

No. 709,425.

A. B. TAYLOR.

Patented Sept. 16, 1902.

LAST.

(Application filed Mar. 24, 1902.)

(No Model.)

Fig. 1.

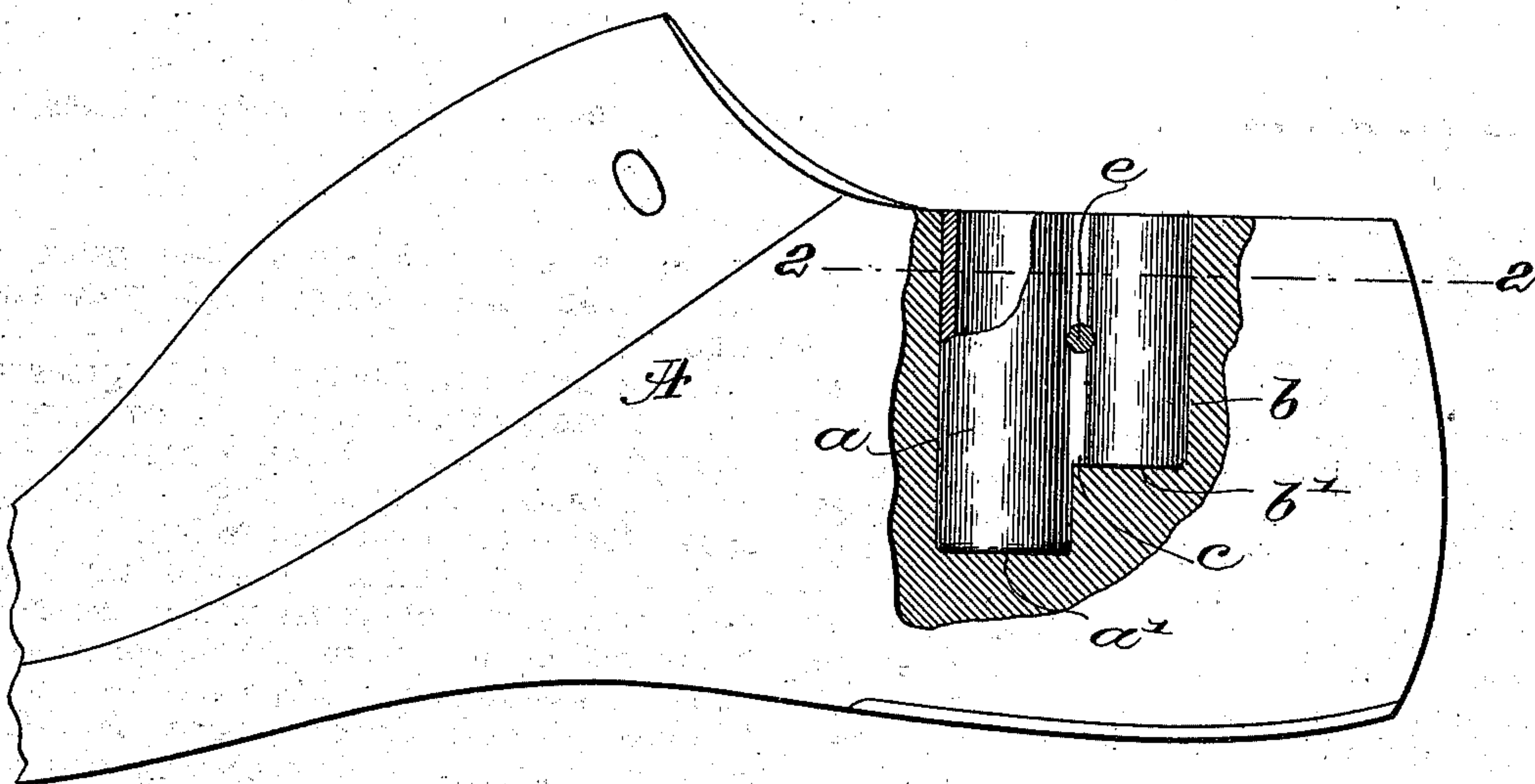


Fig. 2.

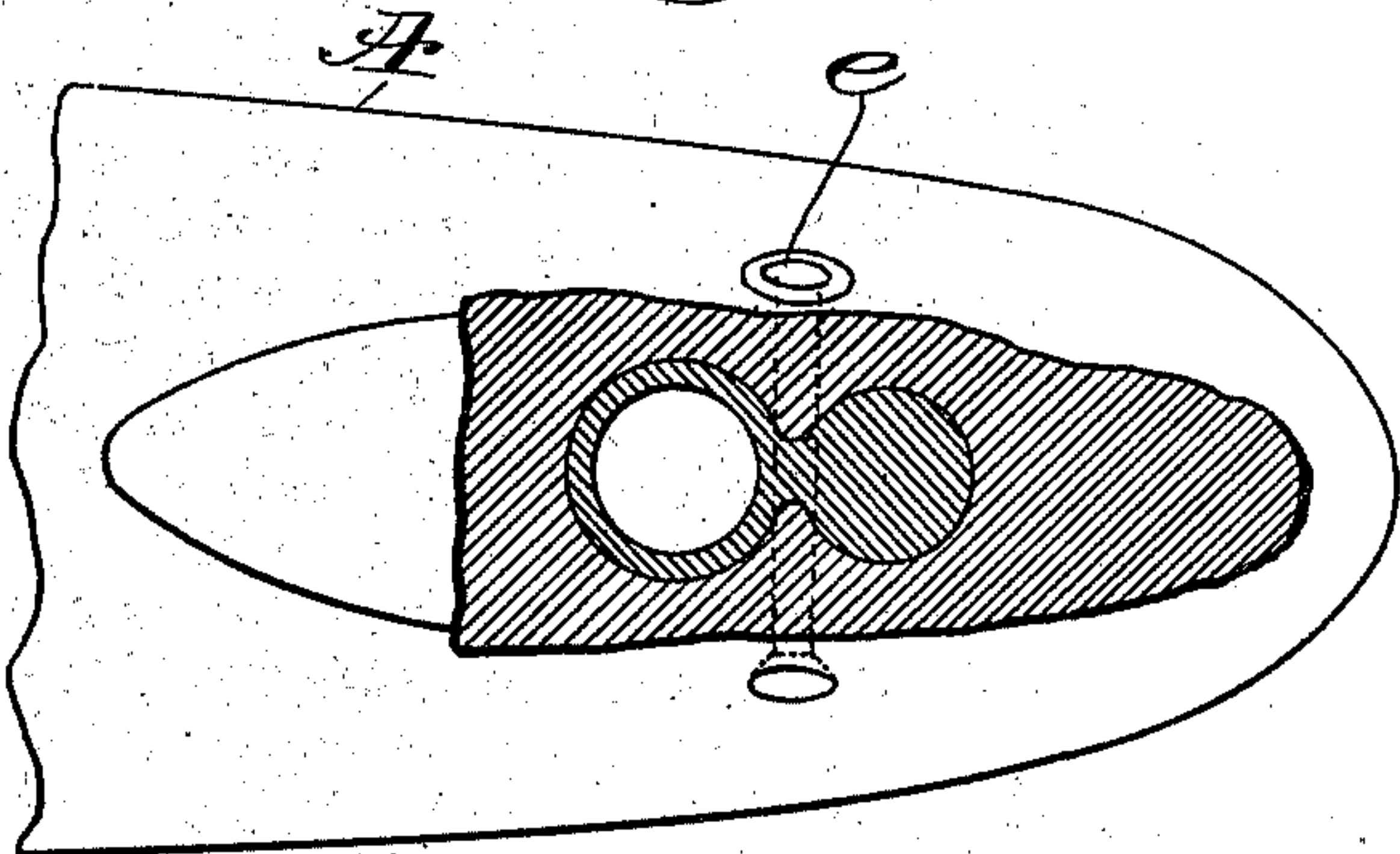
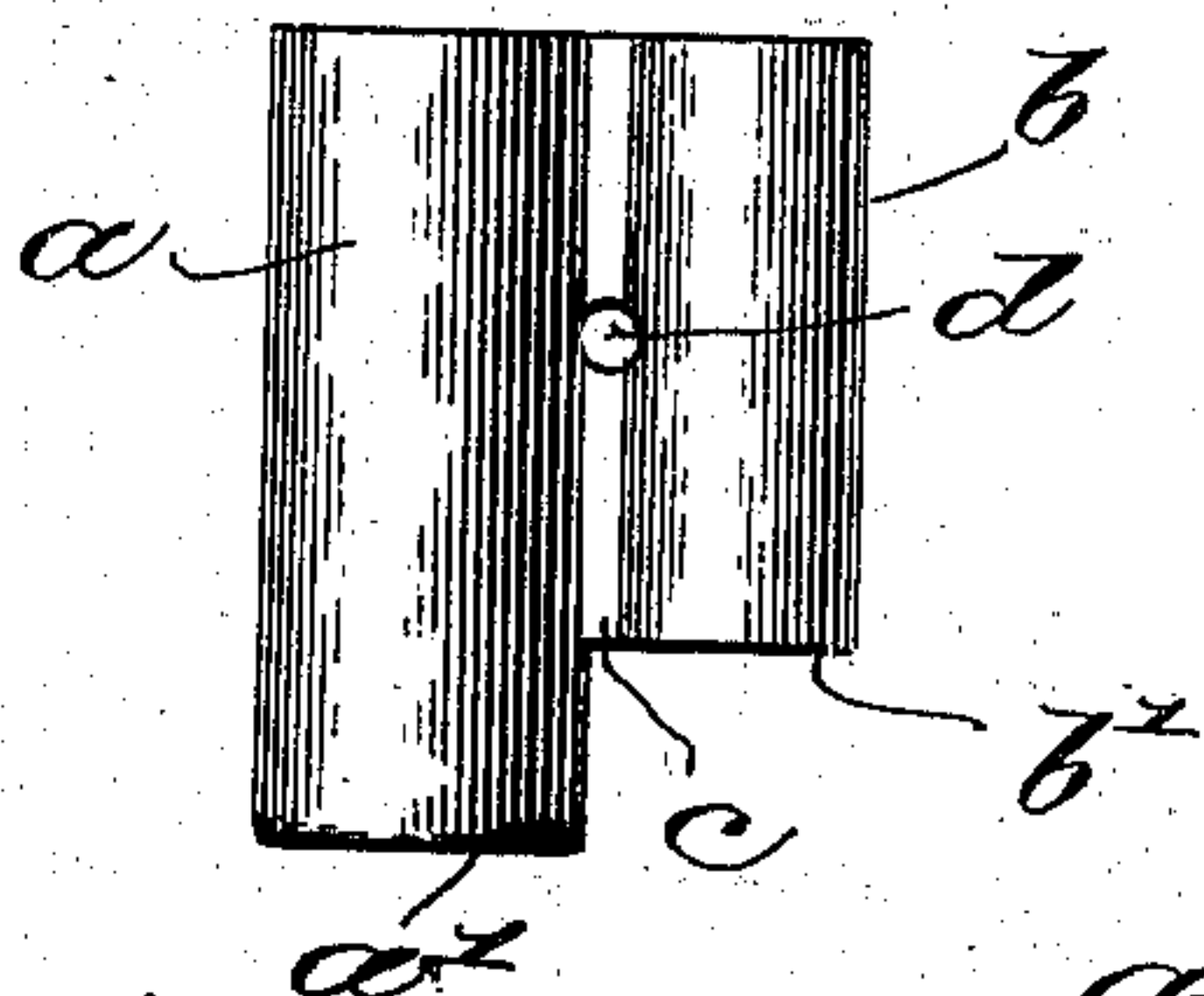


Fig. 3.



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LAST.

SPECIFICATION forming part of Letters Patent No. 709,425, dated September 16, 1902.

Application filed March 24, 1902. Serial No. 99,595. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR B. TAYLOR, a citizen of the United States, residing at Worcester, county of Worcester, State of Massachusetts, have invented an Improvement in Lasts, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My invention is an improved last, and has for its object the strengthening and cheapening of the heel part of a last.

Very little strain is brought upon the fore part of a last, and very little difficulty is experienced anywhere in the last excepting at the heel; but here the difficulties become complex and manifold, as most of the crushing pressures, twisting strains, and movements which tend to break down, split, and spoil the last take place at the heel, and for the purpose of obviating these difficulties a large number of special inventions have been devised, including special spindle-sockets of various shapes, solid heel-castings or anvil-heels, transverse stays, vertical dowels, &c.; but the additional weight, cost, or inconvenience of manufacture stands in the way of many of these. Accordingly I have devised the hereinafter-described last-heel for securing the requisite strength and ability to resist vertical pressures without seriously increasing the weight of the last or the difficulty of its manufacture, my last being practically as easy to manufacture as the old form of simple spindle-socket last, while at the same time having the strength of the heavier and more cumbersome kinds of lasts and the added advantage of carrying most of the weight and inserted material high up in the heel, thereby preventing weakening of the base of the heel, and having the further advantage of leaving the external surface of the wood smooth and uncut, the inserted part having a pressure-post or anvil-like wing entirely inclosed in the heel and bearing on the wood in a different plane or at a different depth from the thimble or socket part of the insert.

The constructional details and further advantages of my invention will be pointed out

in the course of the following description, reference being had to the accompanying drawings.

In the drawings, Figure 1 is a fragmentary view of one form of last provided with my invention. Fig. 2 is a horizontal sectional view thereof, taken on line 2 2, Fig. 1; and Fig. 3 shows the insert in side elevation.

It will be understood that the last A may be of any kind and construction desired, a block-last being herein shown for convenience. Instead of providing the heel part or heel end of the last with a usual thimble or spindle-socket I provide a casting (shown in detail in Fig. 3) comprising a hollow portion *a* of the usual kind required for receiving the supporting-spindle of the jack or other device which sustains the last when in use and a shorter stub part or impact-post *b*, joined integrally with the part *a* by a neck or web *c*, the casting in cross-section having a figure-8 appearance, as clearly shown in Fig. 2. Preferably the anvil-wing or impact-post *b* is solid, and in any case the bottom *b'* thereof and the bottom *a'* of the socket part are in different horizontal planes, and the hole in the last is bored to correspond, thereby providing for separate seats or rests at different depths in the wood of the last for receiving the impact of the blows which are brought upon the upper end of the casting or insert-piece. The purpose of this construction is to distribute the crushing effect in such a manner that the usual wood of the last will be able to endure the same without breaking down, and for this purpose one of the ledges, as will be seen viewing Fig. 1, is located at a considerable distance above the other, and each ledge is of large area, constituting, in fact, flat bottom seats in different planes of the grain of the wood perpendicular to the direction of thrust and blows brought upon the heel in use. The wood below the insert is uncut, being left integral, so as to be able to afford the highest resistance with the utmost simplicity of construction. Through the web *c* I insert in the opening *d* a binding member *e* for performing the twofold result of holding the wood against the sides of the tube *a* and post *b* and also

retaining the insert in the wood so that it cannot drop out because of rough usage or shrinkage of the wood.

I wish it understood that I do not claim, 5 broadly, the provision of an inserted casting nor the provision of a thimble provided with a wing nor the retention of the insert, as these various features taken separately are old; but my invention resides in providing a single insert or casting wholly embedded in the 10 heel and having its thimble portion and impact-post or anvil-wing terminating in different horizontal planes, so as to bear on the wood of the last transversely of the grain 15 thereof at different depths.

Besides the above statement of my invention I have defined the same, with various other restrictions, in the appended claims.

Having explained my invention, and without 20 undertaking to enumerate all the changes which may be made without departing therefrom, what I claim as new, and desire to secure by Letters Patent, is—

1. A last having embedded in its heel an 25 insert composed of a spindle-socket and impact-post formed in a single piece and terminating, respectively, at different depths within the last, the bottoms thereof resting on the solid wood of the last at right angles to the 30 length thereof in different and approximately parallel planes.

2. A last having its heel portion provided with a single insert composed of two cylindrical parts of different lengths joined by a 35 web part, the longer of said parts being hol-

low to constitute a spindle-socket, and the bottoms of said cylindrical parts resting flat upon the wood of the last in different horizontal planes.

3. A last having its heel portion provided 40 with a single insert composed of two cylindrical parts of different lengths joined by a web part, the longer of said parts being hollow to constitute a spindle-socket, the bottoms of said cylindrical parts resting flat upon 45 the wood of the last in different horizontal planes, and a retaining device extending transversely through said web part and the adjacent wood of the heel.

4. A last having its heel portion provided 50 with a spindle-socket and impact-post joined integrally by a narrow part, said post being shorter than said socket, solid, and substantially the same size in cross-section as the socket, both being tightly set into the wood, 55 the latter surrounding the same integrally on all sides, presenting a smooth integral surface of wood to bear against the shoe, and the inserted parts affording an extended metal bearing-surface at the top of the heel and hav- 60 ing extended bearings in different horizontal planes within said heel portion.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ARTHUR B. TAYLOR.

Witnesses:

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