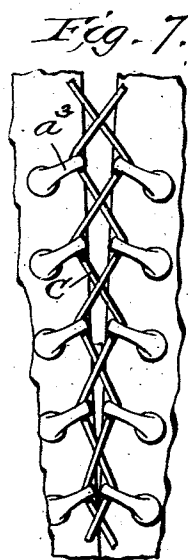
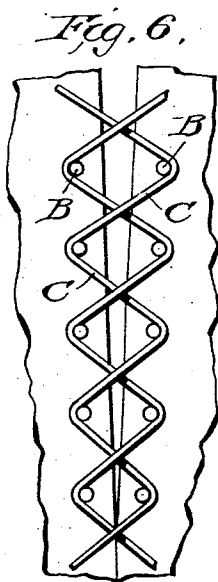
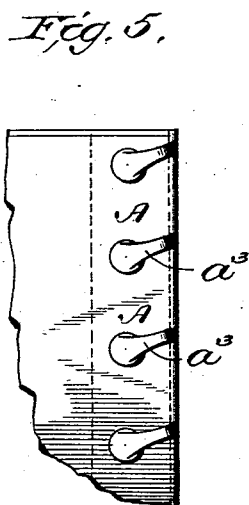
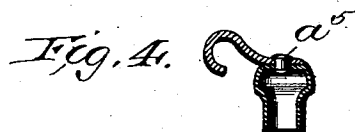
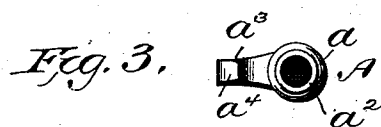
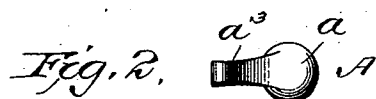
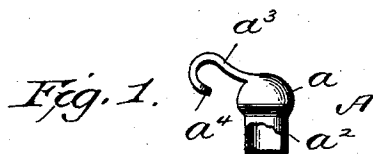


(No Model.)

J. L. CONAWAY.
FASTENING FOR SHOES, LEGGINGS, &c.

No. 572,157.

Patented Dec. 1, 1896.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN L. CONAWAY, OF PHILADELPHIA, PENNSYLVANIA.

FASTENING FOR SHOES, LEGGINGS, &c.

SPECIFICATION forming part of Letters Patent No. 572,157, dated December 1, 1896.

Application filed December 21, 1896. Serial No. 572,906. (No model.)

To all whom it may concern:

Be it known that I, JOHN L. CONAWAY, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Fastenings for Shoes, Leggings, &c.; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to fastenings for shoes, leggings, &c.

The objects are to produce a fastening which will avoid the entanglement of the bottom of trousers, skirts, dresses, &c., as is common with fastenings in general use; furthermore, to produce a fastening constructed in such manner that when secured in place upon the shoe-upper its hook will lie close to or in alinement with the edge of the upper, by which arrangement, when drawn taut, the lacing will present a line slightly deviating from a straight line, or, in other words, a line composed of a series of long and wide angles—as distinguished from the sharply angular and pronounced zigzag line presented by the lacing when the fastenings are located at some distance from the edges of the upper—thereby reducing the attrition and wear of the lacing and allowing it to be drawn taut with ease and with but slight strain; furthermore, to produce a fastening by which the lacing of the shoe may be accomplished in a rapid, certain, and effective manner, and which will require less length of lacing than is necessary with the fastenings in common use.

With these objects in view the invention consists, broadly, in a shoe-fastening comprising a head having an eyelet and an outward-projecting shank terminating in an underturned hook; furthermore, in a shoe-fastening comprising a head having an eyelet and an outward and upward projecting shank terminating in an underturned hook; furthermore, in the combination, with a shoe-upper, of a fastening having a shank carrying an underturned hook, the shank being arranged at an angle to the edge of the upper with the hook close to or in alinement with the said edge, and, finally, in the various novel details

of construction, as will be hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, forming a part of this specification, and in which like letters of reference indicate corresponding parts, I have illustrated a form of embodiment of my invention with a modified form thereof, although other forms of embodiment thereof may be employed without in the least departing from the spirit thereof, and in these drawings—

Figure 1 is a view in elevation, partly in section, showing the contour of my improved fastening. Figs. 2 and 3 are top and bottom plan views, respectively. Fig. 4 is a view in sectional elevation of a fastening device wherein the hook-carrying shank is pivoted to the head of the fastener. Fig. 5 is a view in plan, displaying a portion of the upper of a shoe and showing the manner in which my fastening is disposed relatively to the meeting edges of the upper. Fig. 6 is a diagrammatic view showing the position occupied by the lacing when used in connection with the fastenings in ordinary use. Fig. 7 is a similar view showing the position occupied by the lacing when used in connection with my improved fastening.

Referring to the drawings and to Figs. 1 to 3 thereof, A designates the fastening, comprising a head *a*, having on one side an eyelet *a*² and on the opposite side an upward and outward extending shank *a*³, terminating in an underturned hook *a*⁴. These parts are all integral, and are constructed of any suitable material combining lightness and strength.

The shank *a*³ is extended outward a sufficient distance beyond the head to bring the hook *a*⁴, when the fastening is secured in position, practically into alinement with the edges of the upper and is then curved upward to allow the hook *a*⁴ to be a sufficient distance above the upper to permit of the passage of the lacing between the upper and hook, and in order to prevent the fastening from projecting beyond the meeting edges of the upper and also to dispose the hooks in such manner to avoid the danger of their catching in the bottom of trousers, skirts, dresses, &c., and to facilitate the lacing and unlacing of the shoe I incline the shanks upward in a

plane approximately horizontal with the upper and at an angle of about forty-five degrees to the meeting edges thereof, as shown in Fig. 5.

5 In order to show clearly the advantages accruing from having the hooks of the fastenings arranged close to the meeting edges of the upper, and of disposing the shanks at an angle to the said edges, and also to demonstrate that there will be less attrition and consequent wear to the lacing by this arrangement, and that the lacing may be drawn taut with but little strain, I have prepared the diagrammatic views, Figs. 6 and 7. In Fig. 15 6 the circles B indicate the portion of the ordinary lacing-hook around which the lacing C passes, and in Fig. 7 the ends of the shanks a^3 indicate the same, the circles and hook ends being the same distance apart in both 20 views and taken by actual measurement from a shoe. It will be seen that in Fig. 6 the lacing C resembles lazy-tongs when retracted and the lacing in Fig. 7 lazy-tongs when projected. In the former the lacing forms a 25 pronounced zigzag line removed by a considerable space from the edges of the rive of the upper, while in the latter the lacing is extended longitudinally, and the contour or configuration passes from that of a zigzag 30 more and more toward a straight line or alinement, causing the lacing to lie close to or nearly parallel with the edges of the upper, so that instead of the lacing being bent at sharp angles at the points where it passes 35 around the hooks, as shown in Fig. 6, at which points there will be great strain and consequent wear, the lacing will be deflected only to a slight degree from a straight line at the points referred to, thus bringing the line of 40 draft in an approximately straight line and

as a result reducing the friction and wear at these points. This peculiar disposition of the hooks also permits of the employment of a much shorter lacing than where the hooks are set back some distance from the edge of the 45 upper.

In some instances I may pivot the shank to the head by means of a pin or screw, as shown in Fig. 4, so that the shank will yield to strain, as when the lacing is drawn taut, or from the 50 different positions taken by the foot and ankle in walking.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a shoe-upper, of 55 a fastening device comprising a head having an eyelet secured in the upper, and a shank projecting from the top of the head upward and outward beyond the side of the head and 60 terminating in an underturned hook lying close to or in alinement with the meeting edges of the upper, said shank being arranged at an angle to the said meeting edges with the hook disposed toward the top of the up- 65 per, whereby when the lacing is being drawn taut, there will be but slight resistance and consequently but little attrition offered to the lacing by the hook, substantially as described.

2. A shoe-fastening comprising a head hav- 70 ing an eyelet and a shank pivotally connected with the head and terminating in an underturned hook, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN L. CONAWAY.

Witnesses:

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DAVID O. BOORSE.