

WILLIAM SHELLEY.

Improvement in Coal-Sifters.

No. 127,805.

Patented June 11, 1872.

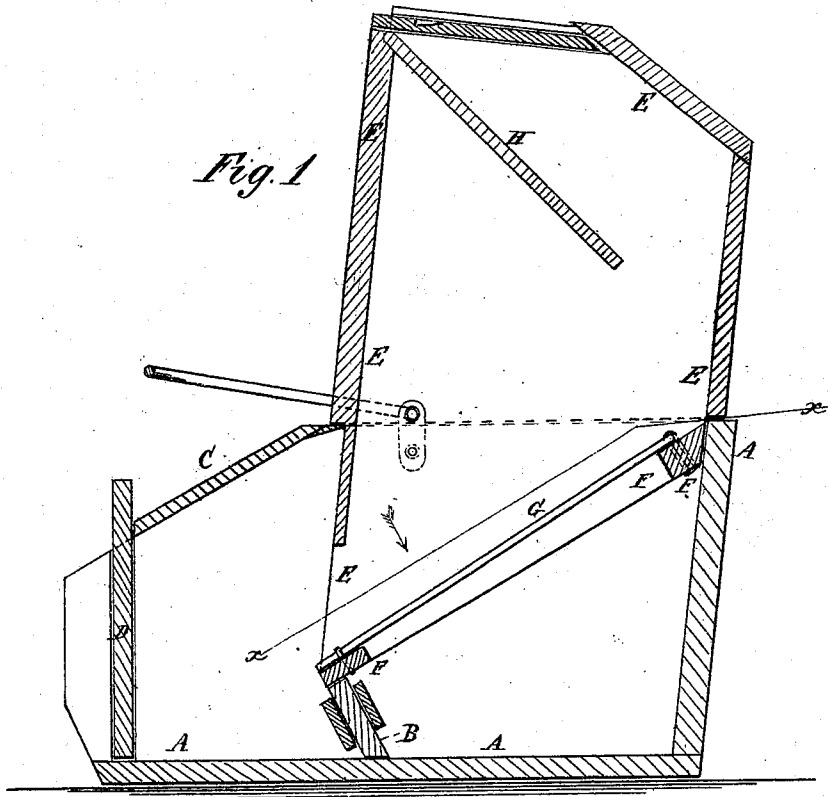
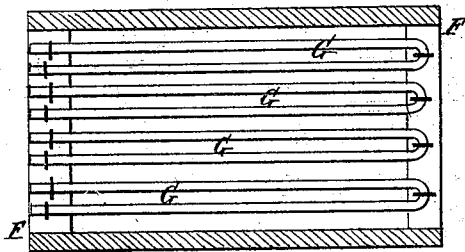


Fig. 2



Witnesses:

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WILLIAM SHELLY, OF NEW YORK, N. Y.

IMPROVEMENT IN COAL-SIFTERS.

Specification forming part of Letters Patent No. 127,805, dated June 11, 1872.

Specification describing a new and useful Improvement in Angle-Sieve Coal-Sifter, invented by WILLIAM SHELLY, of the city, county, and State of New York.

Figure 1 is a detail vertical section of my improved sifter. Fig. 2 is a detail sectional view of the sieve-box taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved coal-sifter, simple in construction, convenient in use, and effective in operation, being so constructed that the ashes and cinders may be shoveled from the stove directly into the sifter, and which will separate the ashes from the coal and cinders, allowing the ashes to fall into one compartment while the coal slides down into another compartment; and it consists in the construction and combination of the various parts of the sifter, as hereinafter more fully described.

A represents the lower part of the sifter, which may be made of wood, of wood lined with metal, or of metal. The box A may be made with vertical sides, or it may be made in about the shape of an ordinary coal-scuttle, and may, in fact, be a coal-scuttle. The lower part of the box A is divided into two compartments by the partition B, which may be detached or stationary, as may be desired. The forward part of the top of the box A is provided with a cover, C, which may be hinged or stationary, as may be desired. In the lower part of the box A is formed an opening, closed with a slide, D, so that the coal and cinders may be poured out of the forward compartment without disturbing the ashes in the rear compartment. The ashes may then be poured out either at the rear part of the top of the box or at the same place as the coal, as may be desired. E is a box, which fits closely into the mouth of the box A, and is supported by shoulders formed upon or by cleats attached to said box E, and which rests upon the upper edge of said box A. The lower edge of the box E inclines downward from rear to front, as shown in Fig. 1, and to it is attached an inclined or angle sieve or screen, F G. F is the frame of

the screen or sieve, consisting of two end bars, attached at their ends to the ends of two side bars, which side bars may be the sides of the box E, or may be attached to said sides. G are the wires or bars of the sieve, each wire being of twice the length of the sieve and being bent at its middle into U-shape, as shown in Fig. 2, so that each wire may form two bars or rods of the screen or sieve. The wires are arranged with their bends at the upper end of the frame F, where they are secured in place by a staple passing into or through the top end-bar of said frame F. The lower ends of the wires G are laid upon the upper side of the foot cross-bar of the frame F, where they are secured in place by staples passing through or into the said cross-bar, as shown in Fig. 2. The upper surface of the sieve is thus left smooth and free, so that the coal and cinders will slide down said sieve into the forward compartment of the box A, while the ashes pass through the spaces between the wires G and fall into the rear compartment of said box A. The opening for the introduction of the ashes and cinders is made in the forward part of the top of the box E, which opening may be closed with a slide. In the upper part of the box E, a little below the ingress opening, is secured an apron or shelf, H, which projects nearly to the rear side of the box E, and inclines downward from front to rear, as shown in Fig. 1, so that the ashes and cinders when thrown into the box E will slide down the shelf H and fall upon the upper end of the sieve F G.

By this construction the coal and cinders will be thoroughly separated from the ashes without jarring, shaking, revolving, or otherwise agitating the sifter.

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

The scuttle A, having cover C and slide D, combined with a box, E, having inclined sieve F G, and shelf H reversely inclined, as and for the purpose described.

WILLIAM SHELLY.

Witnesses:

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