

(No Model.)

C. L. PORTER.
ASH SIFTER.

No. 411,529.

Patented Sept. 24, 1889.

Fig. 1

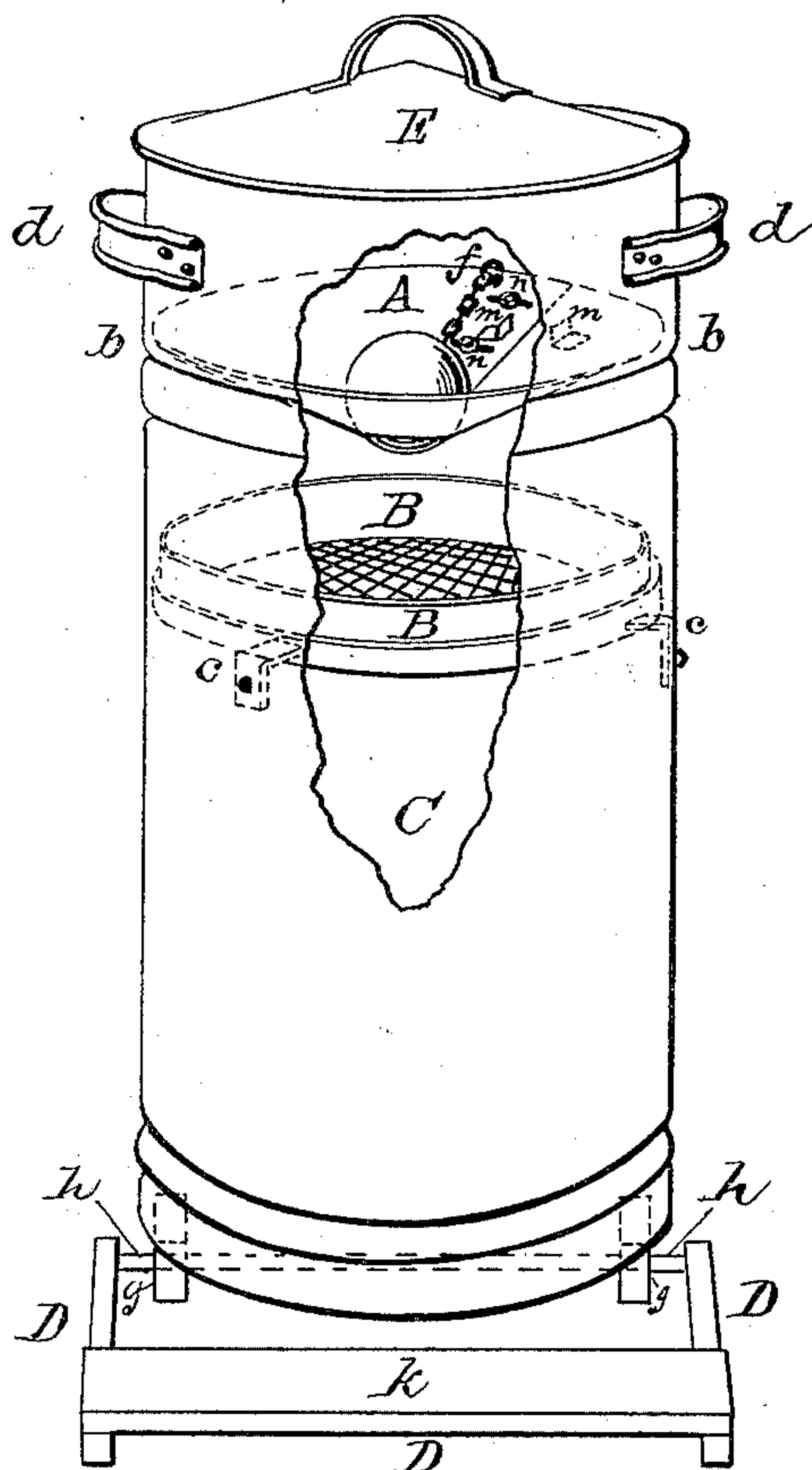
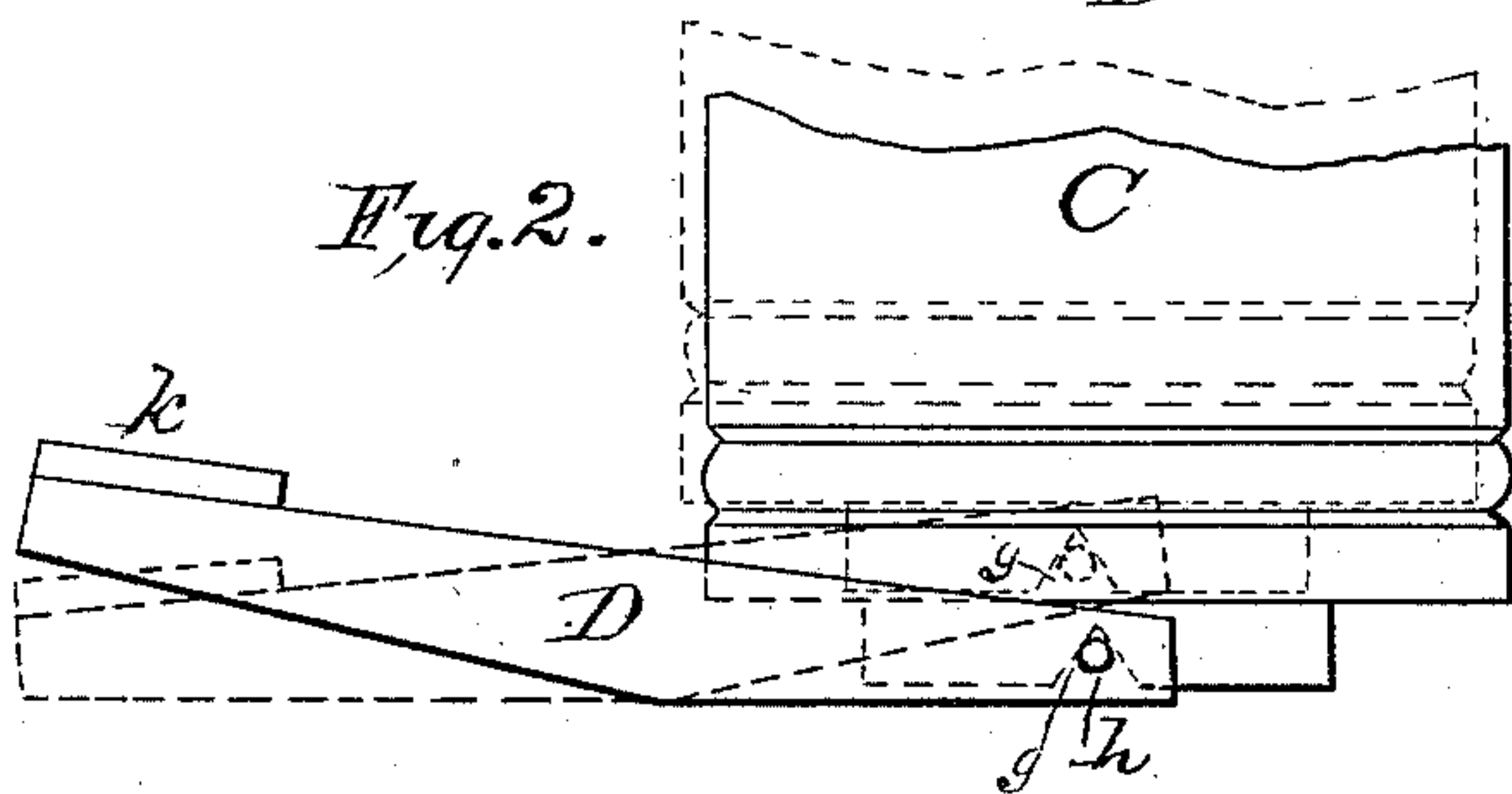


Fig. 2.



Witnesses:

Wassenaar
Truitt

Inventor

Charles L. Porter.
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his atty.

UNITED STATES PATENT OFFICE.

CHARLES L. PORTER, OF PHILADELPHIA, PENNSYLVANIA.

ASH-SIFTER.

SPECIFICATION forming part of Letters Patent No. 411,529, dated September 24, 1889.

Application filed December 11, 1888. Serial No. 293,252. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. PORTER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Ash-Sifters; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a convenient device to sift coal-ashes, so as to avoid dust and greatly lessen the labor, and to secure a convenient fire-proof receptacle for the hot ashes without any rehandling.

Figure 1 is a perspective of the complete device, showing its arrangement in all its parts; Fig. 2, a side elevation illustrating the use of the supporting-floor frame.

Referring to Fig. 1, C is the ash-receiver, formed of sheet metal in the shape of a cylinder, closed at one end by a bottom either of wood or metal and covered at the top with a metallic lid.

b b are corrugations or pressed rings in the metal, extending around the cylinder, the inner projections of which are of utility to support the edges of the hopper A, which rests upon them. In the interior of the cylinder and still lower down are cleats or angle-pieces *c c*, secured thereto, upon which the sieve or screen B is supported.

e is a metal ball attached to the hopper A by a chain in such way that the ball may roll about in any position, but always finds its way to a resting-place over the opening in the bottom of the basin-shaped hopper A. The hopper A is made from a single piece of sheet metal, and its edges are secured by rivets which are firmly attached to one edge, but slide in slots *n n*, cut in the overlapping edge, so that the diameter of the hopper can be decreased in order to introduce it within the cylinder C, and the natural spring of the metal may expand it and cause the periphery to fit snug against the walls of the cylinder

when released. The lips *m m* are to be pressed between the thumb and fingers in the act of inserting or withdrawing the hopper.

D D D is a frame of wood connected together at one of its ends by means of a rod *h*, the purpose of which will be apparent from the description of the operation of the sifter, which is as follows:

Having placed the ashes and coals to be sifted in the hopper A along with and entirely disregarding the ball *e* and replacing the cover E, the cylindrical receiver is to be placed on the frame D D D in such a way that the notches *g g* in the cleats at the bottom will embrace the rod *h* of the frame, the frame meanwhile lying upon the floor or ground. Then pressing the foot on the cross-piece K, the cylinder C will be elevated from the floor, and the operator, by means of the handles *d d*, communicates a rocking or oscillating motion thereto, with the rod *h* as a pivotal point. This motion causes the ashes and coals to work their way through the opening in the hopper A, the ball *e* meantime rolling about with the motion and, as it is the largest object, working its way to the top of the mass. The ashes and coals fall upon the screen B, the coals being retained thereon, while the ashes drop through and are contained in the bottom of the cylinder. As the mass of ashes and coals work down through the opening in the bottom of the hopper A, the ball *e* follows and settles down on the opening, thus effectually preventing any dust from rising when the cover is taken off in the act of replenishing.

It is obvious that a sieve such as can be purchased in any house-furnishing store may be employed, thus making it possible to supply at trifling cost a new one as often as necessary.

The receptacle C may be used to contain the ashes until taken away by the city contractors, and thus insure safety against fire.

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

1. The combination, with a cylindrical ash-receptacle C, of the hopper A and screen B,

the bottom cleats formed with notches *g g*,
and the supporting-frame *D D D*, as described,
and for the purpose set forth.

2. The combination of the hopper *A*, as de-
5 scribed, with the ball *e* and chain *f*, with the
cylindrical ash-receptacle *C* and screen *B*, as
and for the purpose set forth.

In testimony whereof I affix my signature in
presence of two witnesses.

CHARLES L. PORTER.

Witnesses:

FRANK CRAVEN,
IDA McCORNELL.