

S. J. PHREANER.

ASH SIFTER.

APPLICATION FILED MAR. 5, 1909.

943,457.

Patented Dec. 14, 1909.

2 SHEETS—SHEET 1.

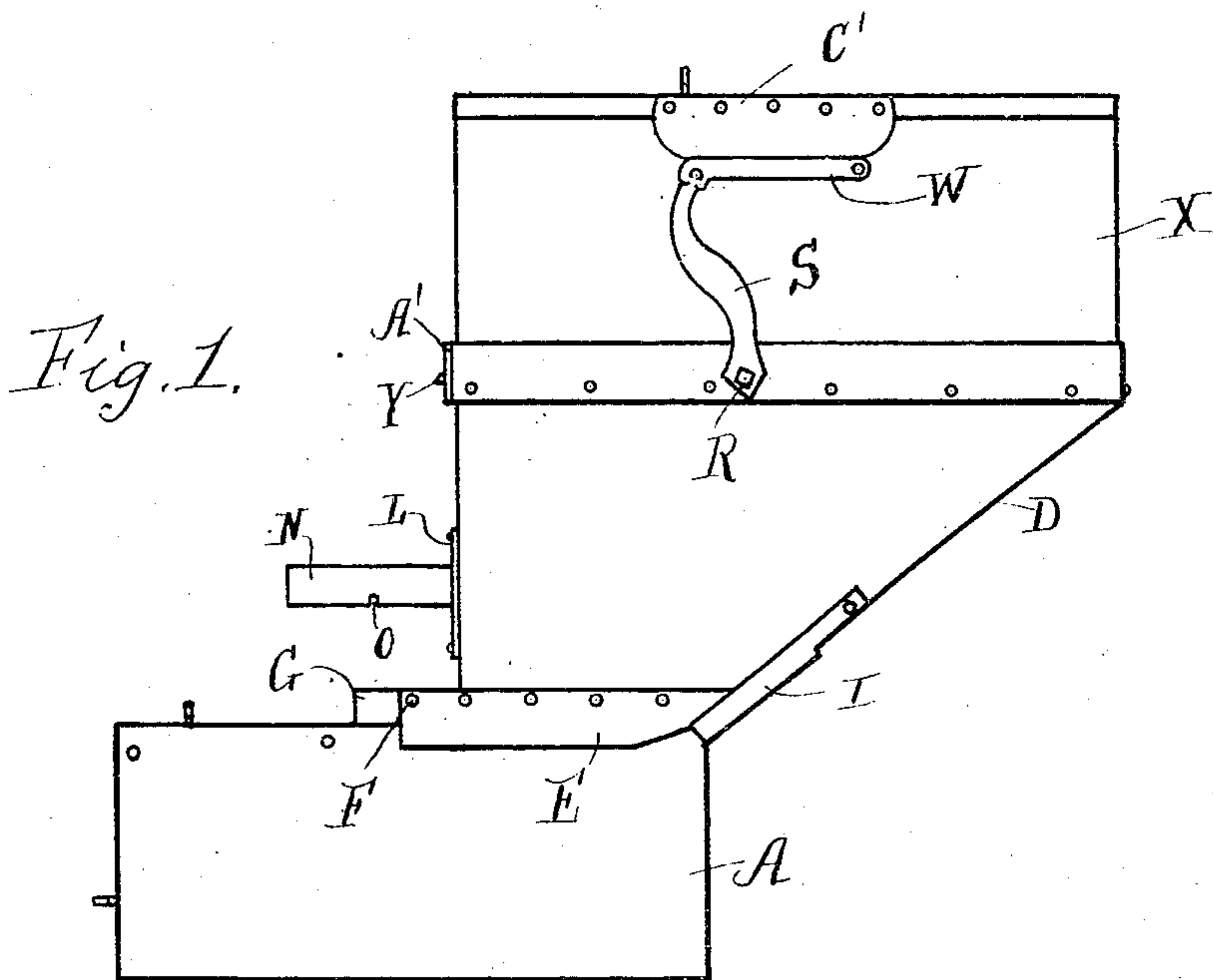
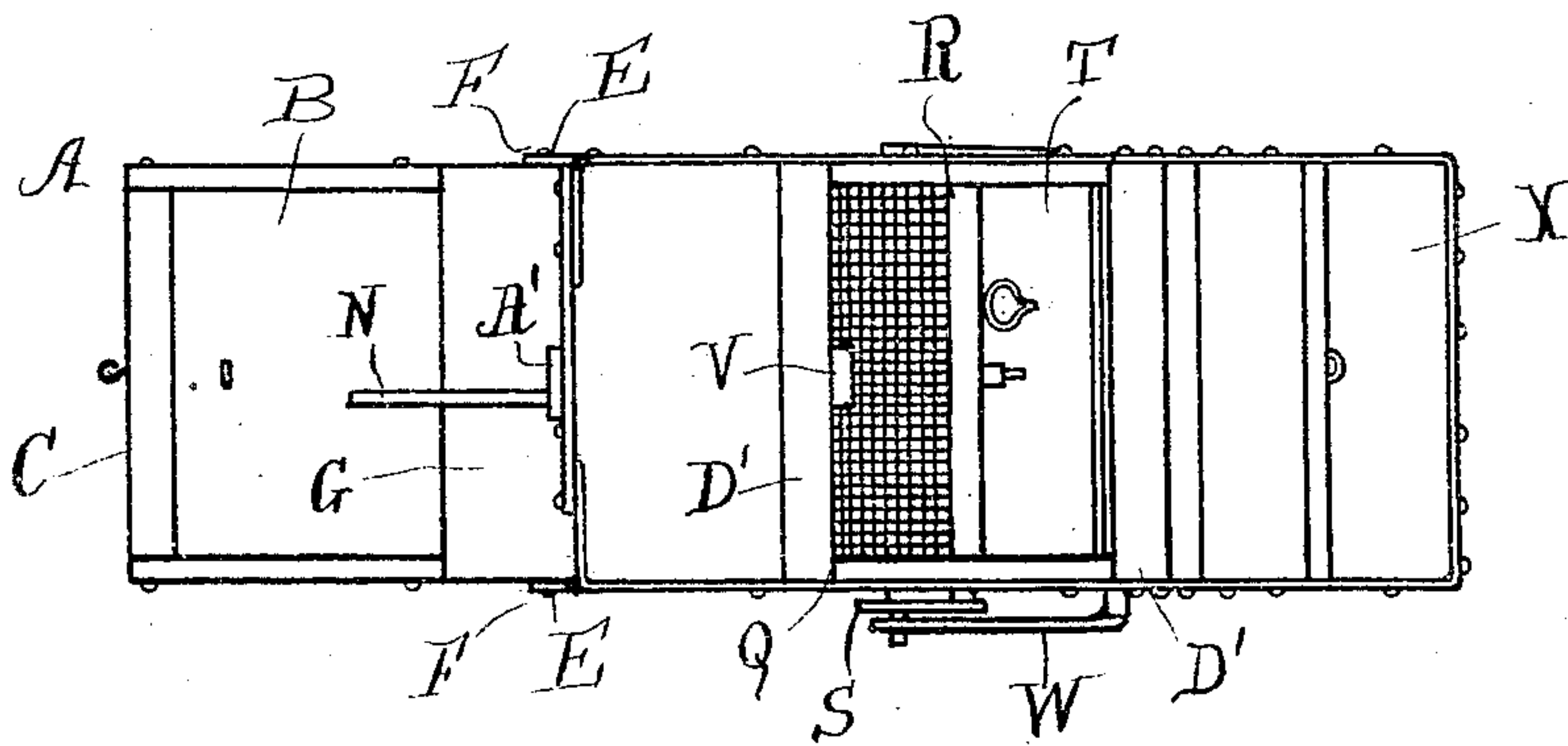


Fig. 2.



WITNESSES

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Samuel J. Phreaner

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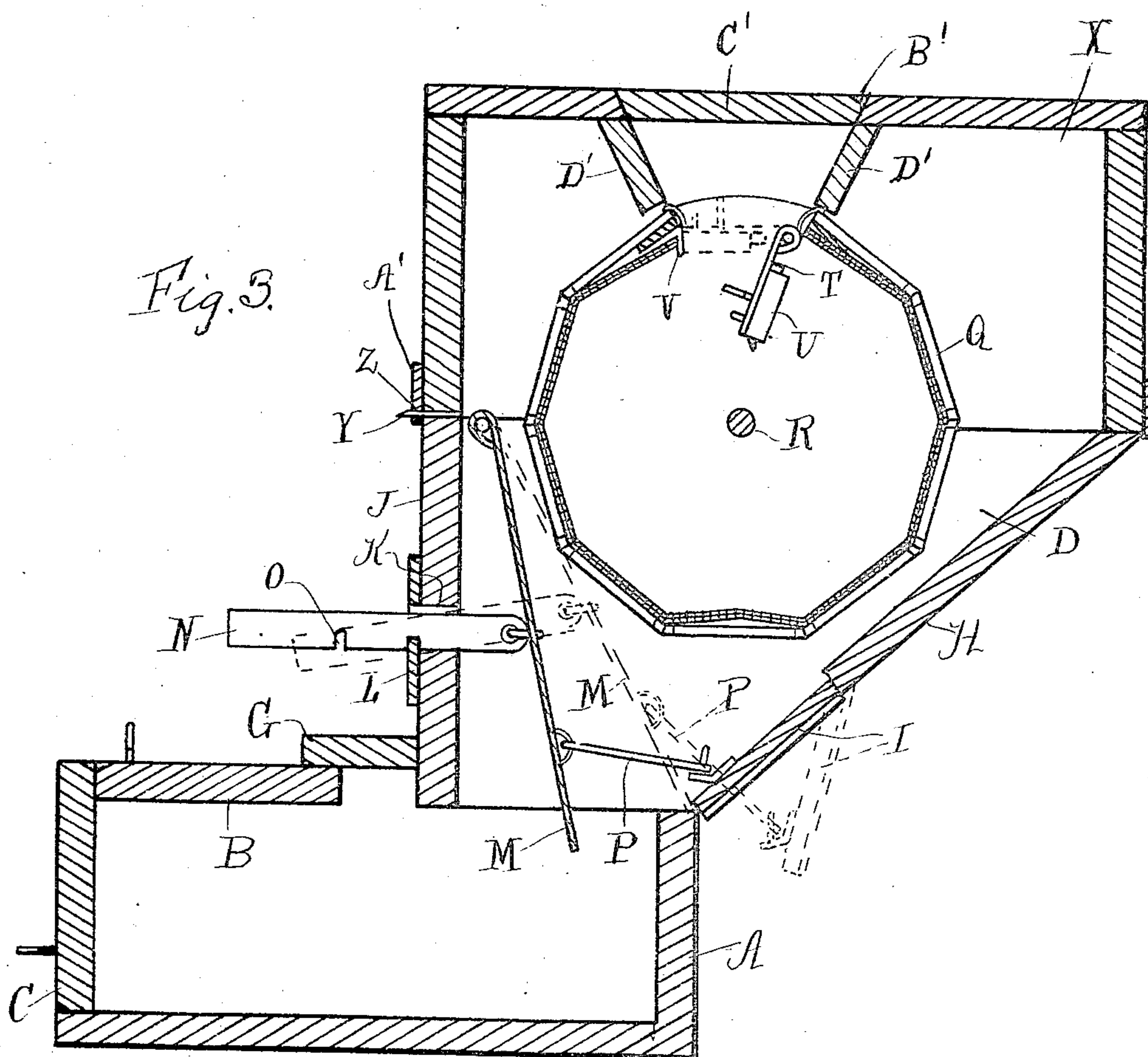
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UNITED STATES PATENT OFFICE.

SAMUEL J. PHREANER, OF OLNEY, PENNSYLVANIA.

ASH-SIFTER.

943,457.

Specification of Letters Patent.

Patented Dec. 14, 1909.

Application filed March 5, 1909. Serial No. 481,409.

To all whom it may concern:

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

My invention relates to a new and useful improvement in ash sifters, and has for its object to provide an exceedingly simple and effective device of this character, whereby the ashes placed therein are sifted, and the coal removed without the dust therefrom entering the air.

A further object of my invention is to provide a device of the character described in which the ashes may be sifted passing into a deposit box provided therefor and when the sifting has been accomplished the coal may be removed from the sieve and caused to pass outside of the sifter, at the same time closing the opening to the deposit box, which will prevent the dust from leaving the sifter. With these ends in view, this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction in detail, referring by letter to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a side elevation of my improved ash sifter. Fig. 2, a plan view thereof, the top door being shown open, and Fig. 3, a vertical sectional view thereof.

In carrying out my invention as here embodied, A represents the deposit box, having the door B hinged to the upper portion thereof, so that by opening the same a person may readily see how full the box is.

C represents a door hinged to the box, which allows the ashes to be removed when said box has become full, but said door cannot be opened until the door B has been raised.

To the top of the deposit box A at one end thereof is hinged the casing D, by means of the hinge plates E, through which pass the nails or screws F, one of said screws or nails passing through each hinge plate entering the cross piece G, which is secured to the deposit box. One end H, of this casing is

formed on an angle so that the ashes will be forced to enter the deposit box and fall toward the end opposite which it enters. To this side which is formed on an angle is hinged the door I. In the opposite end J of this casing is formed the opening K, and about said opening is placed the metal strip L.

In proximity to the upper end of the side J, on the inside of the casing is hinged the guide M, to which is secured the lever N, having notches O formed therein, and this lever is adapted to pass through the opening K in the side J, and by engaging the notches O with the metal strip L the guide M may be held in any desired position. In proximity to the lower end of the guide M is fastened one end of the link P, the opposite end being attached to the door I, so that when the guide M is shifted from one position to another the door I will also be moved to a different position, as indicated by the dotted lines on Fig. 3 of the drawing. In the upper edges of the sides of this casing is journaled the polyhedrous sieve Q, by means of the shaft R.

On one end of the shaft R is detachably secured the crank S, whereby the sieve may be revolved for sifting the ashes. To one of the sides of the sieve is hinged the door T, which has a latch U fastened thereon, which is adapted to engage with the catch V, for holding the door closed after the ashes have been placed in the sieve.

In order that the sieve may be held in the position where the door T will be at the top, I provide a holder W pivoted to the side of the top X, so that one end thereof will engage with the handle of the crank S and hold it in the desired position. The top X has a tongue Y attached thereto which enters the slot Z formed in the metal band A' which is attached to the top edge of the casing D. In this top is formed the opening B' which is closed by the door C'.

In proximity to the opening B' on the inside of the top X are secured the wings D' which guide the ashes into the sieve Q when they are being placed in the sifter.

In practice the door C' is opened, then the sieve is turned until the door T is at the top, at which time the holder W is placed over the handle of the crank S, which will keep the sieve in the position desired. The door T may then be opened and the ashes dumped into the sieve, at which time the door T will

be closed; then by revolving the sieve Q the ashes will be sifted and that portion which it is desired to discard will enter the deposit box A leaving the coal in the sieve, then by moving the lever N to the position shown by the dotted lines, or until the outer notch O will engage with the metal strip L, the guide M will be moved until it takes the position shown by dotted lines, or until the lower end thereof rests at the lower end of the door I, and the door I will be moved outward; then by unlatching the door T and turning the sieve the coal will drop out on to the guide, which will cause it to leave the sifter.

Of course I do not wish to be limited to the exact details here shown as these may be varied within reasonable limits without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new and useful, is—

1. In an ash sifter, a deposit box having a door hinged to the top thereof and another door hinged to one end thereof, a casing, one end of which is formed on an angle, the opposite end having an opening formed therein, a metallic strip secured to the casing in proximity to the opening formed in the end thereof, a door hinged to the lower portion of the angular end of the casing, a metal band having a slot formed therein secured about the upper end of the casing, a polyhedrous sieve, a shaft running through the center thereof by means of which the sieve is journaled to the casing, a door hinged to one side of the sieve, a latch attached to the door, a catch fastened to the sieve with which the latch is adapted to engage for holding the door closed, means for diverting the ashes from the sieve to the deposit box and the coal from the sifter and a top attached to the casing, as shown and described.

2. In an ash sifter, a deposit box having a door hinged to the top thereof and another door hinged to one end thereof, a casing, one end of which is formed on an angle, the opposite end having an opening formed therein, a metallic strip secured to the casing in proximity to the opening formed in the end thereof, a door hinged to the lower portion of the angular end of the casing, a metal band having a slot formed therein secured about the upper end of the casing, a polyhedrous sieve, a shaft running through the center thereof by means of which the sieve is journaled to the casing, a door hinged to one side of the sieve, a latch attached to the door, a catch fastened to the sieve with which the latch is adapted to engage for holding the door closed, a guide hinged to the upper portion of one end of the casing, a lever having notches formed therein secured to the guide, said lever adapted to pass through the opening formed in the casing so that the notches engage with the metal strip about said open-

ing, a link one end of which is fastened in proximity to the lower end of the guide, the opposite end to the door hinged to the angular side and a top attached to the upper portion of the casing, substantially as shown and described.

3. In an ash sifter, a deposit box having a door hinged to the top thereof and another door hinged to one end thereof, a casing, one end of which is formed on an angle, the opposite end having an opening formed therein, a metallic strip secured to the casing in proximity to the opening formed in the end thereof, a door hinged to the lower portion of the angular end of the casing, a metal band having a slot formed therein secured about the upper end of the casing, a polyhedrous sieve, a shaft running through the center thereof by means of which the sieve is journaled to the casing, a door hinged to one side of the sieve, a latch attached to the door, a catch fastened to the sieve with which the latch is adapted to engage for holding the door closed, a guide hinged to the upper portion of one end of the casing, a lever having notches formed therein secured to the guide, said lever adapted to pass through the opening formed in the casing so that the notches engage with the metal strip about said opening, a link, one end of which is fastened in proximity to the lower end of the guide, the opposite end to the door hinged to the angular side, a top attached to the upper portion of the casing, a tongue secured to said top adapted to pass through the slot formed in the metal band, a door hinged to the said top, wings attached to the top at two sides of the door for guiding the ashes into the sieve and means for revolving the sieve, as specified.

4. In an ash sifter, a deposit box having a door hinged to the top thereof and another door hinged to one end thereof, a casing, one end of which is formed on an angle, the opposite end having an opening formed therein, a metallic strip secured to the casing in proximity to the opening formed in the end thereof, a door hinged to the lower portion of the angular end of the casing, a metal band having a slot formed therein secured about the upper end of the casing, a polyhedrous sieve, a shaft running through the center thereof by means of which the sieve is journaled to the casing, a door hinged to one side of the sieve, a latch attached to the door, a catch fastened to the sieve with which the latch is adapted to engage for holding the door closed, a guide hinged to the upper portion of one end of the casing, a lever having notches formed therein secured to the guide, said lever adapted to pass through the opening formed in the casing so that the notches engage with the metal strip about said opening, a link, one end of which is fastened in proximity to the lower end of the guide, the opposite end to the door hinged to the angu-

lar side, a top attached to the upper portion
of the casing, a tongue secured to said top
adapted to pass through the slot formed in
the metal band, a door hinged to the said top,
5 wings attached to the top at two sides of the
door for guiding the ashes into the sieve, a
crank detachably secured to the shaft for
revolving the sieve, a holder pivoted to the
top adapted to engage with the handle of

the crank for holding the door of the sieve 10
at the top while being filled.

In testimony whereof, I have hereunto
affixed my signature in the presence of two
subscribing witnesses.

SAMUEL J. PHREANER.

Witnesses:

EDW. W. AUSTIN,
S. M. GALLAGHER.