

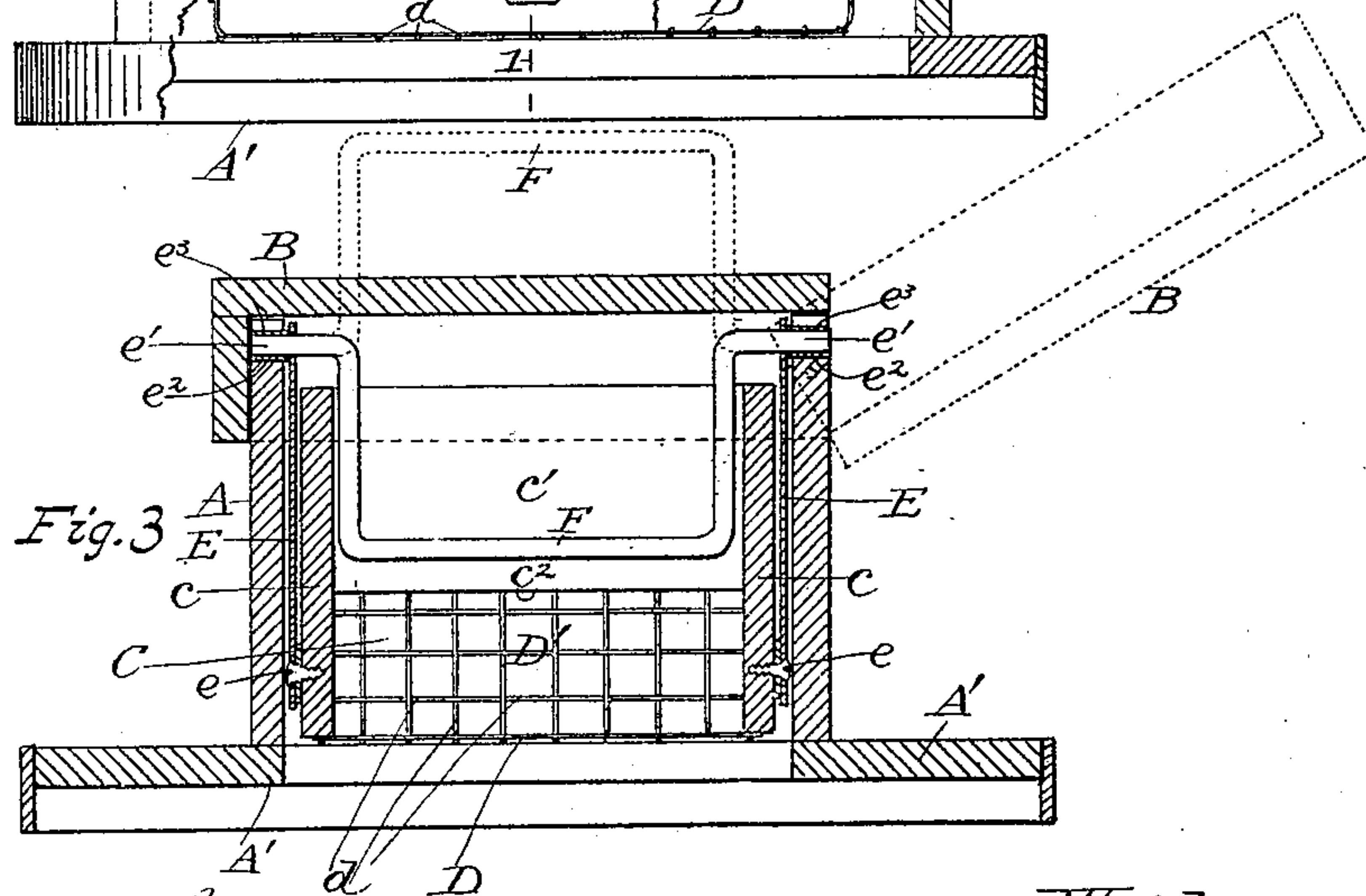
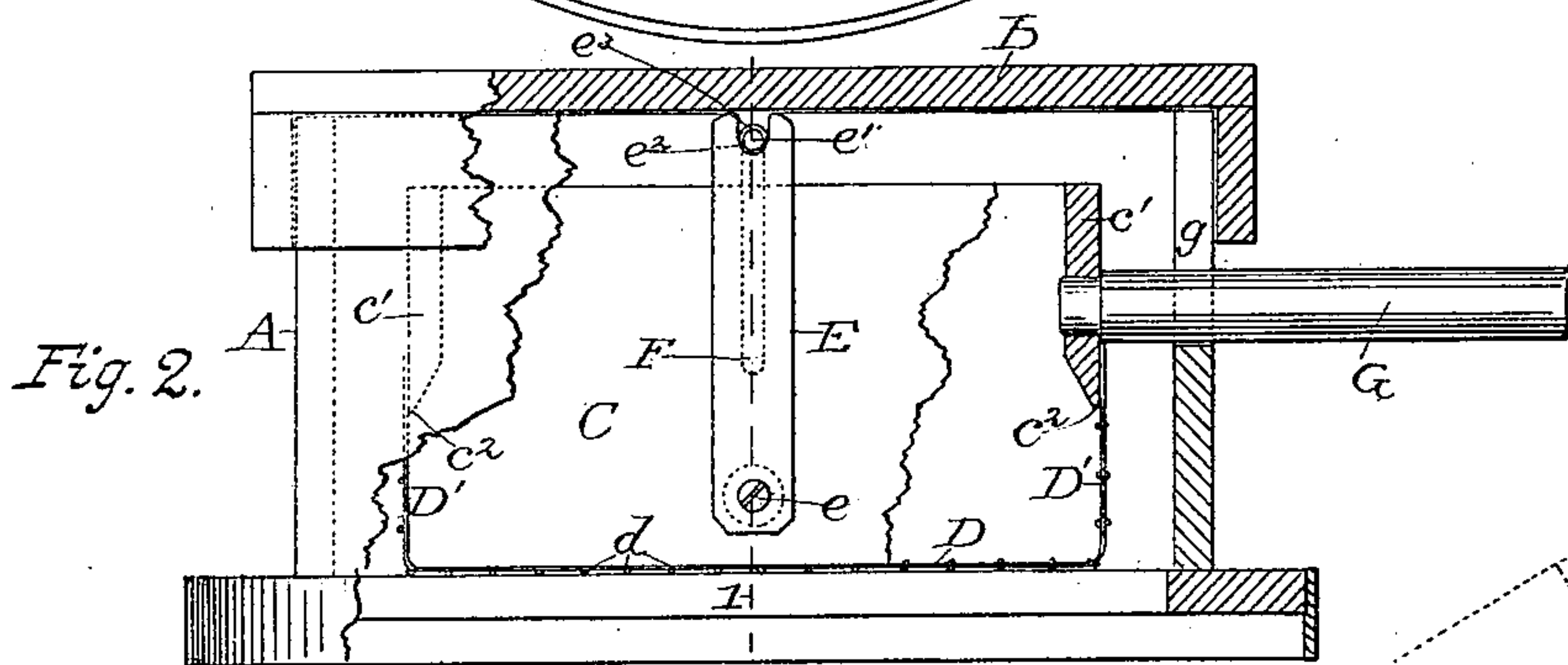
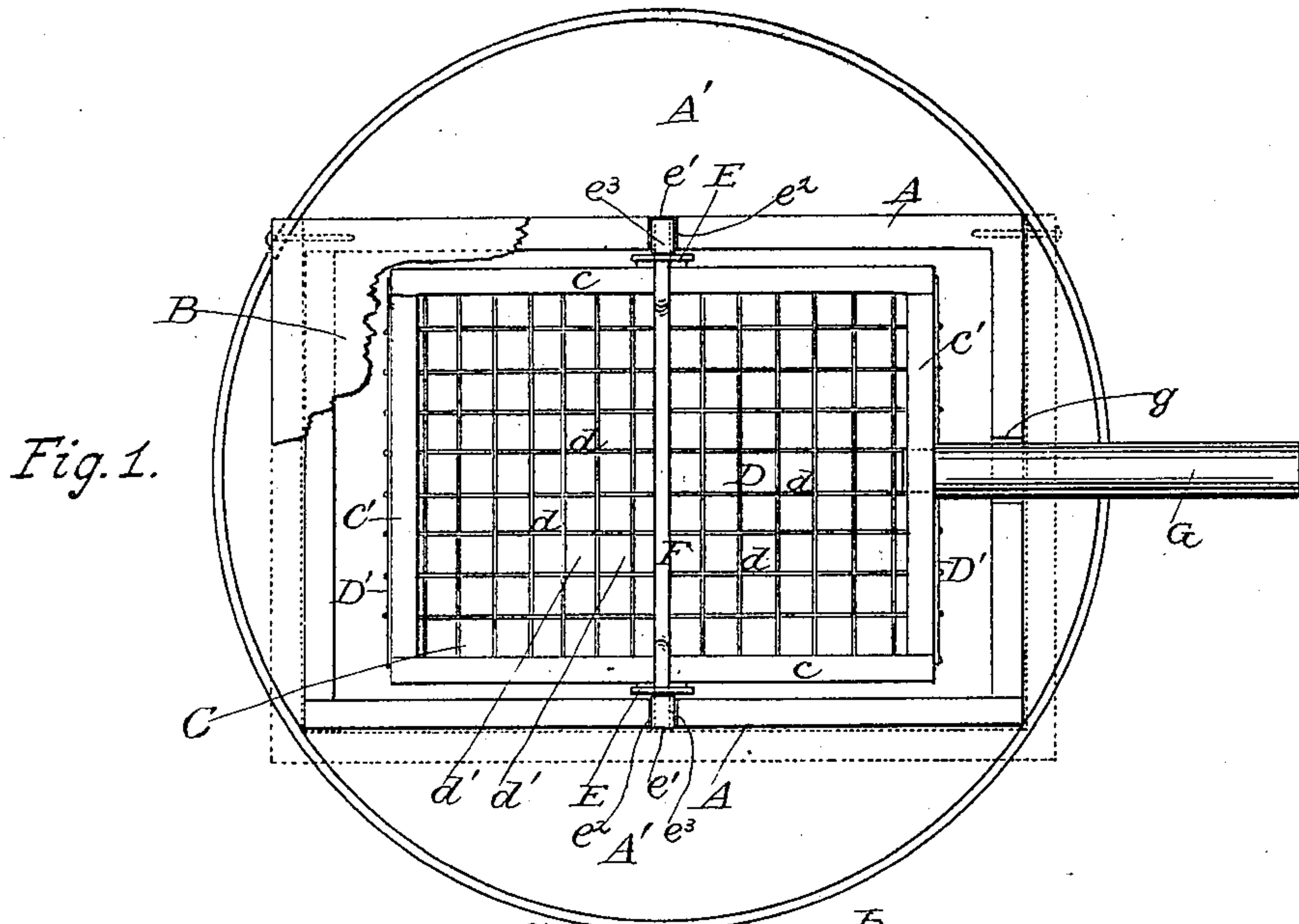
No. 654,209.

Patented July 24, 1900.

A. WEIDMAN.
ASH SIFTER.

(Application filed Dec. 3, 1898.)

(No Model.)



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UNITED STATES PATENT OFFICE.

ALMON WEIDMAN, OF ALBANY, NEW YORK.

ASH-SIFTER.

SPECIFICATION forming part of Letters Patent No. 654,209, dated July 24, 1900.

Application filed December 3, 1898. Serial No. 698,221. (No model.)

To all whom it may concern:

Be it known that I, ALMON WEIDMAN, a citizen of the United States, residing at Albany, in the county of Albany and State of New York, have invented new and useful Improvements in Ash-Sifters, of which the following is a specification.

My invention relates to ash-sifters; and it consists in the novel construction and combinations of parts, as will be hereinafter fully set forth, and pointed out in the claims.

The objects of my invention are, first, to provide a reciprocating sifting-box with end sifting-webs in connection with the bottom sifting-web; second, to provide between a reciprocating sifting-box and an outer box a pair of trunnions having bearings in the latter and in the upper ends of hangers pivoted to the former, and, third, to provide with the sifting-box and an outer box a pair of trunnions which are integral with an adjustable bail-handle adapted to serve as a convenience for carrying and dumping the sifting-box.

The same letters of reference refer to similar parts throughout the several views in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan of my improved ash-sifter. Fig. 2 is an elevation with parts broken away and parts in section and illustrating my improvements, and Fig. 3 is a section taken at line 1 in Fig. 2.

In the drawings, A represents the outer box, which is the housing-box of the sifting-box. A' is a circular-form bottom firmly secured to said outer box by nails or screws (not shown) and having a central opening of dimensions and form corresponding with the chamber of said box and also having a downwardly-projected flange or rim adapted to hold with the upper end of a barrel on which this sifting device is to be placed for operation.

B is a cover for closing over the upper side of the outer box A for preventing dust escaping from the sifter when being operated. This cover is shown to be pivoted to the outer box, yet it may be a loose cover, if preferred.

C is the sifting-box, preferably of rectangular form and comprising the side pieces *c c* and end pieces *c' c'* and open above. These side pieces *c* and end pieces *c'* are preferably

of wood, the former extended down from their upper edges to the full depth of this sifting-box, while the end pieces *c' c'* have a less extension from their upper edges, downwardly, so that their lower edges *c²* are on a plane two inches, more or less, above that of the lower edges of the side pieces *c*.

D is a sifting-web made of wire *d* and comprising suitable meshes. This web is secured to the side pieces *c c* of the sifting-box by suitable means, as heretofore practiced by the trade, and has its end portions D' turned up against the ends of said side pieces and lap on the lower margin of the end pieces *c' c'*, as shown in Figs. 1 and 2, so that the ends of this sifting-box may have their upper portions solid and their lower portions of open-work construction for ready passage of ashes from within the box to without the same by the way of the ends of the box as well as through the meshes in its horizontal bottom portion.

E E are hangers, which are pivoted by suitable pivots *e e*, one at each side, to the side pieces *c c* of the sifting-box and about at the middle of length of the same and at points at a short distance above the lower edge of said side pieces. The upper ends of these hangers E are pivoted on suitable pivots *e'*, which are suitably supported in bearings *e²*, provided in the upper edge portions of the side pieces of the outer or housing box A.

F is a bail-handle, which may be pivoted to the sides of the ash-sifting box C, as indicated by dotted lines, taken in connection with full lines of the bail-handle F, in Fig. 3, yet at present I prefer to make this bail-handle integral with pivots *e'*, supported in bearings *e²* and receiving the upper ends of the hangers E E, as shown in Fig. 3. With this form of bail-handle and its support in the bearings *e²*, so as to be removable therefrom at will, and its pivotal connection with the hangers E E, this bail-handle operates as a convenient means for lifting the sifting-box out from its housing-box, and also is made to serve as suitable trunnion-form pivots for oscillating the hangers, which are themselves removable from the housing-box. Although the pivot ends *e'* of the bail-handle from which the hangers are oscillated may be made to have direct bearing on the bottoms of the bearings *e²* made in the upper margin of the side pieces

of the housing-box, yet I prefer to interpose between said pivots and said bearings metal thimbles e^3 that wear of the said bearings may be prevented.

- 5 G is a handle secured to one end of the sifting-box and supported and guided by slot g , provided in an end of the housing-box and serving as a convenient means for operating the sifting-box in a reciprocating manner.
- 10 By my above-described improvements the sifting-box is suspended free from contact with any parts liable to excessive friction when the sifting-box is charged, while the ends of the sifting-box allow the ashes
- 15 thrown by its reciprocating movements against their open-work end portions to freely escape from said box and quickly relieve the coal and cinders from the ashes mixed with them. The bail-handle is made to have two
- 20 added functions, in that it is made to serve as a means for suspension of the hangers, which are pivoted to the sifting-box, and at the same time it serves as trunnions for support of the suspended sifting-box from the hous-
- 25 ing-box, while the pole-like handle secured to the sifting-box coacts with the guiding-slot for holding the former from being tilted in either direction while being operated, besides violent concussions heretofore attend-
- 30 ing the reciprocating movements of the sifting-box within the housing-box and which operated to gradually loosen parts of the sifter are wholly prevented, so that all parts of the

sifter may be longer preserved in their normal good condition for best service.

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

1. The combination with a housing-box and a reciprocating sifting-box within the former, and hangers pivoted by their lower ends to the sides of the sifting-box, of the bail-handle F, having integral with it pivots $e' e'$, from which said hangers are oscillated, and bearings $e^2 e^2$ provided in the upper margins of the side pieces of the housing-box and receiving the extensions of said pivots $e' e'$, substantially as set forth.

2. The combination with the housing-box A, reciprocating sifting-box C, and sifting-web D forming the bottom and portions of the ends of said sifting-box, of a bail-handle having integral with it pivots $e' e'$, hangers E E pivoted by their lower ends to the side pieces of said sifting-box, and having their upper ends oscillating on said pivots $e' e'$, bearings $e^2 e^2$ provided in the side pieces of the housing-box and receiving the extended portions of said pivots $e' e'$, and the handle G secured to said sifting-box and guided by a slot provided in an end of said housing-box, substantially as set forth.

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Witnesses:

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