

No. 763,752.

PATENTED JUNE 28, 1904.

C. F. A. HENTSCHEL.

RETORT LID.

APPLICATION FILED MAY 13, 1903.

NO MODEL.

Fig. 1.

Fig. 2.

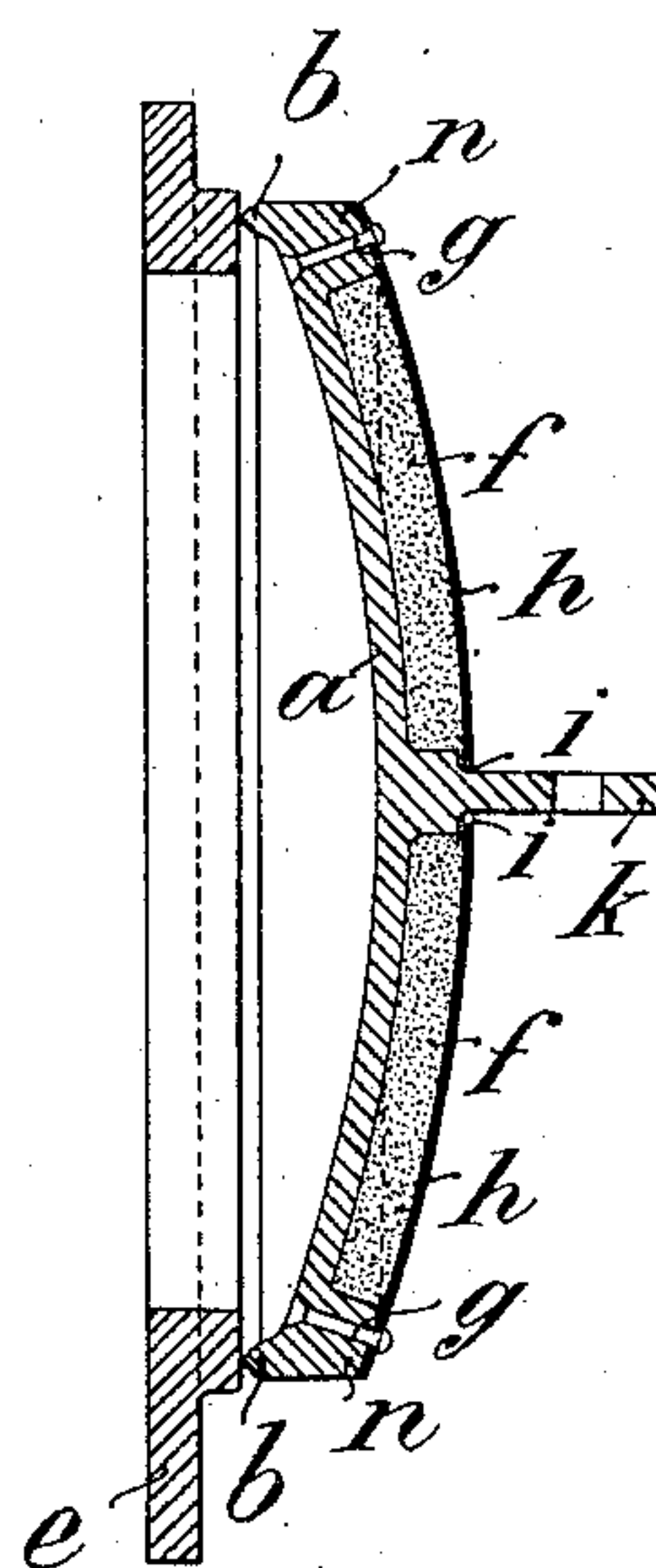
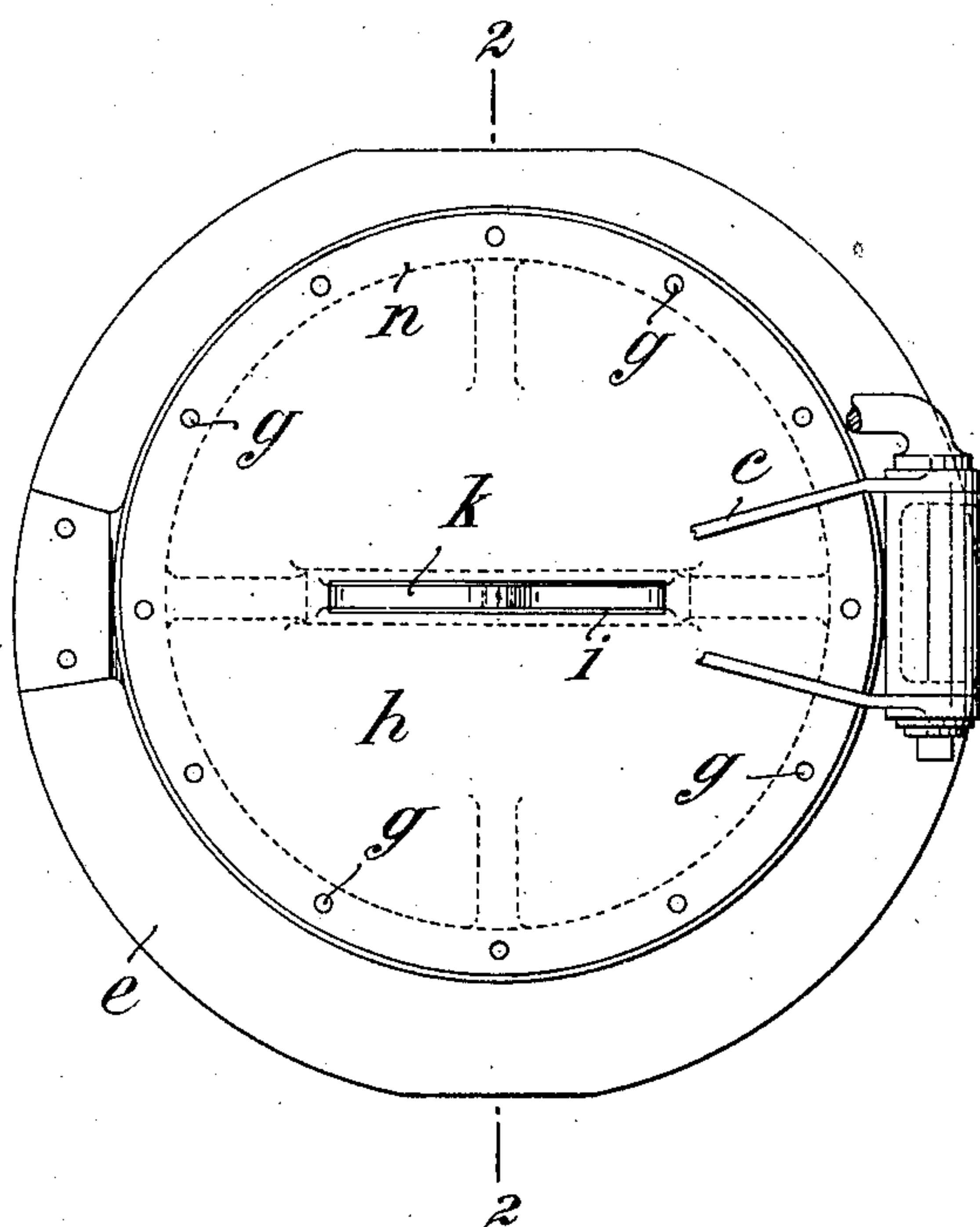
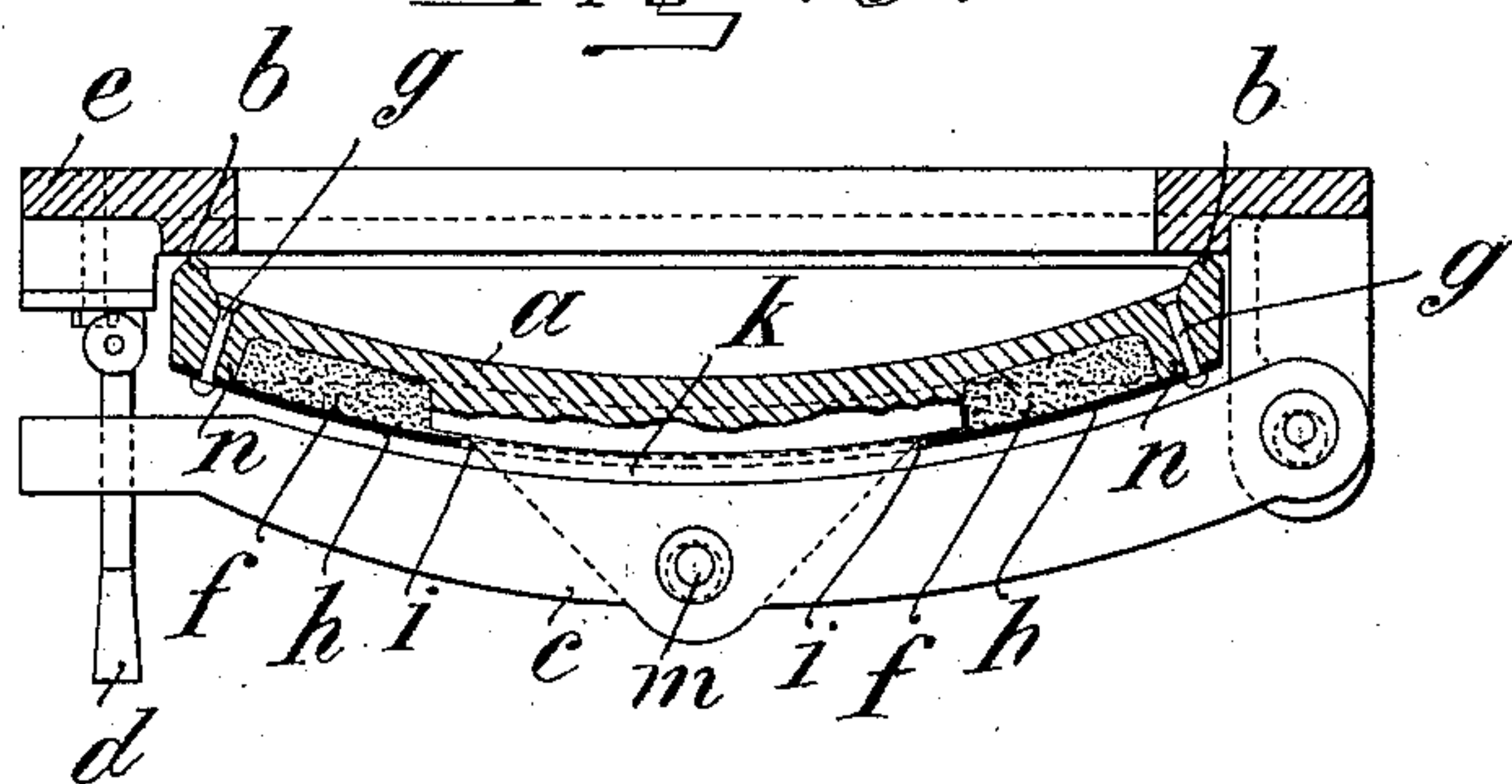


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

CARL FERDINAND ADOLPH HENTSCHEL, OF STETTIN, GERMANY.

RETORT-LID.

SPECIFICATION forming part of Letters Patent No. 763,752, dated June 28, 1904.

Application filed May 13, 1903. Serial No. 157,013. (No model.)

To all whom it may concern:

Be it known that I, CARL FERDINAND ADOLPH HENTSCHEL, a subject of the German Emperor, and a resident of Stettin, Germany, have invented a new and Improved Cover for Securing Retorts and Similar Vessels, of which the following is a full, clear, and exact description.

This invention relates to a cover or lid for securing, tightly closing, or sealing vessels, mainly retorts used for purposes of coal or other distillation, the object of the invention being to avoid as far as possible the radiation of heat from the iron lid or cover, which has hitherto proved to be a grave inconvenience in practice and one that very seriously interfered with the operation of the retorts.

In the accompanying drawings, in which similar letters denote similar parts, one form of the improved cover is illustrated in connection with a fastening arrangement on the Morton system.

Figure 1 is a top plan view showing a cover or lid for a vessel having my improvements embodied in connection therewith. Fig. 2 is a vertical section on the line 2 2 of Fig. 1, and Fig. 3 is an inverted transverse sectional view showing other features of construction and organization.

The cover-plate *a*, the inner sharp-edged flange *b* of which is in the well-known manner pressed down against the packing of the head *c* of the retort by means of a yoke *c* and a turn-over lever *d*, is provided with an outer turned-up flange *n*, forming a cup-shaped cavity. This cavity is filled with packing *f* of silicious quartz, asbestos, or other suitable material, being a non-conductor of heat, which is retained therein by means of a plate or sheet of metal *h*, secured in place by means of rivets *g*. In the center of the metal plate *h* a slot *i* is provided for the passage of the loop *k*, projecting from the cover *a*, the yoke *c* being connected to such loop by a pivot or hinge pin *m*.

By the arrangement of a packing which is a non-conductor of heat the objectionable radiation of heat from the retort-cover is reduced to a minimum. Inasmuch as the heat-excluding packing is situated outside the

cover, the top plate which holds such packing in position is secured from the action of the high temperature prevailing in the interior of the retort. No warping or burning of the said top plate can therefore take place here as would almost inevitably be the case in a short time if the packing were, as heretofore, placed inside the cover. On the contrary, the external heat insulation in accordance with this invention remains intact for a practically indefinite duration without necessitating any repairs.

What I claim, and desire to secure by Letters Patent, is—

1. A lid for vessels, having an annular upturned flange, and provided with a plate fitted to the latter, the space between said lid and plate containing non-conducting material, said lid having a projecting loop, and the plate having a slot through which the loop extends, a yoke centrally pivoted to said loop and also pivoted at one end to the vessel, and means for fastening the other end of said yoke to the vessel.

2. A lid for vessels, having an annular upturned flange, and provided with a plate fitted to the latter, the space between said lid and plate containing non-conducting material, said lid having a projecting loop and the plate having a slot through which the loop extends, a yoke centrally pivoted to said loop and also pivoted at one end to the vessel, and a turn-over lever for fastening the other end of said yoke to the vessel.

3. A retort-lid consisting of a rigid plate having an annular upturned flange, a thin plate secured to the flange, and a filling of insulating material between the two plates; said rigid plate having an integral loop extending therefrom through the filling and thin plate, and means extending entirely across said thin plate and acting on said loop for holding the parts in place.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CARL FERDINAND ADOLPH HENTSCHEL.

Witnesses:

GEO. LILICQUIST,

HANS HILDEBRAND.