

(No Model.)

S. J. PHREANER.

ASH SIFTER.

No. 316,653.

Patented Apr. 28, 1885.

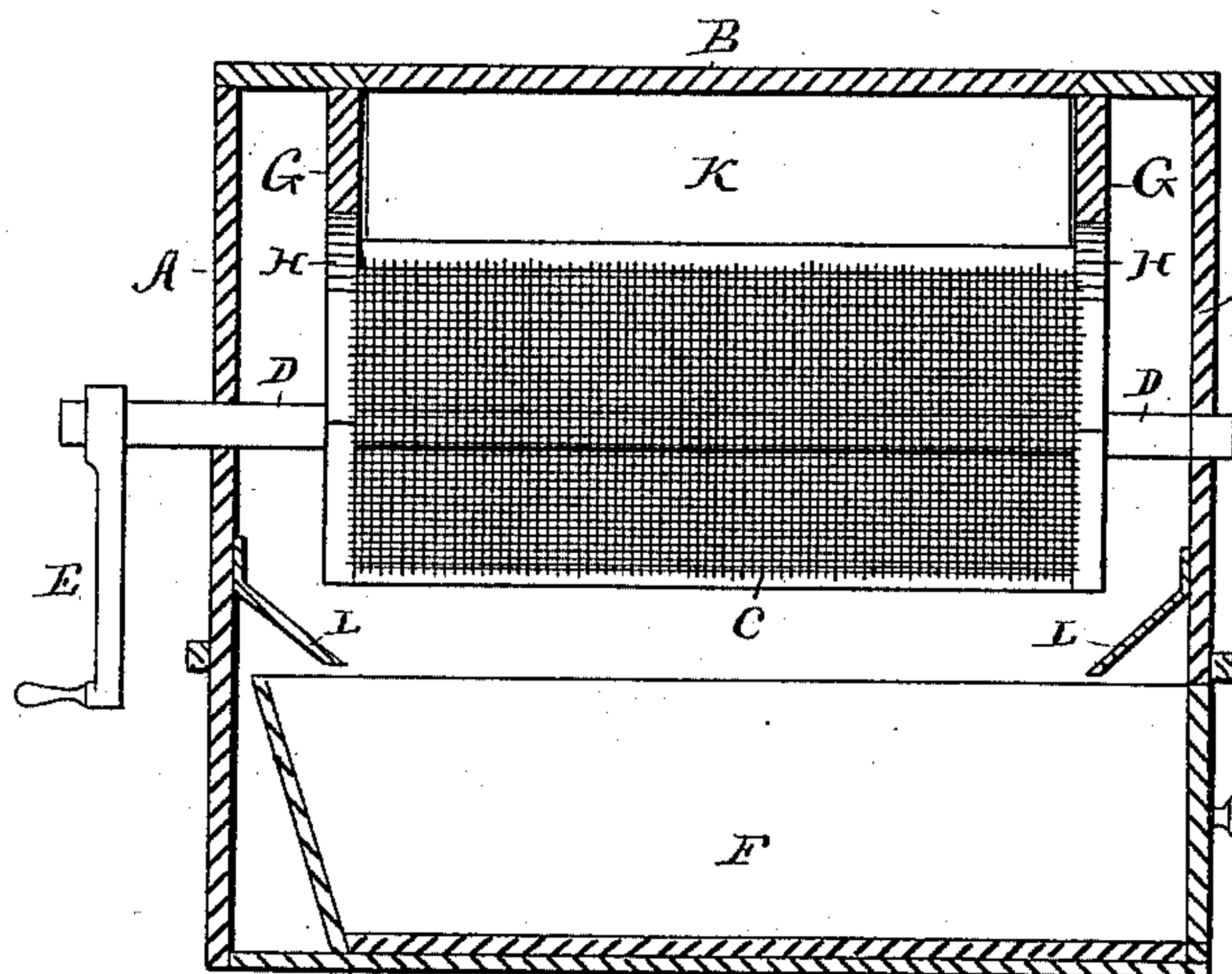


Fig. 1.

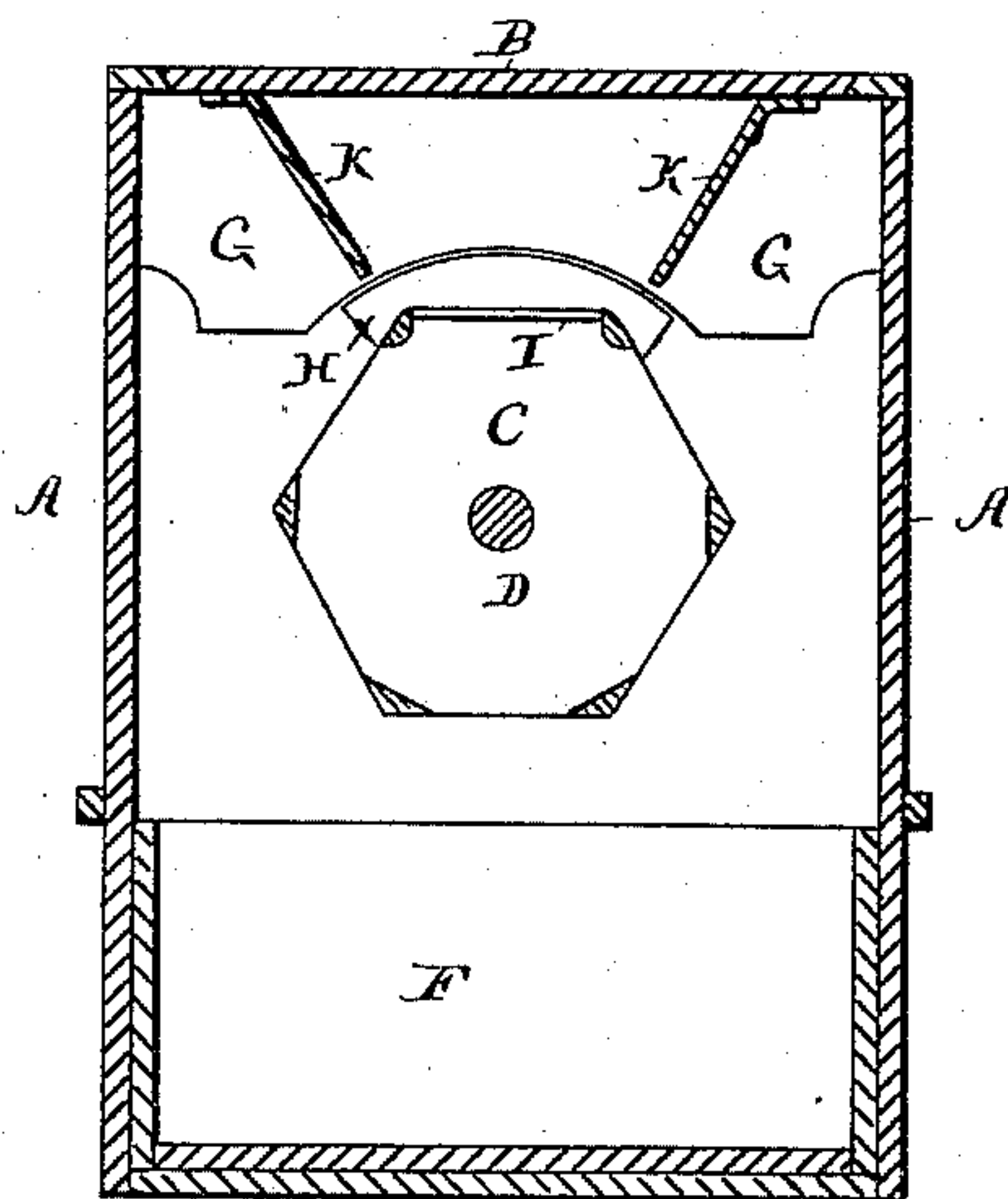


Fig. 2.

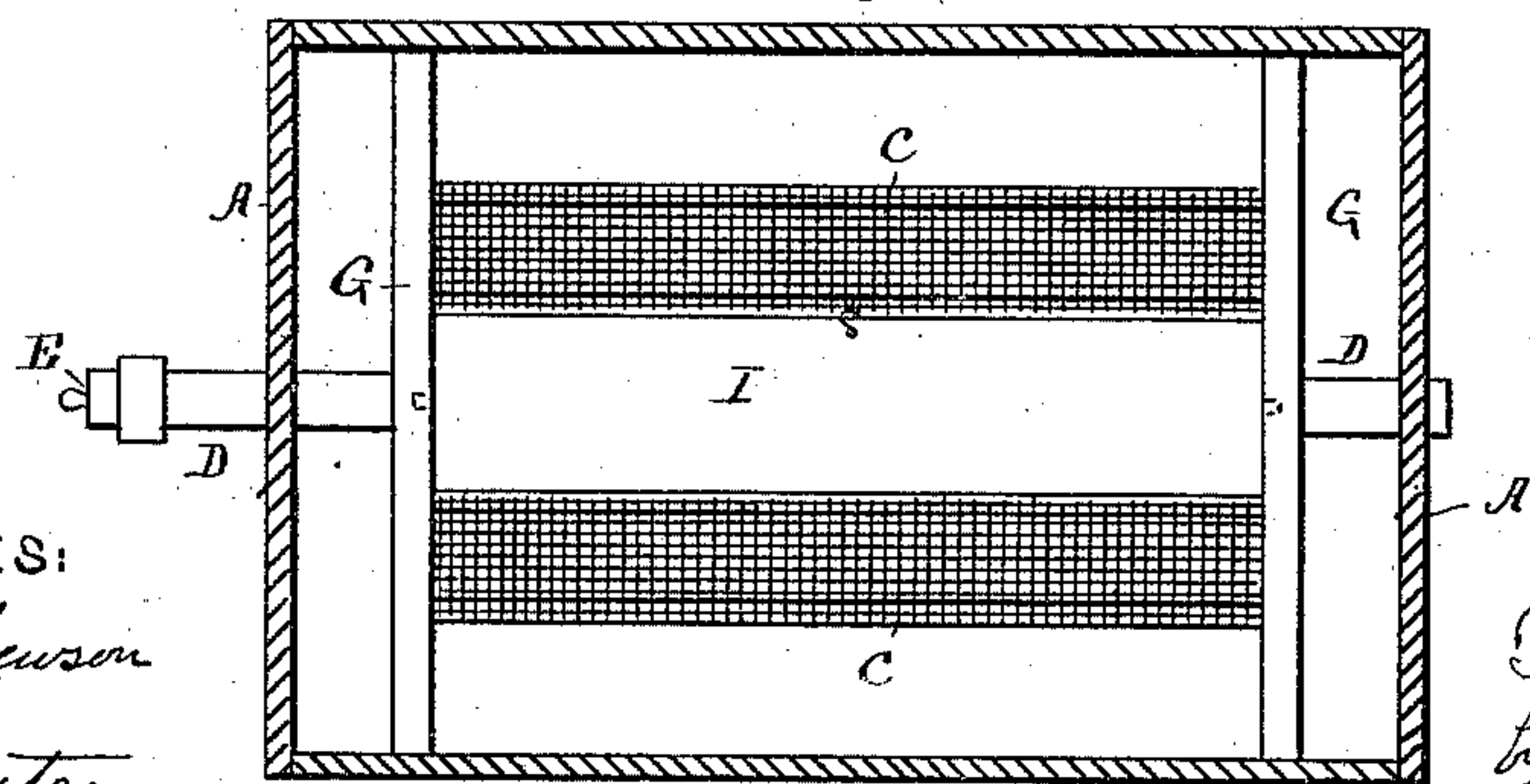


Fig. 3.

WITNESSES:

William H. Hewson

W. R. Webster.

INVENTOR

Jamuel J. Phreaner  
by his attorney  
Chas A. Rutter.

# UNITED STATES PATENT OFFICE.

SAMUEL J. PHREANER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF  
ONE-HALF TO CYRUS BOWMAN, OF SAME PLACE.

## ASH-SIFTER.

SPECIFICATION forming part of Letters Patent No. 316,653, dated April 28, 1885.

Application filed January 5, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL J. PHREANER, a citizen of the United States, and a resident of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Ash-Sifters, of which the following is a specification.

The object of my invention is to furnish a sifter for separating the ashes from the unburned coal which will be perfectly dustless.

In all places where coal is used as a fuel there is a considerable waste occasioned by unburned pieces being raked down and falling among the ashes.

I propose placing my sifter in a perfectly dust-tight case.

In the accompanying drawings, forming part of this specification, and in which similar letters of reference indicate similar parts in the several views, Figure 1 is a longitudinal section through the center of my sifter; Fig. 2, a transverse section, and Fig. 3 a plan, of the sifter with the top removed.

A is a case or box furnished with a lid, B, at its top.

C is the sieve, which is shown in the drawings as hexagonal in section; but it may have any other desired shape. The sieve is hung upon an axle, D, the ends of which are furnished with suitable bearings in the case A, and one end is furnished with a crank and handle, E, by means of which the sieve may be rotated.

F is a drawer in the bottom of the case A, into which the ashes fall from the sieve C.

The sieve is furnished with a trap or door, I, which is opened to place the ashes within it, and the ends of the sieve at the ends of the trap I are furnished with segmental projec-

tions H, which fit closely against the concaves G, which, with the wings K K, which project down from the top of A, prevent, in a great measure, the escape of dust from the box when the lid B is opened to refill the sieve. The parts H and G shut off all escape of dust from the ends of the box and the wings K from the sides. The wings K also serve as guides for passing the ashes to the sieve.

L L are wings from the sides of case A which are to prevent the rise of dust, and to guide the ashes into the drawer F.

The arrangement and number of the wings herein shown and described may be considerably varied without altering my invention, and, as I before stated, the sieve may have any desired and suitable cross-section.

After the ashes have been placed in the sieve the door I and lid B are closed, and the sieve is revolved by the handle F. This causes all the loose and fine ashes to fall out into the drawer F, some fifteen or twenty revolutions being sufficient. The unburned coal remains in the sieve, and after the ashes have been emptied from the drawer the door I may be raised and the coal dumped directly from the sieve to the drawer.

Having thus described my invention, I claim—

The herein-described ash-sifter, comprising the box A, provided with the concaves G and wings K and L, the sieve C, having the door I and segmental projections H, and the drawer F, substantially as described.

SAMUEL J. PHREANER.

Witnesses:

OTIS EGAN,

CHAS. A. RUTTER.