H. KEMMERER, Sr., AND H. A. KEMMERER, Jr.

DUSTLESS ASH SIFTER.

APPLICATION FILED MAR. 1, 1919.

1,318,289. Patented Oct. 7, 1919.

FIG. 1.

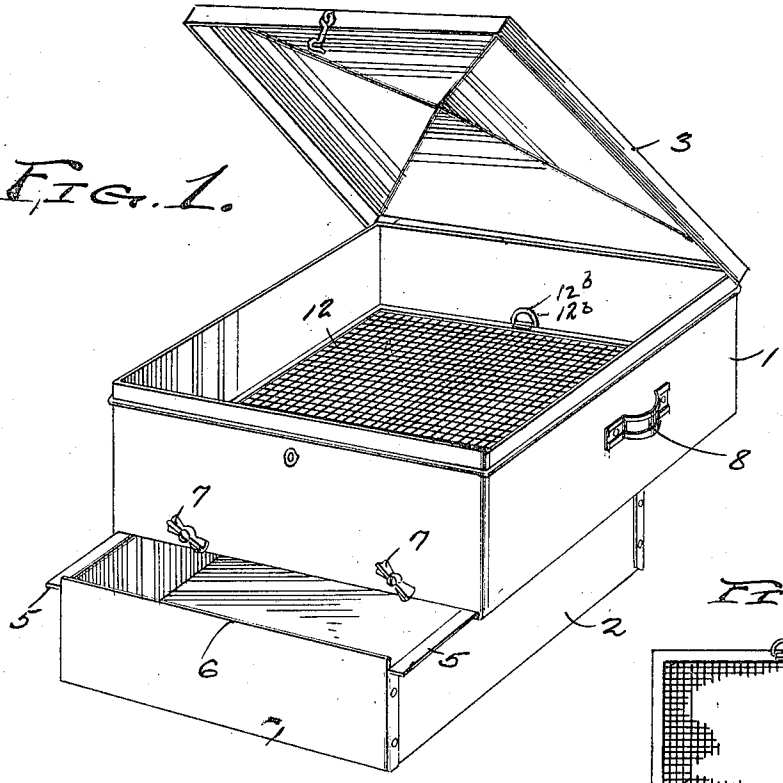


FIG. 3.

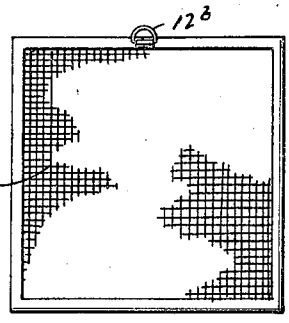
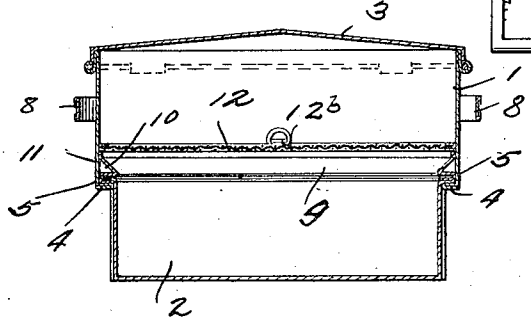


FIG. 2.



WITNESSES

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DUSTLESS ASH-SIFTER.

1,318,289. Specification of Letters Patent. Patented Oct. 7, 1919.

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To all whom it may concern:

Be it known that we, HENRY KEMMERER, Sr., and HARRY A. KEMMERER, Jr., citizens of the United States, residing at Wilkes-Barre, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Dustless Ash-Sifters, of which the following is a specification.

The invention provides a sifter for separating material such as ashes from cinders, sand from gravel and any objectionable matter from material of any nature capable of being sifted.

The invention provides a sifter which embodies compartments for retaining the separated material. In the case of ashes the cinders are retained in one compartment and the ashes collected in another compartment, the device being completely inclosed, thereby preventing the escape of dust to the inconvenience and annoyance of the user.

The drawing illustrates a preferred embodiment of the invention. However, it is to be understood that in adapting the same to meet different conditions, various changes in the form, proportion, and minor details of construction may be resorted to without departing from the nature of the invention as claimed hereinafter.

Referring to the drawing hereto attached,

Figure 1 is a perspective view of a sifter embodying the invention, showing the cover partly elevated and the lower compartment partly drawn forward.

Fig. 2 is a vertical cross section.

Fig. 3 is a detail view of a screen to be substituted for that illustrated in Figs. 1 and 2.

Corresponding and like parts are referred to in the following description and indicated in both views of the drawing by like reference characters.

The sifter comprises an upper compartment 1 and a lower compartment 2, said compartments being readily separable so that the lower compartment may be stored within the upper compartment so as to economize room in transportation and in storing. The sifter may be made of any material such as sheet metal, wood or a combination of metal and wood. The lower compartment 2 is of such relative proportions as to fit within the upper compartment. A cover 3 closes the upper compartment and is preferably hinged thereto and is adapted to be secured when closed by any suitable fastening means. A guide way 4 is provided at the lower edge of the rear and sides of the compartment 1 and engages an outer flange 5 at the rear and sides of the compartment 2, thereby retaining the latter in position and at the same time insuring the formation of a close joint. The flange 5 is formed by bending the upper edges of the rear and sides of the compartment 2 outwardly so as to engage over the inwardly bent lower edges of the rear and sides of the compartment 1. The front of the compartment 2 projects upwardly, as indicated at 6 to overlap the lower edge of the front of the compartment 1 and provide a close joint to prevent the escape of dust. Turn buckles 7 or like fastening means applied to the front of the compartment 1 engage the front of the compartment 2 and retain the latter in position when fitted to the compartment 1. The compartment is provided at opposite sides with handles 8 for convenience of manipulating the sifter when in operation.

A strip 9 is secured to the inner side of the rear and side walls of the compartment 1 adjacent their lower edges and said strip is bent to provide an inclined portion 10 and a horizontal portion 11, the horizontal portion 11 paralleling the inwardly bent portion of the rear and side walls of the compartment 1 so as to form therewith the guide way which receives the supporting flange 5 of the compartment 2. The inclined portion 10 of the strip 9 forms a chute for directing the ashes or other material into the compartment 2 and prevents the formation of corners for the lodging of ashes or other material. This strip 9 in conjunction with the inwardly bent edges of the rear and side walls of the compartment 1 serve to strengthen and reinforce the walls of the compartment besides providing a supporting ledge for receiving the screen 12 which is mounted thereon. The outer flange 5 serves to strengthen and reinforce the upper edges of the rear and side walls of the compartment 2 in addition to forming supporting means for such compartment when applied to the lower side of the compartment 1.

For economizing in space the compartment 2 is adapted to be placed within the compartment 1. When the sifter is required for service the compartment 2 is placed beneath the compartment 1 and is retained in

position by the flange 5 engaging the guide way 4, the turn buckles 7 being moved to extend across the front of the compartment 2 and retain the latter in place. The ashes or other material to be sifted is placed in the compartment 1 on the screen 12 after which the cover 3 is closed and made fast and the device is operated by grasping the handles 8 and imparting a shaking movement thereof, whereby the ashes pass through the meshes of the screen 12 and collect in the compartment 2, the cinders remaining in the compartment 1. The device being completely inclosed prevents dust from flying about to the annoyance of the user.

It is contemplated to provide the device with one or more screens which are interchangeable so that one screen may be substituted for another according to the degree of fineness of the material to be separated. When a screen of large or coarse mesh is placed in position the siftings will necessarily be coarse. If a screen of fine mesh is placed in position the screenings will obviously be fine. To facilitate the handling of the screens each will be provided with a ring 12^b which by preference is connected to the frame thereof. The screen 12^a shown in Fig. 3 is of a different mesh than the screen shown in Figs. 1 and 2, and the screens are detachable to admit of a screen of desired mesh being placed in position.

The foregoing description and the drawing have reference to what may be considered the preferred, or approved form of our invention. It is to be understood that we may make such changes in construction and arrangement and combination of parts, materials, dimensions, et cetera, as may prove expedient and fall within the scope of the appended claim.

Having thus fully described our invention, what we claim as new and desire to secure by Letters Patent is:

A sifter, comprising an upper compartment having an inwardly extending flange at the lower edge of its rear and side walls, a strip upon the inner side of the walls of said compartment and comprising an inclined portion and a horizontal portion, the latter overlying and being spaced from the inner flange, a lower compartment having an outer flange at the upper edge of its rear and sides to engage over the inner flange at the sides of the upper compartment and beneath the said strip, and having its front extended to overlap the lower edge of the front of the upper compartment, fastening means for securing the two compartments when in operative position, a cover for the upper compartment, and a screen supported upon the said strip, the lower compartment being adapted to be placed within the upper compartment when not in use.

In testimony whereof we affix our signatures in presence of two witnesses.

HENRY KEMMERER, Sr.
HARRY A. KEMMERER, Jr.

Witnesses:
H. C. Jacobs,
Peter Conlan.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."