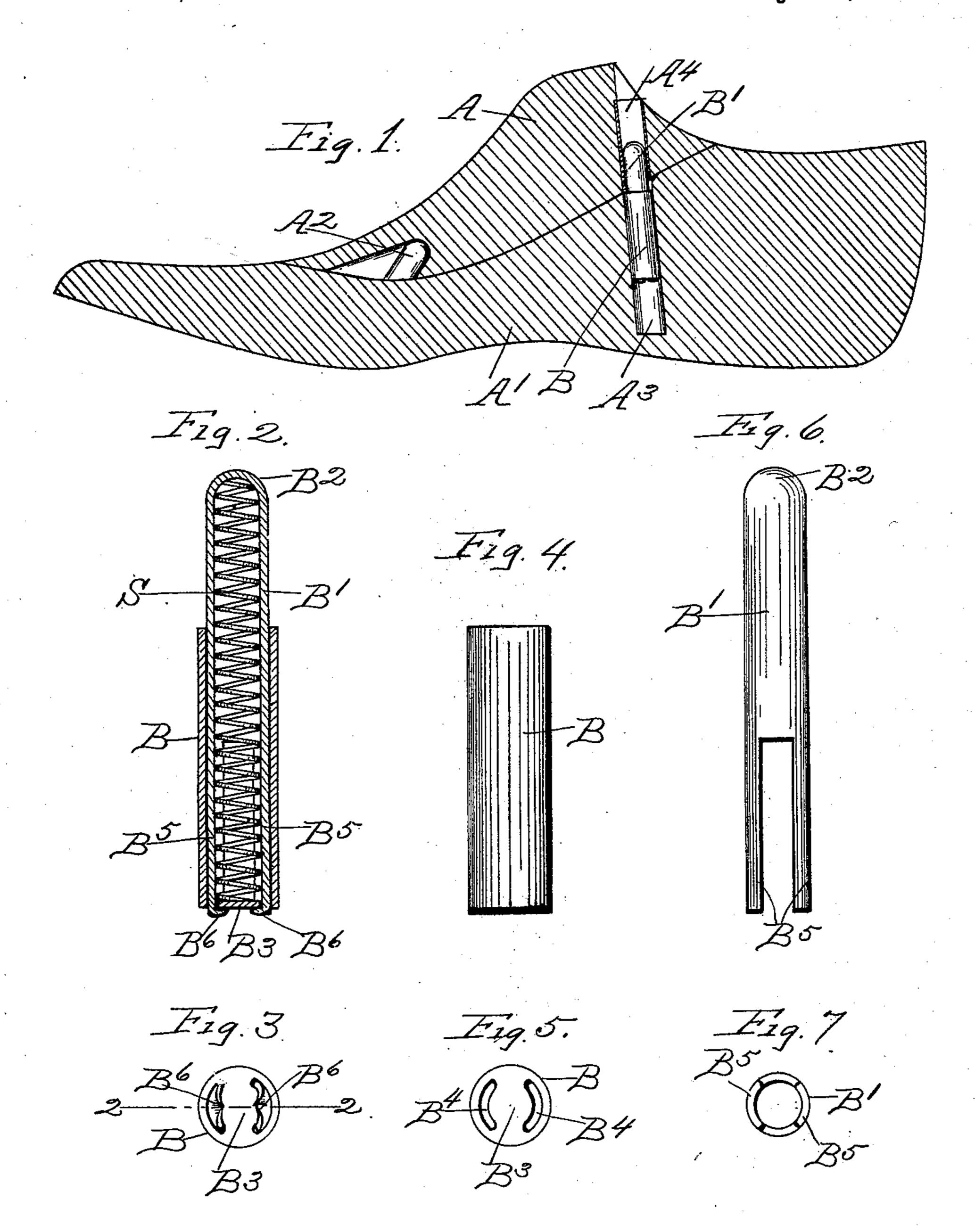
(No Model.)

## L. E. GOSS. LAST BLOCK FASTENER.

No. 539,940.

Patented May 28, 1895



Witnesses: Homan St Mother Fort-Curtie

Inventor: Lyman & Goss, by Mosher Hustis Mys.

## United States Patent Office.

LYMAN E. GOSS, OF TROY, NEW YORK.

## LAST-BLOCK FASTENER.

SPECIFICATION forming part of Letters Patent No. 539,940, dated May 28, 1895.

Application filed October 23, 1894. Serial No. 526,706. (No model.)

To all whom it may concern:

Be it known that I, LYMAN E. Goss, a citizen of the United States, residing at Troy, county of Rensselaer, and State of New York, have invented certain new and useful Improvements in Last-Block Fasteners, of which the following is a specification.

The invention relates to such improvements and consists of the novel construction and combination of parts hereinafter described

and subsequently claimed.

Reference may be had to the accompanying drawings, and the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the

several figures.

Figure 1 of the drawings is a vertical central longitudinal section of a last, showing my improved fastener in position for use in side elevation. Fig. 2 is a similar section of the fastener detached, taken on the broken line 2 2 in Fig. 3. Fig. 3 is a bottom end view of the fastener. Fig. 4 is a side elevation of the slideway-barrel. Fig. 5 is a bottom view of the same. Fig. 6 is a side elevation of the tubular slide-bolt. Fig. 7 is a bottom view of the same.

My invention relates to that class of fas-30 teners which are employed to detachably secure a last-block A— to the body A'— of the last.

The body part of the last is provided with a pin or lug A<sup>2</sup>— which fits into an aperture 35 in the block near its forward end, and with a hole or socket  $A^3$ — adapted to receive the body part of a fastener which is permanently secured to the body of the last in such position that the spring-controlled bolt of the 40 fastener will enter an aperture A4— in the rear end of the block in the position shown. The socket A<sup>3</sup>— is made of sufficient depth to extend a considerable distance below the body part of the fastener, forming a pocket 45 to receive the tail end of the bolt when the bolt is pressed down in opposition to the resilient force of the controlling spring. The aperture A<sup>4</sup>— extends up through the block so that a tool may be inserted from above to

push the bolt down into its socket and un-50 lock the block in the usual well known manner.

The object of my invention is to produce a

simple, cheap and durable fastener.

My improved fastener comprises two telescoping tubes each having at one end a closed 55 end-portion, and the other end open, and a coil-spring inclosed within the tubes so that one end of the spring bears on the closed end-portion of one tube, and the other end of the spring on the closed end-portion of the other 60 tube.

B— is a slideway-barrel; and B'— a slidebolt inserted therein. Both the barrel and bolt are of tubular form. The outer end of the bolt is closed at  $B^2$ — and the inner end 65 of the barrel is closed by the end-portion B<sup>3</sup> except for a pair of apertures or slots B4—- in such end. B<sup>5</sup>—, B<sup>5</sup>—, are extensions of the tubular wall or shell of the bolt, and are projected through the end-apertures B4— in the 70 inner end of the barrel. The extensions have their projecting ends upset or bent to form stops B<sup>6</sup>—engageable with the closed end-portion of the barrel to prevent the withdrawal of the bolt from the barrel. A coil-spring S-75 is inclosed within the bolt and barrel and bears at its opposite ends upon the respective closed end-portions of the bolt and barrel to yieldingly hold such parts distended with the stops B6— in engagement with the closed 80 end-portion of the barrel.

The barrel is secured to the last-body by driving it into the socket or aperture A<sup>3</sup>—within which the barrel is adapted to tightly fit; or it may be secured in any known manner. 85.

The bolt of the fastener is adapted to enter the aperture A<sup>5</sup>— in the last-block to secure the parts of the last together in the usual manner.

My improved fastener comprises only three 90 parts and is easily and cheaply constructed.

By making both the barrel and bolt of tubular form, I am able to use the longest possible spring in my fastener the spring extending from the extreme end of one part to the opposite extremity of the other part. This is an important feature, for as heretofore constructed, it has been possible only to use a spring of very limited dimensions which soon became set from frequent use, and having lost its resiliency rendered the device inoperative.

What I claim as new, and desire to secure

by Letters Patent, is—

In a last-block fastener, and in combination, a slideway barrel having a closed endportion at one end; a tubular slide-bolt inserted in the slideway barrel, having its outer end closed and an extension of its tubular wall projected from its inner end through an aperture in the closed end-portion of the bar-

rel; a spring inclosed within, and bearing at its opposite ends upon the respective closed 15 end-portions of the bolt and barrel; and a stop on the inner projecting end of the bolt-extension engageable with the closed end-portion of the barrel, substantially as described.

In testimony whereof I have hereunto set 25 my hand this 20th day of October, 1894.

LYMAN E. GOSS.

Witnesses:
Frank C. Curtis,
John A. Macdonald.