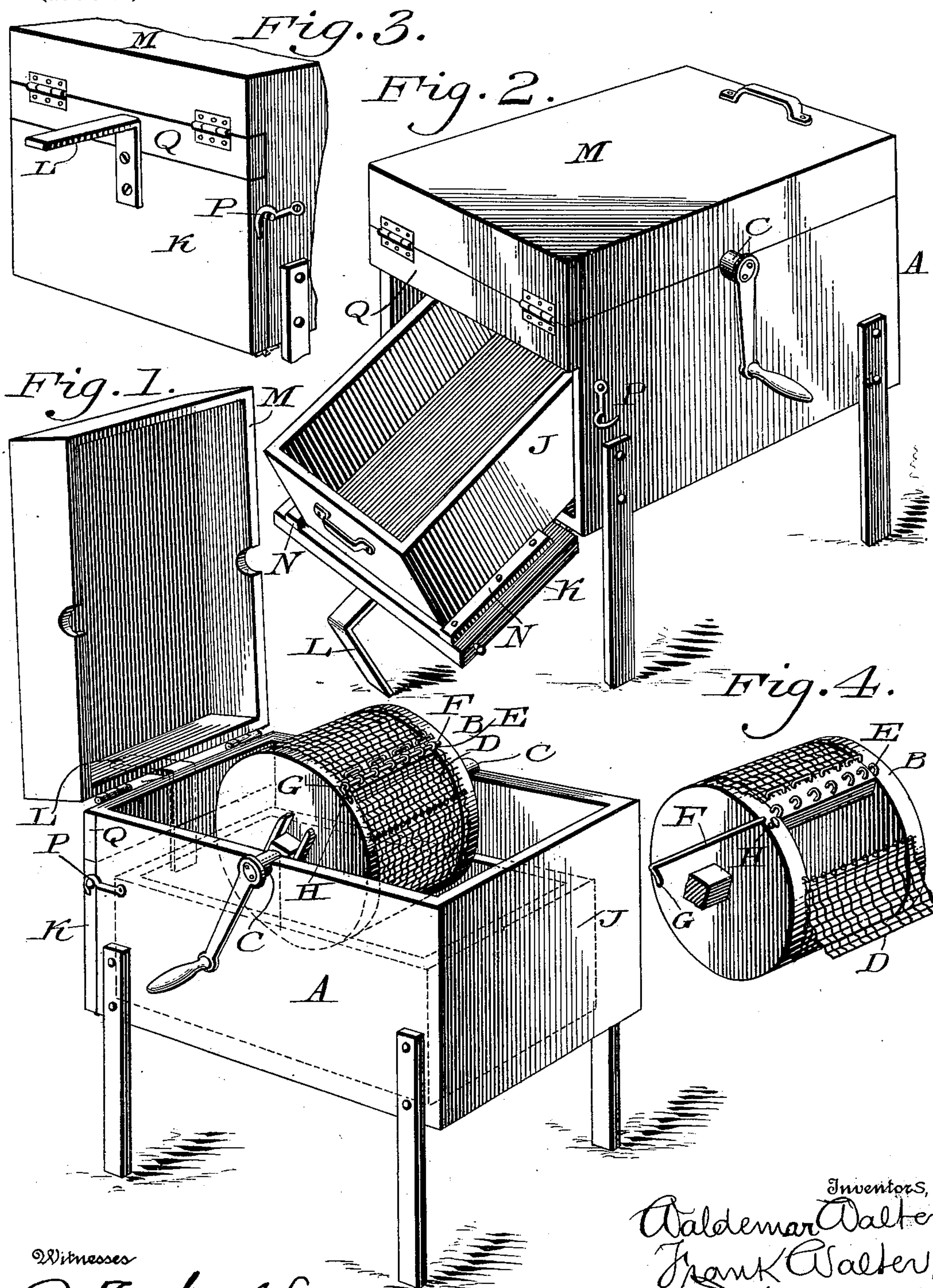


No. 653,045.

Patented July 3, 1900.

W. & F. WALTER.
ASH OR COAL SIFTER.
(Application filed Mar. 19, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

WALDEMAR WALTER AND FRANK WALTER, OF PHILADELPHIA,
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ASH OR COAL SIFTER.

SPECIFICATION forming part of Letters Patent No. 653,045, dated July 3, 1900.

Application filed March 19, 1900. Serial No. 9,241. (No model.)

To all whom it may concern:

Be it known that we, WALDEMAR WALTER and FRANK WALTER, citizens of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Ash or Coal Sifters, which improvement is fully set forth in the following specification and accompanying drawings.

Our invention consists of an ash or coal sifter composed of a closed casing, a rotary screen therein, a box or receptacle for ashes and cinders or unconsumed coal, and a leg which is adapted to support both the cover of the casing when open and the door of the casing through which said box is removable and restorable, said door then serving as a chute on which said box may slide in its motions.

Figure 1 represents a perspective view of a sifter embodying our invention. Fig. 2 represents a perspective view, certain parts being in different positions from those shown in Fig. 1. Fig. 3 represents a perspective view taken from the end, the device being in closed condition. Fig. 4 represents a perspective view of the screen employed.

Similar letters of reference indicate corresponding parts in all the figures.

Referring to the drawings, A designates a casing on whose sides are mounted the screen B, which is preferably of cylindrical form and has its shaft C provided with a crank-handle for rotating the same, said screen having a door D, which is closed by the eyes E on the screen and the rod F, which latter passes through said eyes over the door, the eyes protruding through said door, said rod having on its end the limb G, which is adapted to engage with the head H on the side of the body of the screen, whereby said rod is securely retained in position, it being evident that when said rod is properly turned it is disengaged from the head H, so that the rod F may be withdrawn to unlock the door D.

On the floor of the casing is the box J, into which the ashes and coal may be dumped as from the screen, as will be hereinafter more fully described, said box being accessible through the door K, which is hinged to the side of the casing A. Connected with said

door K is the angular arm L, one limb of which projects horizontally outwardly therefrom when the parts are in normal position and is adapted to be placed in vertical position as a leg or prop when said door K is opened, so as to sustain the latter.

It will be seen that when the cover M of the casing is raised access is had to the screen, when the door of the same is opened and the ashes and cinders or unconsumed coal are placed in the screen, and the latter is then closed and rotated. The ashes now drop into the box J, when the door K is opened and said box is withdrawn from the casing and its contents discharged. The box is now returned, the door K closed, and the cover M raised, when the screen is opened and the cover closed. The screen is now properly rotated, so that the cinders or comparatively-good coal drop into the box, when the door K is again opened and the box withdrawn, when the cinders are discharged therefrom.

It will here be noticed that the cover M and door K are closed during the screening operations, so that dust is prevented from escaping from the casing. When the cover is open, it rests on the arm L. When the cover is closed and the door K is opened, the latter is supported by said arm L resting on the floor or elsewhere as a prop, the door then acting as an inclined platform or chute, on which the box J may slide in removing it from or restoring it into the casing, said door being provided with parallel cleats N, which guide said box in its motions to and from the interior of the casing A.

When the door K is closed, it is engaged by the catch P to prevent improper opening of the same.

The stationary cross-piece Q on the end of the casing above the door K has the cover M hinged to the same and serves with said door to close the casing at said end. The attaching-limb of the arm L rises from the door and extends along said piece Q, so that the horizontal limb of the arm is close to the bottom edge of said cover M, so as to sustain the latter in comparatively-upright position, and thus prevent the device from becoming top-heavy and overturning.

Having thus described our invention, what

we claim as new, and desire to secure by Letters Patent, is—

1. A sifter, consisting of a casing with a hinged cover, a rotary screen in said casing,
5 a door on an end of said casing, and an arm connected with said door, so as to move therewith, said arm being so constructed and arranged that it will support said cover when
10 raised and form a prop to sustain said door when thrown down.

2. In a sifter, a casing with a hinged cover, a rotary screen in said casing, a door on an

end of said casing, a stationary cross-piece on said end above said door, the cover being hinged to said piece, and an angular arm secured to and movable with said door, the
15 attaching-limb of said arm extending upwardly along said piece adjacent to the lower end of said cover.

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