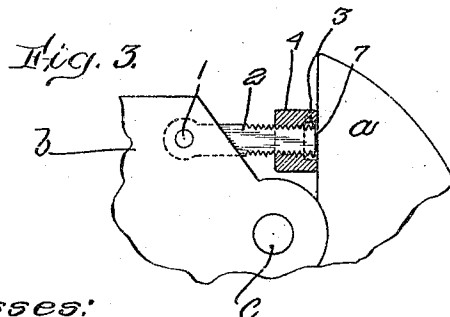
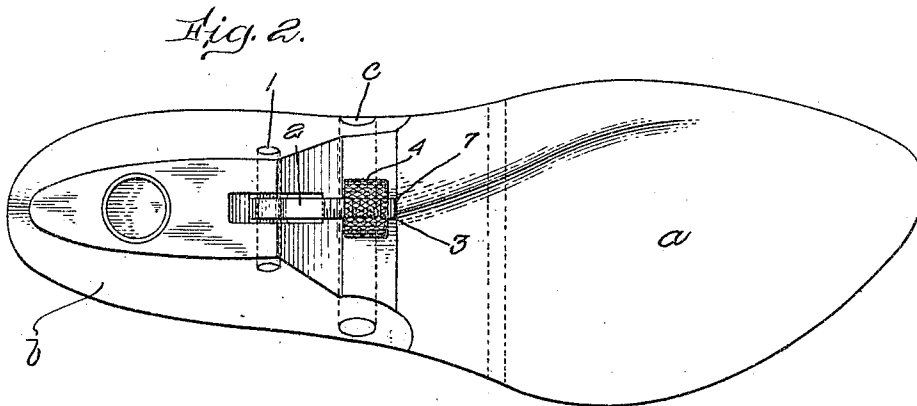
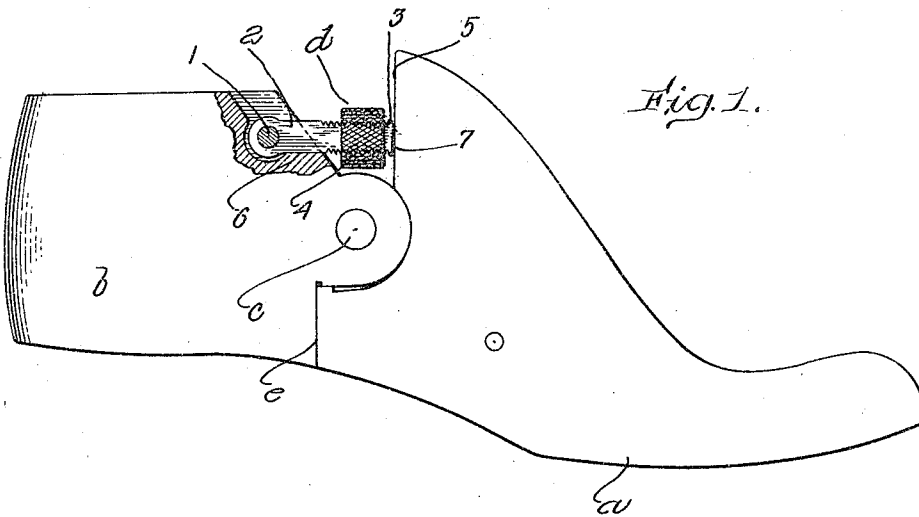


E. O. KRENTLER.
 LAST LOCK.
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1,017,058.

Patented Feb. 13, 1912.



Witnesses:
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UNITED STATES PATENT OFFICE.

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LAST-LOCK.

1,017,058.

Specification of Letters Patent.

Patented Feb. 13, 1912.

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To all whom it may concern:

Be it known that I, EDWIN O. KRENTLER, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented an Improvement in Last-Locks, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to improved locking means for holding the parts of a hinged last in extended position, providing means whereby such a last can be quickly and firmly locked or readily unlocked.

It is desirable in using certain kinds of hinged lasts, that means should be provided for locking them rigidly in extended position, and it is desirable that such means should be cooperative with the last parts to produce a strong substantial assemblage to withstand the severe usage of present-day practice, while at the same time providing for adequate adjustment to take up any looseness that always develops.

My invention provides a very simple, yet strong, locking means, which may be fixed in operative position in the last without having to saw into the wood of the forepart nor fasten any locks or screws therein or otherwise weaken the last parts to any material degree, while at the same time providing for an adequate amount of instant adjustment to compensate for shrinkage of the wood and any looseness arising from the pins being stretched or small imperfections in the size of the holes of the hinges or otherwise.

In the drawings, Figure 1 is a side elevation of a last having my improved lock associated therewith, a part being sectioned away to more clearly show the mounting of said lock; Fig. 2 is a plan view of the same; and Fig. 3 is a detail showing the locking parts engaged.

For convenience of illustration I have shown my invention applied to an ordinary hinged last, whose forepart *a* and heel-part *b* are joined to turn on the hinge pintle *c*, leaving a V-shaped gap or opening *d* above said hinge, and abutting walls or shoulders *e* below said hinge, although it will be un-

derstood that my invention is likewise applicable to most of the other kinds of hinged and divided lasts.

Pivotaly secured to one of the last parts, preferably on a pin 1 in the heel-part, to swing in a recess therein is an eye bolt, or rod 2 having a threaded free end 3. This member 2 is preferably mounted for pivotal movement and in a vertical plane, but the invention in its broader aspect is not limited in these respects. A nut 4 is threaded on the free end 3 of the bolt 2 having preferably a milled or roughened periphery for convenient manipulation and being of some considerable radial thickness, as shown, so as to afford an adequate bearing surface against the opposite abutting wall 5 on the other part of the last. The eye bolt 2 is of a length so as to clear the opposite wall 5 in swinging down to an approximately horizontal position, as shown in Fig. 1, where it preferably rests on the bottom 6 of the recess therefor in the heel-part *b* of the last, leaving the nut 4 free to turn. The last parts being then swung to extended position with the shoulders *e* abutting, the nut 4 may be adjusted outward on the eye bolt 2 beyond the end thereof to engage the opposite wall 5 and thus firmly hold the last parts in such extended position. The position and construction of the parts are such that this adjustment may be instantly accomplished with the finger or thumb whenever the last is swung to lengthened position or the last shrinks or any slackness requires it. The nut 4 is preferably recessed at its outer end by having the threads partly or wholly removed at this point and the end of the bolt 2 is burred as shown at 7 so as to prevent accidental detachment of the nut. It is obvious that the wall 5 may, if desired, be faced with wear-resisting material, and a slight countersink may be formed as a seat for the nut 4 therein. It is thus apparent that the nut 4 has a range of adjustment on the eye bolt capable of instantly and positively locking the last-parts lengthened and also quite sufficient to take up any looseness due to wear or yielding between the parts, and that its adjustment flat against the wall 5 effects a very rigid backing and effectively braces the parts against any relative spring-

ing or yielding or collapsing movement. Further, that these desirable ends are attained by a device of greatest simplicity and cheapest construction.

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

1. A divided last, provided with a locking device wholly carried by one member of
10 the last, said locking device being movable as a whole to and from locking position, and having a part with a separate variable and controllable adjusting movement to engage
15 the other member of the last for locking action, said adjusting movement of the locking device adapting it to hold the last members rigid in locked position irrespective of wear thereof.

2. A hinged last, having abutting portions
20 below the hinge, and a locking device mounted on one last member, said locking device being movable as a whole to and from locking position, and a part thereof being mounted for variable and controllable extensible
25 adjustment against the other last member to lock the last in lengthened position, the construction being such that the last members may be rigidly locked in lengthened position irrespective of wear thereof and of
30 their hinge connection.

3. A divided last, having a connection between the parts thereof and provided with a pivoted locking device mounted to swing on an axis transverse of the last, said locking
35 device being arranged to cooperate with said connection to hold the parts rigid in extended position and having a threaded adjustment for increasing the length of the locking device to bear against the opposing

part of the last to lock the last in length- 40
ened position.

4. A last, comprising pivotally joined members, and a locking device consisting of a bolt pivoted to one member and having a
45 nut adjustable thereon to engage against the other member.

5. A last, comprising members having hinged connection, abutting shoulders below the hinge, an opening above the hinge, and
50 a locking device operable in said opening, said locking device consisting of an eye bolt pivoted to one member and having a nut adjustable from the free end thereof against the other member.

6. A hinged last, having its forepart and
55 heel-part hinged together with a gap above the hinge, and a locking device secured to one part and having threaded on its front end a round nut with a relatively flat front face adapted to engage flat against the op-
60 posite last part when turned on its threads beyond said front end.

7. A hinged last, having its forepart and heel-part hinged together with a gap above
65 the hinge, and a locking device secured to one part and provided with a nut threaded on the outer end thereof, having a relatively flat, laterally extended front face to engage flat against the opposite last part when
70 turned forward toward said opposite last part.

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

EDWIN O. KRENTLER.

Witnesses:

C. L. ROGERS,

W. J. PIKE.