

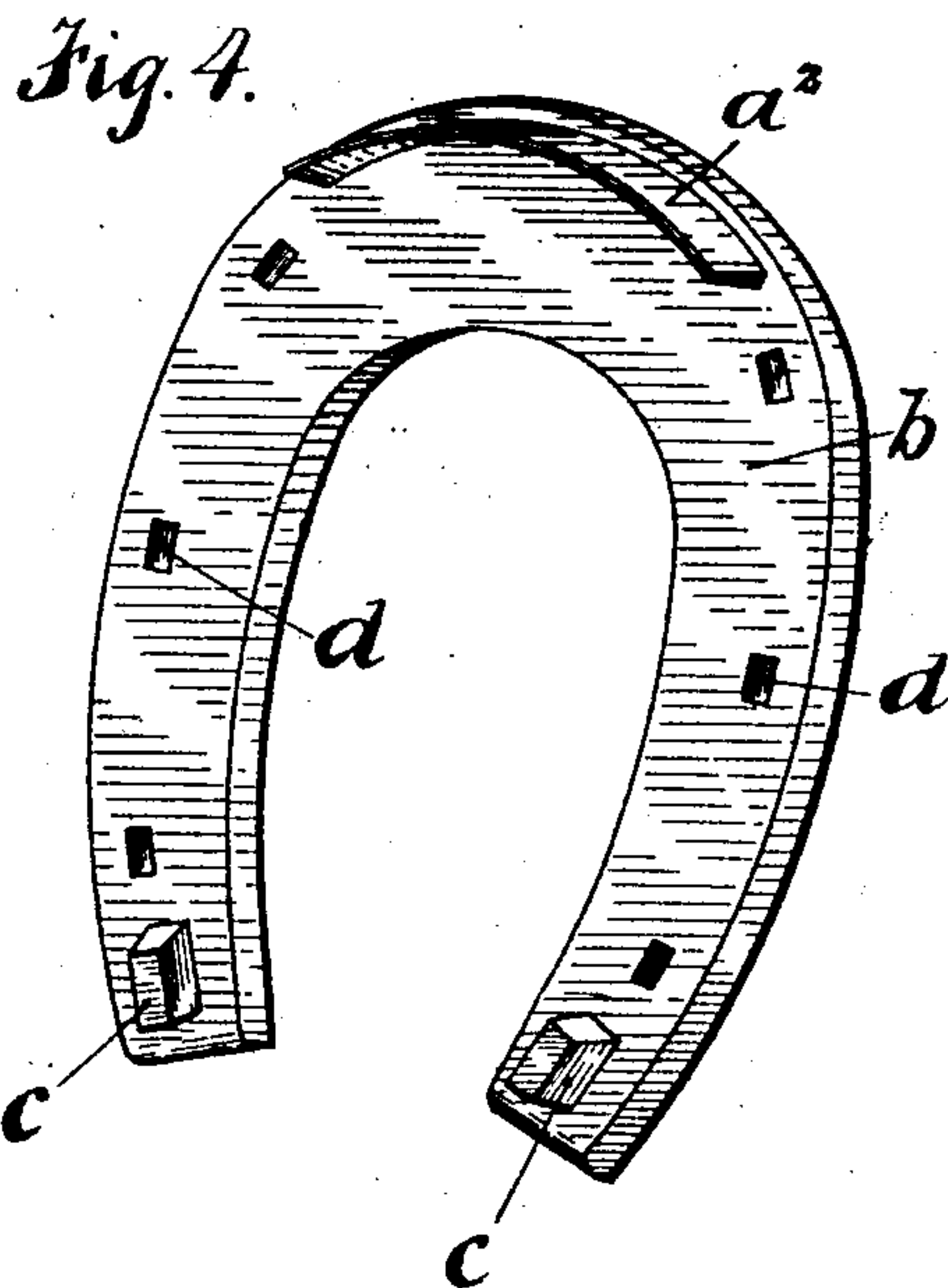
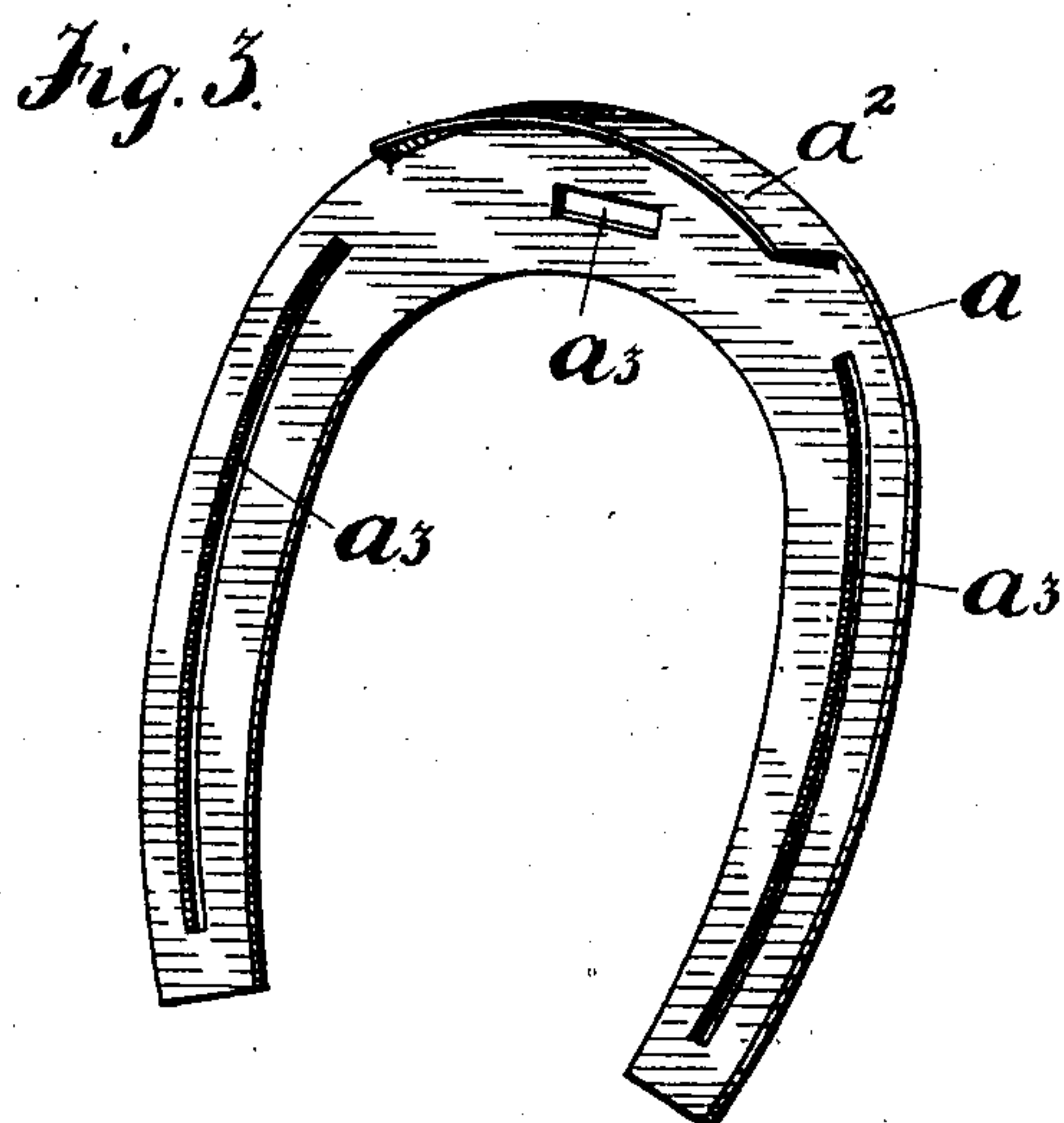
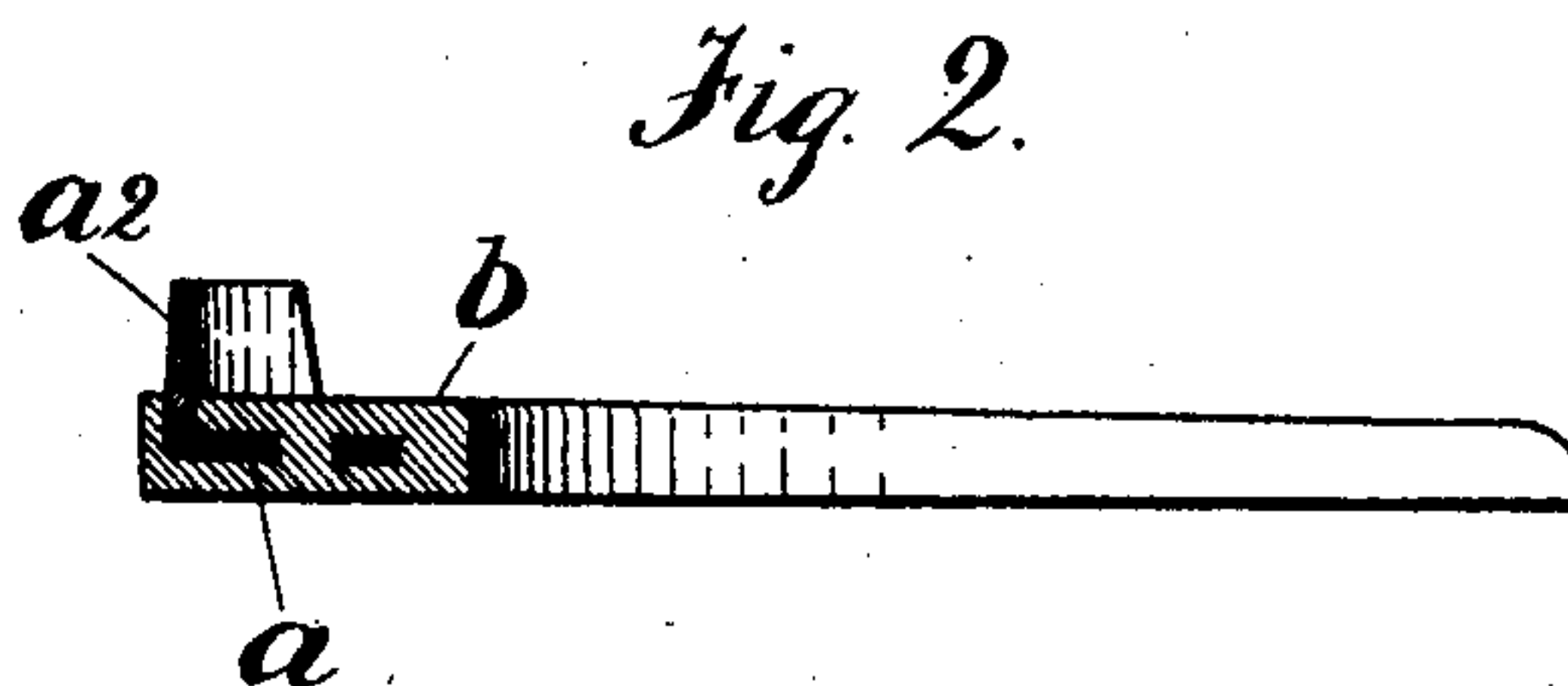
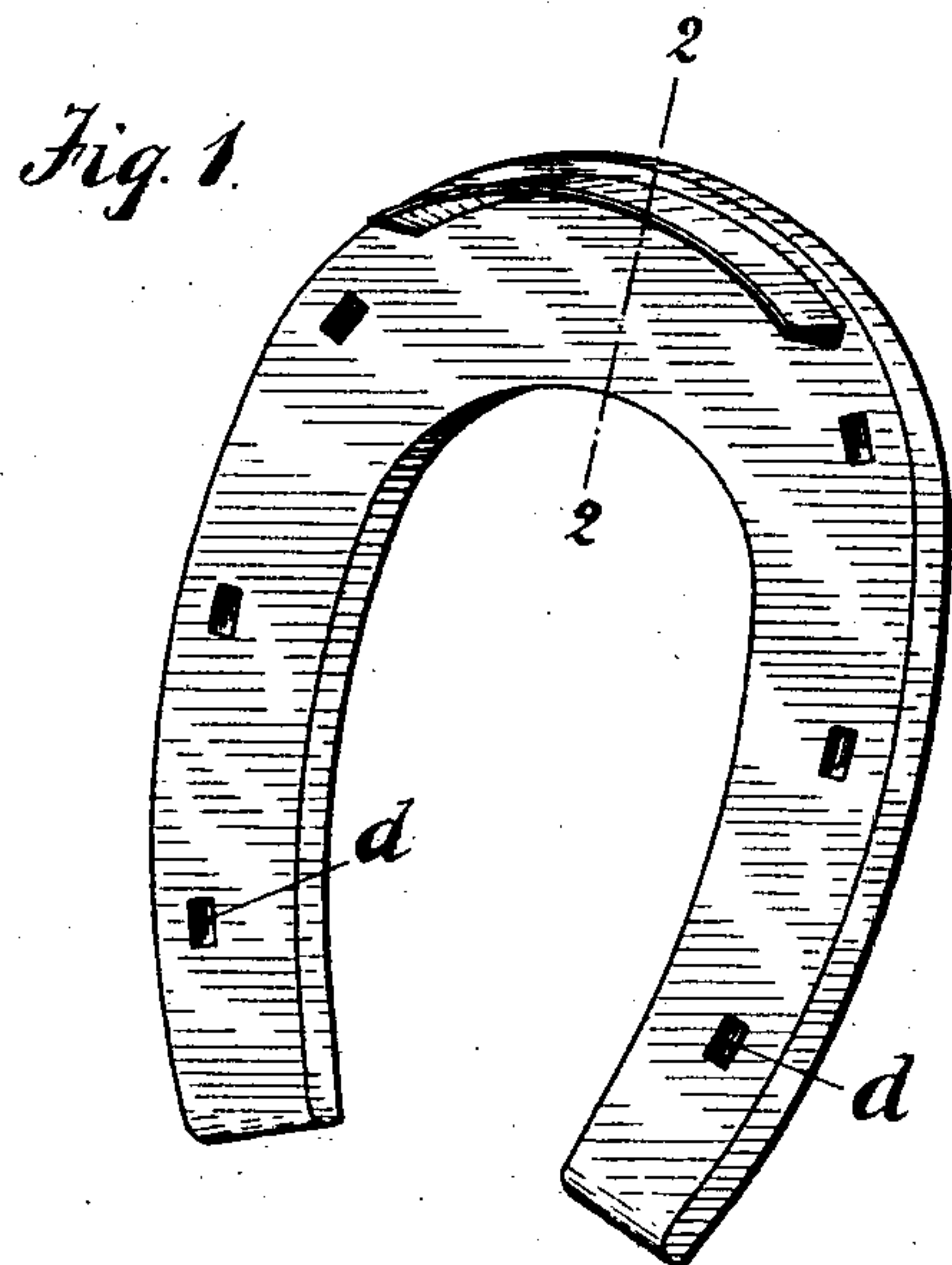
No. 765,177.

PATENTED JULY 19, 1904.

E. GRIFFITHS.  
HORSESHOE.

APPLICATION FILED AUG. 18, 1903.

NO MODEL.



WITNESSES

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BY

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# UNITED STATES PATENT OFFICE.

EDWARD GRIFFITHS, OF PENRITH, ENGLAND.

## HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 765,177, dated July 19, 1904.

Application filed August 18, 1903. Serial No. 169,859. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD GRIFFITHS, a subject of the King of Great Britain, residing at Eamont Bridge, Penrith, county of Cumberland, England, have invented certain new and useful Improvements in Horseshoes, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide a horseshoe composed of a core or frame of steel which is embodied in or covered by a body portion of aluminium, whereby a shoe is rendered very light and sufficiently strong for all necessary purposes, a further object being to provide a horseshoe which is designed particularly for racing-horses, but may be used whenever light shoes are required.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a perspective view of my improved horseshoe complete; Fig. 2, a cross-section thereof through the toe-calk and on line 2 2 of Fig. 1. Fig. 3 is a perspective view of the steel core or frame; and Fig. 4, a view similar to Fig. 1, but showing the shoe provided with heel-calks.

In the practice of my invention I provide a core or frame *a*, as shown in Fig. 3, which is composed of steel and which is thickened or strengthened at the toe portion and provided with a toe-calk *a*<sup>2</sup>, which may be formed thereon in any desired manner, and said core or frame portion is also provided with slots *a*<sup>3</sup> to provide facilities for forming the nail-holes in the finished shoe and partly with the object for reducing the weight of the shoe to the lowest minimum consistent with the re-

quired strength. The core or frame *a* is embedded in or covered with the body *b*, of aluminium, in such a manner that the toe-calk only projects, as shown in Fig. 1, or so that the toe-calk and heel-calks *c* will also project as shown in Fig. 4, if it be desired to provide heel-calks. In covering the core or frame with aluminium the said core or frame is placed in a mold, provision being made for holding it in the required position, and molten aluminium is then poured into the mold, so as to fully cover or embed the core or frame, or I may make a separate casting and insert the core or frame afterward and secure the same by means of rivets or screws.

The nail-holes *d* are made in the shoe in any desired manner, and it will be understood that aluminium in any of its forms or alloys may be employed, the only object in this connection being to provide a shoe which is not only very light, but which also possesses the required strength.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A horseshoe comprising a core or frame of flat steel entirely inclosed in a body portion of aluminium, said core or frame and said body portion being provided with nail slots or openings in the sides and toe portion of the shoe, and the core or frame being provided with toe and heel calks which extend through the bottom of the body portion, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 25th day of July, 1903.

EDWARD GRIFFITHS.

Witnesses:

THOMAS SLACK STRONG,  
HENRY HODGSON.