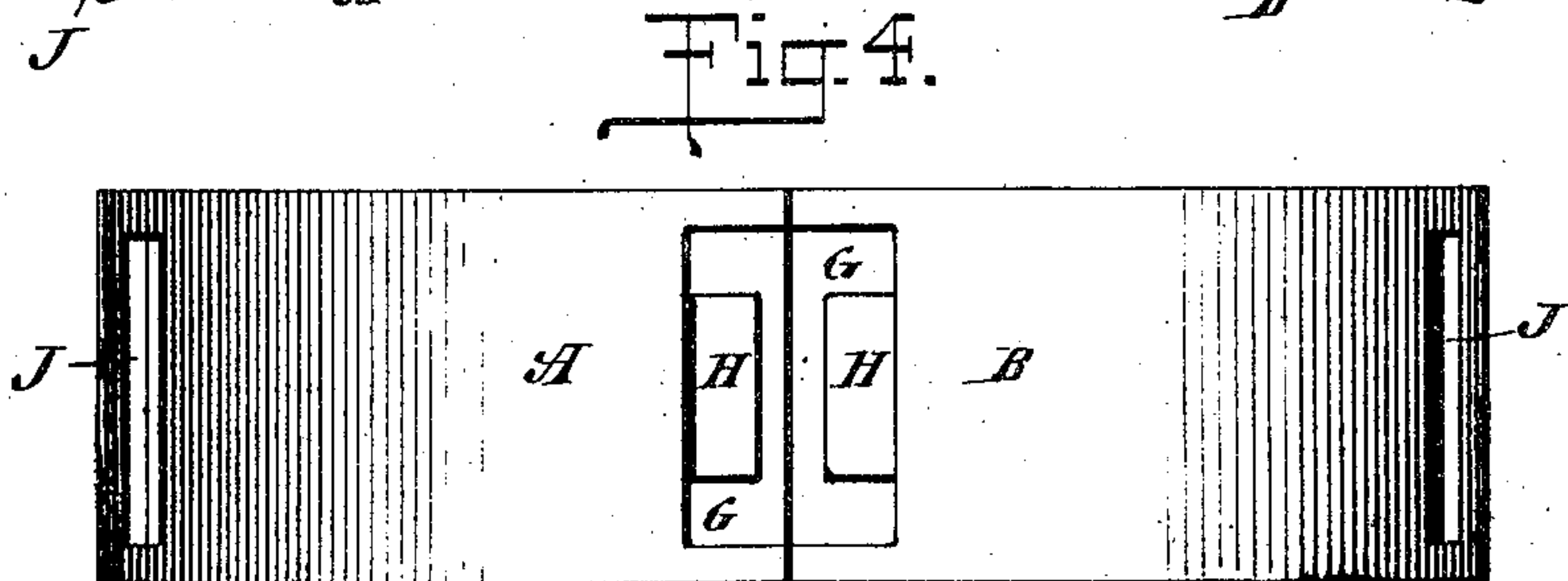
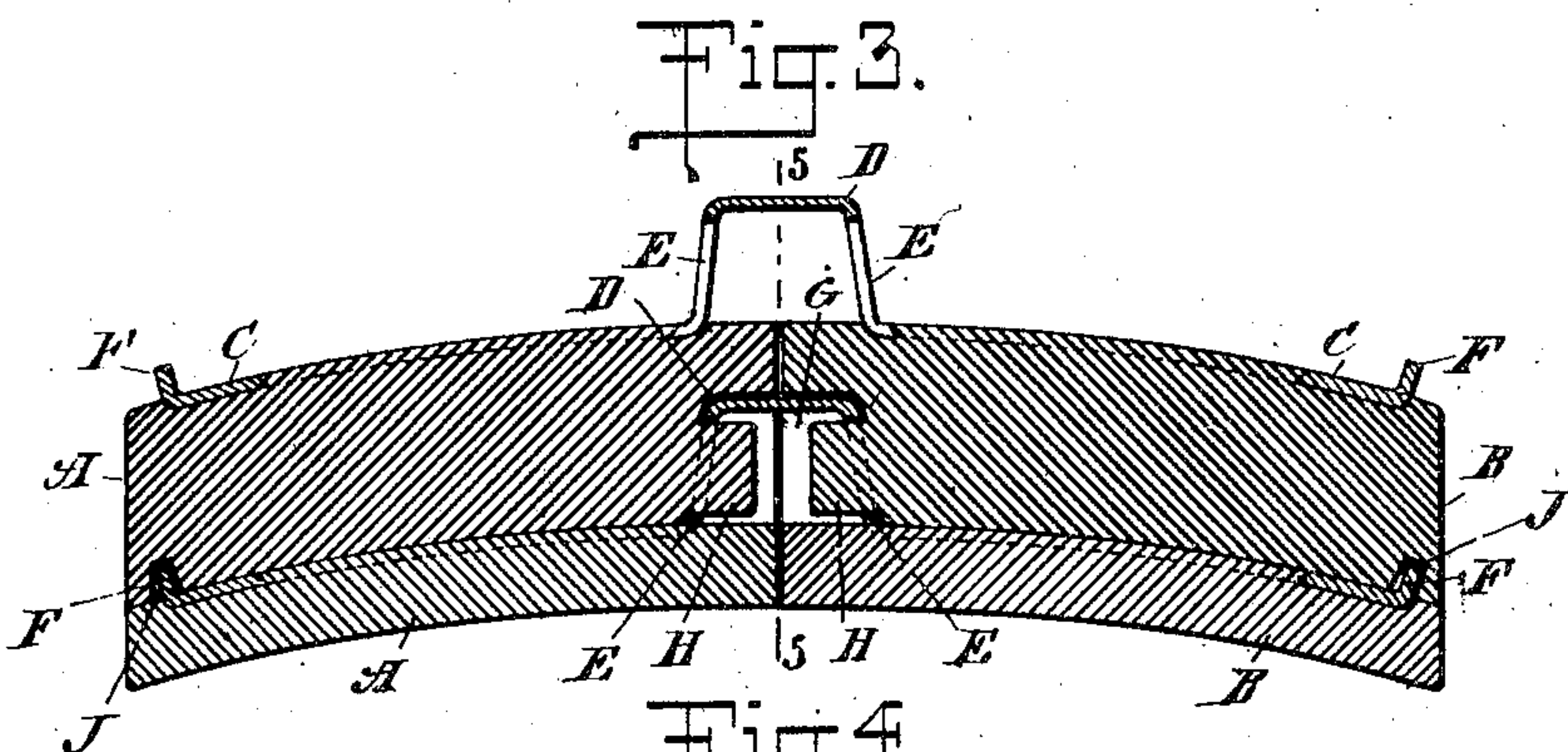
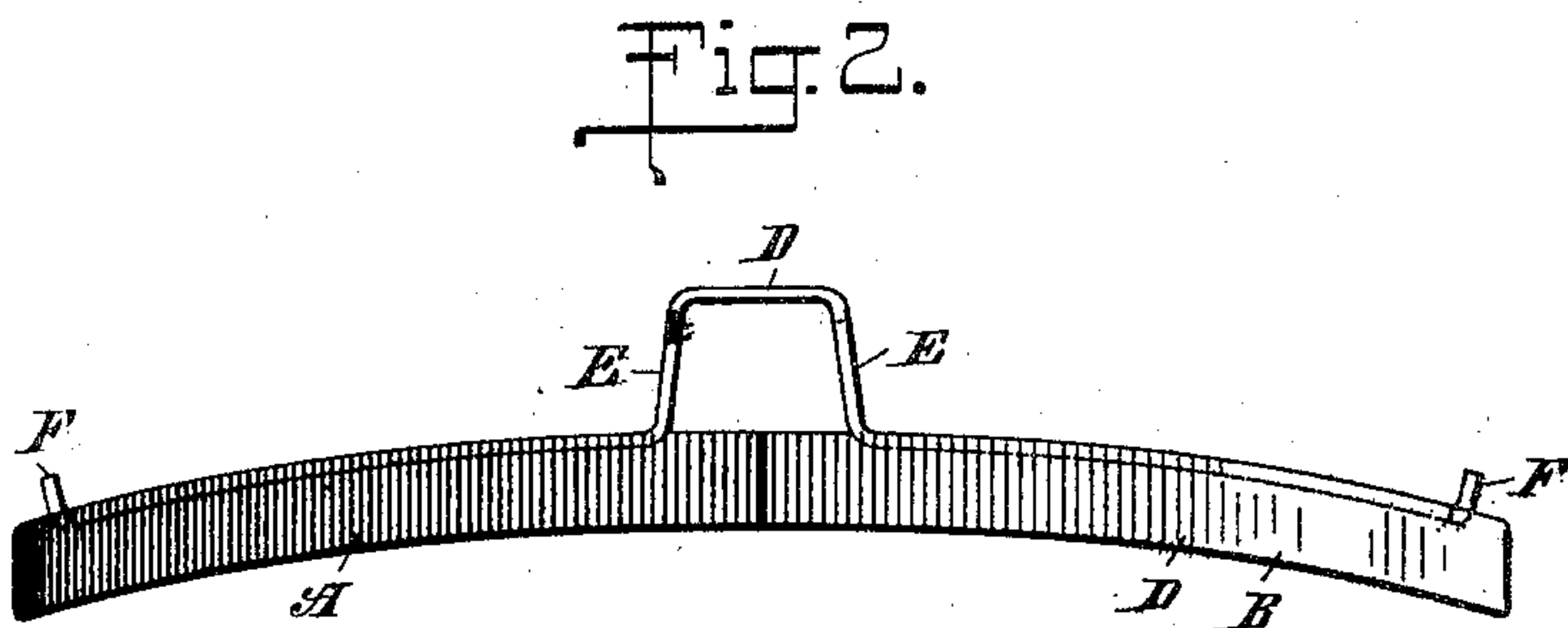
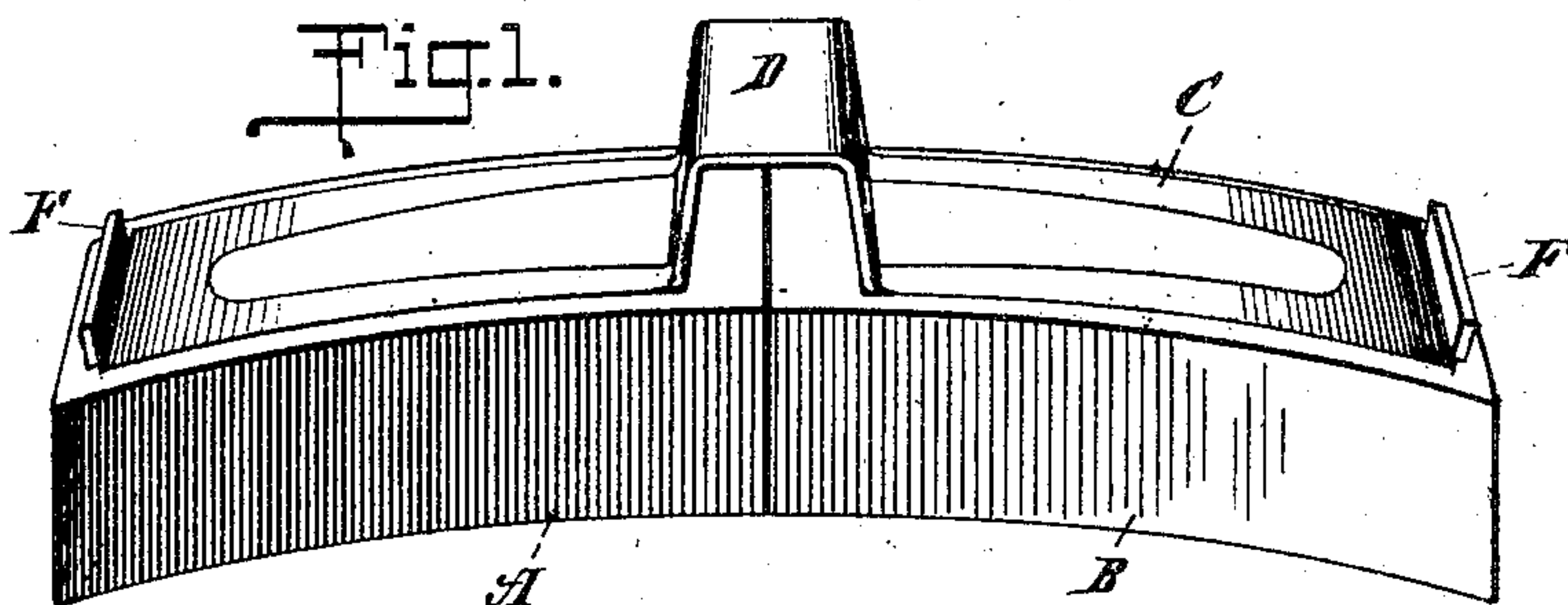


No. 887,244.

PATENTED MAY 12, 1908.

J. D. GALLAGHER.  
BRAKE SHOE.

APPLICATION FILED OCT. 22, 1907.



WITNESSES  
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# UNITED STATES PATENT OFFICE

JOSEPH D. GALLAGHER, OF GLENRIDGE, NEW JERSEY, ASSIGNOR TO EDWARD H. FALLOWS,  
TRUSTEE, OF NEW YORK, N. Y.

## BRAKE-SHOE.

No. 887,244.

Specification of Letters Patent.

Patented May 12, 1908.

Application filed October 22, 1907. Serial No. 393,666.

*To all whom it may concern:*

Be it known that I, JOSEPH D. GALLAGHER, a citizen of the United States, and a resident of Glenridge, in the county of Essex and State of New Jersey, have made and invented certain new and useful Improvements in Brake-Shoes, of which the following is a specification.

My invention relates to an improvement in brake shoes, and more particularly to that type of brake shoe having a steel or wrought metal back.

The principal object of my invention is to provide means whereby a partially worn shoe of that type may be readily attached to a new shoe, thereby enabling the partially worn portion to be completely used up, and avoid any waste of material.

With these and other objects in view, my invention consists in the construction and combination of parts, as will be hereinafter fully described and specifically pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective view of my improved shoe. Fig. 2 is a side elevation of the shoe after having been partially worn down. Fig. 3 is a sectional view showing the partially worn shoe attached to a new one. Fig. 4 is a bottom plan view, and Fig. 5 is a sectional view on the line 5—5 of Fig. 3.

As is clearly shown in the drawings, the body portion of the shoe, which may be made of any suitable metal or metals, preferably cast iron, is divided transversely across the center, thus forming two sections A and B, which are held in position, with their inner ends abutting, by means of the back C. This back, which consists of a plate of steel, wrought iron, or any other suitable ductile or tough metal, is provided with a central attaching lug D having openings E formed therein, adapted to receive the attaching key (not shown), and with the upturned ends F forming end stops against which the brake head is adapted to bear. The back is made of a comparatively heavy plate throughout its length, excepting at the central portion which forms the attaching lug, at which point it is thinned or reduced by elongation or any other suitable means, to about one-half of its original thickness, thereby allowing it to be sprung or bent for the purpose hereinafter set forth.

While the sections of the brake shoe may

be secured to the back in any suitable manner, I prefer to cast them directly thereto in the manner well understood by those skilled in the art. The inner or abutting ends of the sections are provided with a recess G which extends inwardly from the face of the shoe opposite to the attaching lug D. The depth and width of this recess are substantially those of the attaching lug, whereby said recess is adapted to receive the attaching lug of a partially worn shoe. Extending inwardly from the sides of said recess are the lugs H, which are adapted to pass through the openings E in the attaching lug of a partially worn shoe, and hold the same securely in place, as is clearly shown in Figs. 3 and 5. The wearing surfaces of the brake shoe sections are provided with the recesses J, adapted to receive the upturned ends F of the back of the partially worn shoe. The back and face of the shoe are given the same degree of curvature, in order that the back of the partially worn shoe will fit snugly against the face of the new one to which it is to be attached.

When the brake shoe has been worn down in service, it is detached from the brake head and attached to a new shoe in the following manner: Owing to the fact that the metal which forms the detaching lug is thinned or reduced, as hereinbefore described, the sections of the new shoe may be drawn apart in the direction of the length of the shoe, whereby the lugs H may be separated a sufficient distance to allow the attaching lug of the partially worn shoe to be inserted between them, after which the said sections are sprung or forced back into their normal positions, the lugs H passing through the openings E in the attaching lug of the worn shoe, thereby holding it securely in place. The new shoe, to which the worn shoe has been attached, is then fastened to the brake head in the usual manner. In service, the body portion and back of the old shoe will be completely worn away, after which the body portion of the new shoe will be worn down in the usual manner. When the new shoe has been worn down sufficiently, it in turn may be detached from the brake head and attached to another shoe in the manner above described. It will thus be seen that by means of my invention, the brake shoe will be completely used up in service, thereby avoiding any waste of material.

Having fully described my invention, what



I claim as new and desire to secure by Letters Patent, is:—

1. A brake shoe comprising a sectional body and a one piece back permanently secured thereto, substantially as described.
2. A brake shoe comprising a body divided transversely into two sections, and a one piece back permanently secured thereto, substantially as described.
3. A brake shoe comprising a sectional body and a one piece back secured thereto, said back being provided with a lug of comparatively thin metal, substantially as described.
4. A brake shoe comprising a sectional body, said sections having abutting ends, a back permanently secured to said sections, and recesses formed in the abutting ends, substantially as described.

5. A brake shoe comprising a body composed of sections abutting at their ends, a back permanently secured to said sections, a recess formed in said abutting ends and lugs extending into said recess, substantially as described.

6. A brake shoe comprising a sectional body, a one piece back permanently secured thereto, and means whereby another shoe may be attached to said sectional body, substantially as described.

Signed at New York borough of Manhattan, in the county of New York and State of New York this 18th day of October, A. D. 1907.

JOSEPH D. GALLAGHER.

Witnesses:

M. VAN NORTWICK,  
JOHN B. WHITE.