Nov. 8, 1932. E. T. REMY 1,887,041

ASH CARRIER

Filed Nov. 18, 1930

Fig. 1.

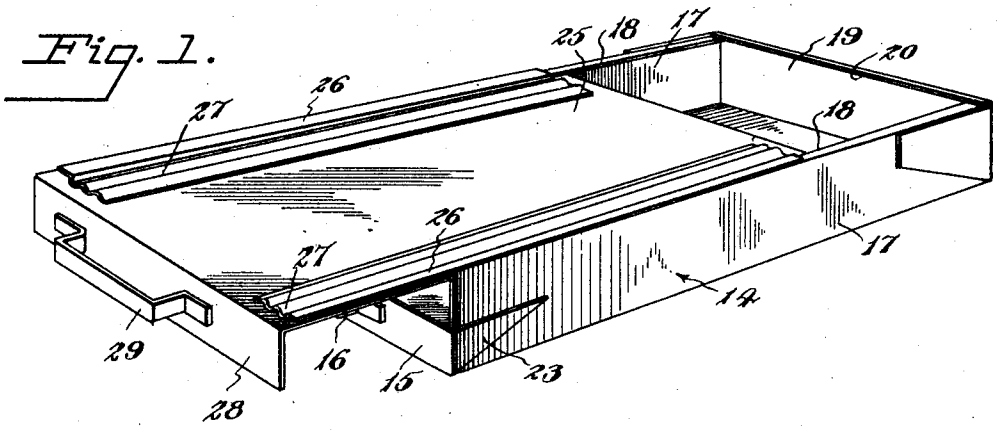


Fig. 2.

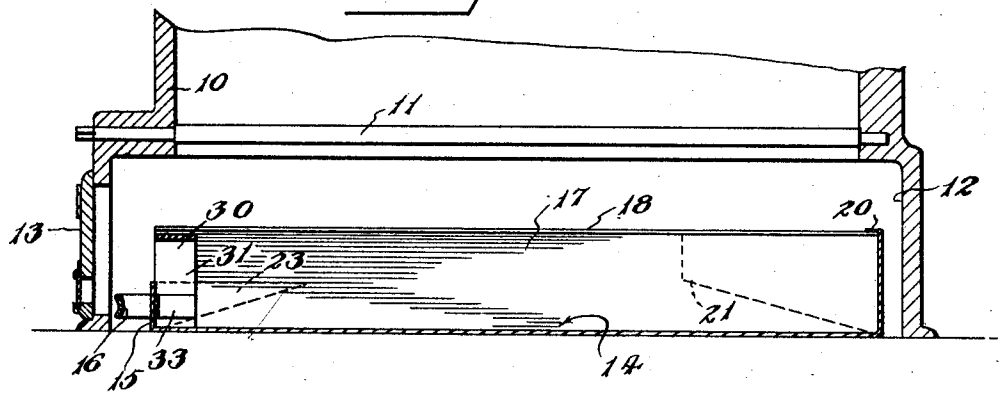


Fig. 3.

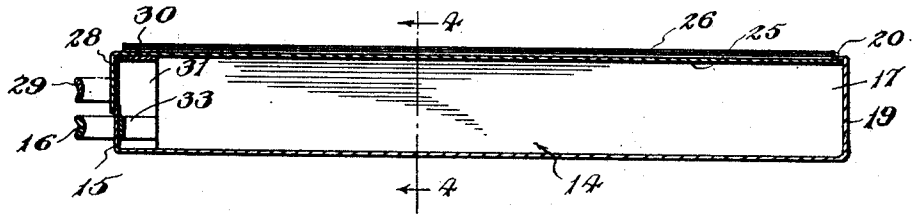
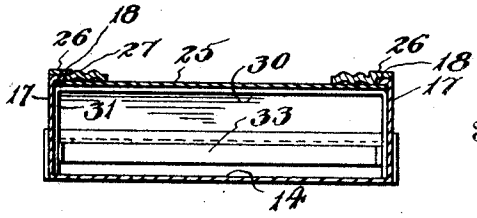


Fig. 4.



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UNITED STATES PATENT OFFICE

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ASH CARRIER

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This invention relates to ash carriers.

An object of the invention is to provide a receptacle or container by means of which the accumulating, removing and disposing of ashes from a coal burning furnace to the point of final disposition will be accomplished conveniently and in a dustless manner.

A further object is to provide a novel container and novel lid therefor, the container being adapted to be placed within the ash pit of the furnace without the lid, and after it has become filled, the lid is applied through the instrumentality of a track carried by the container, the covered receptacle being adapted to be easily and conveniently removed by means of handles from the ash pit and dustless disposal of the ashes made by simply inverting the container and withdrawing the lid from the track.

A further object is to provide the container and the lid therefor each with a front wall constituting one-half of the front wall space of the device so that when the lid is detached, the top portion of the front wall space of the container will be open to facilitate proper draft through the ash pit door.

A still further object is to provide an ash carrier which will be composed of a few simple, strong and durable parts which will be easy to manufacture and will not readily get out of order.

With the above and other objects in view the invention consists in certain novel details of construction and combinations of parts hereinafter fully described and claimed, it being understood that various modifications may be resorted to within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawing forming part of this specification:

Figure 1 is a perspective view of the ash carrier showing the lid partly open,

Fig. 2 is a detail sectional view through the lower part of a coal burning furnace and showing the ash carrier in place.

Fig. 3 is a longitudinal sectional view through the ash carrier with the lid closed, and

Fig. 4 is a cross sectional view of the ash carrier taken on the line 4—4 of Fig. 3.

Referring now to the drawing in which like characters of reference designate similar parts in the various views, 10 designates a coal burning furnace, 11 the grate bars, 12 the ash pit, and 13 the ash pit door, these parts being of the usual and well known construction.

In carrying out the invention, I provide a container 14 which is preferably formed of sheet metal. The container is open at the top and is closed at the sides and the rear end. The front end wall space is partially closed by means of a front wall 15 which extends in height substantially to a point one-half the height of the container and is equipped with a handle 16. The container is adapted to be placed on the bottom of the ash pit below the grate bars 11 and by virtue of the open space existing above the front wall 15, proper draft of the furnace through the ash pit door 13 and container will be effected.

Preferably, the container is oblong in contour, although variations in contour may be resorted to to fit the container to various shapes of ash pits. In the present embodiment of the invention, the sheet metal side walls 17 of the container are provided with inturned flanges 18 and the rear wall 19 of the container is provided with an inturned flange 20. The rear wall, sides and front wall may be secured together in any suitable manner, preferably the ends of the rear wall being bent over the rear ends of the side walls, as shown at 21, and welded to the side walls. Likewise, the ends 23 of the front wall 15 may be bent over the side walls and welded to the latter.

A sheet metal lid 25 is provided of suitable length and cross dimension to close the top of the container. A pair of longitudinal Z-shaped flanges 26 preferably corrugated to reinforce and prevent buckling of the lid, as shown at 27, are welded to the longitudinal edges of the lid. The flanges are so spaced as to receive the inturned flanges 18 of the side walls so that said inturned flanges 18 constitute a track and the Z-shaped flanges 26 con-

stitute guides which direct sliding movement of the lid during application to and removal from the container.

The lid is provided with a front wall 28 which preferably is formed by bending the lid downwardly. The front wall is of sufficient height to extend from the lid to the top of the front wall 15 of the container when the lid is applied. Consequently, the front wall of the lid and the front wall of the container form a complete closure for the ash carrier when filled with ashes so that the same may be transported to the place of disposal conveniently and in a dustless manner. The front wall of the lid is provided with a handle 29 which overlies the handle 16 of the front wall of the container, as shown in Fig. 3. The handle 29 of the lid is preferably welded at the ends to the front wall 28 of the lid.

For preventing distortion of the lid, a transverse brace 30 is secured to the container near the front wall thereof, the brace preferably having downwardly bent portions 31 which are riveted, as shown at 32, to the side walls 17.

Furthermore, for bracing the front wall against distortion, a transverse brace 33 is preferably welded to the front wall. Said transverse brace is provided with rearwardly extending portions 35 which are preferably welded to the side walls 17.

It will be observed by referring to Figs. 1 and 3 that the guide flanges 26 of the lid terminate short of the rear end edge of the lid so that the inturned flange 20 of the rear wall of the container may project over the top face of the lid and thus seal the crack that would otherwise exist between the rear wall and lid when the lid is applied and consequently prevent escape of dust.

It will be particularly pointed out that the front wall 28 of the lid overlaps the front wall 15 of the container and thus effectively seals the front wall against the escape of dust when the lid is applied.

In operation, the container is inserted in the ash pit underneath the grate bars. After the container has become filled with ashes, the ash pit door 13 is opened and the lid is applied to the track of the container, the lid being slid rearwardly until the front walls of the container and lid meet, in which position of the parts the container is sealed against escape of ashes or dust. The container, with the lid applied, is now bodily withdrawn from the ash pit by means of the container handle 16 and may be transported to the point where disposition of ashes is to be made. Thereupon, the container is inverted so that the lid becomes the bottom. The lid is then withdrawn by means of the handle 29 thereof and at the same time lifting the container obliquely to deposit the ashes in the ash depository.

By virtue of the novel construction of the track on the container and guide flanges snugly fitting the track, the escape of dust while transporting the ash carrier will be prevented, while at the same time easy application and removal of the lid will be assured.

By virtue of the overlapping front walls of the container and lid, such walls constituting approximately one-half of the front wall space of the entire device, escape of dust during transportation will be prevented, while at the same time when the container is in operative position in the ash pit, the open space above the short front wall will assure proper draft of the furnace through the ash pit door 13.

Having thus described the invention, I claim:

1. An ash carrier comprising an open top container adapted to be inserted in the ash pit of a coal burning furnace, a lid for closing the top of the container when filled, a track on the container, corrugated Z-shaped reinforcing guide flanges on the lid for slidably engaging the track, coacting overlapping front walls on the lid and container each of less height than the depth of the container and adapted to coact in forming a closure for the front of the container when the lid is applied, and handles on said front walls.

2. The combination with the ash pit of a coal burning furnace, of a container in the ash pit open at the top for receiving ashes gravitating from the grate bars, a front wall for the container extending from the bottom of the container for a short distance upwardly and forming a partial closure for the front of the container whereby the furnace draft from the ash pit door may enter the container above said front wall, a handle on said front wall, a lid for the container having a front wall adapted to coact with the front wall of the container in forming a complete closure for the front of the container when the lid is applied to permit transportation of the ash filled container in a dustless manner, a handle on said lid, inturned flanges on the container forming a track, and corrugated reinforcing flanges on the lid above the track forming guides for the lid.

3. An ash carrier comprising a container open at the top and adapted to be inserted in the ash pit of a coal burning furnace, a track on the top edges of the sides of the container, a lid adapted to form a closure for the open top of the container, corrugated Z-shaped guide flanges on the sides of the lid above said track and directing the sliding movement of the lid during application and removal and reinforcing the sides of the lid, an inturned flange on the container back wall adapted to project over the rear edge of the lid and abut the guide flanges to form a dust-tight connection between the lid

and container, coacting front walls on the lid and container each of less height than the depth of the container and forming a closure for the front of the container when the lid is applied, and handles on said front walls.

In testimony whereof I affix my signature.

EARL T. REMY.