P. MISCHKE.

ASH SIFTER.

APPLICATION FILED OCT. 22, 1921.

1,421,809.

Patented July 4, 1922.

Fig. 2.

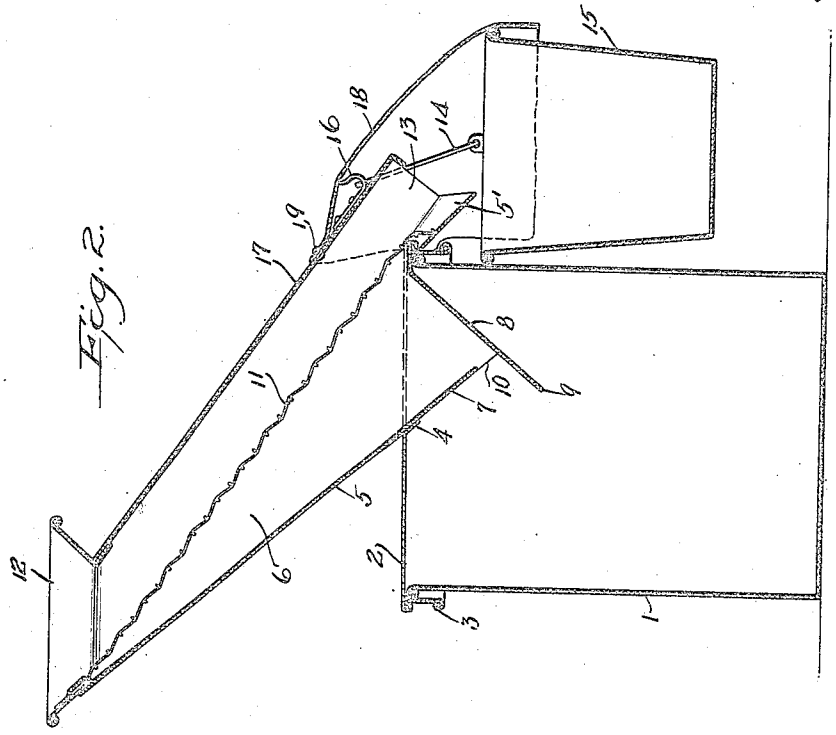
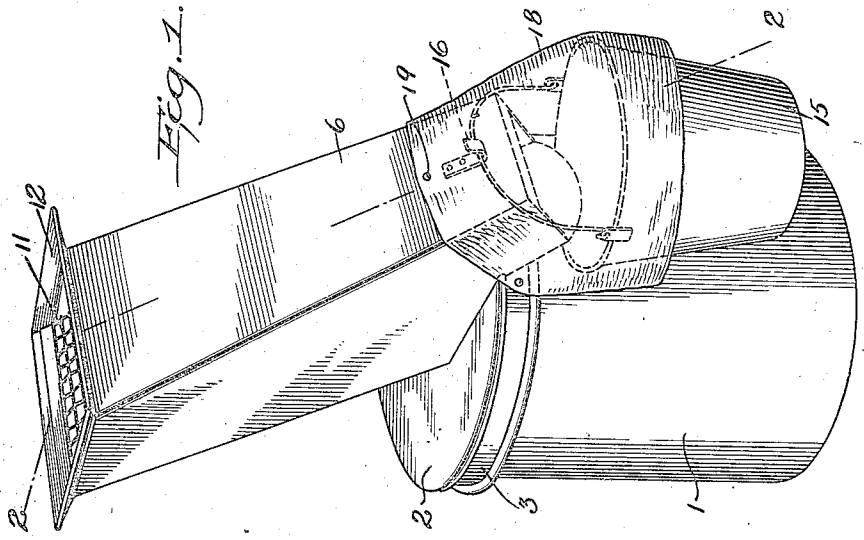


Fig. 1.



WITNESSES

Oliver W. Holmes

A. L. Hutchins.

INVENTOR

PAUL MISCHKE

BY Munn & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

PAUL MISCHKE, OF EAST RUTHERFORD, NEW JERSEY.

ASH SIFTER.

1,421,809. Specification of Letters Patent. Patented July 4, 1922.

Application filed October 22, 1921. Serial No. 509,477.

To all whom it may concern:

Be it known that I, PAUL MISCHKE, a citizen of the United States, and a resident of East Rutherford, in the county of Bergen and State of New Jersey, have invented a new and Improved Ash Sifter, of which the following is a full, clear, and exact description.

This invention relates to ash sifters and has for an object to provide an improved construction which may be placed on a specially prepared container or on an ordinary ash can, the parts being so arranged that practically no dust escapes during the sifting operation.

Another object of the invention is to provide an ash sifter in which the discharge is overlapped in such a manner as to prevent dust from returning readily through the discharge opening.

A still further object of the invention is to provide an ash sifter in which the ashes may be readily separated from the cinders and coal and directed to a given discharge point while the cinders and coal are directed to a different discharge point, each said discharge points being provided with means for preventing the rise or return of dust.

In the accompanying drawing—

Figure 1 is a perspective view of an ash sifter disclosing one embodiment of the invention, the same being shown ready for use.

Figure 2 is a sectional view through Figure 1 approximately on line 2—2.

Referring to the accompanying drawing by numerals, 1 indicates an ordinary ash can of any desired kind and 2 the base for the sifter, said base acting as a lid for the can 1. This base is provided with a depending flange 3 overlapping the can 1 and the flange member 4 to which the bottom wall 5 of the sifting chute 6 is secured. The side walls of the sifting chute 6 are also secured to the base 2 by being connected in a suitable way to the flange 4 and extend downwardly into the container 1 as shown in Figure 2. The bottom wall 5 is provided with an extension 7 extending downward into the container but falling short of the deflecting plate 8 having a suitable extension 9 whereby a discharge opening 10 is presented. Ashes striking the bottom 5 will slide down and strike against the deflecting plate 8 and then change the direction and pass through opening 10 so as to be discharged off the end of the extension 9. This will cause the ashes to be discharged substantially centrally of the container 1 and thereby produce an even distribution.

In addition to this desirable feature, the arrangement of opening 10 back of extension 9 prevents the dust from the ashes from returning through opening 10 and said dust will naturally rise vertically. The chute 6 is provided with a sifting screen 11 extending from the mouth 12 which is preferably flared to the cinder and coal discharge 13. This discharge overlaps the edge of the base 2 so that the bail 14 of the bucket 15 may be readily passed over the hook 16 secured to the top wall 17 of the chute 6. It will be noted that the wire mesh 11 is connected with the bottom 5′ positioned at the discharge opening 13 so that the cinders and coal will be readily discharged into the bucket 15. As the cinders and coal strike the bucket, a small amount of ash dust will naturally rise and in order to prevent this from passing out into the air a hood 18 is provided of some flexible material, as for instance, a heavy grade of canvas or other cloth. The hood 18 is secured at suitable points 19 to the chute 6 and also to the flange 3 whereby it thoroughly covers most of the upper part of the bucket 15.

When operating the sifter, it is only necessary to pour in the ashes and cinders into the mouth 12. The matter thus poured into the chute will pass downwardly under the action of gravity and by reason of the screen 11 the ashes will fall onto the bottom member 5 and will be finally discharged out opening 10 while the cinders and coal, if any, will pass downwardly over the top of the wire mesh 11 so as to be discharged into the bucket 15. The hood 18 prevents the escape of dust from the bucket 15 while the arrangement of the extension 9 and associated parts prevents the dust from passing upwardly from the ash can 1 into the chute 6. It will thus be noted that without providing any moving parts the ashes may be readily separated from the cinders and coal and without causing an unnecessary discharge of ash dust adjacent the sifter.

What I claim is:—

1. An ash sifter comprising a base having an opening on top, a chute arranged at an incline to the horizontal when in use, said chute being secured to said base and projecting through said opening, said chute having a bottom plate extending below the base

and at right angles to the general direction of the chute, said chute adjacent the base having an opening so that ashes passing downwardly through said chute will strike said plate and be deflected so as to move at right angles through said opening whereby ash dust rising from beneath the chute cannot re-enter the chute, a wire mesh division member arranged in said chute so as to divide the chute into upper and lower compartments, the lower compartment acting as an ash guiding compartment and the upper compartment acting as a cinder guiding compartment.

2. An ash sifter comprising a base adapted to fit over a container, said base having an opening therein, a substantially rectangular chute arranged so that part of one end will extend through said opening in the base, an end member for part of said chute extending at right angles to the general direction of the chute and spaced from the bottom wall thereof, said end member projecting an appreciable distance beyond said bottom wall whereby ashes moving down said bottom wall must strike said end member and change direction, a wire mesh division member arranged in said chute and extending for substantially the full length of the chute for dividing the same into upper and lower compartments, means arranged at the lower end of the wire mesh division member co-acting with the upper part of the chute for forming an auxiliary chute for cinders.

3. An ash sifter, comprising a base adapted to fit over a container, said base having an opening therein, a substantially rectangular chute arranged so that part of the bottom wall extends through and below said base, an end member secured to the base extending within the container substantially at right angles to the base of the chute and beyond the intersecting line of the same, leaving between the end member and the bottom wall an opening for the ashes to pass, which ashes change direction upon striking said end member, a wire mesh division member arranged in said chute and extending substantially the full length of the same, said wire mesh dividing said chute into an upper and a lower compartment, the lower compartment forming an auxiliary chute for the cinders in communication with said container.

PAUL MISCHKE.