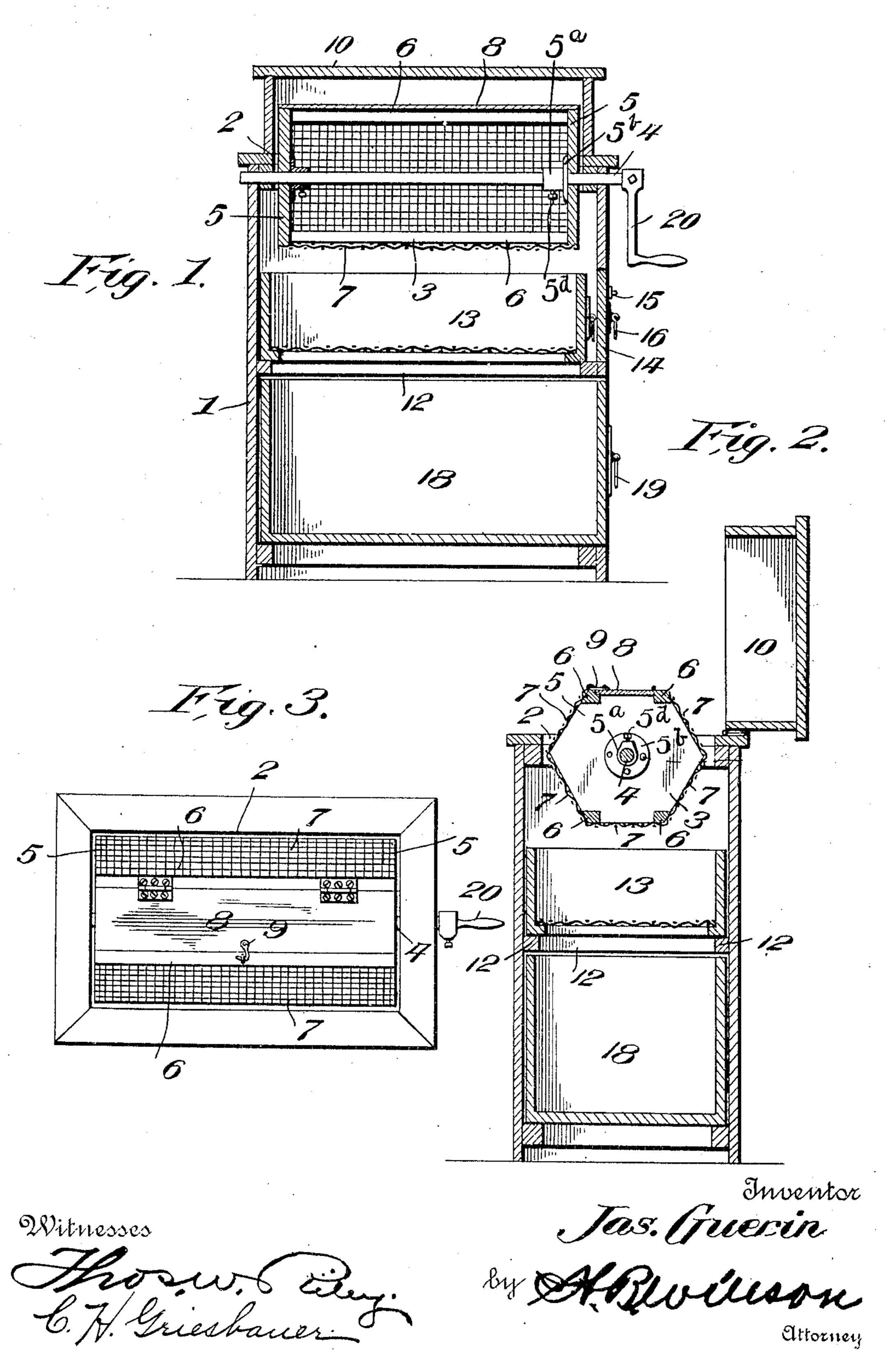
J. GUERIN.

ASH SIFTER.

APPLICATION FILED NOV. 27, 1905.



## UNITED STATES PATENT OFFICE.

JAMES GUERIN, OF PHILADELPHIA, PENNSYLVANIA.

## ASH-SIFTER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, James Guerin, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and 5 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 10 the art to which it appertains to make and use the same.

This invention relates to improvements in ash sifters.

The object of the invention is to provide a 15 device of this character in which ashes may be thoroughly sifted or screened and by means of which the dust arising from the sifting operation will all be retained or confined within a dust-proof casing.

20 A further object is to provide means whereby the cinders from the ashes may be conveniently removed from the sifter and from the casing without removing the sifter or screen.

With the above and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be hereinafter described and claimed.

In the accompanying drawings:—Figure 1 is a vertical longitudinal sectional view of the device; Fig. 2 is a vertical cross sectional view of the same; and Fig. 3 is a top plan view with the top section or covering of the 35 casing removed.

Referring more particularly to the drawings, 1 denotes a box or casing, which may be formed of wood or metal, as desired. In the top of the box or casing 1 is formed a 40 rectangular opening 2, in which is adapted to revolve an ash sifter or screen 3, said screen being preferably hexagonal in form and is mounted upon a horizontal, longitudinally disposed shaft 4 journaled in suitable bear-45 ings in the opposite end of the box or casing 1.

The numeral 5 denotes heads, to which the ends of the screen 3 are secured. To the inner faces of the heads 5 are secured collars 5<sup>b</sup> with inwardly-projecting sleeves 5<sup>a</sup> having 50 set screws 5<sup>d</sup>. The shaft 4 projects through said heads, collars and sleeves, and is rotatably mounted in suitable bearings in the top of the casing, said set screws serving to secure the shaft to said collars.

The screen or sifter 3 is preferably formed with solid heads 5 connected at their corners 1

by longitudinally disposed beater bars 6 said beaters extend longitudinally along the angular portions of the screen, and serve when the screen is rotated to permit of the ashes 60 to abut against the same, which renders their passage through the screen more complete.

Five of the sides of the screen or sifter are covered with a wire netting 7 of suitable 65 sized mesh, and in the sixth side is arranged a hinged door 8 which is here shown in the form of a solid plate, but which if desired may also be formed of netting. The door 8 is provided with a hook 9 or other suitable 70 fastening device by means of which it is held in closed position.

On the top of the box or casing 1 is hingedly mounted a box-like cover 10 by means of which said upper end of the casing 75 is closed. Said box-like cover forms a space in which the upper portion of the screen or sieve turns.

In one side of the casing 2 apertures are formed, slightly spaced apart, one aperture 80 adapted to receive a drawer 18, one end of the drawer forming the closure of the opening, and provided with a handle 19 by which it may be withdrawn and inserted. The other aperture is provided with a removable 85 door 14 provided with a handle 16. Disposed upon the inner sides of the casing 1 opposite the door 14 are guide cleats 12 to receive the drawer 13, which is inserted into the casing through the aperture covered by 90 the door and is provided with a screen bottom, as shown in Figs. 1 and 2. From this arrangement, it will be obvious that the drawer 13 may be removed from the casing and the aperture through which it is re- 95 moved closed by the door 14, leaving the passage-way between the revolving screen and the drawer 18 unobstructed. The door 14 is held in closed position by a hook 15 or other suitable fastening device.

The sifter or screen 3 may be revolved by any suitable means, but is preferably provided with a crank handle 20.

In operation the drawer 13 is removed and the door 14 closed, the top or cover 10 swung 105 back and the door of the sifter or screen opened to permit the placing of the ashes therein, after which the door 8 of the screen and the top 10 of the casing are closed. The sifter is now revolved, causing the ashes to 110 be quickly separated from the cinders, said ashes dropping into the ash receiving drawer

18. After the ashes have been thus sifted the door 14 is opened and the drawer 13 having a reticulated bottom is inserted by sliding it inwardly upon its guide cleats 12, and 5 the door 14 closed. The cover 10 is then opened and the hook or fastening device 9 of the door of the ash sifter detached and the cover 10 closed. Then upon the half revolution of said sifter or screen, the cinders there-10 in will push said door open and drop therethrough into the cinder drawer. If any ashes still remain commingled with the cinders, they can be easily separated therefrom by agitating the drawer 13 while resting upon 15 the cleats, before it is withdrawn from the casing. The drawers 13 and 18 can then be removed and the contents disposed of as required.

It will thus be obvious that the casing is tightly closed during the sifting operation, and after this is accomplished, the cinder drawer can be inserted long enough to receive the cinders and remove any ashes which may be detained with the cinders.

The operation is thus materially simplified 25 and the annoyance of flying ashes and dust obviated.

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

An ash sifter comprising a casing, a sifter having heads, collars with secured sleeves having set screws, said collars being secured to the heads, a shaft projecting through the heads, collars and sleeves and rotatably 35 mounted in the upper ends of the casing, said set screws serving to secure the shaft to said sleeves, and beater bars extending longitudinally along the angular corners of said sifter and secured to said heads, substantially as 40 specified.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES GUERIN.

Witnesses:

SARAH GUERIN, JAMES R. ANDERSON.