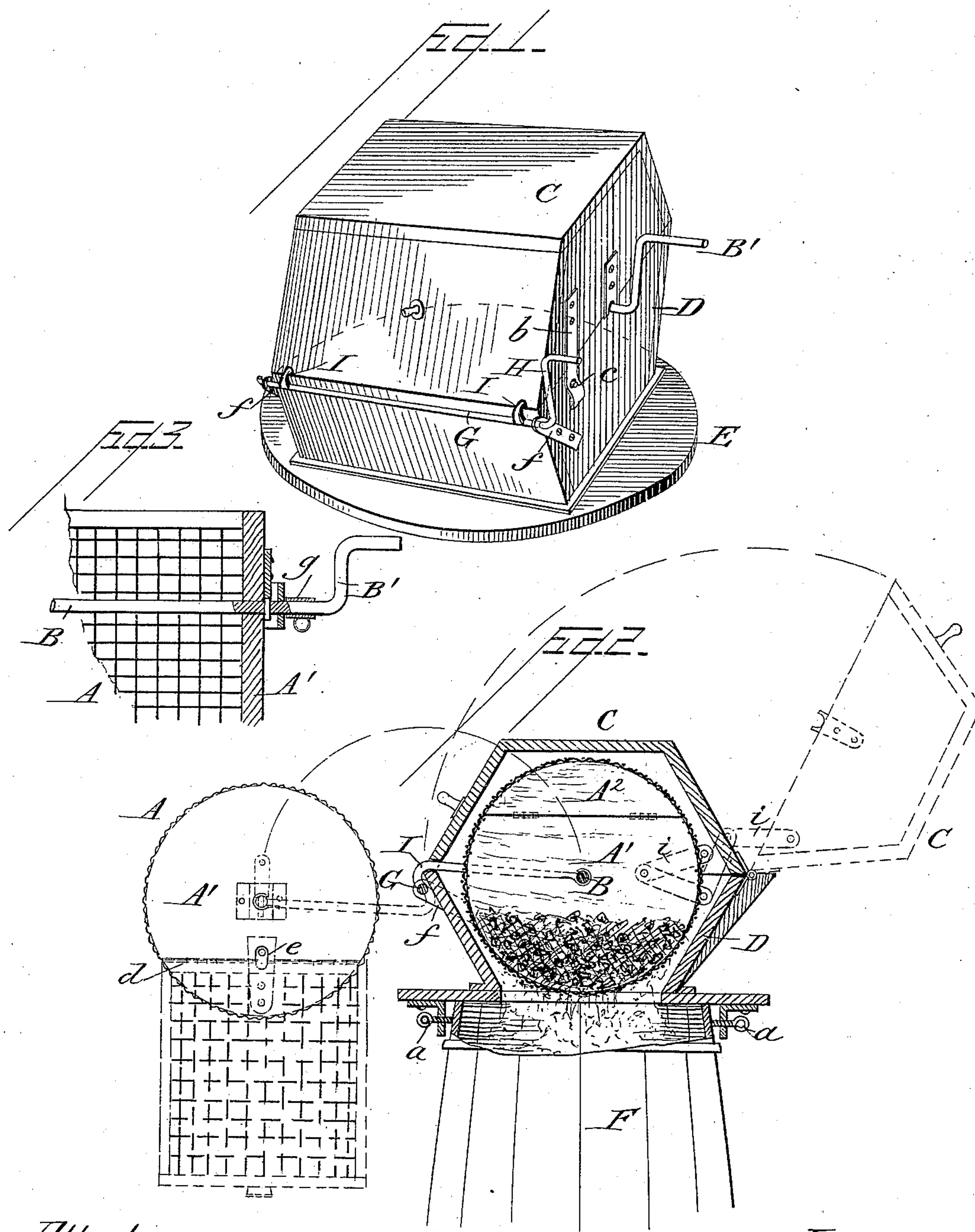


(No Model.)

G. PALMATIER.
ASH SIFTER.

No. 415,554.

Patented Nov. 19, 1889.



Attest:
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UNITED STATES PATENT OFFICE.

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ASH-SIFTER.

SPECIFICATION forming part of Letters Patent No. 415,554, dated November 19, 1889.

Application filed March 16, 1889. Serial No. 303,530. (No model.)

To all whom it may concern:

Be it known that I, GILES PALMATIER, a citizen of the United States, residing at Schenectady, in the county of Schenectady and State of New York, have invented certain new and useful Improvements in Ash-Sifters; and I do hereby 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.

This invention refers to an improvement in ash-sifters, the object thereof being to simplify and cheapen the construction of the same, so that as an article of household use such an ash-sifter may be brought within the purchasing reach of all; and the invention consists in the construction, arrangement, and combination of parts, substantially as will be hereinafter described, and then more specifically pointed out in the appended claims.

In the accompanying drawings illustrating my invention, Figure 1 is a perspective view of my improved ash-sifter. Fig. 2 is a cross-sectional view of the same, showing the manner in which it may be attached to the barrel, and also indicating the way in which the cylindrical sieve may be removed from its casing when it is desired to discharge the ashes from the sieve. Fig. 3 is an enlarged detail view of a portion of the sieve or sifter, and shows the way in which its operating-shaft is connected thereto and to the means for lifting the sifter from its casing and replacing it therein.

Similar letters of reference designate corresponding parts in the different figures.

In proceeding to carry my invention into practical effect I employ a cylindrical sieve or sifter, consisting of the cylindrical network of wire or other suitably meshed material A, which cylindrical net-work is secured to the solid heads A' A'. This sifter is provided with a horizontal shaft B, running centrally through the same and secured at the center points of the two heads, said shaft being formed at one end outside of the head with a handle B', whereby the sifter is rotated. The shaft B also is carried at each end in bearings in a suitably-shaped casing, adapted to surround and contain the rotary

sifting device, so that when said device is being revolved it may be closely confined within a box or casing to prevent any undesirable escape of the dust and ashes.

The casing which I employ for the purpose of containing my rotary sifter is preferably made in a hexagonal form, and consists of the two parts C and D, the part D being mounted upon a horizontal plate E, which has an opening of greater or less size, and which plate is adapted to be located upon the top of a barrel, as F, (see Fig. 2,) to which it may be securely attached by the clamping-screws *aa*, or by any other convenient means as may be employed or used for the purpose. The upper part C of the casing is hinged to the part D, so that it may be easily lifted therefrom. Said part C is also provided with a catch, consisting of a flat metal spring *b*, securely fastened thereto in a vertical position and overlapping the part D of the casing, said overlapping part of the spring *b* being perforated, and thus adapted to engage a projecting pin *c* on the part D of the casing. It will thus be seen that when the two parts C and D are brought together the catch just described will hold them securely fastened together in a closed position.

The cylindrical ash-sifter is constructed in such a manner that a longitudinal section of the cylindrical net-work A may be removed from the rest of the cylinder, said removal being accomplished by having the two end pieces A' A' properly cut, so that the portion thereof which is connected to one end of the longitudinal section of the cylinder—as, for instance, the part A²—may be hinged to the head A', (see Fig. 2,) while the other part to which the other end of the longitudinal section of the cylinder is attached (see *d*, Fig. 2) is provided with a catch *e*, adapted to engage a pin on the head A' of the sifter. Thus it will be manifest that in order to open the sieve to place ashes therein or to discharge coals therefrom such opening can be easily accomplished by simply lifting the longitudinal section of the sieve, which is hinged as just described. In the left-hand part of Fig. 2 the longitudinal section is shown in its open position.

It becomes necessary to provide means for removing easily the rotary sifter from its po-

sition within the casing when it is desired to discharge the coals from the sifter, and also for replacing the sifter within the casing after this discharge of the coals therefrom has been completed. In order to accomplish this easily and expeditiously, I have devised mechanism therefor, consisting of a horizontal shaft G, provided at one end with a crank H and journaled in projecting arms *ff* on the lower section D of the casing, said shaft G being located in proximity to the upper edge of said section D. The shaft G is provided with two arms I I, which are bent near the point where they are connected to the shaft G, and which are provided at their terminal points with terminal bearings *g*, which bearings receive the shaft B, that is fastened to the cylindrical ash-sifter, and by means of which said sifter is rotated. It will be evident that the user of the device can, by laying hold of the crank-handle H and rotating the same, cause the cylindrical ash-sieve to be lifted from its position within the casing where its shaft B rests in the bearings provided in the sides of said casing for it, and transferred out of the casing into the position shown in dotted lines in Fig. 2, where, by unclasping the catch of said sieve, the movable section thereof can be opened and the coals which have been freed from ashes during the revolutions of the sifter within its casing be discharged into some suitable receptacle provided to receive them.

The movement of the upper section C of the casing, when it is desired to remove the sifter from within the same or replace it, is shown clearly in dotted lines in Fig. 2. In

order to hold the cover C in its open position easily while the sieve is being lifted and freed of its coals, I provide the pivoted brace *z*, connected to the upper part C and the lower part D of the casing, as shown in Fig. 2.

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

1. In an ash-sifter, the combination of the hexagonal casing consisting of two hinged sections, the rotary cylindrical sifter and its shaft carried in bearings in said casing, and means for removing the sifter from the casing, consisting of a horizontal crank-shaft having arms secured thereto, which arms are provided with terminal journals for receiving the shaft of the rotary sifter, substantially as described.

2. In an ash-sifter, the combination, with the casing and the rotary sifter, of means for removing said sifter from the casing, consisting of a horizontal crank-shaft having arms provided with terminal journals that hold the shaft of the sifter, substantially as described.

3. In an ash-sifter, the combination, with the casing and the rotary sifter, of a horizontal shaft G, journaled in suitable bearings and having a crank-handle H, and arms I I, secured on shaft G, and provided with terminal journals *g*, that receive the shaft of the rotary sifter, substantially as described.

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

GILES PALMATIER.

Witnesses:

HENRY J. CLUTE,
CHARLES Y. SCOTT.