No. 609,112. Patented Aug. 16, 1898.

L. C. MOORE.

SHOE LACE FASTENER.

(Application filed Sept. 14, 1897.)

(No Model.)

Fig - 1 -

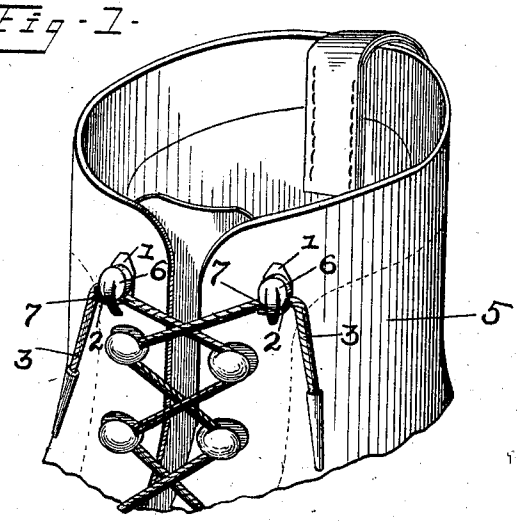


Fig - 2 -

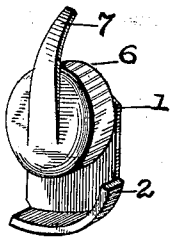


Fig - 3 -

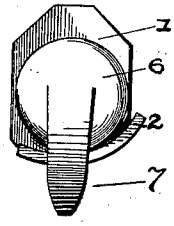


Fig - 4 -

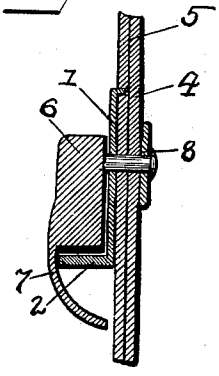
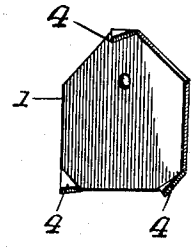


Fig - 5 -



Inventor:-

Llewellyn C. Moore,

Witnesses

C. A. Young,

U. S. Hillyard.

By his Attorneys,

C. A. Snow & Co.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

LLEWELLYN C. MOORE, OF FARRAGUT, IOWA, ASSIGNOR OF ONE-HALF TO SAMUEL A. COX, SIMON CROSSER, AND HARRISON ROGERS, OF SAME PLACE.

SHOE-LACE FASTENER.

SPECIFICATION forming part of Letters Patent No. 609,112, dated August 16, 1898.

Application filed September 14, 1897. Serial No. 651,673. (No model.)

To all whom it may concern:

Be it known that I, LLEWELLYN C. MOORE, a citizen of the United States, residing at Farragut, in the county of Fremont and State of Iowa, have invented a new and useful Shoe-Lace Fastener, of which the following is a specification.

This invention relates to means for securing the loose ends of a shoe-lace after the shoe has been laced, and is designed to improve the general construction of this class of fastenings, whereby they are rendered more effective in service, easier of manipulation, and secure the lace against possible slipping when fastened.

For a full understanding of the merits and advantages of the invention reference is to be had to the accompanying drawings and the following description.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a detail view of the upper portion of a laced shoe, showing the application of the invention. Fig. 2 is a detail view of the fastening, the cam being turned back about into the position which it will occupy when placing the lace in position or removing it from the fastener. Fig. 3 is a detail view in elevation. Fig. 4 is a sectional detail. Fig. 5 is detail view of the face-plate inverted, showing the retaining-points which enter the material and prevent the fastening from turning when subjected to lateral strain.

Corresponding and like parts are referred to in the following description and indicated in the several views of the drawings by the same reference characters.

The face-plate 1 has an offstanding lip or flange 2 at one end, which forms a fixed jaw against which the loose end of the shoe-lace 3 is clamped, and this lip or flange curves longitudinally and is an integral part of the plate 1, being formed by bending an end portion thereof about at right angles. Points 4 project from the inner or rear face of the plate 1 and enter the material 5 a sufficient distance to prevent the turning of the plate when subjected to strain.

The cam 6 is pivoted eccentrically to the plate 1 and coöperates with the lip or flange 2, so as to bind the end portion of the lace 3 between it and the part 2, said cam being of a height or thickness corresponding to the depth of the lip or flange 2 and having an arm 7 projecting therefrom and overhanging the said lip or flange 2 and curving toward the material 5, whereby the lace is prevented from slipping from between the parts 2 and 6 when clamped. This arm 7, in addition to retaining the lace in position, provides a means for operating the cam upon its pivot, and may be engaged by a finger of the hand or by the lace, as required. The cam is thrown back by means of the finger engaging with the arm 7, thereby permitting the end of the lace being placed in position to be secured, and when it is required to release the lace the latter is caught between the thumb and finger in front of the fastener and is pulled outward and backward and, engaging with the arm 7, throws the cam around upon its pivot, thereby releasing the lace, as will be readily understood. By having the outer end of the arm 7 curving, as shown, it is out of the way and serves in a measure to reinforce the lip or flange 2 by engaging therewith, as will be readily understood.

A plate 8 is placed against the inner or rear side of the material 5 opposite the plate 1 and receives the upset or riveted end of the pivot by means of which the cam 6 and plate 1 are held in place, and this pivot may be formed with the cam 6 or may be separate and passed through corresponding openings in the cam, plates 1 and 8, and the material 5, its end portions being upset or riveted to secure the parts in place, as will be readily comprehended.

The invention has the following advantages: The arm 7, by which the cam is operated, not only serves as a handle, but it operates as a guard, and when the cam is in engagement with a shoe-string or extends across the space between the stationary jaw it prevents the shoe-string from becoming acci-

dentally disengaged from the device by being forced outward. The guard is particularly advantageous when the device is applied to shoes, as the outer face of the cam is in a substantially vertical position and there is a liability of the shoe-string being forced outward by the wearer in walking. The arm by being arranged at an angle to the top face of the cam is adapted to embrace the stationary jaw or lip, and when the device is constructed on a larger scale for clamping ropes this arrangement is especially advantageous, as it assists in supporting the said lip or jaw and prevents the same from being forced outward from the cam by the clamping action thereof.

Having thus described the invention, what is claimed as new is—

A device of the class described, comprising a plate having a lip or flange forming a fixed jaw, a cam pivotally connected with the plate and arranged to coöperate with the fixed jaw, and an arm extending from the cam, forming a handle for operating the same and arranged to swing over the lip or flange to form a guard, said arm being arranged at an angle to the cam, whereby it is adapted to embrace the lip or flange and support the same against outward movement, substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

LLEWELLYN C. MOORE.

Witnesses:

HARRISON ROGERS,

SAMUEL A. COX.