March 24, 1925. 1,530,713

J. S. D. CLARK

LACING DEVICE FOR BOOTS AND SHOES

Filed Feb. 11, 1924

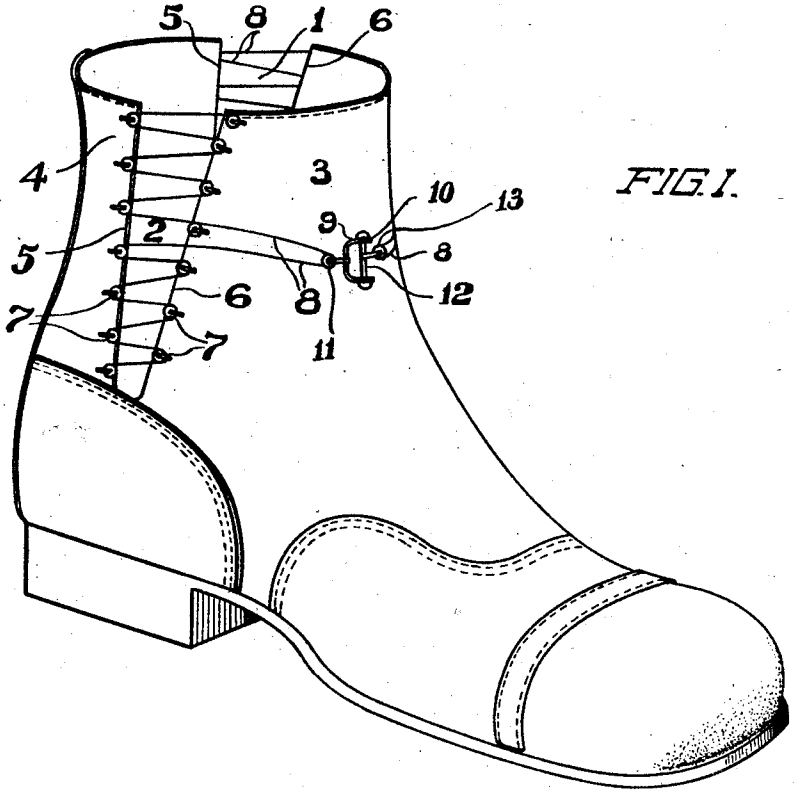
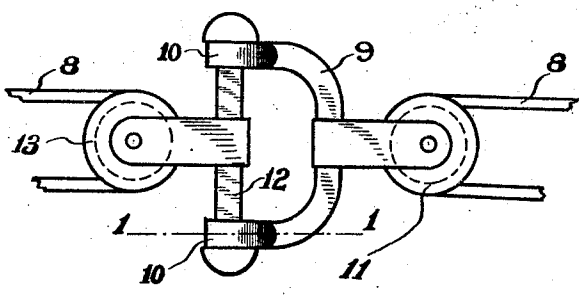


FIG. 1.

FIG. 2.



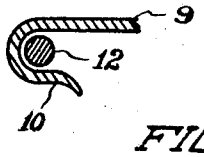


FIG. 3.

INVENTOR,
John Stephen Day Clark
BY Frederick E. Bromby
ATTY.

Patented Mar. 24, 1925. 1,530,713

UNITED STATES PATENT OFFICE.

JOHN STEPHEN DAY CLARK, OF BATTLEFORD, SASKATCHEWAN, CANADA.

LACING DEVICE FOR BOOTS AND SHOES.

Application filed February 11, 1924. Serial No. 692,127.

To all whom it may concern:

Be it known that I, JOHN STEPHEN DAY CLARK, a subject of the King of Great Britain, resident of the town of Battleford, in the Province of Saskatchewan, in the Dominion of Canada, have invented a new and useful Improvement in Lacing Devices for Boots and Shoes, of which the following is a specification.

The invention relates to improvements in boots and shoes as described in the present specification and shown in the accompanying drawings which form a part of the same.

The invention appertains more particularly to a new and useful method of lacing boots and shoes, which method consists substantially in providing one or more openings in the upper, to permit of putting on and removing the boot or shoe; securing small pulleys along the opposing edges of such openings to reduce the wear of a lace running alternately over the pulleys upon one side of the openings to those upon the other side thereof, and connecting a fastener to the lace of each opening so that it is simply necessary to draw taut the fasteners and secure them to one another in order to draw together the separated parts of the upper.

The fasteners, which secure the laces together, form a very distinctive feature of this invention as by their engagement and disconnection they serve to secure or loosen the boot or shoe upon the wearer's foot.

The object of the invention is to provide an efficient and serviceable device of the class described, which both facilitates and expedites the putting on and removal of boots and shoes, and one which eliminates the annoyance caused by laces becoming untied.

In the drawings, Figure 1 is a perspective view of a boot embodying the invention.

Figure 2 is an enlarged detail of the lace fasteners.

Figure 3 is a sectional view, taken on the line 1—1, Figure 2, of the fasteners.

Like numerals indicate corresponding parts in each figure throughout the drawings.

In the drawings, the preferred form of the invention comprises a boot or shoe, of any design or construction, having its upper cut away at each side, as at 1 and 2, so that said upper may expand to receive the wearer's foot and contract upon its reception.

The openings so formed separate the upper into a front piece 3 and a rear piece 4 having opposing edges at each side of the boot or shoe as at 5 and 6, which edges may be reinforced in the usual manner, or otherwise, to impart strength to same.

It will be readily understood that in fancy and novelty shoes, or where it is desired to provide a cool shoe, the uppers may be constructed with wide openings, thus rendering them cool and comfortable for the wearer; tongues can, of course, be inserted when it is desired to secure the opposite effect.

Pulleys 7 are affixed to the front piece 3 and rear piece 4 of the upper, longitudinally disposed at the edges 5 and 6 thereof, such pulleys being of a comparatively small size and preferably spaced an equidistance apart, the set of pulleys on one side of the openings being staggered in relation to those on the opposing side of the same opening.

A lace 8 is passed alternately over the pulleys of the opposing edges 5 and 6 at each side of the upper and secured at their ends to the extreme pulleys of same, such lace being of a sufficient length to permit of ample expansion of the front and rear pieces 3 and 4 upon slackening thereof.

Intermediate of the lacing at each side of the upper, fasteners are provided, which upon being drawn together interlock; one of such fasteners comprises a U-shaped member 9 having its ends terminating in hooks 10 and carrying a pulley 11, which pulley receives one of the laces 8, the other fastener consisting of a headed cross bar 12 arranged to lock in the interfitting fastener hooks 10 and bearing a similar pulley 13 which receives the other lace.

It will be clear from the foregoing that in order to tighten the laces of the respective openings it is merely necessary to pull the fasteners taut and connect them together at the front of the upper, and, inversely, the laces may be loosened by disengaging said fasteners and allowing them to slacken.

To construct a boot or shoe embodying the present invention with a single opening, the pulley of one of the fasteners is replaced by a rivet which secures the fastener permanently to the upper. The closing of the opening is then effected by drawing the lace taut and engaging its fastener with that secured to the upper.

What I claim is:—

1. A boot or shoe having its upper cut away to form a pair of openings, pulleys affixed at the opposing edges of such opening, a lace passing alternately over the pulleys of the opposing edges of each opening so as to close same upon being drawn taut, a fastener comprising a U-shaped member having hook ends and carrying a pulley engaging the lace of one of the openings, and a further fastener comprising a cross-bar disposed to lock in said hook ends of the aforesaid fastener and having a pulley engaging the lace of the other opening so that the respective laces will be drawn taut upon the interlocking of the fasteners one with the other.

2. A boot or shoe having its upper cut away forming an opening, pulleys affixed at the opposing edges of such opening, a lace passing alternately over the pulleys of the opposing edges of the opening so as to close same upon being drawn taut, a fastener comprising a U-shaped member having hook ends and carrying a pulley engaging the lace of the opening, and a further fastener comprising a cross-bar disposed to lock in said hook ends of the aforesaid fastener and affixed to the upper so that the lace will be drawn taut upon the interlocking of the fasteners one with the other.

3. In a boot or shoe, the combination with the lacing of the upper of a fastener comprising a U-shaped member having hook ends and carrying a pulley engaging a lace element, a further fastener consisting of a cross-bar disposed to lock in said hook ends of the aforesaid fastener and having a pulley engaging another lace element so that the lace element will be drawn taut upon the interlocking of the fasteners one with the other.

Signed at Battleford, Canada, this 8th day of January, 1924.

JOHN STEPHEN DAY CLARK.

Witnesses:

W. L. CLINK,

C. WRYOURE.