

Hagar & Allyn,
Steam-Boiler Furnace,
No. 14,812, Patented May 6, 1856.

Fig. 2.

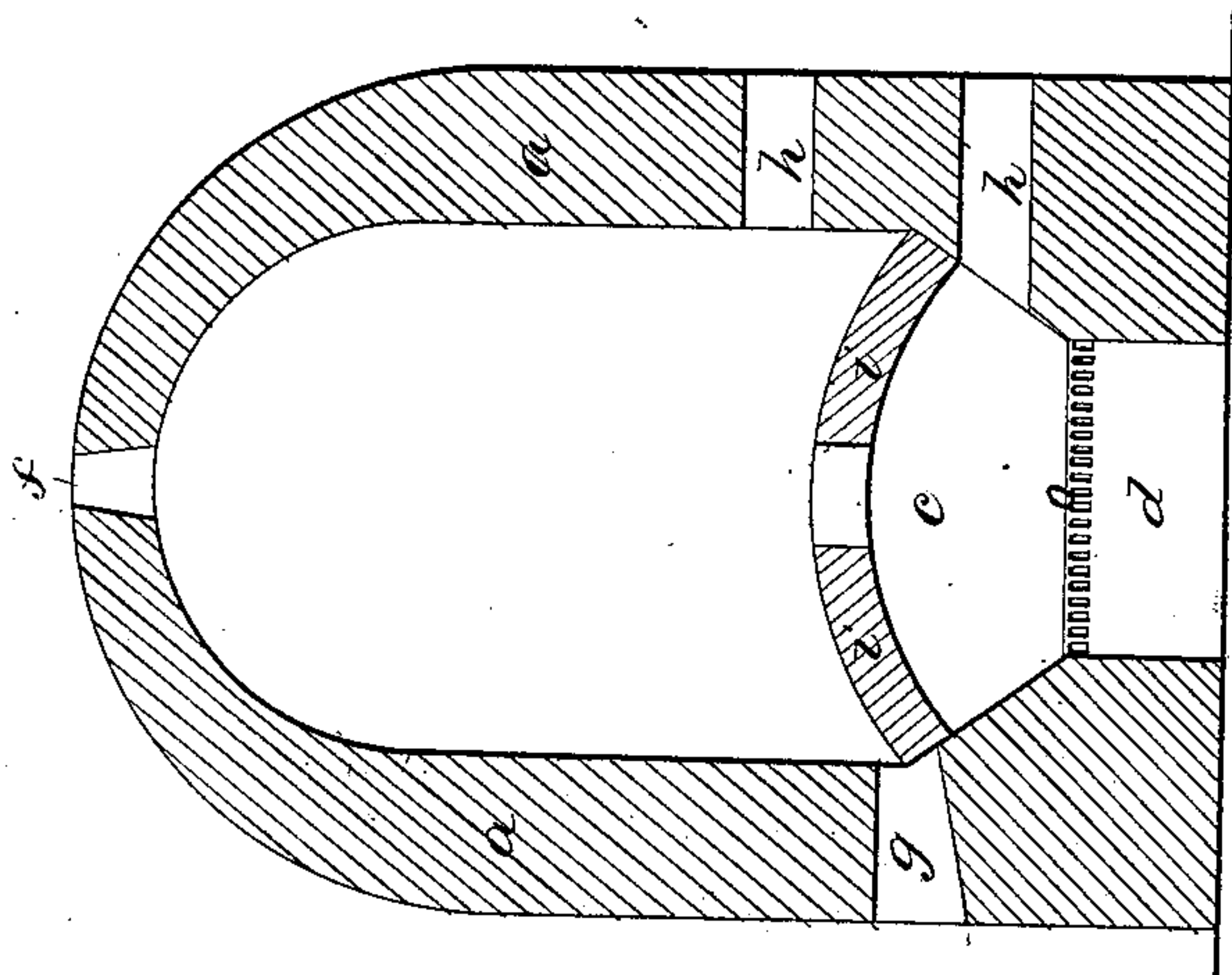


Fig. 1.

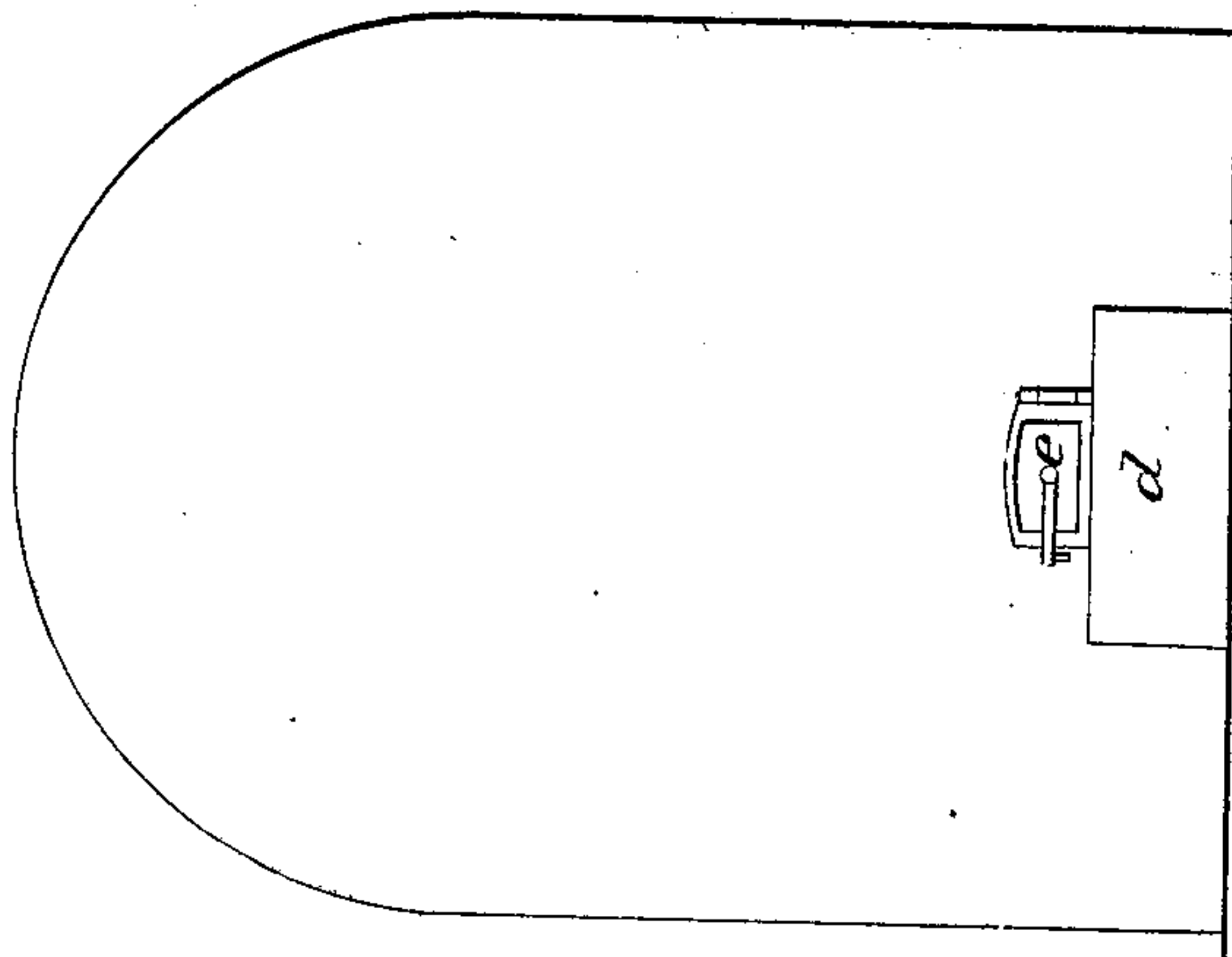
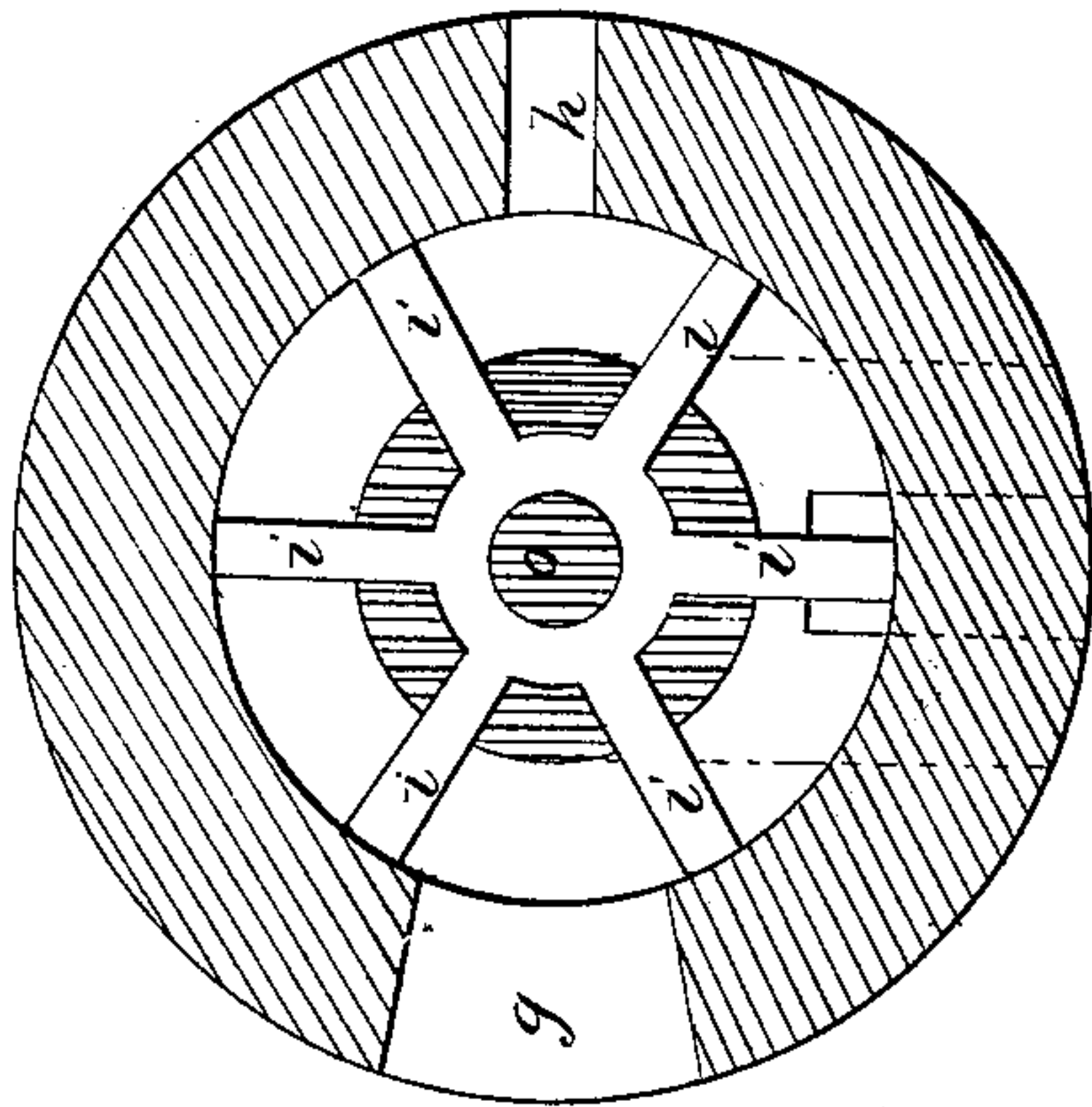


Fig. 3.



UNITED STATES PATENT OFFICE.

ABRAHAM HAGER AND YOUNGS ALLYN, OF BATON ROUGE, LOUISIANA.

BAGASSE-FURNACE.

Specification forming part of Letters Patent No. 14,812, dated May 6, 1856; Reissued May 4, 1858.
No. 549.

To all whom it may concern:

Be it known that we, ABRAHAM HAGER, of the city of Baton Rouge, parish of East Baton Rouge, and YOUNGS ALLYN, of the city of New Orleans, parish of Orleans, both State of Louisiana, have made a new and useful Improvement in Bagasse-Furnaces; and we do hereby declare the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, the same letters being used as references in each view.

Figure 1, side elevation, a general view of that class of bagasse furnaces. Made cylindrical, or other forms, constructed of brick, or other non-combustible material; having the vertex an arch formed from the walls of the same, with an opening through said arch to admit the bagasse to pass from the mill, to the interior of the furnace; showing furnace door, *e*, grate bars, *o*, ash pit *d*, to admit the atmosphere through the grate bars, to support combustion in the furnace, *c*, as shown in Fig. 2.

Fig. 2, sectional side elevation, showing exterior and interior views of furnace; *a*, *a* the main body, or walls of the furnace, forming sides and vertex; *p*, the opening through which the bagasse is admitted from the mill; *c*, that portion of the furnace supplied with air through the grate bars *s*; *l*, furnace door, to allow substances to be removed from the furnace *c*; also to replenish with fuel if re-

quired; *h*, *h*, openings to allow the bagasse to be stirred occasionally if necessary; *d*, ash pit below the grate bars, *o*; *g*, the flue for the heated gas from combustion to pass from the furnace to the steam boilers, or other subjects where the heat may be required; *i*, *i*, skeleton arch formed across the interior of the furnace, above that portion marked, *c*; on which the bagasse in descending lodges temporarily, to allow the moisture to be evaporated, preparatory to make it a useful fuel, before falling on that portion in a state of combustion.

Fig. 3, a transverse section of lower part of the furnace; *i*, *i*, *i*, *i*, *i*, *i*, branches of the skeleton arch, extending from the sides of the furnace, and meeting near the center of the same, supporting a cylindrical tube, made a part of said skeleton arch.

After this our description of improvement in bagasse furnaces—

What we claim as our invention, and desire to secure by Letters Patent, is—

The application to bagasse furnaces, of a skeleton arch, made and arranged as described, which will retard the bagasse in falling direct on such portions of the fuel in a state of combustion; or any other mode substantially the same, which will produce the same effect.

ABRAHAM HAGER
YOUNGS ALLYN

Witnesses:

FRANCIS ARMSTRONG,
Jos. F. DICK.