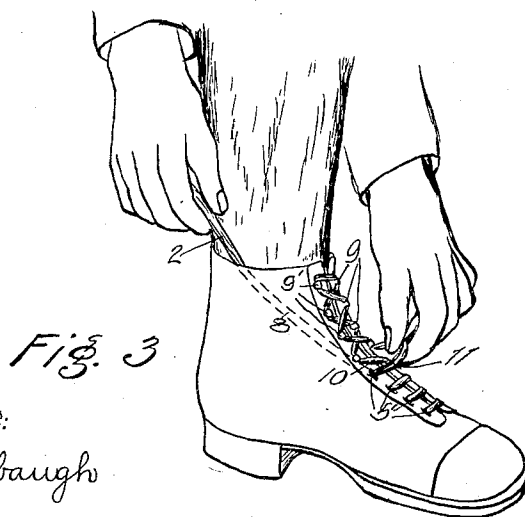
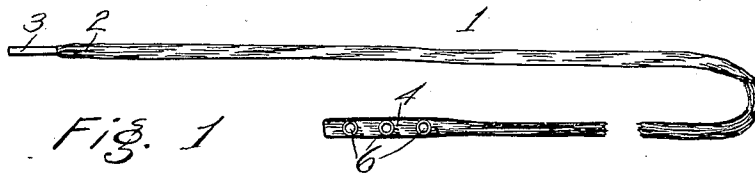
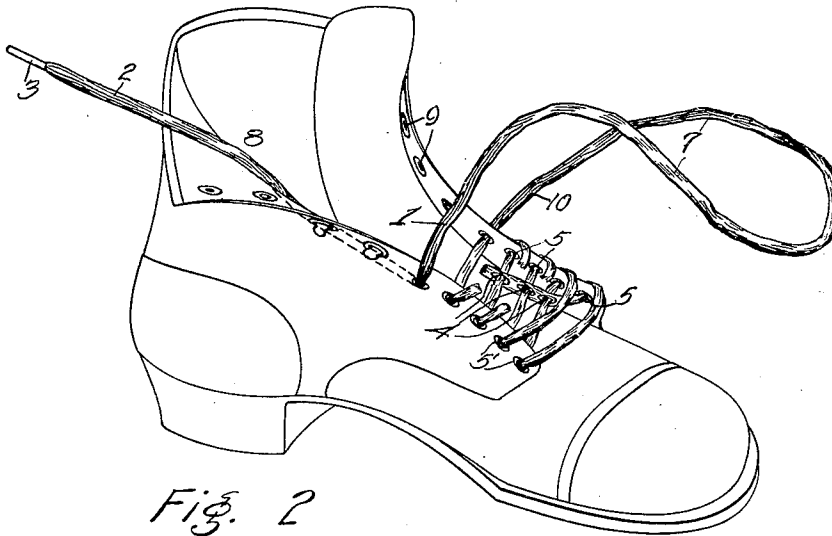


W. J. A. MUIRHEAD.
SHOE LACE AND MANNER OF TYING SAME.
APPLICATION FILED APR. 24, 1911.

1,065,264.

Patented June 17, 1913.



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WILLIAM J. A. MUIRHEAD, OF SEATTLE, WASHINGTON.

SHOE-LACE AND MANNER OF TYING SAME.

1,065,264.

Specification of Letters Patent.

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Application filed April 24, 1911. Serial No. 623,087.

To all whom it may concern:

Be it known that I, WILLIAM J. A. MUIRHEAD, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Shoe-Laces and Manner of Tying Same, of which the following is a specification.

This invention relates to improvements in shoe-laces and the art or manner of using the same.

The object of the invention is the provision of a shoe-lace of simple and novel design and the utilization of said lace in securing a shoe to afford more comfort and freedom to the foot and effect an economy in expense and time.

The invention consists in the adaptation of a shoe-lace of novel construction and the manner of attaching the same to a shoe, as will be hereinafter described and claimed.

In the accompanying drawing, Figure 1 is a detached perspective view of an embodiment of my invention. Fig. 2 is a perspective view of a shoe with the invention in connection therewith, the latter shown partly broken away. Fig. 3 is a view similar to Fig. 2 at a later stage of completion.

Referring to the accompanying drawings, the reference numeral 1 designates my improved shoe-lace and 2 one of its ends provided with a suitable tip 3 for threading the lace through the shoe-eyelets. At its opposite extremity 4 the lace is provided with devices for attachment to the eyelets 5, 5' commonly positioned upon the lower opposing edges of the opening in the shoe-upper. Such devices preferably consist in an eyelet or a plurality of eyelets 6 spaced apart in the end 4 of the lace. It is not necessary nor particularly desirable that the end 4 be provided with more than one eyelet as a single one will sufficiently secure the lacing in attached position to the shoe, as will be understood from the following description of the manner of using the same.

Referring to Fig. 2, the lace is employed as follows: The tipped end 2 of the lace is first threaded from the underside through the lowermost eyelet 5 at one side of the shoe-upper and a portion of the end 4 is left remaining upon such underside and directed upwardly to have the spaced eyelets 6 register with the respective eyelets 5 above the said lowermost eyelet thereof. Said tip end is thereupon threaded downwardly

through the lowermost eyelet 5' upon the opposite edge of the shoe-upper when it is rove through the innermost of the eyelets 6 of the lace and through the second of the eyelets 5. Thence the lace is threaded again downwardly through the opposite second eyelet 5' and under through the second of the eyelets 6 and the adjacent third eyelet 5 and so on until the eyelets of the lower portion of the shoe-upper are threaded by the single end 2. After said lower portion of the shoe is laced in the manner described and tightened to the degree desired which causes the end 2 to extend for a considerable distance beyond the uppermost of the eyelets 5', the overlying portion of the lace between said last named eyelet and the uppermost of the eyelets 5 is redrawn to form a bight in the lace, as shown at 7 in Fig. 2 while the free end 2 is laid diagonally between one side of the shoe-upper and the user's ankle in the manner shown at 8 in Fig. 3 with the tip 3 and a portion of the said end 2 projecting above the shoe top. The devices upon the upper portion of the shoe for engaging the shoe lace commonly consisting of a plurality of hooks 9 and 9' upon the opposing side of the shoe-upper are laced by utilizing said bight. The standing part 10 of said bight is first engaged with the lowermost hook 9' while the degree of tension desired to be imparted to the shoe is maintained, thence the lace is crossed to the second from the lowermost hook 9 upon the opposite side of the upper and thence back to the third of the hooks 9' until the upper row of opposing hooks is reached whereupon the lace is crossed directly over and the alternate hooks to those previously secured are engaged by the lace until the lowermost of the hooks 9 is reached upon the opposite side to that with which the lacing of the bight was begun. A slack portion illustrated at 11 in Fig. 3 remains at this point, whereupon the user grasps the end 2 of the lace which projects from the top of the shoe as aforesaid and, exerting a pull upon the same, draws said slack 11 of the lace taut through the uppermost of the eyelets 5'. After lacing has been thus accomplished, said end 2 may be tucked in at the top of the shoe where it is out of sight and may be had at any time to adjust the tension of the lacing. To unlace the shoe, the lacing is removed from engagement with one of the hooks, preferably one of the uppermost

hooks, which can readily be done by compressing the opposing edges of the shoe-upper slightly together. Thereupon the shoe lace is quickly and easily unloosed in
5 a manner readily understood. No tying of the end 2 of the lace is necessary to prevent the same from becoming slack and loosening the shoe. While the upper portion of the shoe is still open the said end is laid diagonally between the shoe top and the ankle as
10 afoersaid, which causes the lace to overlies the foot in proximity of the projecting ankle-bone and whereat the shoe-top is stretched tightly thereover in lacing. The
15 friction upon the length of lacing thus engaged is amply sufficient to prevent the same from becoming unloosed.

Among the advantages afforded by my invention are the utilization of a single end
20 of a shoe lace to secure the shoe; the additional security afforded the lacing from becoming loose by being fastened at the instep rather than at the top of the shoe where the strains upon the lace from walking are

more severe; the placing of the final tension 25 upon the shoe-lace at the instep and the free and convenient adjustment thereof of the tension where most discomfort is felt in cramped or loosely tied shoes; and the saving in length of the shoe-lace and economy 30 resulting therefrom.

What I claim as my invention, is—

The combination with a shoe having spaced lace receiving eyelets; of a lace led through said eyelets and provided with an 35 end having spaced eyelets, the spacing between the eyelets on the lace being equal to the spacing between the eyelets of the shoe and the lace being led alternately through the eyelets in the shoe and its own eyelets 40 whereby the portions between the eyelets in the shoe are held without flexure between successive eyelets.

WILLIAM J. A. MUIRHEAD.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
