March 23, 1926. 1,577,814

E. H. SHOLAR

AUTOMATIC ASH DUMP

Filed Oct. 26, 1925

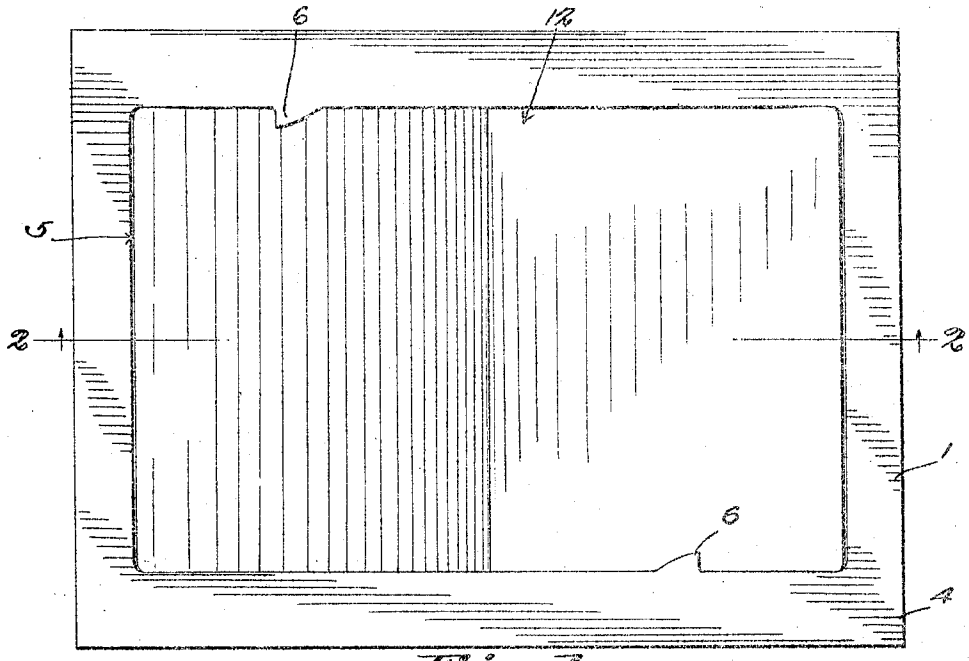


Fig. 1.

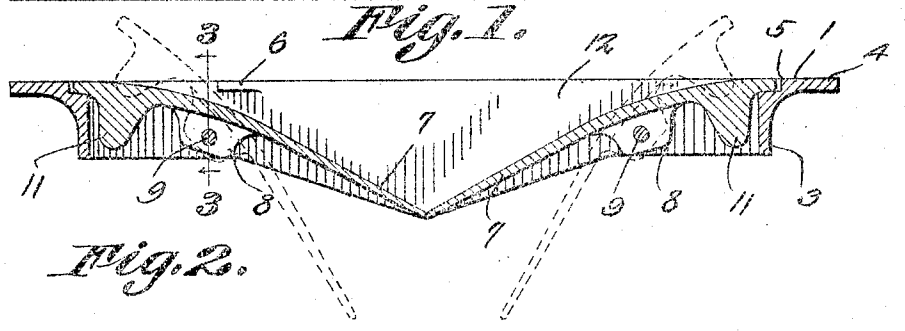


Fig. 2.

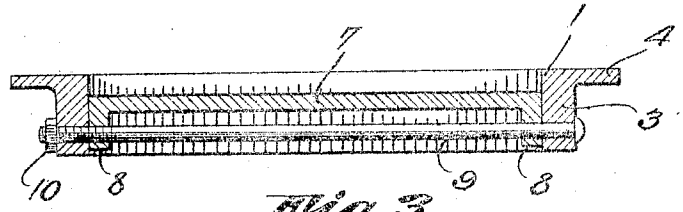


Fig. 3.

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UNITED STATES PATENT OFFICE.

EDWARD H. SHOLAR, OF CHATTANOOGA, TENNESSEE.

AUTOMATIC ASH DUMP.

Application filed October 26, 1925. Serial No. 64,964.

To all whom it may concern:

Be it known that I, EDWARD H. SHOLAR, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented a new and useful Automatic Ash Dump, of which the following is a specification.

This invention relates to an automatic ash dump designed primarily for use across the opening usually provided beneath the grate basket of an open fire place.

One of the objects of the invention is to provide an ash dump which will open automatically when the accumulated ashes are heavy enough to over balance the movable members of the dump, said members being so mounted as to return automatically to closed position after the dumping operation.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed may be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:

Figure 1 is a top plan view of the automatic ash dump.

Figure 2 is a section on line 2—2 Figure 1, the position of the movable members during the dumping operation being indicated by broken lines.

Figure 3 is a section on line 3—3 Figure 2.

Referring to the figures by characters of reference 1 designates the frame of the structure, the same being formed with a depending flange 3 along the inner edges thereof and with an outwardly extending flange 4, this latter flange being designed to rest upon the supporting surface close to the opening into which the flange 3 extends, when in use. A rabbet 5 is provided in the top of the frame along the end portions of the opening therein and projecting inwardly from the sides of the opening adjacent the respective ends are stop lugs 6.

The opening in the frame is normally closed by two oppositely disposed shutters 7 each shutter being provided, at its sides with depending ears 8. These ears of each shutter are adapted to receive a removable pivot rod or bolt 9 which is extended through the sides of the frame and held in place by a nut 10 or in any other manner desired. The outer ends of the shutters are adapted to be seated in the rabbets 5 and they are normally held there by weights 11 which are formed integral with the shutters and extend downwardly therefrom between the pivot rods 9 and the end walls of the frame 1. The opposite ends of the shutters normally come together as shown in Figure 2 and the upper surfaces of these shutters are curved inwardly and downwardly from their outer ends to their inner or meeting ends so that the shutters and the side flanges 3 of the frame normally cooperate to form a shallow hopper as indicated generally at 12 in Figure 2.

As before explained this device is adapted to be placed across the opening usually provided under a grate basket. As the ashes fall from the grate they will drop into the hopper 12 and be supported by the shutters 7. When the weight of the ashes becomes sufficient to overbalance the weights 11, the shutters will swing downwardly at their inner or meeting ends as shown by broken lines in Figure 2, so that the ashes will gravitate between the shutters. Immediately thereafter the weights 11 will return the shutters to their normal positions. The downward swinging movement of the shutters is limited by the stop lugs 6.

By curving the shutters as shown it becomes possible to locate the weights 11 on the lower sides of the shutters and nearer the ends of the frame than would otherwise be possible and, consequently, the shutters will close more readily than if they should be straight.

An important feature of the present invention is the location of the pivot rods. These are located under the shutters and the bearings are also located below the top of the frame. It thus becomes unncesssary to provide protecting pieces over the bearings or to have upstanding portions on the frame as has heretofore been the practice. By locating the bearings above the frame as heretofore they quickly burn out under the hot ashes deposited thereon.

What is claimed is:

1. The combination with a frame, of oppositely disposed shutters therein, pivot devices extending under the respective shutters, depending means upon the shutters

engaging the pivot devices, weights depending from the outer end portions of the respective shutters for holding said end portions normally bearing downwardly on the frame and the inner end portions of the shutters normally closed together, said shutters and the sides of the frame cooperating to provide an ash receiving hopper, the upper surfaces of the shutters converging downwardly toward their inner ends.

2. The combination with a frame having recesses in the end portions thereof, of inwardly and downwardly extended shutters within the frame having their outer ends normally seated in the recesses, pivotal connections between the frame and shutters said connections being located below the shutters and below the top of the frame, and means carried by the shutters adjacent the outer ends thereof for holding said outer ends normally in the recesses and the inner ends of the shutters normally closed together.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

EDWARD H. SHOLAR.