March 11, 1924.

1,486,511

G. E. BELCHER

DIVIDED LAST

Filed July 27, 1922

FIG. 1.

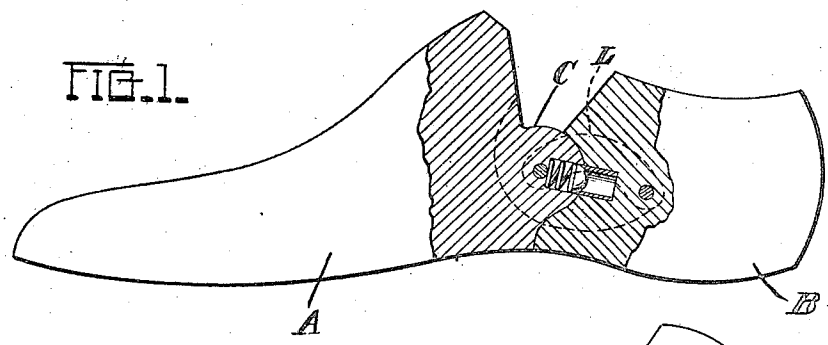
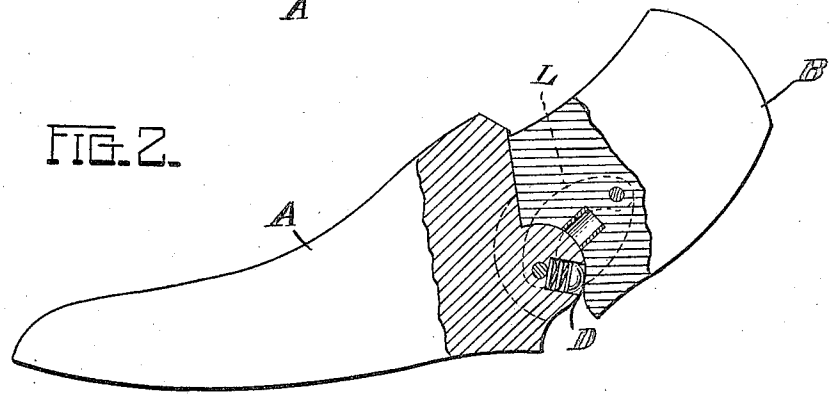


FIG. 2.



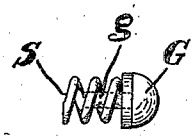


FIG. 3.

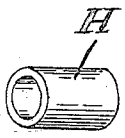


FIG. 4.

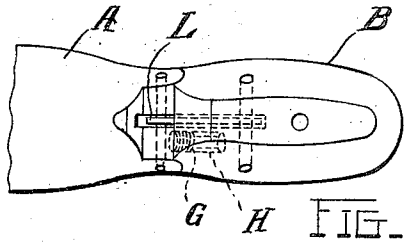


FIG. 5.

Inventor:
George E Belcher
by Thos. L. Spooner
Attorney.

Patented Mar. 11, 1924. 1,486,511

UNITED STATES PATENT OFFICE.

GEORGE E. BELCHER, OF ORLEANS, MASSACHUSETTS.

DIVIDED LAST.

Application filed July 27, 1922. Serial No. 577,914.

To all whom it may concern:

Be it known that I, GEORGE E. BELCHER, a citizen of the United States, residing at Orleans, county of Barnstable, Commonwealth of Massachusetts, have invented certain new and useful Improvements in Divided Lasts, of which the following is a specification.

This invenution involves certain improvements in divided lasts and particularly in such lasts of the knuckle joint type in which an extended bearing surface is present in the joint.

Lasts of this type have usually been equipped with a connecting spring effective across the joint and exerting major stress longitudinally when the last was in extended position so as to support it against collapse when in the shoe and under operation.

In my improved last I may employ a spring which is effective radially of the center of the joint and still seems a stiff last in extended position. This I accomplish by introducing cooperating or resiliently interengaging members between the last parts in the region of their continuous contact at the joint.

Such a construction is shown in the accompanying drawings and described in this specification, throughout both of which corresponding reference characters are employed to indicate the parts.

In the drawings:

Fig. 1 is a view of a last in accordance with my invention in extended position.

Fig. 2 is a similar view in collapsed position,

Figs. 3 and 4 are details of the interlocking members, and Fig. 5 is a pressure plan view of the last.

My last comprises the usual fore part A and heel part B having a central fulcrum or joint of extended bearing surfaces as C and D.

The parts A and B may be connected together in various ways but preferably as shown I employ the curved link L which has many advantages in simplicity and strength.

The link L is preferably pivoted at one end on a pin E positioned at the center of the curved surface C. At its opposite end it is connected to the heel part B by a pin F which is preferably set with a taper so as to give the link L a proper tension. The two parts of the last are therefore tightly held together and turn with the desired friction. Between the surfaces C and D and specifically between such portions of them as are constantly overlapped, I introduce a pair of interengaging members. One of these is set in a recess or bore and consists of a rounded or hemispherical head G having a shank *g* extending centrally of the bore and surrounded by a coiled compression spring S which bears against the bottom of the bore and the under face of the head tending to project the same beyond the surface C.

Aligned with this bore and the head G is a cylindrical or tubular pocket H driven into a corresponding recess. The pocket H is of a diameter slightly smaller than the head G so as to partially but not wholly receive it under the urge of the spring S.

When the parts are alined as shown in Fig. 1 the head G partially enters the end of the tubular pocket H thus locking the last in extended position in which it is firmly resistant to normal strains. When it is desired to collapse the last to the position shown in Fig. 2 it is readily buckled by excess pressure applied diagonally to the heel part. The last so formed is simple and inexpensive to make and assemble and simple and durable in operation.

Various modifications in the form and construction of my device may obviously be resorted to without departing from the spirit of my invention if within the limits of the appended claims.

What I therefore claim and desire to secure by Letters Patent is:—

1. A divided last comprising a fore part and a heel part, said parts having curved contacting joint surfaces therebetween, a link pivotally connecting said parts, a spring pressed locking plunger having a rounded head and mounted in one of said last parts, the other last part having a locking bore alined with said head and adapted to receive the same when the last is extended, said bore and locking plunger being disposed within the surfaces of continuous contact in all positions of the last parts and being offset laterally relative to said link.

2. A divided last comprising a fore part and a heel part, said parts having curved contacting joint surfaces therebetween, a

link pivotally connecting said last parts, a yieldable locking member mounted in one of said last parts, the other last part having a locking bore alined with said locking member and adapted to receive the same when the last is extended, said bore and locking member being disposed within the surface of continuous contact in all positions of the last parts and being offset laterally relative to said link.

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

GEORGE E. BELCHER.

Witnesses:

GEO. A. SHAW,

ARTHUR WALES.