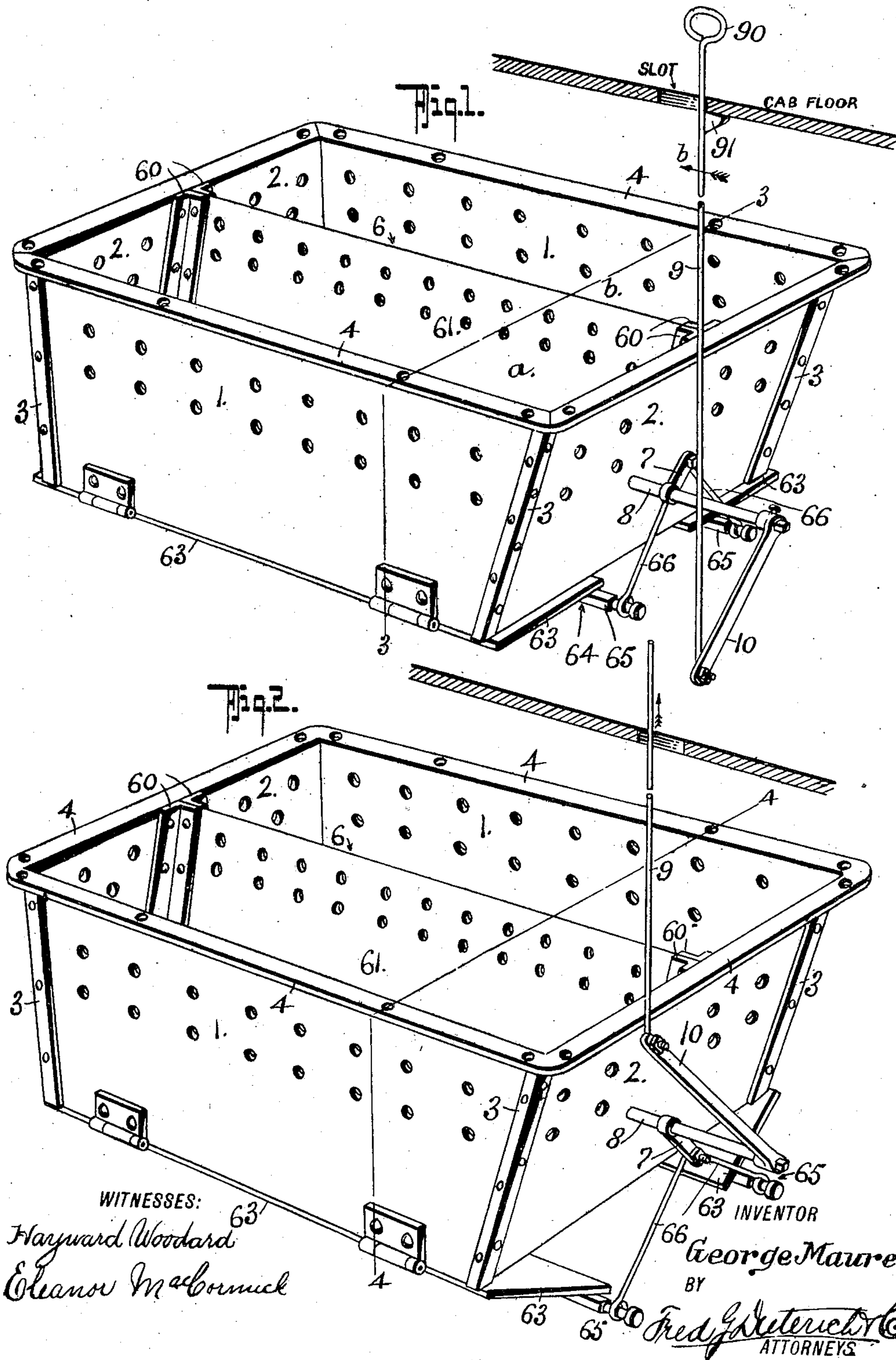


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APPLICATION FILED DEC. 27, 1909.

995,698.

Patented June 20, 1911.

2 SHEETS—SHEET 1.

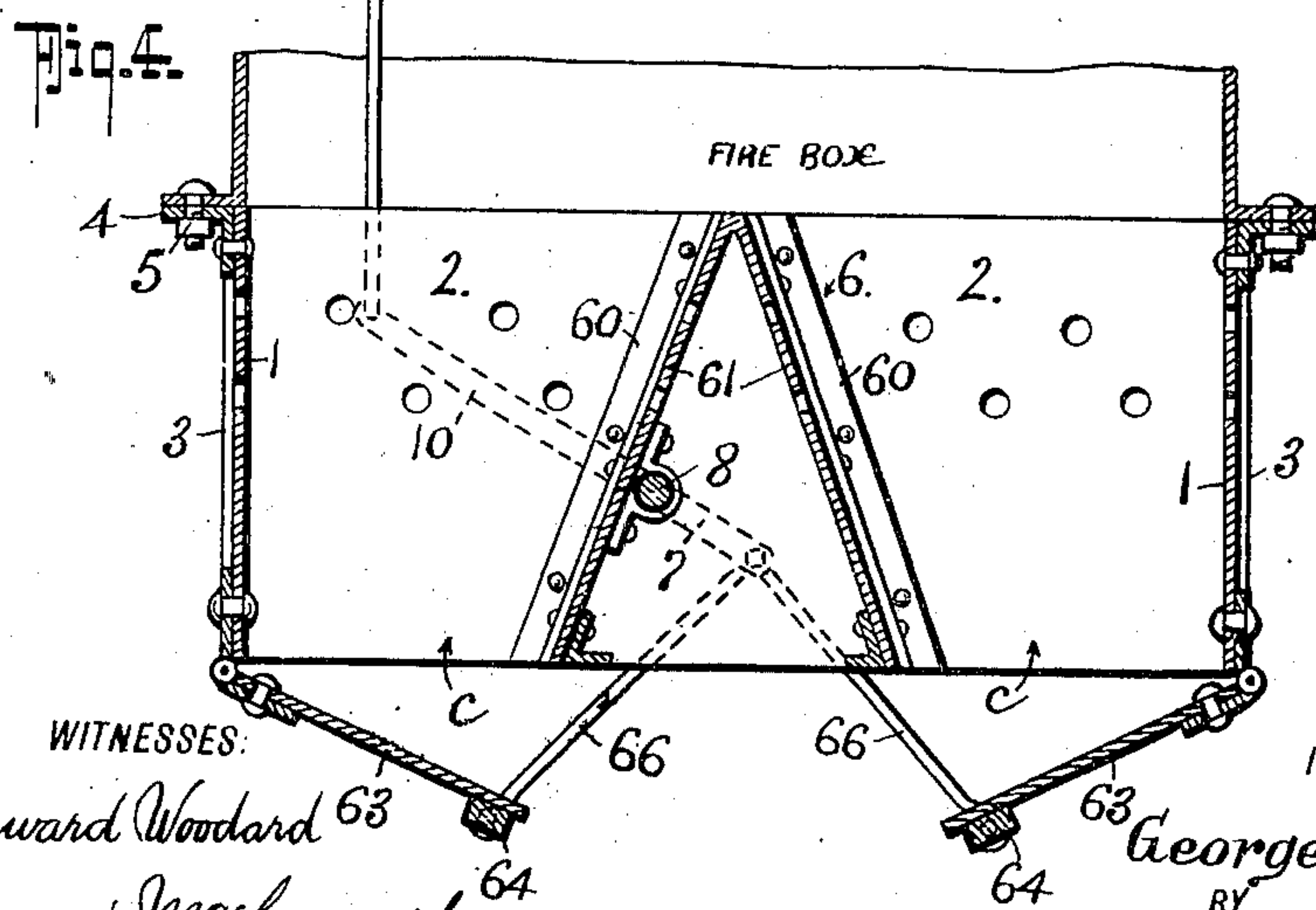
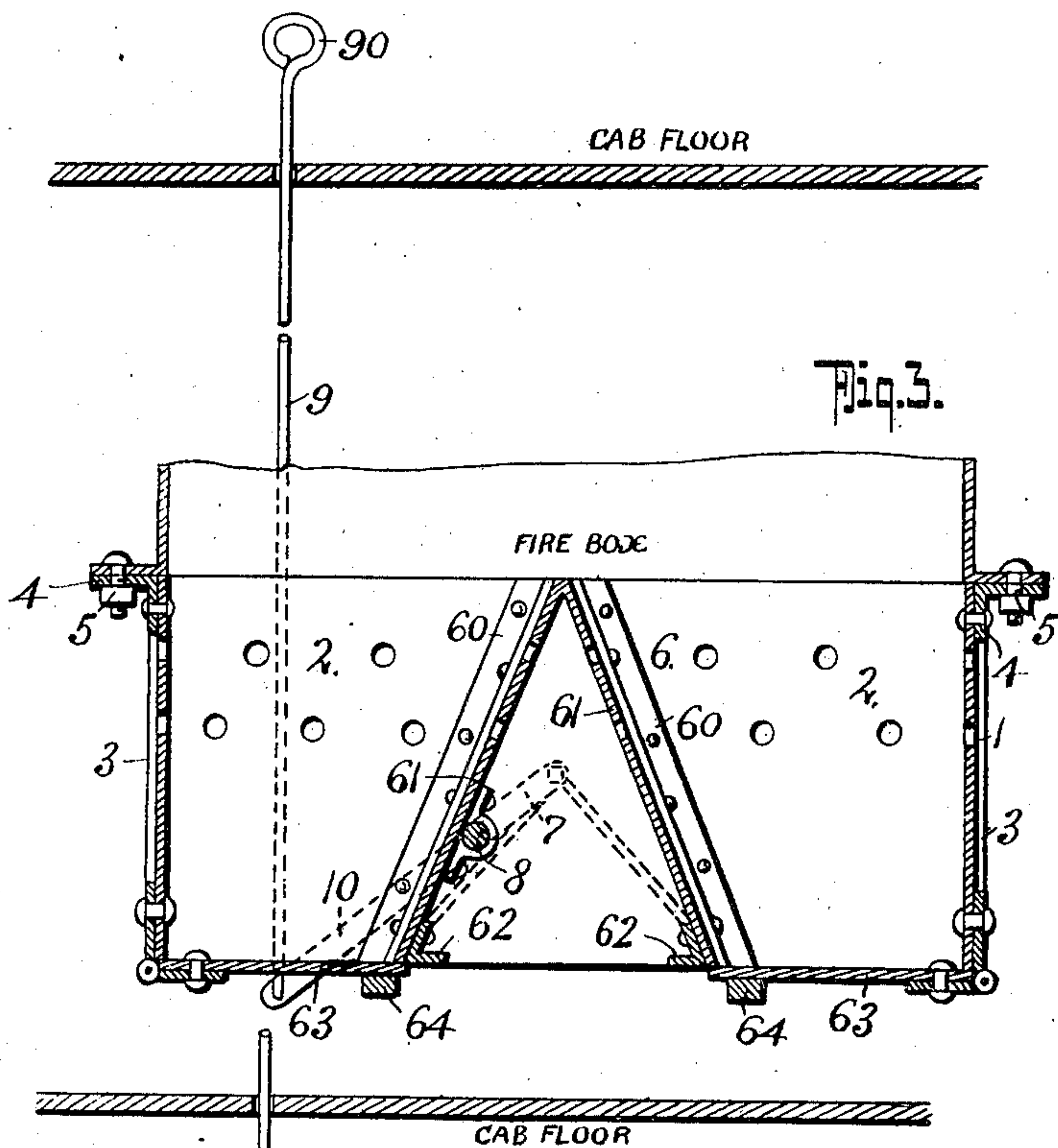


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LOCOMOTIVE ASH-PAN.

995,698.

Specification of Letters Patent. Patented June 20, 1911.

Application filed December 27, 1909. Serial No. 535,063.

To all whom it may concern:

Be it known that I, GEORGE MAURER, residing at Terre Haute, in the county of Vigo and State of Indiana, have invented a new and Improved Locomotive Ash-Pan, of which the following is a specification.

This invention relates to improvements in that type of ash receivers or pans used in connection with locomotive boilers and it has for its object to provide a simple and compact arrangement of parts, including a special construction of hinged bottom members operable from above the floor or deck of a cab.

With other objects in view that will hereinafter appear, my invention consists in certain details of construction and novel arrangement of parts, all of which will be hereinafter fully explained, specifically pointed out in the appended claim and illustrated in the accompanying drawings, in which:

Figure 1, is a perspective view of my invention, the hinged bottom members being shown in their closed position. Fig. 2, is a similar view of one end of my improved ash pan, the hinged members being shown as held in the open or dumping position. Figs. 3 and 4 are cross sections, taken respectively on the lines 3—3 and 4—4 on Figs. 1 and 2.

In its structural arrangement, my invention comprises a body preferably of rectangular shape and formed of the sides 1—1 and ends 2—2 joined at their meeting edges by angle plates 3—3 and to provide for a proper draft for the fire grate the said sides and ends 1 and 2 are perforated, as shown. The ash receiving body or pan has angle irons 4—4 at the upper edge for conveniently attaching it by means of bolts 5—5 to the bottom of the fire box.

The bottom of the pan, the peculiar construction of which and the means for opening and closing the same at will from above the cab floor or deck, forms the essential features of my invention and they embody a central and longitudinally extended stiffening portion 6, formed by the end angle irons 60—60 bolted to the end plate 2 and disposed in oppositely inclined positions for supporting the fixedly held bottom and perforated plates 61—61, the lower edges of which are braced by angle bars 62 bolted to the under side of the said plate 61 and which

form bearing portions for the inner ends of the dumping members 63—63 presently again referred to. The stiffening portion above referred to also forms a central division for the pan and divides the said pan into two distinct compartments *a* and *b*, the inner side of each of which inclines toward the restricted outlets or throats *c—c* which outlets are normally closed by the hinged dumping members 63, the latter being hinged to the lower end of the side plates as best shown in Figs. 3 and 4.

So far as described it will be apparent that by joining the several parts in the manner shown and stated, a compact and durable structure is provided, which is rendered very rigid or stiff by the central longitudinal inverted V-shaped bottom portion, the peculiar cross-sectional shape of which separates the ashes as they drop through the grate and directs the said droppings on to the dumping members 63, the opening and closing of which is controlled by the lever devices, the construction of which is best shown in Figs. 3 and 4.

The free ends of the members 63 each have a bar 64 secured to the same, one end of which is extended as at 65.

66—66 designate links pivotally connected at one end to the extensions 65—65 and whose other ends are pivotally connected to the outer end of a crank lever that is fixedly held on a rod arm 8 rockably mounted on the inner side of one of the inclined bottom plates and projected endwise therefrom as best shown in Fig. 2.

9 designates an operating rod that pivotally joins at the lower end with the long end of a second crank member 10 on the arm 8 and it extends up to a slot in the cab deck or floor, it having a suitable handle 90 and a detent 91 for engaging with the under side of the deck when the rod 9 is pushed down to swing the members 63—63 up to a closed position and to hold them locked to such position, it being understood that to dump the pan it is only necessary to push the end 90 of the rod in the direction indicated by the arrow *b* to release the detent from the deck edge, it being obvious that when that is done the rod 9 will move up as the hinged dumping members drop, the latter being again closed by pushing the rod 9 down and locking it, as stated.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:

5 In a locomotive ash pan, the combination with the side and end plates secured together to form the outline of the pan, an inverted V-shaped partition held within said pan and running lengthwise of the same, angle irons secured in the end plates of said pan and to
10 said inverted partition extending from the bottom to the top of the pan, bottom gates hinged along their outer longitudinal edges to the side walls of the pan, bearing members secured to the under side of said in-

verted V-shaped partition, a shaft in said 15 bearing members, a lever on said shaft, connecting rods between said lever and said bottom gates, and an operating rod connected to said lever through the medium of which said bottom gates may be opened, said bot- 20 tom gates opening toward one another, substantially as shown and for the purposes described.

GEO. MAURER.

Witnesses:

J. C. HICKLIN,
PETER DREHER.

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