

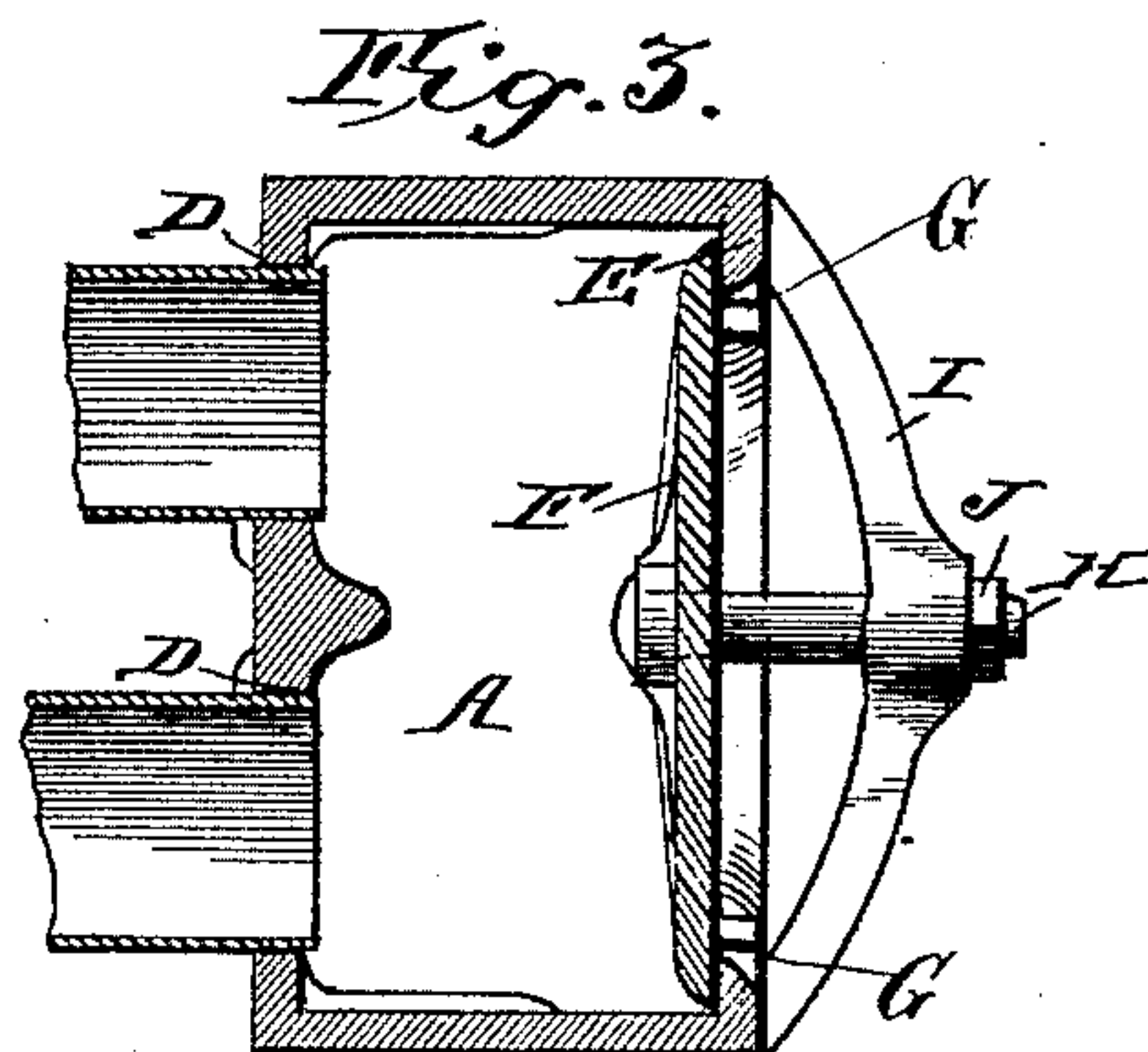
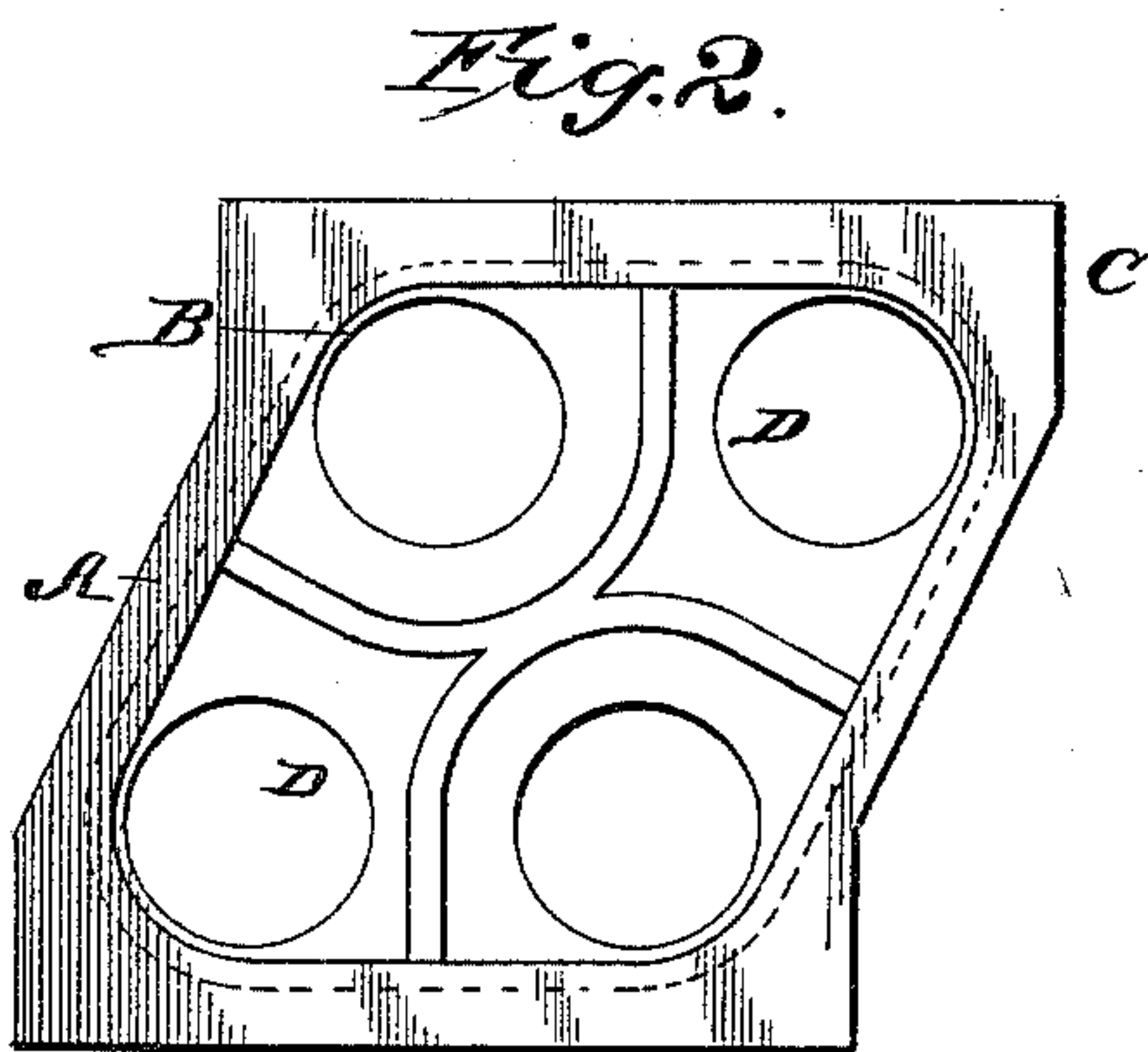
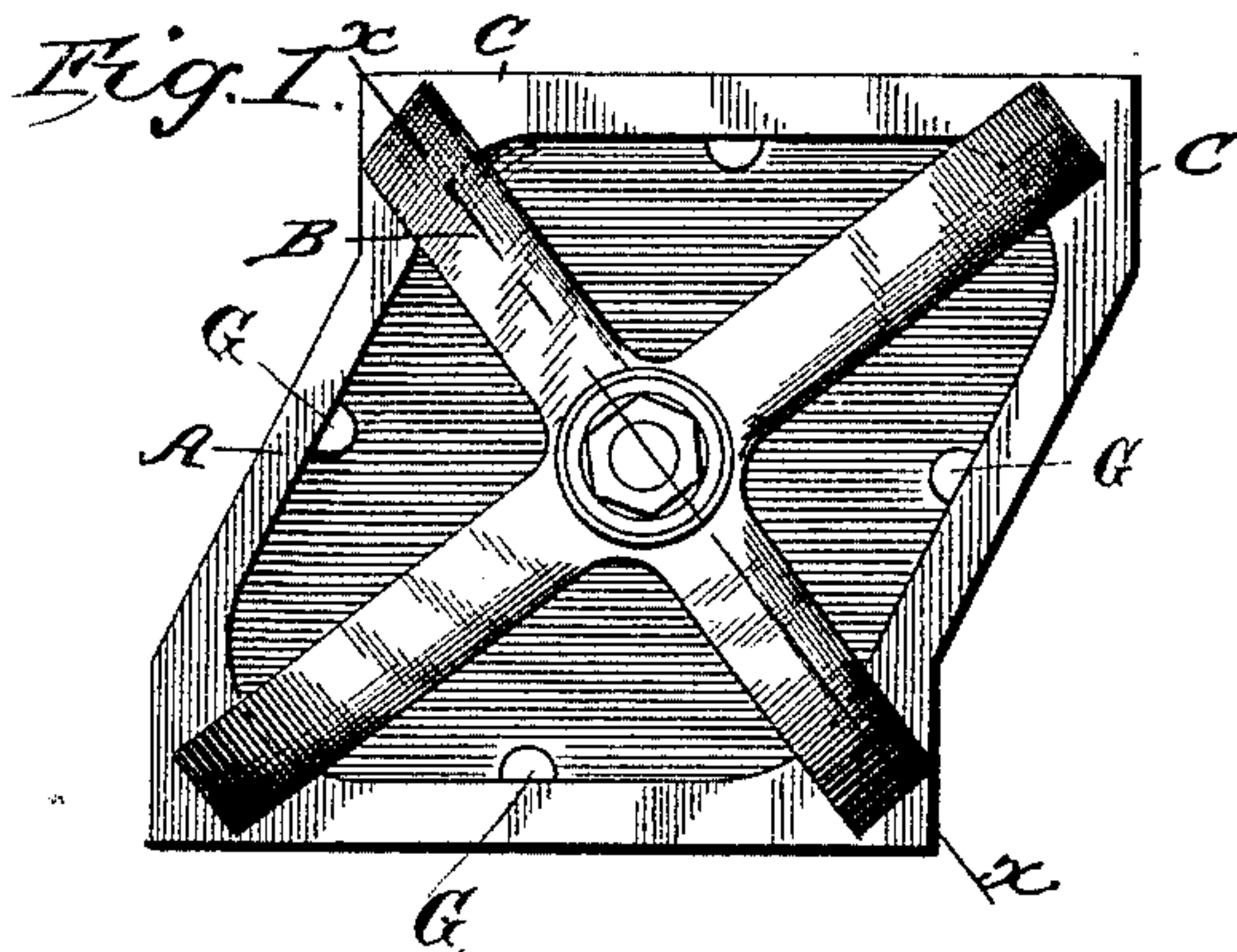
(No Model.)

R. R. ZELL.

HEADER FOR SECTIONAL BOILERS.

No. 327,850.

Patented Oct. 6, 1885.



WITNESSES:

Edw. A. Dutovich
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UNITED STATES PATENT OFFICE.

ROBERT R. ZELL, OF BROOKLYN, ASSIGNOR TO THE SAFETY STEAM GENERATOR COMPANY, OF NEW YORK, N. Y.

HEADER FOR SECTIONAL BOILERS.

SPECIFICATION forming part of Letters Patent No. 327,850, dated October 6, 1885.

Application filed March 24, 1885. Serial No. 160,006. (No model.)

To all whom it may concern:

Be it known that I, ROBERT R. ZELL, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Headers for Sectional Boilers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is an end view of one of my improved headers for sectional boilers. Fig. 2 is an end view of the same, the end-plate having been removed; and Fig. 3 is a vertical transverse sectional view taken on the line *x x* in Fig. 1.

The same letters refer to the same parts in all the figures.

My invention has relation to headers for steam-boilers, and it contemplates certain improvements upon the header for which Letters Patent No. 304,889 were granted to me on the 9th day of September, 1884; and it consists in the improved construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the drawings hereto annexed, A designates the box or header, which is preferably of rhomboidal shape, as shown, having rounded corners B and projecting triangular webs C, whereby the several headers employed in making up the ends of a sectional boiler may be neatly fitted together. The header is cast in a single box-like piece, the inner end of which is provided with openings D, to receive the ends of the boiler tubes.

The outer end of the header-box is open, and provided with an inwardly-extending projection or flange, E, the inner edge of which is faced off true, so as to afford a smooth bearing for the cover-plate F, the outside of which is likewise faced off at the edge, so as to pro-

vide a tight joint. Said cover-plate is located within the header-box, from which, however, it may be readily removed when desired, and it may be provided, near the edge of its outer face, with one or more guards, G, whereby it may be retained in its proper position.

The cover-plate is provided with a centrally-located outwardly-extending bolt, H, extending through a perforation in a yoke, I, having its bearings at the corners of the header-box. By tightening a nut, J, upon the end of the bolt H, it will be seen that the cover-plate is drawn up against the flange E of the header-box, thus forming a perfectly tight joint, which even becomes tighter as the steam-pressure in the header-box increases.

By this construction it will be seen that the cover-plate may be readily removed from the header-box, thus affording access to all parts of the interior of the latter. The header-box being constructed in a single piece or casting, all superfluous joints or connections are dispensed with, thereby avoiding danger of leakage, and saving the cost of fitting the parts, expense for bolts, and the like.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a header for sectional boilers, the combination of a rhomboidal header-box, consisting of a single casting and having at its outer end an inwardly-extending flange faced off on its inner side, the interiorly-located cover-plate faced off at its outer edge and provided with one or more guards, the fastening-bolt, and the yoke, all constructed and arranged substantially as and for the purpose herein shown and specified.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

ROBERT R. ZELL.

Witnesses:

LUTHER B. EATON,
J. B. STEWART.