

No. 719,318.

PATENTED JAN. 27, 1903.

A. G. FITZ.
LAST.

APPLICATION FILED MAR. 26, 1902.

NO MODEL.

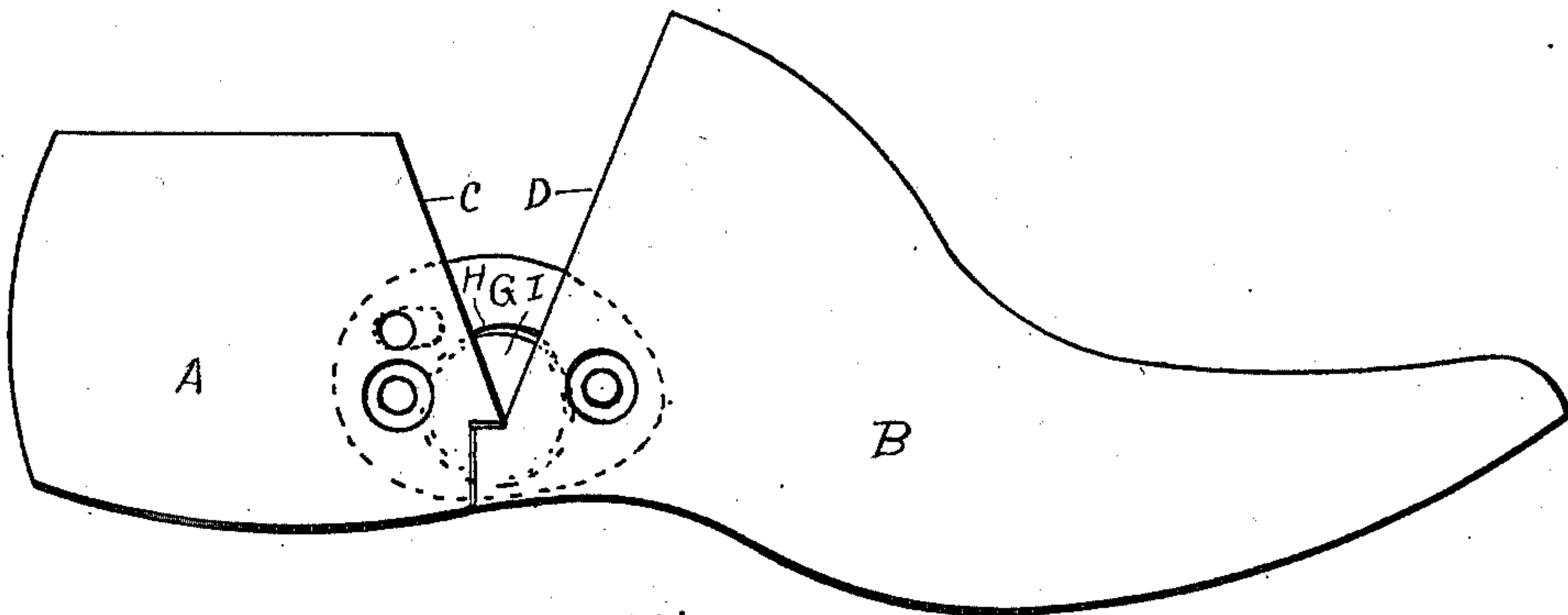


Fig. 1.

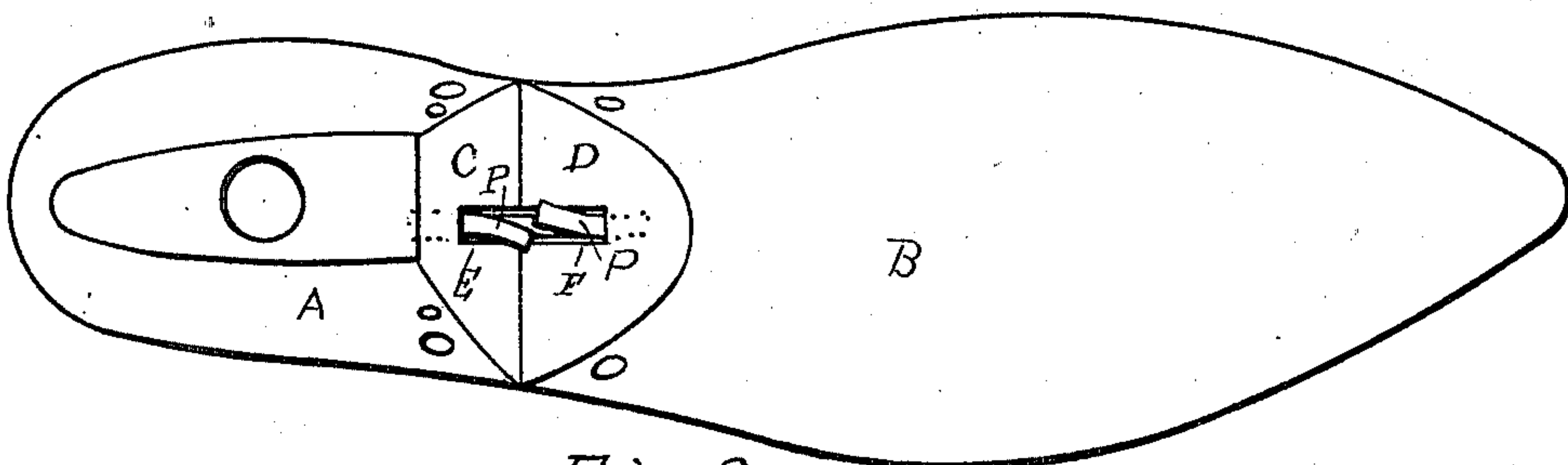


Fig. 2.

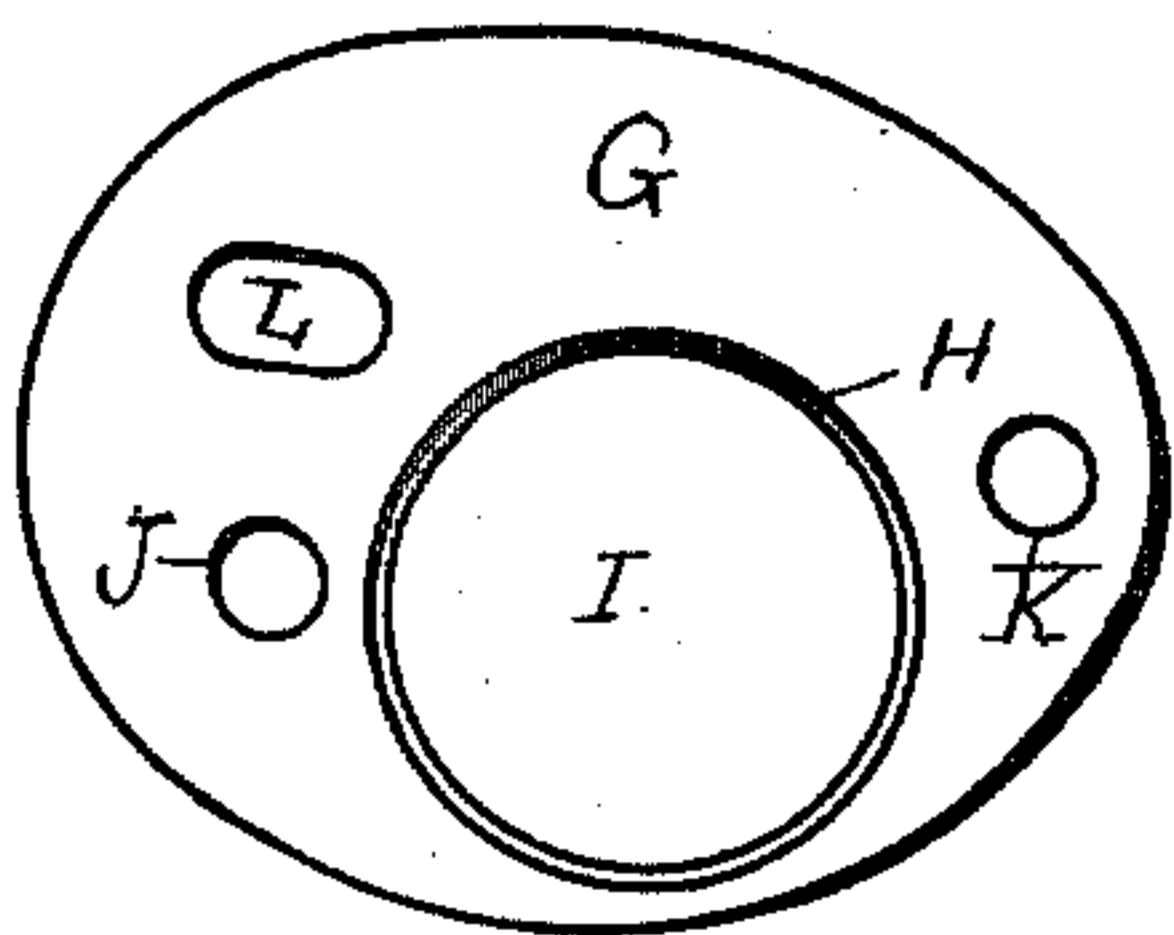


Fig. 3.

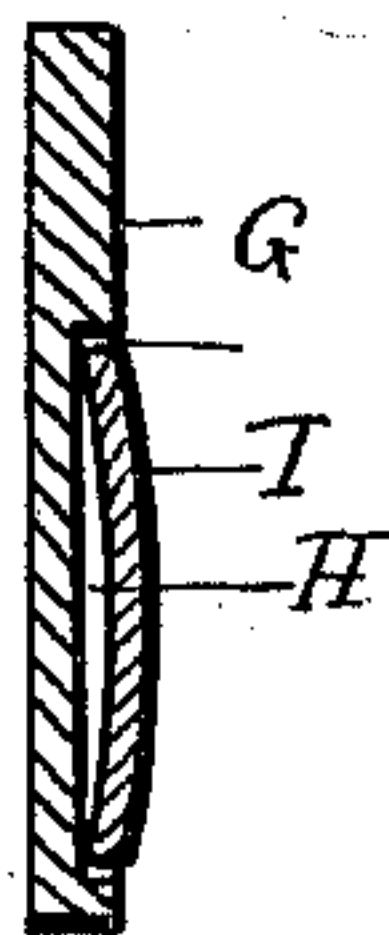


Fig. 4.

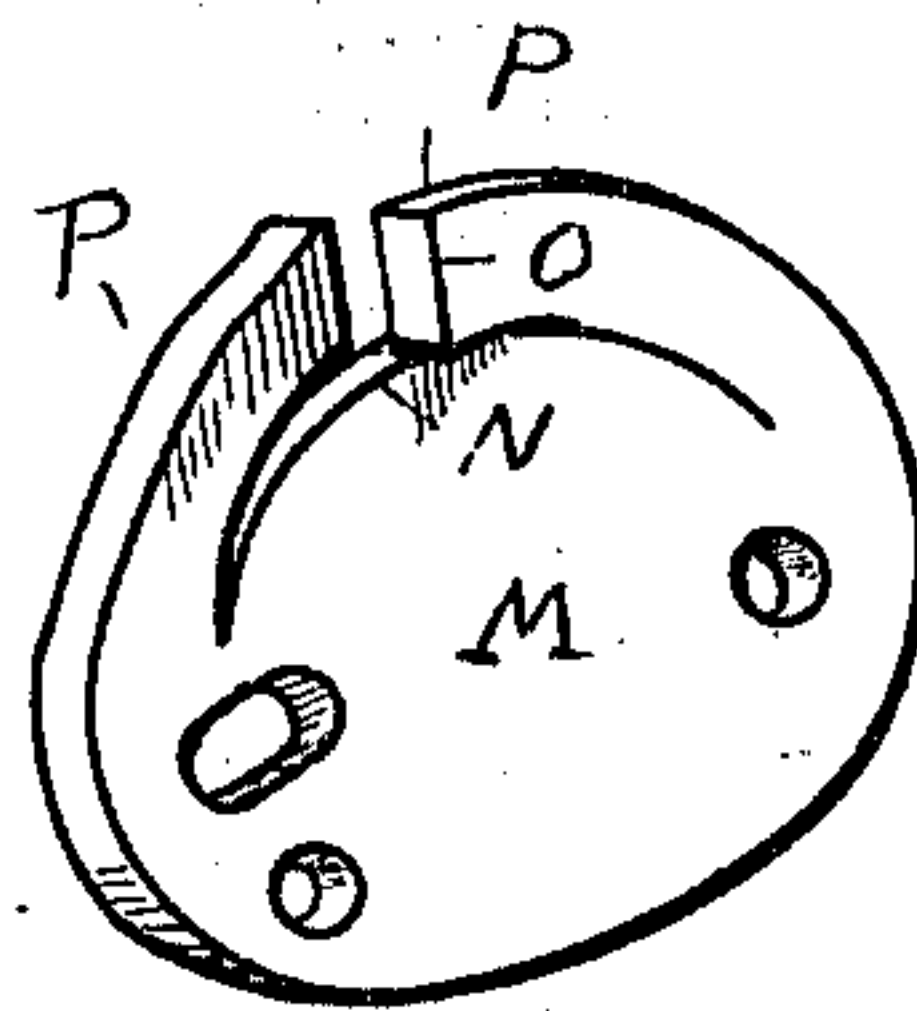


Fig. 5.

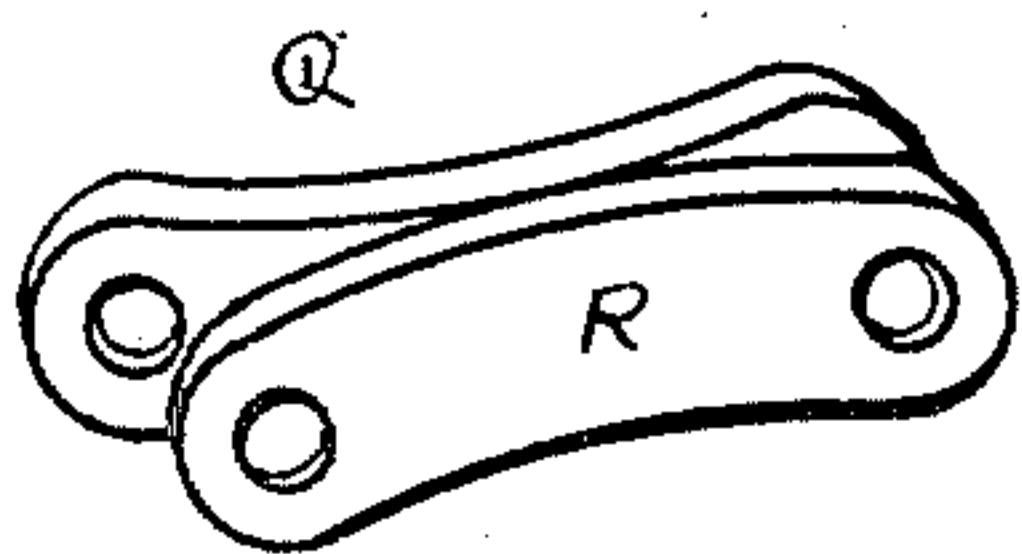


Fig. 6.

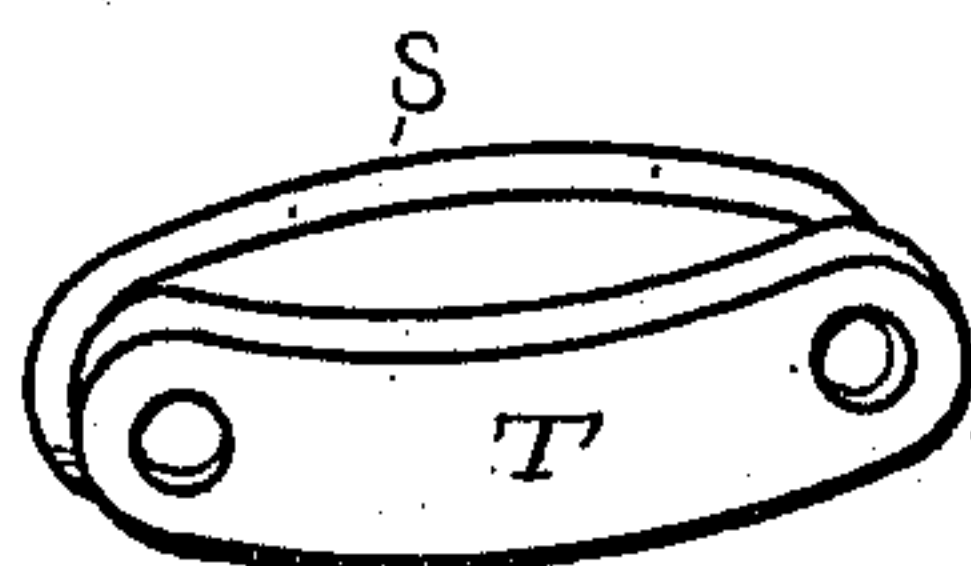


Fig. 7.

Witnesses
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UNITED STATES PATENT OFFICE.

AMOS G. FITZ, OF AUBURN, MAINE.

LAST.

SPECIFICATION forming part of Letters Patent No. 719,318, dated January 27, 1903.

Application filed March 26, 1902. Serial No. 99,988. (No model.)

To all whom it may concern:

Be it known that I, AMOS G. FITZ, a citizen of the United States, residing at Auburn, in the county of Androscoggin and State of Maine, have invented certain new and useful Improvements in Lasts; 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 ap-
10 pertains to make and use the same.

My invention relates to improvements in lasts, and more particularly to lasts which are divided transversely and which have the parts thus divided connected by a union
15 which permits movement of one part relative to the other to shorten the last, and it is equally applicable whether the last is divided by a single cut extending from the top to the bottom or by lines of cut which form a gap
20 extending into the last from the top.

The object of my invention is to provide a divided last with a union having a pivot-point located so near the bottom of the last that it will change to shortened position with-
25 out any material lengthening of the last and at the same time provide means connected with the union for yieldingly holding the parts of the last in any given position with sufficient firmness to obviate the accidental
30 movement of one part relative to the other. In other words, my invention when applied to lasts enables the parts to be held firmly at any given point, but leaves them capable of being freely moved by the exertion of sufficient
35 force.

To this end my invention consists in dividing a last transversely, making vertical kerfs in the adjacent ends and uniting the parts by a union pivotally connected thereto and
40 adapted to have vertical movement in one or both of said kerfs, parts of the union, whether made from one piece or from two or more, being arranged to act with a powerful lateral spring tension, but yieldingly against the
45 vertical walls of the kerfs. It will be understood that the parts may be arranged so that the tension is in the kerf in the fore part or in the kerf in the heel part, or in both, and my invention includes all constructions of lasts
50 in which the union which connects the parts holds them against accidental collapse by means of a spring tension exerted by

parts of the union laterally against the walls of the kerf or kerfs in which the union is mounted.

In the drawings herewith accompanying and making a part of this application I have illustrated several of many forms in which my invention may be embodied.

Figure 1 is a side elevation of a last, showing a union of the form shown in Figs. 3 and 4. Fig. 2 is a plan view of a last having the form of union shown in Fig. 5. Figs. 3 and 4 are side elevation and transverse sectional view of a union, consisting of a plate adapted to be pivotally mounted in kerfs in the adjacent ends of a divided last, the same being provided with a spring-disk engaging a recess in the plate and adapted to bear laterally against the walls of said kerfs. Fig. 5
60 is a perspective view of a union having spring-metal lips tending to move laterally out of the plane of the union. Figs. 6 and 7 are perspective views of links or unions adapted to be inserted in the kerfs of the last
65 and tending at some point to separate from each other with a spring tension. It will be noted that in all cases parts of the union which tend to separate are positioned so that they move between the walls of the kerfs and
70 yieldingly in contact therewith.

Same letters of reference refer to like parts in the several views so far as applicable.

In said drawings, A represents the heel part, and B the toe part, of a divided last. In the
85 adjacent ends C and D are made vertical kerfs E and F, in which the union is to be mounted. When the union shown in Figs. 1, 3, and 4 is used, said union consists of a plate of sufficient width set vertically in the kerfs
90 and pivoted in the fore part or heel part, or both, as may be preferred. At a suitable point in the side of the plate G is made a recess H, and in said recess is placed a spring-disk in such position that a portion of said
95 disk, more or less, will be within the kerf or kerfs and will be slightly curved outwardly, so that its face will bear with a yielding spring tension against the wall of the kerf. The disk I, as shown in Fig. 4, does not quite
100 fill the recess, and will therefore be spread out slightly when compressed. The plate may have the usual holes J and K, through which the pivot-pins pass. It may also have

a slot L concentric with one of said holes for the purpose of limiting the movement of one part and then causing further movement, if any, to take place about the pivot in the opposite part. The union shown in Fig. 5 consists of a single piece of metal M, having a substantially circular slit N made therein, with a vertical cut O extending to the circumference, the lips P formed thereby being spring-tempered in a plane outside of the plane of the union proper, the lips extending in opposite directions and adapted when in position to engage with yielding lateral force against the walls of the kerf. The union shown in Fig. 6 consists of two spring members Q and R, arranged so that their ends when compressed and inserted in the kerfs, as aforesaid, tend to separate and bear with a yielding spring tension against the walls of the kerf. Another form is shown in Fig. 7, which consists of two spring-plates S and T, tending when compressed and inserted in the kerf, as aforesaid, to separate and bear against the walls of the kerf with a yielding spring tension.

The operation of my improved last has been fully described in the foregoing specification, and it will be understood that I do not intend to limit myself to the precise forms of union shown or to a last divided and having a gap extending into it from the top, any last divided transversely with vertical kerfs in the adjacent ends and a union having a spring member adapted to bear yieldingly against the walls of the kerf with a spring tension and to move in contact with the wall of the kerf being within the spirit and scope of my invention.

Having thus described my invention and its use, I claim—

1. A last divided transversely, vertical kerfs extending into the adjacent ends and a union pivotally mounted in said kerfs, said union being provided with a spring member adapted to engage the vertical wall of the kerf with a spring tension sufficient to prevent the accidental collapse of the last.

2. A last divided transversely, vertical kerfs extending into the adjacent ends and a union pivotally mounted in said kerfs, said union being provided with a laterally-projecting spring member adapted to have a yielding frictional engagement with the vertical wall of the kerf sufficient to prevent the accidental collapse of the last.

3. A last divided transversely, vertical kerfs in the adjacent ends and a multipart union pivotally mounted in said kerfs, the parts of said union projecting laterally against the vertical walls of said kerfs and having a yielding frictional spring contact therewith, whereby the parts of the last are maintained against accidental movement relative to each other.

4. A last divided transversely, vertical kerfs in the adjacent ends and a union pivotally mounted in said kerfs, said union consisting of a vertically-positioned plate having a recess in the side thereof and a spring mounted in said recess, said spring projecting with yielding force against the wall of the kerf.

In testimony whereof I hereunto affix my signature, in presence of two witnesses, this 22d of March, 1902.

AMOS G. FITZ.

In presence of—

JOHN A. MORRILL,
GERTRUDE T. PREBLE.