No. 661,485. Patented Nov. 13, 1900.

G. E. BELCHER.

HINGED LAST.

(Application filed June 9, 1900.)

(No Model.)

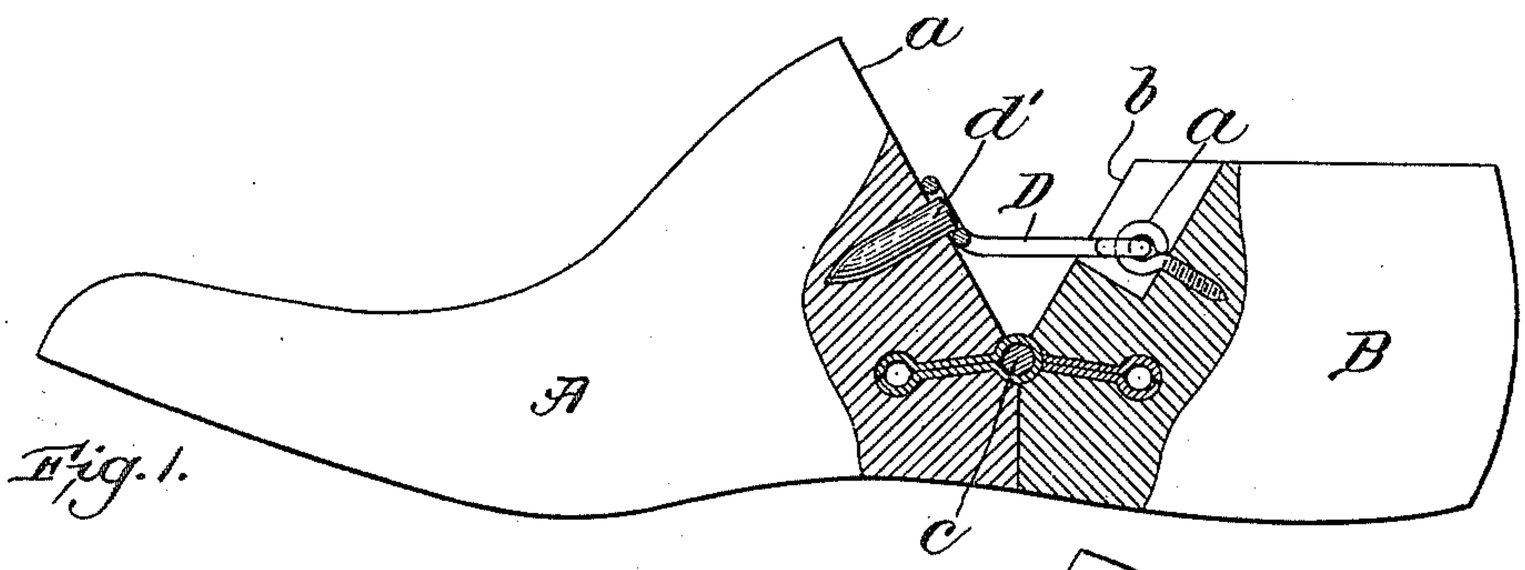

Fig. 1.

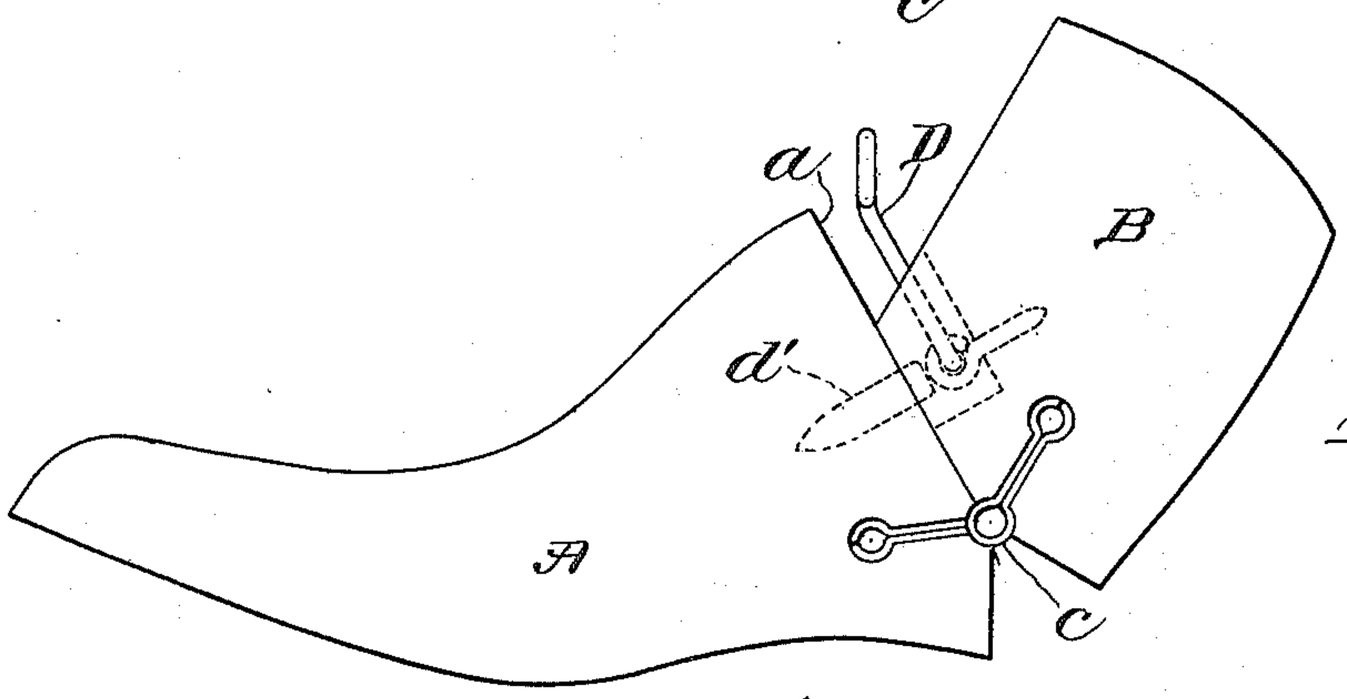

Fig. 2.

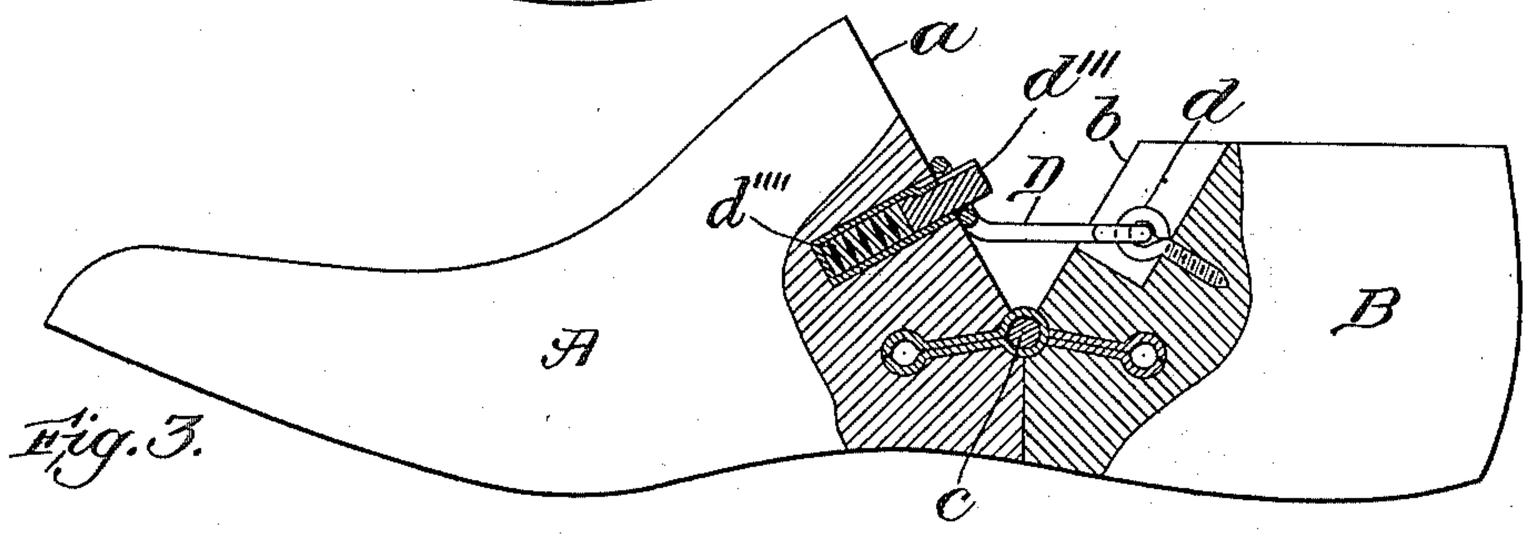

Fig. 3.

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UNITED STATES PATENT OFFICE.

GEORGE E. BELCHER, OF STOUGHTON, MASSACHUSETTS.

HINGED LAST.

SPECIFICATION forming part of Letters Patent No. 661,485, dated November 13, 1900.

Application filed June 9, 1900. Serial No. 19,679. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. BELCHER, of Stoughton, in the county of Norfolk and State of Massachusetts, have invented an Improved Hinged Last, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation, partly in section, of my improved hinged last, showing it in the locked position. Fig. 2 is an elevation of the same, showing it closed. Fig. 3 is an elevation, partly in section, showing a modified form of the locking device.

The object of my invention is to provide a hinged last with a locking device that may be with facility both locked and unlocked and which when locked is rigidly and positively secured. I accomplish this object by means of a locking-bolt which is movably connected at one end to one of the parts of the hinged last and which has at its free end an eye bent at an angle to the length of the locking-bolt in such a fashion that it may coöperate with a catch upon the other part of the hinged last to lock the last in the open position shown in Fig. 1.

In the drawings the two parts of which the hinged last is made up—namely, the toe part and the heel part—are marked, respectively, A and B, and these two parts are hinged together by the hinge C. The locking-bolt D is movably connected to the part B, being universally hinged thereto by means of a screw-eye d, secured in a recess in the face b of the part B, this recessing being employed for a purpose to be hereinafter explained. Approximately opposite to the connection of the locking-bolt D with part B a catch or pin d' projects from the face a of part A to such a distance as will serve to furnish a point of engagement for an eye or slot in the end of bolt D, which is bent upward at a suitable angle. The end of this pin is slightly rounded in order that the eye or slot in bolt D may more readily engage the catch, and the engagement is effected by pressing the bolt D downward until the eye springs over the catch or pin. The disengagement is effected by reversing the operation. It will be obvious that when the eye or slot in the end of the bolt D is in engagement with the catch it will be impossible to close the two parts of the last together.

The purpose of the recess in which the hinge of the locking-bolt is contained is to provide a space in which the bolt and catch may be contained when the last is in the closed position, as shown in Fig. 2. It will be clear that this arrangement allows the maximum of closure with the minimum cutting away of the last.

In Fig. 3 I show a modification in which the catch or pin d' of Fig. 1 is replaced by a disappearing spring-pin d''', which yields inwardly to permit the bolt D to engage the pin d'''. Disengagement is effected by pressing the pin d''' inward until the eye upon the end of bolt D is freed. The advantage of this construction is that the pin d''' can be made to project through the eye of the locking-bolt as far as may be desired, thus insuring against accidental disengagement, a matter of considerable practical importance, for, as will be obvious, the projection of the pin d' is limited to such a distance that the bolt D may be sprung over it and off of it. The spring-pin d''' is suitably arranged in a case, as shown in Fig. 3, and secured within the case so that it cannot be taken out nor expelled by the spring d'''', and it is also suitably proportioned, so that its outer end may be forced down to the surface of the face a and so that when in engagement it will pass through the eye of the bolt D sufficiently to make it impossible that the two parts of the lock should become separated.

I claim—

1. A hinged last made up of a toe-piece and a heel-piece connected by a hinge; that hinge; a spring-catch secured to one of these pieces; a locking-bolt universally hinged to the other piece, and having an eye bent upward at its free end and adapted to engage the spring-catch, all organized and operating as described.

2. A hinged last made up of a toe-piece and a heel-piece connected by a hinge; that hinge; a spring-catch secured to one of these pieces; a locking-bolt having an eye bent upward at its free end and movably secured at the other end to the other piece, all organized to permit the eye of the locking-bolt to engage the

spring-catch to lock the last open, as described.

3. A hinged last made up of a toe-piece and a heel-piece connected by a hinge; that hinge; a spring-catch secured to one of these pieces; a locking-bolt having an eye at its free end bent at an angle to its length, and movably secured at the other end to the other piece; all organized to permit the eye of the locking-bolt to engage the spring-catch to lock the last open, as described.

4. A hinged last made up of a toe-piece and a heel-piece connected by a hinge; that hinge; a spring-catch secured to one of these pieces; a locking-bolt universally hinged to the other piece, and having an eye bent upward at its free end, the point of connection of the locking-bolt being within a recess in the face of the part to which the locking-bolt is hinged, all organized to permit the catch and the bolt to be contained within the recess when the last is in its closed position, as described.

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