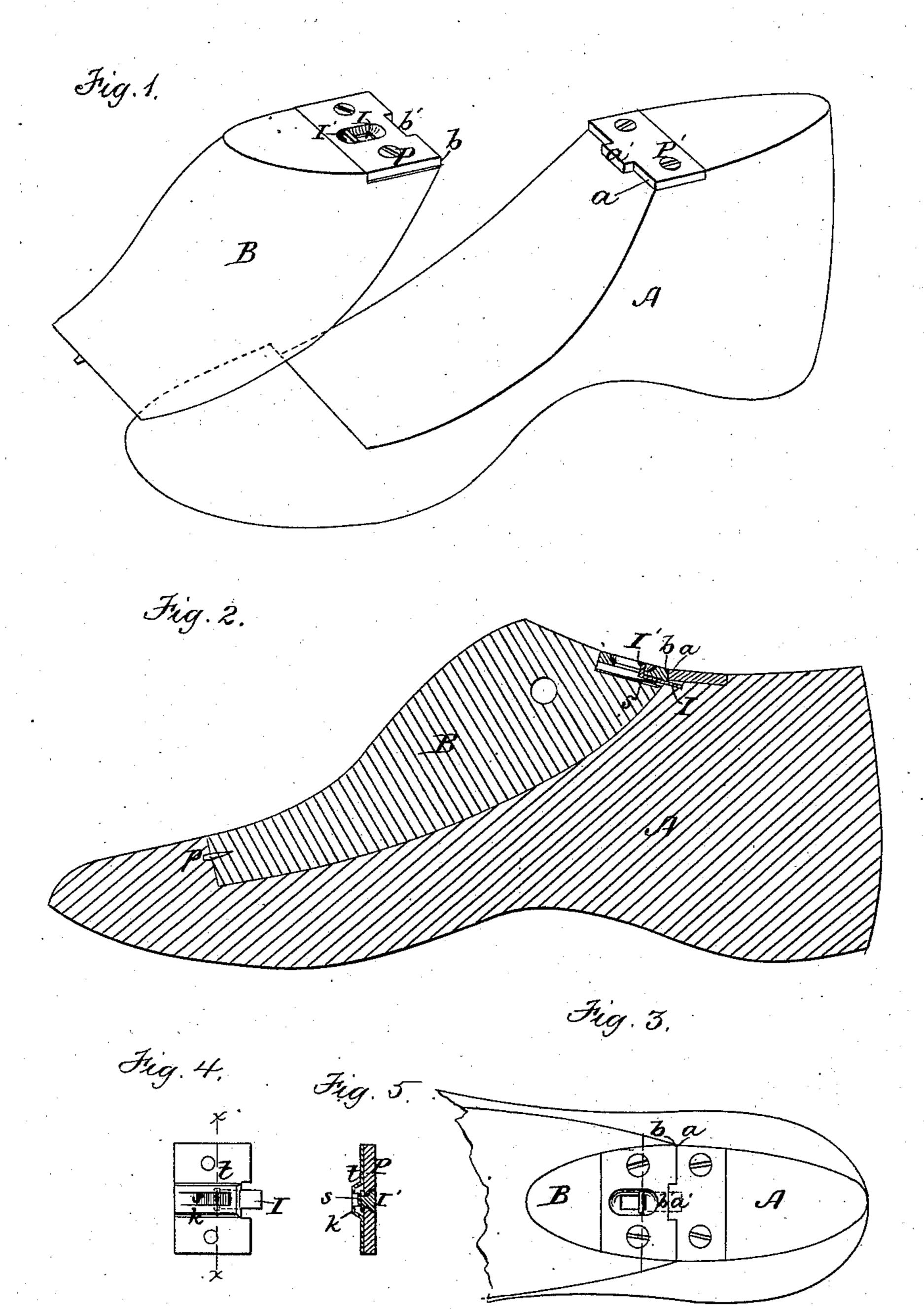
## B. C. YOUNG. LAST-BLOCK FASTENERS.

No. 194,756.

Patented Aug. 28, 1877.



Witnesses. A. E. Brucen ME Brown B. C. Young
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Attys.

## United States Patent Office.

## BARKER C. YOUNG, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN LAST-BLOCK FASTENERS.

Specification forming part of Letters Patent No. 194,756, dated August 28, 1877; application filed July 7, 1877.

To all whom it may concern:

Be it known that I, BARKER C. Young, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Last-Block Fasteners, of which the

following is a specification:

In the accompanying drawings, forming a part of this specification, Figure 1 represents a perspective view of a last and its block disconnected. Fig. 2 represents a sectional view, showing the block in place. Fig. 3 represents a top view. Fig. 4 represents a bottom view of the plate P detached. Fig. 5 represents a section on line  $x \ x$ , Fig. 4.

Similar letters of reference refer to like parts

in all the figures.

This invention has for its object to provide simple, cheap, and convenient means for preventing the longitudinal and lateral displacement of a last-block when it is in position on the last and in use in a boot or shoe, and the accidental removal of the block from the last when the latter is not in use.

To these ends my invention consists, first, in two metallic re-enforcing or bearing plates, which are rigidly attached, respectively, to the last and its block, and are provided with shoulders, which bear against each other when the block is in place and prevent end and side

motion of the block.

It consists, also, in the combination, with the metallic plates, of a bolt, adapted to slide in a socket in one plate, and enter a recess in the other for the purpose of preventing upward motion of the block.

It also consists in certain details of construction, all of which I will now proceed to

describe.

In the drawings, A represents the last, and B represents the last-block, which is formed as usual, excepting that its upper end terminates in a shoulder, b, instead of a sharp angle, as heretofore. The shoulder b is formed by attaching a metallic re-enforcing or bearing plate, P, of suitable thickness to the block, as shown in Figs. 1, 2, and 3.

a represents the shoulder or bearing on the last, said shoulder being the edge of a re-enforcing or bearing plate of metal, P', securely affixed to the top of the last in such position that the edge constituting the shoulder a will

bear against the shoulder b on the block B, as shown in Fig. 2, when the block is in place.

The bearing of the shoulders a b against each other prevents the block from being moved endwise, as will be readily seen.

To prevent the side motion of the block, I provide one of the shoulders with a mortise or recess, b', and the other with a corresponding tenon or projection, a', which fits closely

in said mortise or recess.

The block is thus effectually prevented from being moved in any direction, excepting outwardly or away from the last, by means which are simple and cheap, and by their application to the last and block add to their strength and durability, particularly in the case of the block, the re-enforcing-plate P covering and protecting the thin end of the block, which would otherwise be liable to be worn or broken away.

When the last is not in use it is often desirable to secure the block B so that it cannot be lifted or removed from the last by accident. For this purpose I employ a sliding bolt, I, which is adapted to slide in a socket in the plate P, and enter a recess in the plate P', as

shown in Figs. 2 and 3.

The plate P is, preferably, countersunk, to form a recess in which the upturned end or thumb-piece I' of the bolt I may be worked without projecting above the upper surface of

the plate.

I prefer to make the bolt I and plate P as shown in Figs. 2, 4, and 5, the plate P having a thin plate, t, attached rigidly to its under side in any suitable manner. The plate t is provided with an offset, which constitutes a socket, k, for the bolt I, and is provided with a spring, s, which bears upwardly against the bolt I with sufficient force to prevent said bolt from being moved accidentally. The plate t, socket k, and spring s are, preferably, stamped or struck up from a single sheet of metal.

It will be seen that the bolt I when projected into the recess in the plate P will prevent the block from being raised from the last, and, in connection with the previously-described devices, connects the block rigidly to the last. The spring s prevents the bolt I from being accidentally withdrawn or retracted. The bolt I working in the metal plates P P' is

prevented thereby from wearing the wood of the last, and from working loose.

I claim as my invention—

1. A last, A, and its block B, provided with metallic re-enforcing or bearing plates P P', which are rigidly attached, respectively, to the block and last, and are provided with shoulders a b, one having a projection, and the other a recess, said shoulders being adapted to bear against each other and prevent end and side motion of the block, substantially as described.

2. The plates P P', rigidly attached, respectively, to the last and block, and adapted, as described, to prevent end and side motion of

said block, combined with the bolt I, which is adapted to slide in a socket in the plate P, and enter a recess in the plate P' to prevent upward motion of the block, as set forth.

3. The plate P, having the bottom plate t, provided with the socket k and spring s, com-

bined with the bolt I, as set forth.

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

BARKER C. YOUNG.

Witnesses:

C. F. Brown,

E. B. FAIRCHILD.