## Lynahan & Koch, Last.

NO 47.314.

Patented Apr. 18. 1865.

Fig.1.

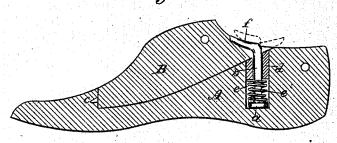
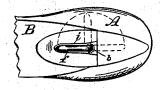


Fig.2.



Witnesses:

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## UNITED STATES PATENT OFFICE.

DANIEL LYNAHAN AND HARRY H. KOCH, OF BUFFALO, NEW YORK.

## IMPROVED FASTENING FOR BLOCKS OF SHOE-LASTS.

Specification forming part of Letters Patent No. 47,314, dated April 18, 1865.

To all whom it may concern:

Be it known that we, DANIEL LYNAHAN and HARRY H. KOCH, of Buffalo, in the county of Eric and State of New York, have invented certain new and useful Improvements in Fastening Blocks to Shoe-Lasts; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical horizontal section of a last with our improvement attached; Fig. 2, a plan view of the same, showing only a

portion of the last.

Like letters of reference indicate correspond-

ing parts in both figures.

In the drawings, A represents the last, and B the movable block. Ordinarily this is secured by means of the pin e at the forward end and a metal tack driven through the heel or thin part of the block into the top of the last. As it is required to remove the block from the last when the latter is taken out of the boot or shoe, the tack is drawn for this purpose, and t'ien, if the workman be discreet, he replaces the block and secures it by the tack to prevent it from being separated from the last or becoming lost; but this he often neglects, and even when done the repetition of the act of driving the tack in the same spot disintegrates the wood, so that the block is easily lost by handling it. This also very soon spoils the last, which would otherwise endure much longer.

Our invention has for its object a fastening which is permanently attached to the last, and will hold the block securely to its place when

required, and as readily release it.

It consists of a vertical spring-bolt, b, with its lower extremity inclosed in a spiral spring, e, intervening between the head or button a and the wooden plug d. The upper end of the bolt is bent to form a hook, f, having an inclination which nearly conforms to the surface of the block B at its rear extremity, so as to bear upon it by the force of the spring e and hold it down. A slight recess or groove is formed in the block at i, in which the hook lies, which prevents it from being accidentally turned aside.

When it is desired to remove the block from the last, the hook end of the bolt is raised by the thumb and finger, or in any other convenient manner, when it may be turned in a reverse position, as indicated by dotted lines in Fig. 2 and red lines in Fig. 1, when it no longer fastens the block, which is free to be drawn out of the shoe or boot in the usual way. When the last is to be laid aside, the two parts are placed together and secured by returning the hook to its former position. The block thus fastened can never be removed except by design, and much time and labor are saved which are often spent in assorting the lasts and blocks to match the sets.

This device is cheaply made, preferably from brass wire. The lower end of the bolt, after it has been put through the hole in the plug d and the coiled spring slipped thereon, is screwed in or riveted to the head a. The device may then be applied by boring a hole in the last of the size of the plug d, and deep enough to receive the lower end of the bolt, when the latter is inserted, and the plug driven in tightly and cut off smoothly at the

The cost of this device for each last is only a few cents, and it is more durable than the last itself, and may be applied to others when the first one is worn out or discarded from change of shape or fashion.

Our improvement does not in the least interfere with the use of the "pegging jack," as employed by shoe-makers.

What we claim as our invention, and desire

to secure by Letters Patent, is-

The improved device for fastening the blocks to shoe-lasts, consisting of the revolving hooked bolt b and spring e, or its equivalent, arranged and operating substantially as described.

In witness whereof we have hereunto signed our names in the presence of two subscribing witnesses.

DANIEL LYNAHAN. HARRY H. KOCH.

Witnesses:

JAY HYATT, JAMES C. BROWN.