C. P. DRESSEL.

ASH DUMPER.

APPLICATION FILED JULY 29, 1910.

997,183. Patented July 4, 1911.

Fig. 1.

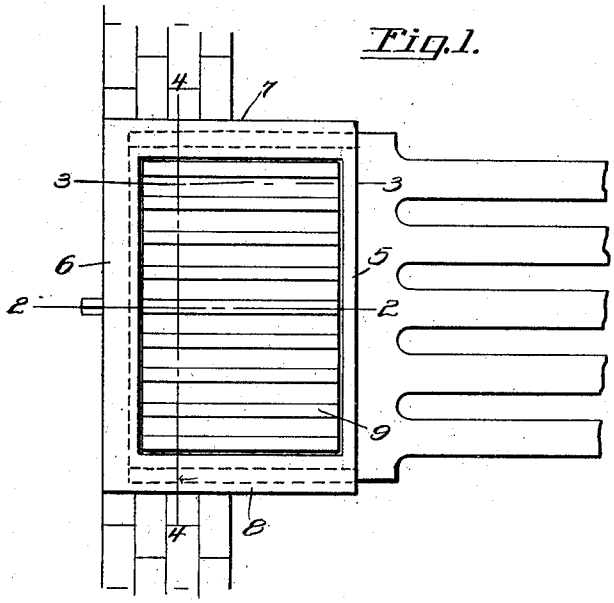


Fig. 3.

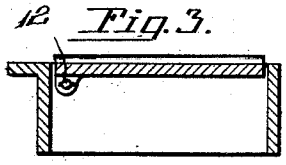


Fig. 2.

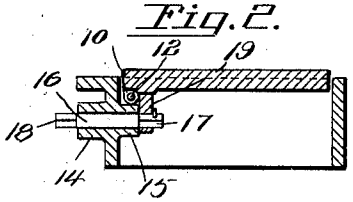
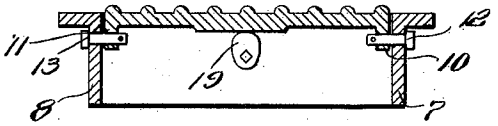


Fig. 4.



Witnesses.

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ASH-DUMPER.

997,183. Specification of Letters Patent. Patented July 4, 1911.

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To all whom it may concern:

Be it known that I, CHARLES P. DRESSEL, a citizen of the United States, residing at Wilkes-Barre, in the county of Luzerne and State of Pennsylvania, have invented new and useful Improvements in Ash-Dumpers, of which the following is a specification.

This invention relates to improvements in ash dumpers, and has particular reference to a device of that kind adapted to be arranged within a firebox and at one end of the grate, in such position that a quantity of ashes moved toward the door will pass onto the device after which they may be dumped into the ash pit.

Another object is the provision of an ash dumper provided with a tilting platform and means for holding the same in a horizontal plane.

With these and other objects in view, which will more fully hereinafter appear, the present invention consists in certain novel details of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and more particularly pointed out in the appended claim; it being understood that various changes in the form, proportion, size, and minor details of the device may be made, within the scope of the appended claim, without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, forming part of the specification;—Figure 1 is a plan view of the device showing its application to a grate. Fig. 2 is a transverse sectional view on the line 2—2 of Fig. 1. Fig. 3 is a similar view on the line 3—3 of Fig. 1. Fig. 4 is a longitudinal sectional view on the line 4—4 of Fig. 1 and looking in the direction of the arrow.

Similar numerals of reference are employed to designate corresponding parts throughout.

The device about to be described is positioned at the outer end of the grate, in an ordinary furnace and occupies the position of the ordinary dead plate, it being understood that the dead plate will be removed so as to provide an opening between the outer end of the firebox and ash pit.

The device as shown in Fig. 1, includes a rectangular-shaped frame, corresponding in area to the area of the dead plate of the boiler to which it is applied, the longitudinal sides of said frame being designated by the numerals 5 and 6 and the opposite ends by the numerals 7 and 8. Positioned in the frame is what will subsequently be termed a tilting platform designated by the numeral 9. This member corresponds in area, approximately, to the inner area of the frame and is provided at its opposite ends, and adjacent to what will subsequently be termed its outer side, with a pair of depending lugs 10 and 11. The lugs 10 and 11 are provided with transverse openings, which aline with similar openings formed in the ends 7 and 8, these openings receiving pivot pins 12 and 13. By virtue of the pivotal mounting of the platform 9, it will be manifest that the latter will normally depend from the frame. It will be further observed, owing to the pivotal connection between the platform and frame, when the platform is in a horizontal position it will be in a plane with the upper edge of the frame, and will occupy the position of the dead plate in an ordinary boiler.

In order to hold the platform in a horizontal position and then to release the same when a quantity of ashes has been moved thereon, so that the ashes will be directed into the ash pit, the following construction is employed:—By reference now to Figs. 1, 2 and 4 it will be seen that the outer side 6 of the frame is centrally provided on its opposite faces with bushings 14 and 15. The bushing 14, extends through an opening in the shell of the boiler (not shown), and journaled in the said bushings 14 and 15 is a shaft 16. The opposite ends of the shaft 16 extend beyond the bushings 14 and 15, the said extending end portions being non-cylindrical in contour as shown at 17 and 18. Keyed or otherwise secured to the inner non-cylindrical end of the shaft 16 is a cam stud 19. This member is best shown in Fig. 4 and comprises an oblong body preferably semi-elliptical in contour. The distance between the shaft 16 and straight side of the body is such that when the cam is turned to one position the said straight side will be in a plane, approximately with the upper edge of the frame so that it will engage with the lower surface of the platform and hold the latter in a horizontal position, until the shaft 16 is turned, which is accomplished by means of a crank handle having a socket to receive the outer non-cylindrical end 18 of the shaft, whereupon the platform will de-

scend, so that ashes or other material placed thereon will be directed into the ash pit, it being observed that the platform will assume an inclined position when dumped, owing to the position of the cam and inner end of the shaft 16, these parts extending beyond the pivotal points of the platform.

I claim:—

The combination of a furnace dead plate provided with an opening, a frame located in said opening, a platform of an area approximately corresponding to the inner area of the frame, said platform being formed upon its opposite transverse edges and adjacent its front edge with depending lugs, said lugs having openings, pivoted members carried by the side of the frame engaging the said openings, the frame having its central portion provided with bushings, a shaft journaled in said bushings and extending beyond the same, the extending portions of the shaft being non-circular in contour, a cam member upon the inner extending portion of the shaft, said cam member contacting the platform beyond its pivots to sustain the same in a plane parallel with the frame when the said cam is in one position, and to allow the platform to tilt upon its pivots when the shaft is rotated to bring the cam to its lower position.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES P. DRESSEL.

Witnesses:

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JOHN A. DONEGAN.