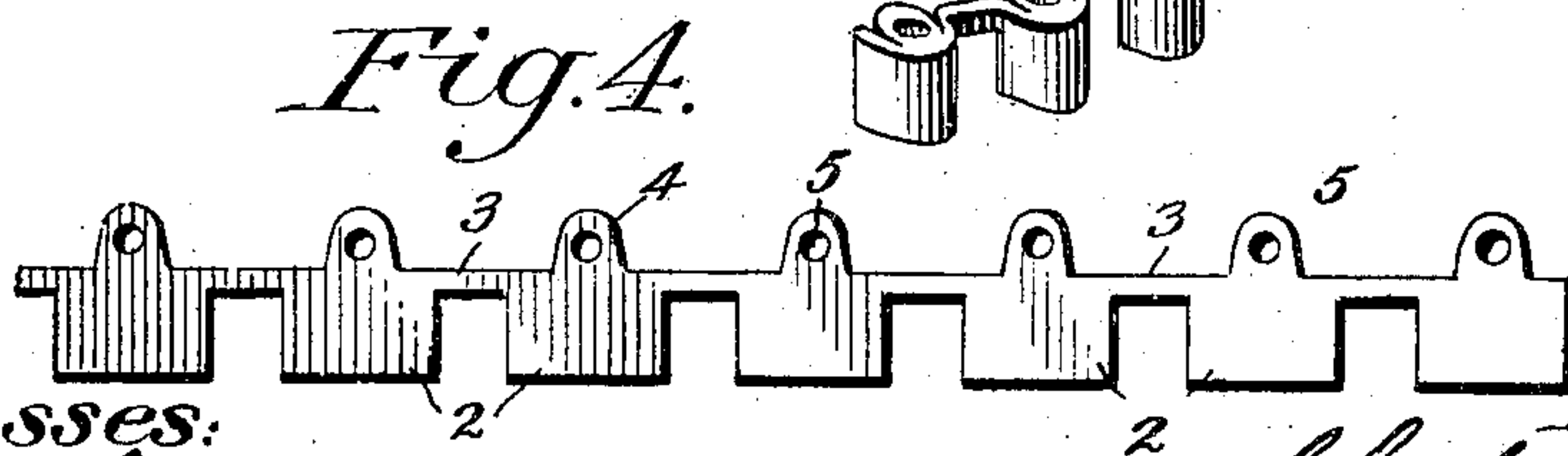
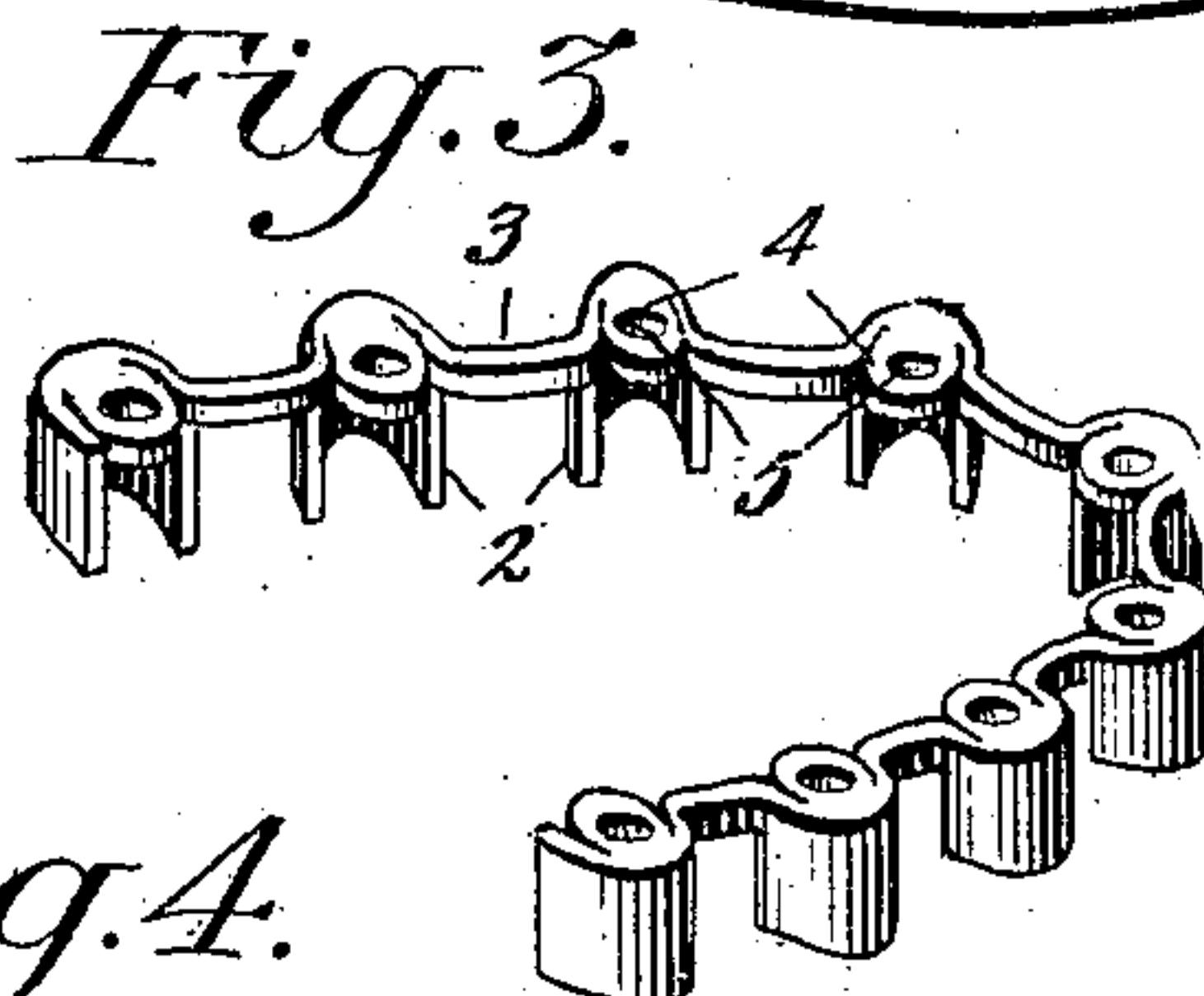
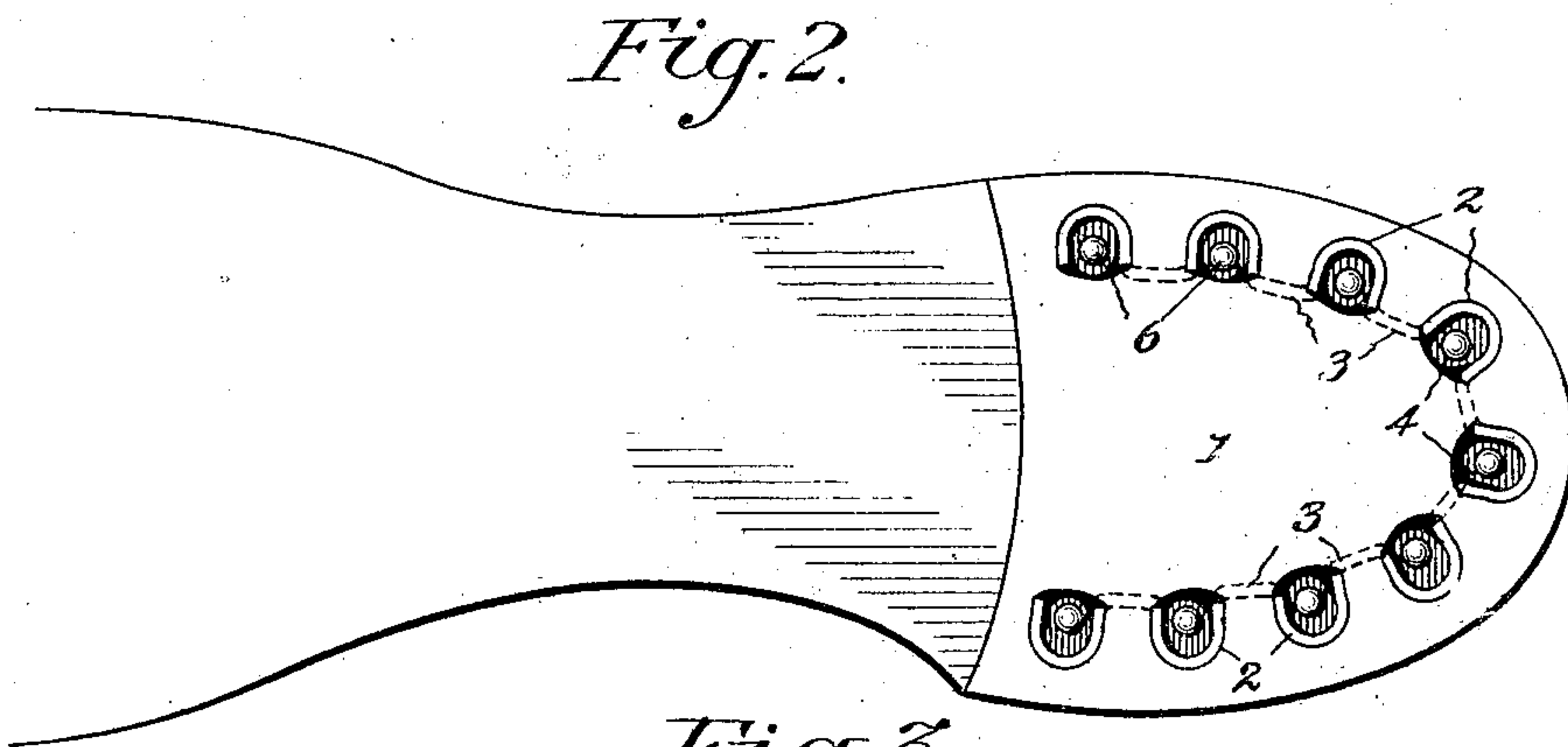
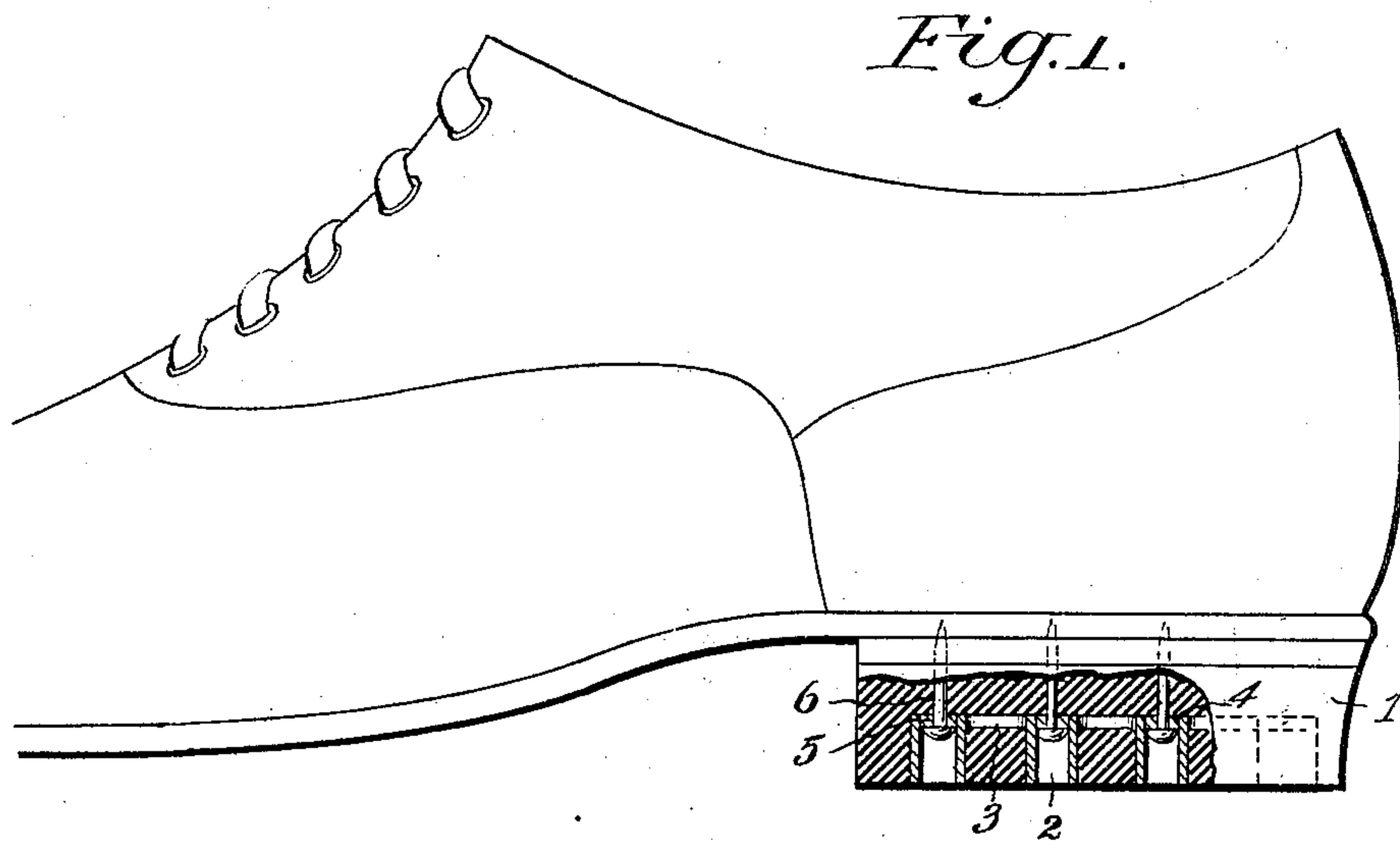


C. M. JAGGERS.  
ELASTIC HEEL FOR BOOTS AND SHOES.  
APPLICATION FILED DEC. 18, 1908.

917,075.

Patented Apr. 6, 1909



Witnesses:  
E. C. Schuerin atty.  
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# UNITED STATES PATENT OFFICE.

CHARLES M. JAGGERS, OF McALESTER, OKLAHOMA.

## ELASTIC HEEL FOR BOOTS AND SHOES.

No. 917,075.

Specification of Letters Patent.

Patented April 6, 1909.

Application filed December 18, 1908. Serial No. 468,116.

*To all whom it may concern:*

Be it known that I, CHARLES M. JAGGERS, a citizen of the United States, residing at McAlester, county of Pittsburg, State of Oklahoma, have invented certain new and useful Improvements in Elastic Heels for Boots and Shoes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to elastic heels or treads for boots, shoes and the like, and has for its object to provide a tread of rubber or similar elastic material having embedded therein wear pieces, the outer ends of which lie substantially in the plane of the tread surface, said wear pieces being provided at their inner ends with tongues to afford nail engaging members by means of which the tread is secured to the heel.

The invention also contemplates the provision of an improved form of wear piece capable of being made in continuous lengths from sheet metal, the wear piece for each tread comprising as an integral structure a series of bent tubular sections, connecting links or bars between the same and perforated tongues bent over to close the upper portions of the respective tubular sections and forming nail engaging members.

In the accompanying drawings, Figure 1 is a side elevation, partly in section, of a shoe having an elastic tread involving the invention. Fig. 2 is a plan view of the bottom of the shoe. Fig. 3 is a perspective view of the wear piece before the same is applied to the tread. Fig. 4 illustrates a sheet metal blank from which the wear piece is formed.

Referring to the drawings, 1 indicates the elastic body portion of the heel tread, which may be formed of rubber or other suitable resilient material. Embedded within the body portion 1, during the operation of molding or otherwise forming the tread section, is a connected series of generally tubular members 2, which may, if desired, be left open at one side to produce a generally horseshoe shape in cross section, the outer end of which lies substantially in the plane of the tread surface, said tubular members having their inner ends closed by tongues 4 bent at right angles to the body of the tubular members, said tongues each being provided with a perforation 5 adapted to receive nails 6 by means of which the tread is secured to the shoe.

Between each of the tubular members there is interposed a positive connection, preferably in the form of a link or bar 3, the several links or bars serving to hold the series of wear pieces together as a substantially rigid integral structure, so that when the same is embedded in the elastic heel tread, it will not only serve to increase the life and durability of the tread, but will prevent the latter wearing unevenly and becoming distorted or deformed, and will, moreover, afford efficient means for attaching the tread to the heel of the shoe. Likewise the positive connection of the several tubular members into an integral structure will prevent any of the said members becoming loose and dropping out of the tread.

In making up the wear pieces, I find it desirable to form the same from sheet metal by stamping from such sheet metal blanks of the character illustrated in Fig. 4 and in any desired lengths. In working the blank into the finished wear piece, the rectangular portions of the blank are bent into the tubular or horseshoe form indicated in Fig. 3, and the perforated tongues are bent down to close the upper ends of the tubular members, the connecting links or bars 3 extending between the inner edges of successive tubular sections. After the blanks have been thus formed into the wear pieces, the latter are bent or curved, as in Fig. 3, to lie within the finished tread, as indicated in Fig. 2, after which each wear piece is applied to the bottom of the mold and the rubber or other elastic material forming the tread is run into the mold and subsequently vulcanized or otherwise treated in the usual manner. When the tread is completed, the wear piece will occupy the relation shown in Figs. 1 and 2, disposed about the outer edge of the heel with the outer ends of the tubular members lying substantially in the plane of the tread surface and the inner or tongue ends embedded within the elastic body 1 at a point about midway the thickness thereof. The connecting links or bars 3 are likewise embedded in and surrounded by the elastic material of the body portion and serve to materially stiffen said body portion against lateral deformation. By passing nails through the perforated tongues 4, the elastic tread may be firmly and effectively secured to the heel of the shoe, as indicated in Figs. 1 and 2.

It will be apparent that instead of making



the tubular members horseshoe shaped in cross section, they may be made substantially annular.

What I claim is:—

5 1. A wear piece for elastic heel treads comprising as an integral sheet metal structure, a series of bent tubular sections, connecting links or bars between the same and perforated tongues bent over to close the upper portions of the respective tubular sections and forming nail engaging members.

10 2. In a heel tread, an elastic lift or heel section and an integral wear piece embedded

therein, said wear piece comprising as an integral sheet metal structure a series of bent tubular sections, connecting links or bars between the same and perforated tongues bent over to close the upper portions of the respective tubular sections and forming nail engaging members.

In testimony whereof I affix my signature, in presence of two witnesses.

CHARLES M. JAGGERS.

Witnesses:

J. W. TOWNSEND,

C. ESILLIF.