G. W. & L. DEMOND.

ASH-SIFTER.

No. 191,520. Patented June 5, 1877.

Fig. 1.

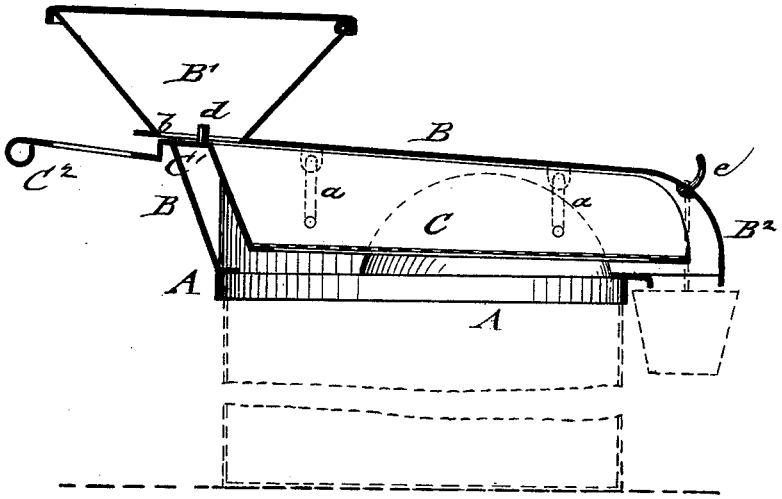
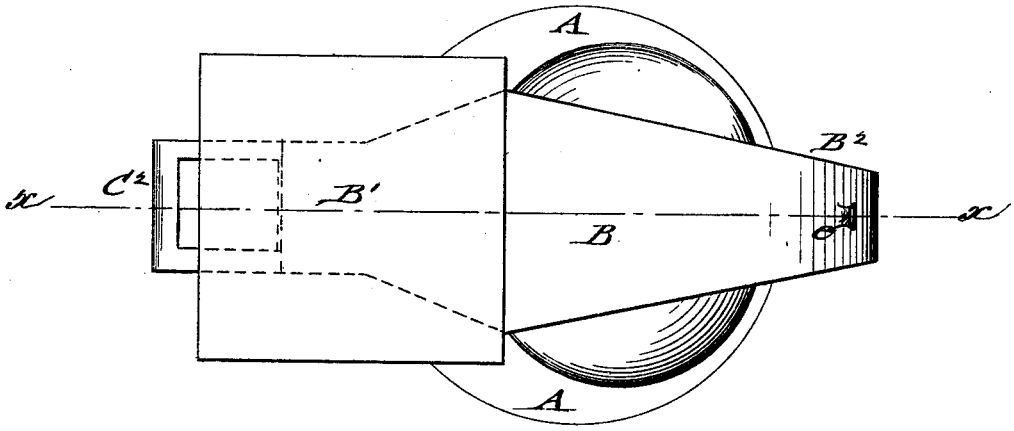


Fig. 2.



WITNESSES:

H. Rydquist

J. A. Scarborough

INVENTOR:

G. W. Demond

L. Demond.

BY

Munn & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

GEORGE W. DEMOND AND LOUIS DEMOND, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN ASH-SIFTERS.

Specification forming part of Letters Patent No. **191,520**, dated June 5, 1877; application filed November 4, 1876.

To all whom it may concern:

Be it known that we, GEORGE W. DEMOND and LOUIS DEMOND, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Ash-Sifter, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical longitudinal section on line *x x*, Fig. 2, and Fig. 2 a top view of our improved ash-sifter.

Similar letters of reference indicate corresponding parts.

The invention has reference to an improved ash-sifter that is placed on the top of the ash-barrel, and operated with great facility, dropping the ashes into the barrel, and discharging the sifted coal through a spout into a pail suspended therefrom. The ashes are fed through a hopper of the casing, and by a partial cut-off with one or more stirrer-pins to the screen, and the coal particles discharged through the spout into a pail hung to a hook at the top of the spout.

In the drawing, A represents a cover which is of the size of the common ash-barrels in use, and preferably cast or otherwise made in one piece, with a casing, B, that extends across the cover and has a hopper, B^1, at one end and a discharge-spout, B^2, outside of the cover at the opposite end.

In the casing is suspended on pivot-arms *a*, a reciprocating screen, C, which is preferably hung at some inclination from hopper to spout, to assist the forward motion of the coal over the screen.

The screen C is open at the end toward the spout and closed at the sides and back, the back being inclined toward the hopper and arranged at the upper end below the discharge-opening of the hopper with an extension-plate, C^1, that passes through a slot, *b*, of the casing to the outside, and is provided with an operating-handle, C^2.

The plate C^1 serves as a partial cut-off for the purpose of regulating the supply of ashes from the hopper to the screen, and is guided and stopped in suitable manner to define the motion of the screen.

In the forward position of the screen the extension-plate C closes partly the hopper-opening, while in the backward position it clears the hopper-opening entirely.

The extension-plate or cut-off C^1 is provided with one or more stirrer-pins, *d*, that agitate the ashes in the hopper when the screen is set in motion, so as to feed the same during the backward motion of the screen while cutting off the supply more or less during the forward motion, as shown in Fig. 1, so as to secure the regular working of the sifter without choking the same.

The hopper is closed by a hinged lid after the ashes have been placed therein, and the screen then set to work.

The pivot suspension of the screen admits the easy swinging of the same by means of the handle without the least fatigue to those using the sifter. The ashes are dropped in the barrel and the unburned coal discharged through the spout into a pail suspended below the same from a hook, *e*, at the top part of the spout, on which the bail of the pail is placed, as shown in Figs. 1 and 2.

The sifter remains on the barrel until the same is filled with ashes, produces no dust during work, and separates the ashes and coal in quick, easy, and reliable manner.

Having thus described our invention, we claim as new and desire to secure by letters Patent—

1. The combination of the hopper and casing, having guide-slots, with an extension-plate of the screen forming a partial cut-off to regulate supply of ashes, substantially as described.

2. The extension-plate or cut-off C^1, having one or more stirrer-pins for the purpose set forth.

GEORGE W. DEMOND.
LOUIS DEMOND.

Witnesses:
C. SEDGWICK,
ALEX. F. ROBERTS.