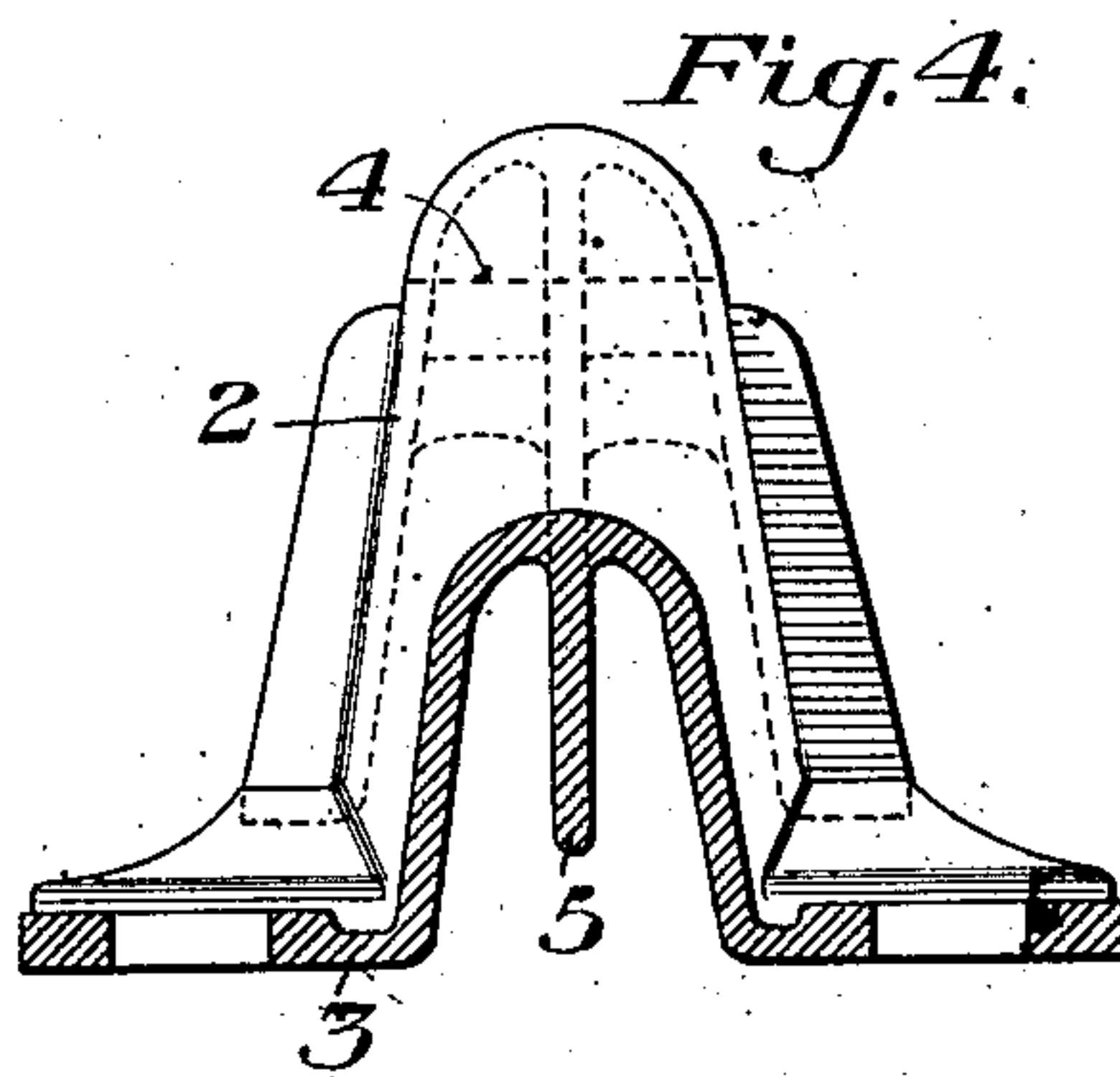
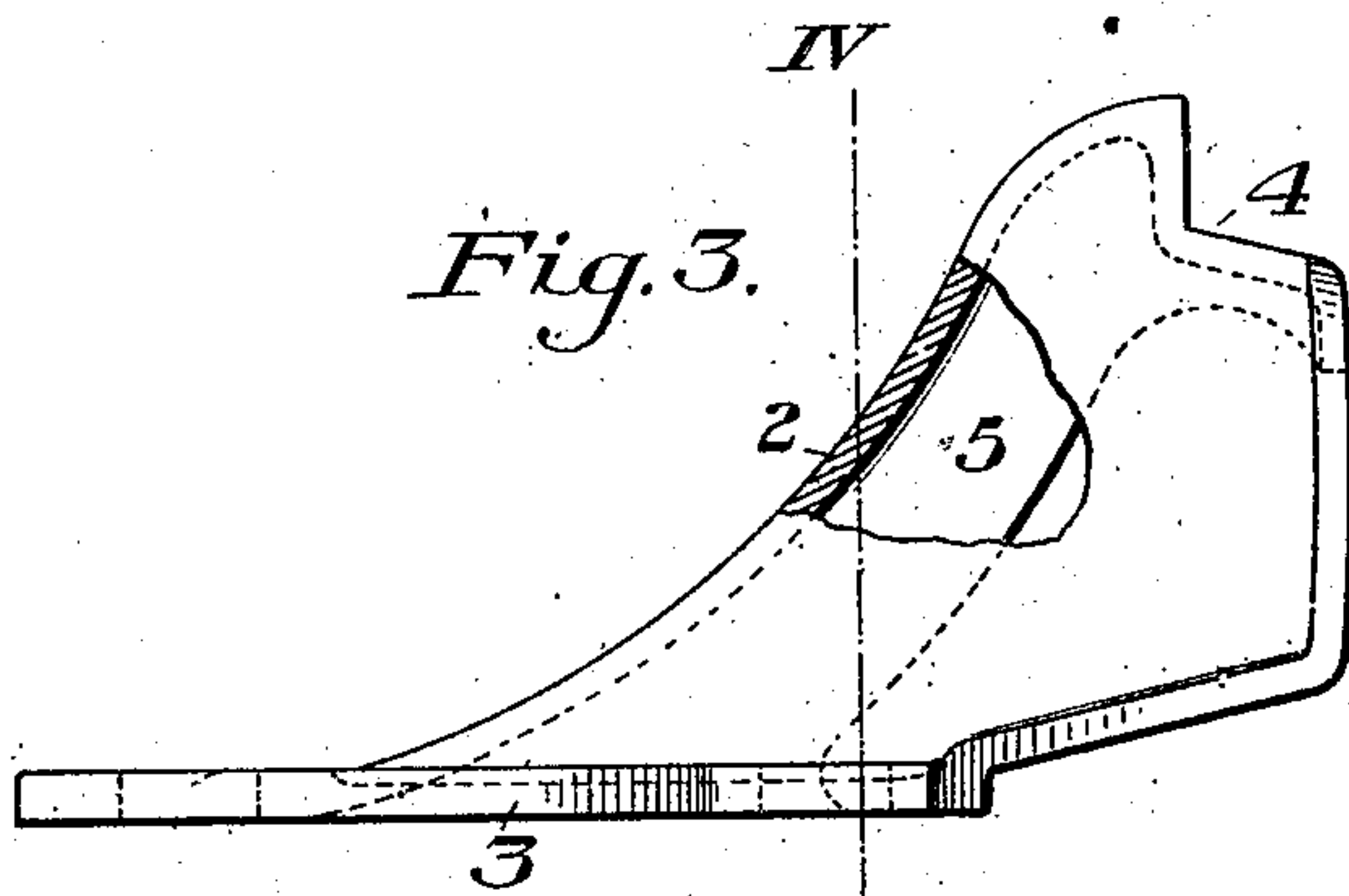
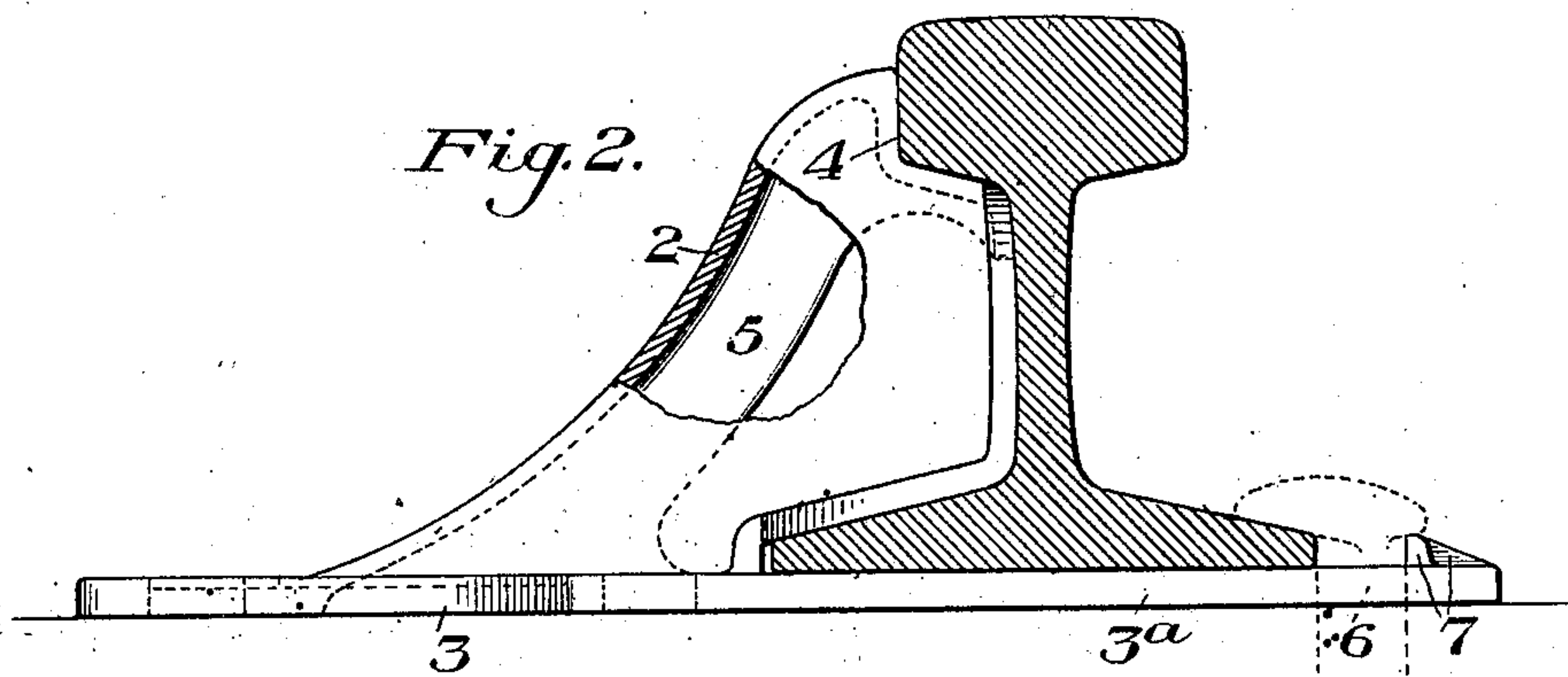
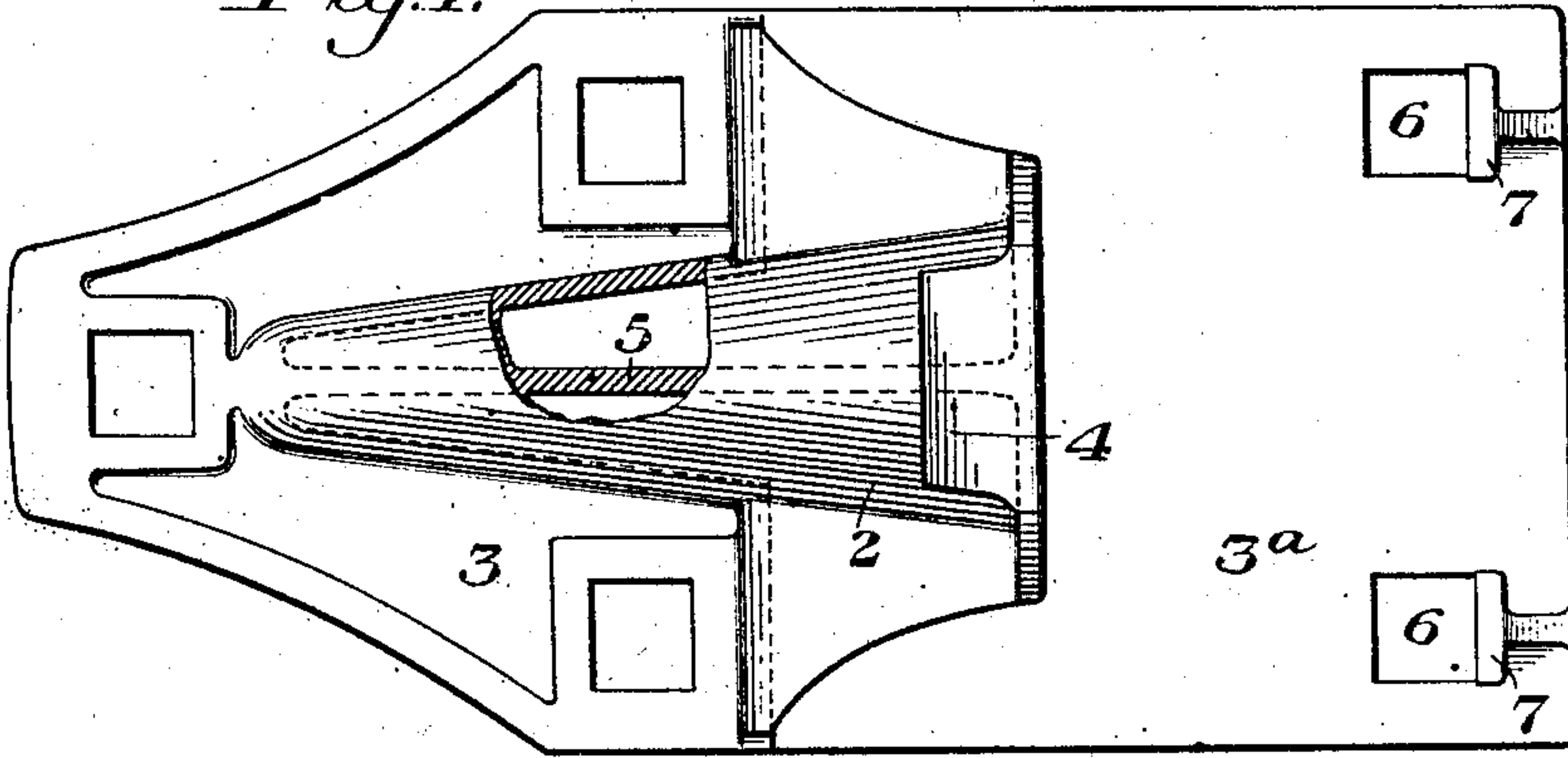


# RAIL BRACE.

**956,282.**

*Fig. 1.*



RA Balderson  
Water Farmans

a. o. Buckins Jr  
by Baberue, Paynes & Parnell,  
his Attys

# UNITED STATES PATENT OFFICE.

ALBERT O. BUCKIUS, JR., OF CHICAGO, ILLINOIS, ASSIGNOR TO THE NATIONAL MALLEABLE CASTINGS COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

## RAIL-BRACE.

956,282.

Specification of Letters Patent.

Patented Apr. 26, 1910.

Application filed January 29, 1910. Serial No. 540,769.

*To all whom it may concern:*

Be it known that I, ALBERT O. BUCKIUS, Jr., a resident of Chicago, Cook county, Illinois, have invented a new and useful Improvement in Rail-Braces, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view partly broken away of a combined rail brace and tie plate embodying my invention; Fig. 2 is an end view of the same applied to the rail; Fig. 3 is an end view showing a modification; and Fig. 4 is a section on the line IV—IV of Fig. 3.

My invention has relation to rail braces, and is designed to provide a rail brace which will possess a maximum amount of strength with a minimum amount of metal, the metal being so disposed as to efficiently resist the stresses to which the braces are subjected in service.

In accordance with my invention, I provide a rail brace, preferably in the form of a malleable casting having a rail bracing member 2 integral with and rising from a base plate 3. The bracing member 2 is of arched hollow form, and is shouldered at its upper end as indicated at 4 to fit underneath the head of the rail in the usual manner. In order to enable the brace to be made of thin metal, and to be of a minimum weight, and yet possess the requisite strength, I provide the hollow brace member 2 with an internal bracing or strengthening rib 5. This rib is preferably arranged centrally within the hollow brace member, and extends from the top to the bottom thereof, extending inwardly from the outer wall or arch of the brace. By the provision of this rib, I am enabled to materially re-

duce the thickness and weight of the remaining portions of the rail brace, since the rib adds very greatly to the strength of the brace and to its capacity for resisting the stresses to which it is subjected.

The base portion 3 of the brace may be extended to form a tie plate portion 3<sup>a</sup>, as shown in Figs. 1 and 2, or this tie plate feature may be omitted, as shown in Figs. 3 and 4.

In the combined rail brace and tie plate formed, inasmuch as the base and tie plate portion are also preferably of reduced thickness, I preferably provide the spike holes 6 with the T-shaped reinforcing braces 7 at their outer edges, as shown in Figs. 1 and 2, which gives a greatly increased bearing for the spikes.

The advantages of my invention will be readily understood, since it provides simple and efficient means whereby the weight of the rail braces and the amount of metal required for their construction may be reduced to a minimum without impairing their strength.

What I claim is:—

1. A rail brace having an upwardly extending hollow bracing member formed with an interior bracing or strengthening rib; substantially as described.

2. A rail brace having an upwardly extending hollow arched bracing member formed with an interior strengthening rib extending inwardly from its outer wall; substantially as described.

In testimony whereof, I have hereunto set my hand.

ALBERT O. BUCKIUS, JR.

Witnesses:

GEO. H. PARMELEE,  
H. M. CORWIN.