

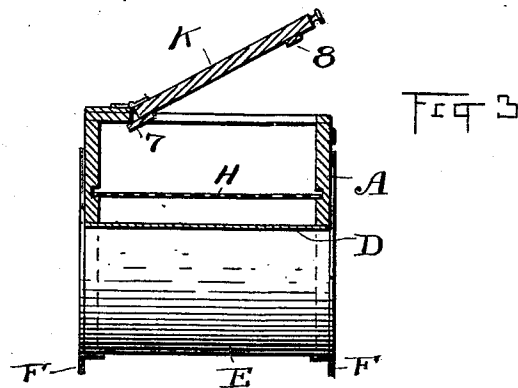
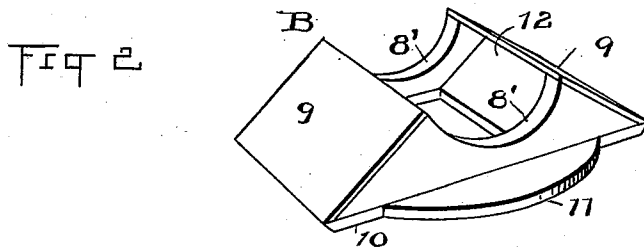
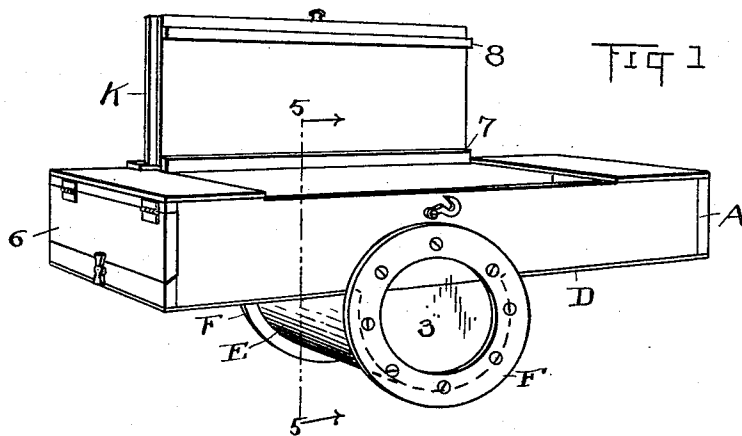
(No Model.)

2 Sheets—Sheet 1.

C. KASPER.
ASH SIFTER.

No. 520,886.

Patented June 5, 1894.



ATTEST

Richard Moser,
Georgia Scharffer

INVENTOR
Christian Kasper

BY *H J Fisher* ATTORNEY

THE NATIONAL LITHOGRAPHING COMPANY,
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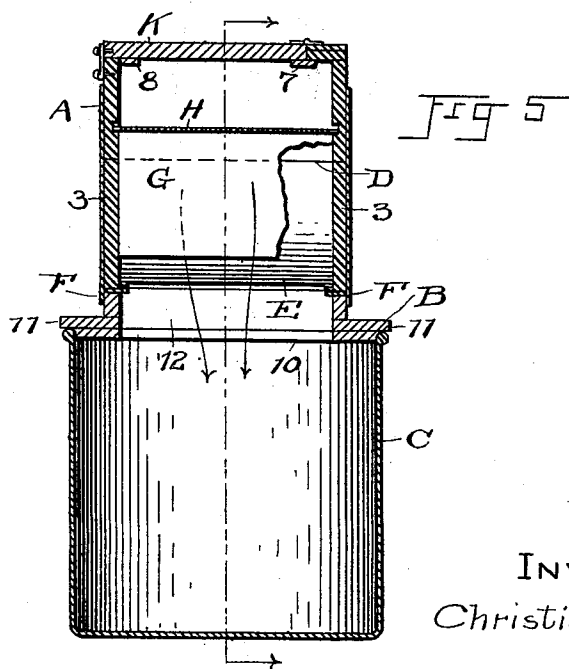
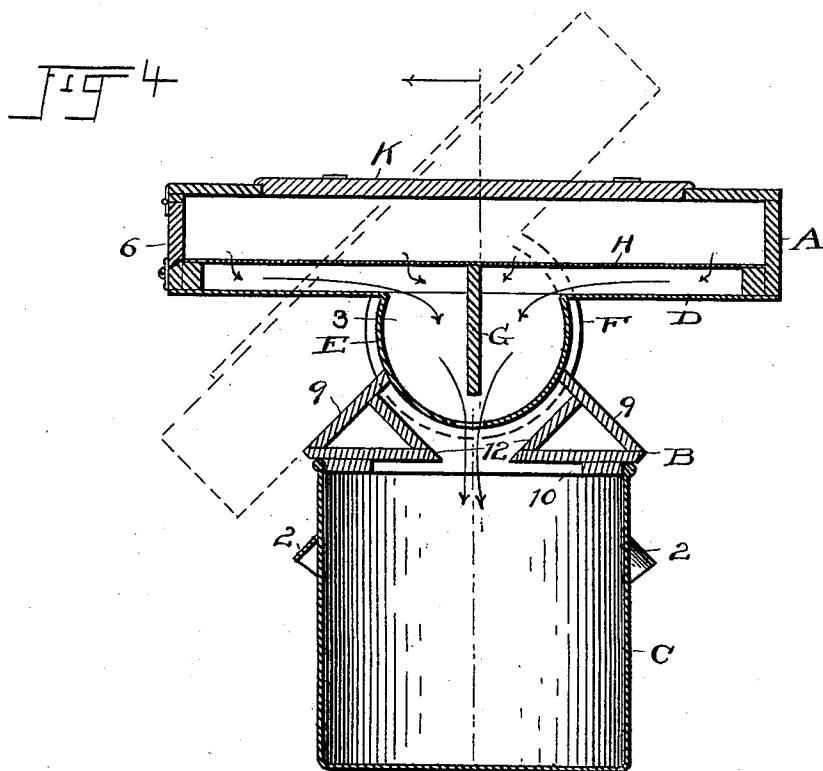
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UNITED STATES PATENT OFFICE.

CHRISTIAN KASPER, OF CLEVELAND, OHIO.

ASH-SIFTER.

SPECIFICATION forming part of Letters Patent No. 520,886, dated June 5, 1894.

Application filed December 8, 1893. Serial No. 493,096. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN KASPER, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Ash-Sifters; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to ash sifters, and the invention consists in an ash sifter constructed substantially as shown and described and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of the top member of my improved sifter, and Fig. 2 is a perspective view of the combined base and cover. Fig. 3 is a cross section on line 5, 5, Fig. 1. Fig. 4 is a vertical central sectional elevation of my improved ash sifter, and Fig. 5 is a vertical central sectional elevation at right angles to Fig. 1.

Two objects are sought to be attained by the construction shown in the foregoing figures: first, to produce a convenient, cheap and reliable sifter which will do the work quickly and easily; and, secondly, to produce an ash sifter that is absolutely clean and dust proof in use. Ordinarily an ash sifter is an offensive and objectionable article because, during the process of sifting, one can scarcely avoid becoming covered over with escaping ashes, which usually will rise in clouds about the sifter and submerge the one who is doing the work. The invention herein not only wholly overcomes these objections and others so far as outdoor work is concerned, but it is so close fitting at all points that it may be used in the cellar, the kitchen, or other place in the house without danger of giving off any dust whatever, while at the same time it effectually separates the ashes into one vessel and the cinders or charred coal in another.

To these ends I construct my sifter of two principal parts A and B, seated one upon the other but not connected when in use. The part A is the sifter and the part B the support therefor and cover for the ash receiving vessel C. This vessel may be made especially for this purpose, as shown in the drawings, or it may be a barrel or other like vessel, the

only limitation being that it shall be of a size to receive the combined support and cover B and make a close fit about the seat so as to avoid escape of dust or ashes. Usually, I make a vessel C of galvanized iron to go with the outfit, and this vessel is about sixteen inches across, which is substantially the size of an ordinary barrel. It is provided with handles—2—, or a bail, if preferred, and has a separate cover (not shown) to be used when ashes are carried away.

The ash box and sifter A is in the shape of a parallelogram, and preferably is made out of wood with a sheet metal bottom D. This bottom is cut to start with of such length as to allow the cylinder E to be formed at its center. This cylinder extends entirely across the bottom from side to side, and has wooden heads—3—fixed in its ends. These heads are supported and held in place by the flat metallic guard and guide rings F which are affixed to the sides of the box A and to the said heads by screws or the like, and project past the outer surface of the cylinder E far enough to overlap the edges of the seat on part B and serve to guide the part A in its rocking movements thereon and to keep it in place laterally.

The cylinder E is open across its top, as clearly seen in Fig. 4, and any ashes that fall upon the bottom D at either side of the cylinder will, when the box A is tilted, slide into the cylinder and thence into the ash pit or receptacle through the opening or slot in the bottom of the cylinder, Fig. 4. This opening also extends the full length of the cylinder between its heads.

Transversely of the box A and centrally in cylinder E is a cross board or plate G, which extends from head to head—3—and is screwed or nailed, or otherwise fastened thereto at its ends, and dips down about two-thirds of the depth of the cylinder. In this relation the said plate serves as a stop and guide for the ashes as they slide from the bottom D when the box is tilted, directing them to the opening in the bottom of cylinder E and preventing their lodgment in said cylinder on either side of said opening.

The sifter or screen H is raised a suitable distance above bottom D to have a chamber beneath, and extends from end to end of box

A. Only the ashes pass this screen, and the charred coal and larger cinders remain on the screen and are removed by tilting the box as seen in dotted lines, Fig. 3, and opening the latched door —6—.

The ashes are poured into box A through the door K covering part of its top. This door needs to be especially close, and since the box is made of wood which may shrink more or less and produce cracks for escape of dust, I provide for such a contingency by a peculiar construction of said cover which not only makes it dust proof, but avoids ledges or places where ashes can gather. Thus I guard the rear of the door with an underlaid inlapping strip —7—, and the front thereof with an under strip —8— likewise affixed to the cover. Then the ends are guarded by forming rabbets in the lower edge of the cover and overlapping the box with the upper part of the cover, as clearly seen in Figs. 1 and 4. This makes a perfectly close door even though the box be made of lumber that may not be thoroughly seasoned.

The base B is constructed to adapt it to the seating and use of box A. The side boards thereof have curved seats —8'— cut deep into their centers which exactly fit the cylinder E, and at their ends these pieces are connected by outside cross boards —9— which also come snugly up to cylinder E. A suitable bottom —10— has outside curved parts —11—, adapting the base to cover a circular vessel, and inside inclined boards —12— serve like the sides of a hopper to direct the inflowing ashes down through the central opening in the base B into the ash receptacle beneath.

In operation the ashes having been carefully placed in box A, as they would be in a coal-hod to carry out, the lid of the box is fastened down and the box is rotated or rocked from side to side with a comparatively slow motion until all the ashes are sifted out and drop into the receptacle beneath. The removal of cinders and ashes may then take place at once or the apparatus may be allowed to stand for a little while until the ash dust has perfectly settled. The box and the base are then successively removed and the ash receptacle taken away and emptied if the sifting has occurred in the base. The box is easily rocked back and forth and is light and easily handled. As the box is rocked the bearing cylinder pockets the ashes and delivers them to the ash receptacle. The whole construction is a very simple and comparatively inexpensive one and the operation in every way is satisfactory and complete.

Having thus described my invention, what I claim is—

1. In ash sifters, the sifting box having a screen, a cylindrical rocking section fixed

across the center of the bottom of the box beneath the screen, a floor beneath the screen forming a passage for the ashes into said cylindrical section, and the base having a circular bearing for said bearing and open through its center for the passage of the ashes, substantially as set forth.

2. The sifting box having a sheet metal bottom with a cylindrical support at its middle forming a part of the bottom and extending across the full width of the box, a screen above said bottom and a pivoted support for said box having a discharge opening, substantially as set forth.

3. The sifting box having a transverse cylindrical bearing surface formed in the bottom of the box and located wholly below the bottom proper, a screen covering the whole of said bottom and cylindrical bearing and supports above the same, and a division plate beneath the screen midway of the said cylindrical bearing and extending into the same, substantially as set forth.

4. The sifting box having greater length than width and provided with a bottom of sheet metal having its center struck up with a cylindrical section for said box, said section having an opening in its bottom for the escape of ashes, a screen stretched over said bottom from end to end of the box, a transverse division plate centrally beneath said screen, and an outlet for the ashes in the bottom of said cylindrical bearing, substantially as set forth.

5. In a sifter, the base described constructed to cover a suitable receptacle and having inclined boards forming a chute for the ashes and bearings in the side pieces for the cylindrical section of the sifting box and inclined outside cross boards having straight inner edges to bear against the sides of the said cylindrical section, in combination with the sifting box having a cylindrical section at its middle, substantially as set forth.

6. The sifting box having a bottom with a transverse cylindrical section extending across the box and wholly beneath the bottom proper and forming a rocking surface for the box, and flanges at the ends of said section to overlap the seat on which the box rests and turns and serving as guards and guides therefor, in combination with the ash receptacle and a cover therefor having a transverse seat for said cylindrical bearing, substantially as set forth.

Witness my hand to the foregoing specification this 1st day of December, 1893.

CHRISTIAN KASPER.

Witnesses:

H. T. FISHER,
R. B. MOSER.