

(No Model.)

G. M. HUNTINGTON.
LAST BLOCK FASTENER.

No. 537,155.

Patented Apr. 9, 1895.

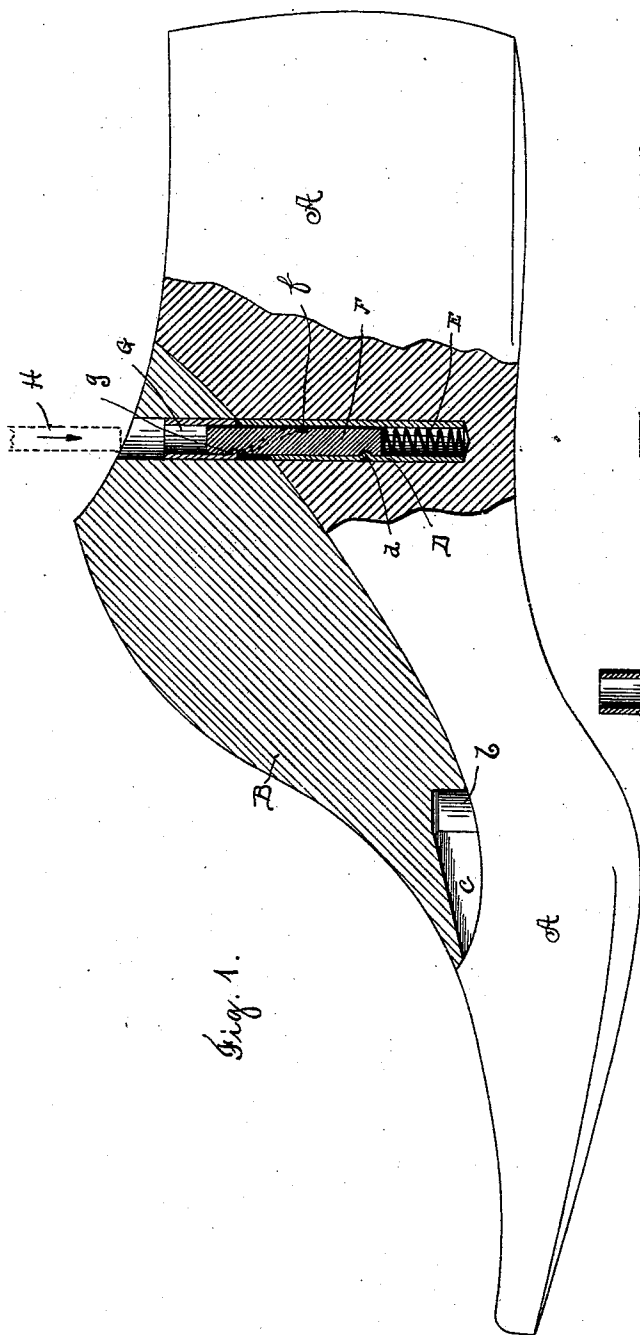


Fig. 1.

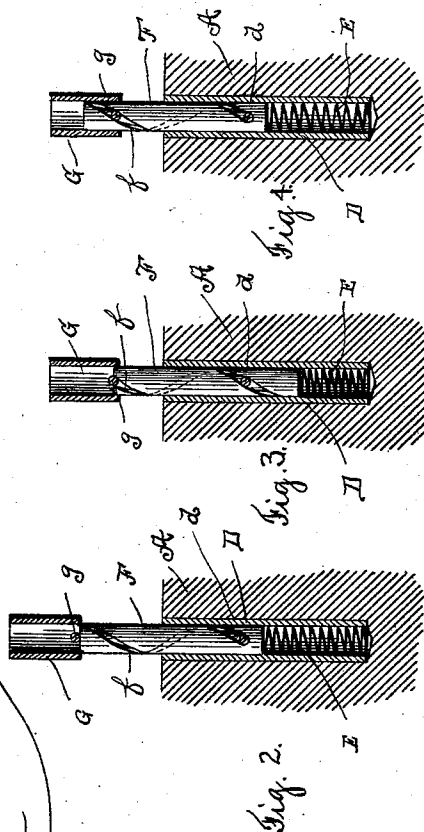


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE M. HUNTINGTON, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO
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LAST-BLOCK FASTENER.

SPECIFICATION forming part of Letters Patent No. 537,155, dated April 9, 1895.

Application filed August 30, 1894. Serial No. 521,670. (No model.)

To all whom it may concern:

Be it known that I, GEORGE M. HUNTINGTON, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Last-Block Fasteners, of which the following is a specification.

My invention relates to that class of devices which are used for detachably securing last-blocks to their lasts, and the object of my invention is to provide a strong, simple and durable securing device, which will tightly secure the last-block upon the last, and which may be readily actuated to unlock said last-block when desired.

To these ends, my invention consists of the parts and combinations of parts, as hereinafter described, and more particularly pointed out in the claims at the end of this specification.

In the accompanying drawings, Figure 1 is a side elevation of a last partially broken away to show the construction of the last-block fastener, and Figs. 2, 3 and 4 are transverse, sectional, detail views illustrating the operation of the securing device.

Referring to the drawings, and in detail, A designates a last, which may be of any ordinary or preferred construction, and which is adapted to receive and support a detachable last-block B.

Fastened in and secured to the last-block A is a suitable pin *b*, which is adapted to fit into and engage a recess *c* in the last-block B. These parts may be of the ordinary construction, and need not be herein described at length.

The fastening device which I preferably employ to detachably secure the block B upon the last A as illustrated in the drawings consists of a tube or bushing fastened in the last A, and a second tube or bushing secured in the block B, the said bushings being provided with projections which are adapted to engage with a spiral groove formed in a rotatable spring-actuated securing pin.

In the drawings, D designates a tube or bushing, which is driven into the last A, and is preferably formed of brass. The lug or projection *d* extending inwardly from the

bushing D may, if desired, be formed by indenting the bushing D, and is adapted to engage with a spiral groove or thread *f* formed in the rotatable securing pin F. Mounted in the lower part of the bushing D, I provide a coiled or spiral spring E, which is adapted to engage and actuate the securing pin F, and to normally hold the same in its elevated position. A second bushing or tube G corresponding with the bushing D is driven into and secured in the last-block B, and is provided with a lug or projection *g*, which is also adapted to fit into and engage the spiral groove *f* of the securing pin F.

The operation of a securing device, as thus constructed, is thought to be apparent, and is most clearly illustrated in Figs. 2, 3 and 4.

When it is desired to secure the last-block B to the last A, the pin *b* is engaged with the recess *c*, the parts of the securing device then assuming substantially the relation illustrated in Fig. 2.

When pressure is applied to the upper end of the last-block, the securing pin F is forced down against the tension of the spring E, and turns until the parts assume substantially the position illustrated in Fig. 3. When the parts have been forced down into the position illustrated in Fig. 3, the projection *g* of the bushing G is brought into a position to engage the spiral groove *f* of the securing pin F, and the spring E is then left free to raise and turn the securing pin F until the parts assume substantially the position illustrated in Fig. 4, thus tightly locking and clamping the last-block, in its place upon the last.

Whenever it is desired to remove the last-block, the parts may be unlocked by means of a suitable key or wire as H, by which means pressure may be applied to the securing-pin F, and the same may be forced down against the tension of the spring E until the spiral groove *f* is disengaged from the projection *g*. By means of this construction, it will be seen that I have provided a very convenient and efficient fastening device which consists of few parts, and which may be readily and cheaply constructed. It will also be seen that the parts constituting my fastening device may be located vertically, and there is little liability of cracking or weakening the last in

boring the holes or sockets to receive the bushings of my fastening device.

If preferred, instead of providing the securing pin F with a regular spiral groove or thread, the lower part of the groove *f* may be formed upon a smaller incline or pitch, and if this construction be adopted, it will be seen that the tension of the spring E will be exerted to more strongly and firmly draw the last-block into position upon the last.

I am aware that the bushings or tubes may be dispensed with, and the projections for engaging the securing pin may be carried directly by the last and the last-block, and also that other changes may be made in the construction of the device without departing from the scope of my invention, as expressed in the claims. I do not wish, therefore, to be limited to the construction which I have shown and described, but

What I do claim, and desire to secure by Letters Patent of the United States, is—

1. The combination of a last, a last-block adapted to engage and be detachably supported by said last, projections carried by said last and last-block, and a securing device comprising a grooved spring actuated securing pin, which is adapted to fit over and engage said projections, substantially as described.

2. The combination of a last, a last-block adapted to fit upon and be detachably secured to said last, and a fastening device compris-

ing a bushing secured in said last, a second bushing secured in said last-block, projections carried by said bushings, and a rotatable spring-actuated, grooved, securing-pin adapted to mesh with and engage said projections, substantially as described.

3. In a last-block fastener, the combination of a bushing or tube adapted to be secured in the last, a second bushing or tube adapted to be secured in the last-block, said bushings being provided with suitable projections, a spirally grooved, rotatable securing-pin adapted to engage said projections, and a coiled spring for actuating said securing-pin, substantially as described.

4. The combination of a last A, a bushing or tube D having a projection *d*, and adapted to be driven into or secured to the last, a last-block B, a second bushing or tube G adapted to be driven into or secured to the last-block, and having a projection *g*, a rotatable, spirally grooved securing-pin F adapted to fit into said bushings, and to engage said projections, and a coiled spring E, adapted to engage and actuate the securing-pin F, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

GEORGE M. HUNTINGTON.

Witnesses:

LOUIS W. SOUTHGATE,
PHILIP W. SOUTHGATE.