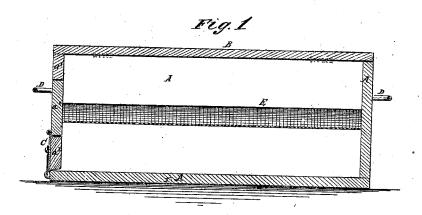
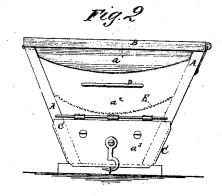
## Istry & Clough, Ash Sifter. No. 108,991. Fatented Nov. 8. 1870.





Witnesses: sm. slingvish alex F. Robert Inventor:
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## United States Patent

## WILLIAM S. ESTEY AND ISAAC S. CLOUGH, OF BROOKLYN, NEW YORK.

Letters Patent No. 108,991, dated November 8, 1870.

## IMPROVEMENT IN ASH-SIFTERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, WILLIAM S. ESTEY and ISAAC S. CLOUGH, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Ash-Sifter; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 is a vertical longitudinal section of our

improved ash-sifter.

Figure 2 is a front end view of the same.

Similar letters of reference indicate corresponding

Our invention has for its object to furnish an improved sifter, designed especially for sifting ashes, but which shall be equally applicable for sifting flour and other material, and which shall be simple in construction, effective in operation, and convenient in use; and

It consists in the construction and combination of the various parts of the sifter, as hereinafter more

fully described.

A is the box of the sifter, which is made long and narrow, with inclined sides and vertical ends, as shown

in figs. 1 and 2.

By this construction the inclination of the sides of the box tends to pack the sifted material and keeps it together, so that it may be more readily poured out without dust.

B is the cover of the box, which is hinged at one of its side edges to the upper edge of one of the sides of the box A, and is fastened at its other edge by a hook or other convenient fastening.

The front end of the box A is made in three parts

or pieces,  $a^1 a^2 a^3$ .

The upper piece  $a^1$  is securely attached to the lower side of the end of the cover B, and the middle piece a2 is securely attached to the ends of the sides of the box A.

The upper edge of the piece  $a^2$  is hollowed or concaved, for convenience in pouring out the coal or cinders, and the lower edge of the piece  $a^1$  is convexed to fit into the concavity of the upper edge of the piece  $a^2$ , and form a close joint.

The lower part  $a^3$  is securely attached to the plate C, which is hinged at its upper edge to the lower part of the piece  $a^2$ .

The side edges of the plate C project and may be bent inward or flanged to overlap the ends of the sides of the box A, and its lower edge projects so as to overlap the end of the bottom of said box A, as shown in figs. 1 and 2, to cover the joints of the piece  $a^3$  and prevent the escape of fine ashes or dust.

The piece  $a^3$  and plate C thus form a door to enable. the sifted ashes to be conveniently poured out of the

lower part of the sifter.

The door a<sup>3</sup> C is secured when closed by a hook or other convenient fastening.

D are handles attached to the ends of the box A, for convenience in handling and carrying it.

The sifting may be done by shaking the sifter or

by rocking it upon its bottom.

The ashes may be poured out first, or the coal, according to the circumstances under which the sifting may be done.

E is the screen, which is made of wire-cloth, concaved or bent, as shown in figs. 1 and 2, and its side edges rest against the inclined sides of the box A.

The friction of the edges of the wire-cloth or screen E will keep it in place in the box A, or it may be secured by nails, buttons, or other convenient means.

This construction enables the wire-cloth or screen to be readily removed and replaced with a finer or coarser screen, thus adapting the screen for the use of druggists or others who may desire to use the sifter for sifting different materials.

Having thus described our invention,

We claim as new and desire to secure by Letters Patent-

An improved sifter, formed by the combination of the box A a1 a2 a3, cover B, plate C, and screen E, with each other, said parts being constructed and operating substantially as herein shown and described, and for the purpose set forth.

WILLIAM S. ESTEY. ISAAC S. CLOUGH.

Witnesses: GEO. W. MABEE, JAMES T. GRAHAM.