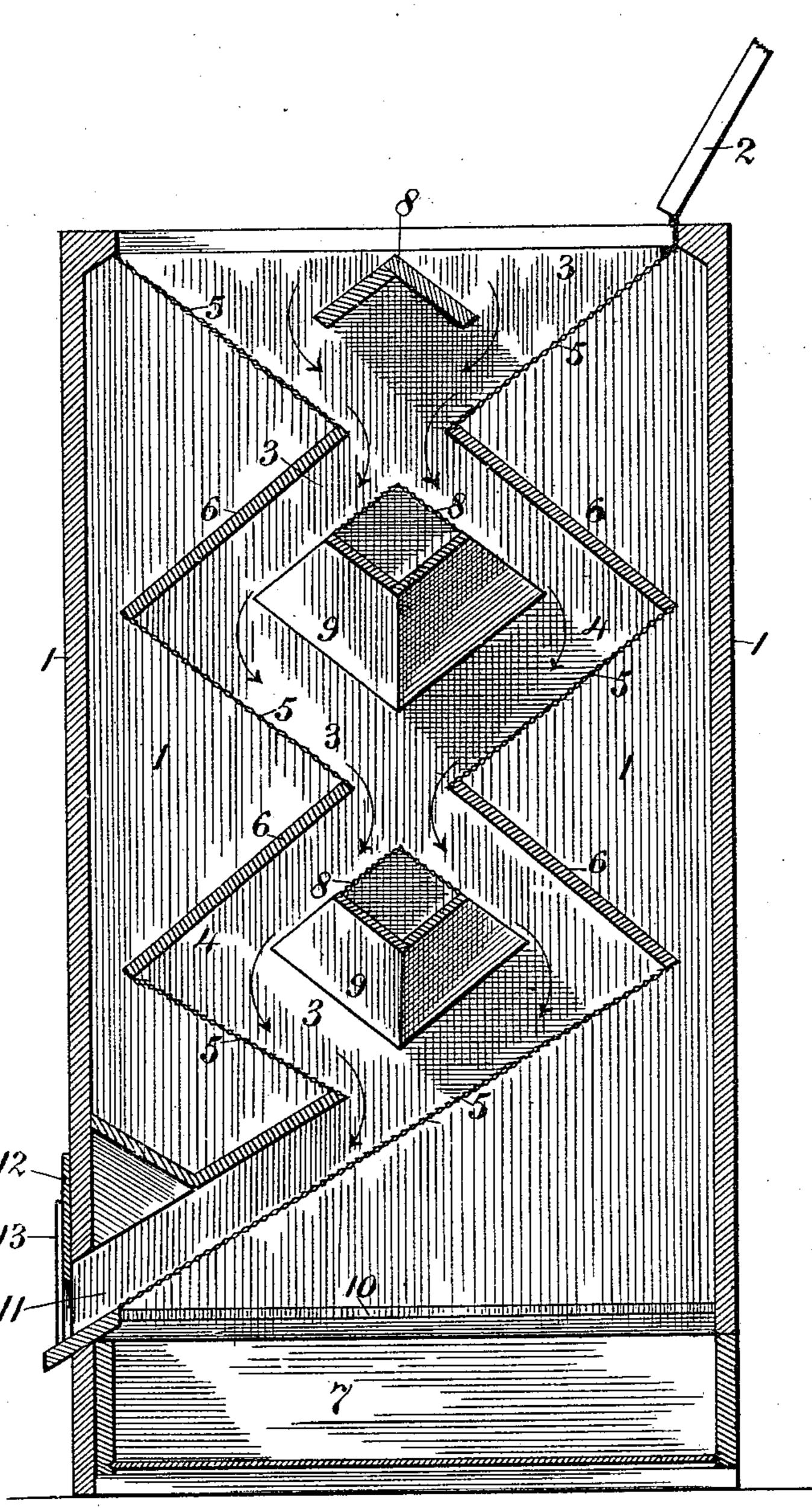


(No Model.)

J. L. JONES. CINDER SIFTER.

No. 538,612.

Patented Apr. 30, 1895.



Witnesses

Thordover Classes

Fig. 4

Inventor John L. Jones per M. S. maliana atti

## United States Patent Office.

## JOHN LEE JONES, OF TORONTO, CANADA.

## CINDER-SIFTER.

SPECIFICATION forming part of Letters Patent No. 538,612, dated April 30, 1895.

Application filed May 19, 1894. Serial No. 511,881. (No model.)

To all whom it may concern:

Be it known that I, John Lee Jones, of the city of Toronto, in the the county of York and Province of Ontario, Canada, have invented certain new and useful Improvements in Cinder-Sifters, of which the following is specification.

My invention relates to an improved sieving device for separating ashes from coal cinders, the object being to provide a simple, reliable, and effective device into which the ashes and cinders can be deposited and by the action of gravity and the particular construction and arrangement of sieves and inclined chutes the ashes are fully separated from and deposited in a receptacle provided for them apart from the cinders. I accomplish this by the means illustrated in the accompanying drawings, in which similar numbers of reference refer to similar parts throughout.

Figure 1 represents a perspective view of my improved cinder-sifter having a portion of one side of the casing removed to show the construction thereof. Fig. 2 represents a vertical section through the same at center to more fully show the construction. Fig. 3 represents a sectional detail of a portion of the discharge-chute to show the inclines to discharge ashes from the top of said chute; and Fig. 4 represents a vertical central section of my improved sifter, taken at right angles to that shown by Fig. 2.

that shown by Fig. 2. The casing, 1, is preferably square in plan and may be constructed either from wood or 35 sheet iron. In the top of the casing, 1, a lid, 2, is hinged to provide a cover to the sieve frame, 3, within the casing, 1. This sieve frame, 3, consists of two closed sides, 4, notched at each edge and adapted to have al-40 ternately, sieves, 5, and inclines, 6, secured thereon, opposite one another, so as to first cause the cinders and ashes to pass over inclining sieves, 5, converging toward one another at their lower edges and allow the ashes 45 to fall on the two diverging inclines, 6, which throw the ashes off to fall down to the ash pan, 7, in the bottom of the casing, 1. Within the frame, 3, and at the top there is a divide, 8, composed of sheet metal preferably to cause 50 the cinders and ashes to fall outward against the first sieves 5, and again there are other divides, 8, but constructed of similar netting as the sieves, 5, and having within these lower !

divides 8, a grooved incline, 9, in each to throw the ashes outward through the sides, 4, to fall 55 down within the casing, 1, and by means of guides, 10, secured to the casing, 1, the ashes are directed into the ash pan, 7. At the bottom of the sieve frame, 3, a chute, 11, is provided having a similar sieve bottom as the 60 sieves, 5, and discharging the cinders outside the casing, 1.

Aslide door, 12, held in position on the casing, 1, by guides, 13, is provided so as to retain the cinders within the chute, 11, when 65 desired, and enable the ash pan from a stove or range from which the ashes and cinders are discharged into the top of the sieve frame, 3, being used to receive the cinders when sieved or separated from the ashes.

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Having described my invention, what I claim, and desire to secure by Letters Patent,

1. In a cinder sifter, the combination of the downwardly divergent inclined planes in the 75 top of the sifter, a series of downwardly convergent sieves to again unite the cinders beneath said inclined planes, a series of externally divergent inclined planes to throw off the ashes falling from said convergent sieves, 80 and a series of divergent sieves having grooved inclines beneath them to discharge the ashes transversely to said divergent inclined planes, substantially as shown and described.

2. In a cinder sifter, having a sieve frame supported within the outer casing by the upper and lower ends of said frame, and having a space between said casing and sieve frame, the combination of the downwardly divergent 90 inclined planes, in the top of the sifter, a series of downwardly convergent sieves beneath said inclined planes, a series of externally divergent inclined planes beneath said convergent sieves having grooved inclines beneath 95 them, said divergent sieves and grooved inclines being transverse to said inclined planes and convergent sieves and within the same, and a chute having a sieve bottom therein within the outer casing of the sifter, substan-100 tially as shown and described.

JOHN LEE JONES.

Witnesses:
ALFRED SMITH,
JAS. A. EGAN.