June 24, 1958 R. BENOIT 2,839,804

SHOELACE STRUCTURE

Filed July 1, 1955

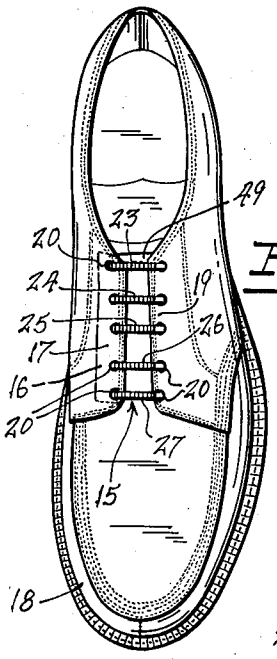


Fig. 1.

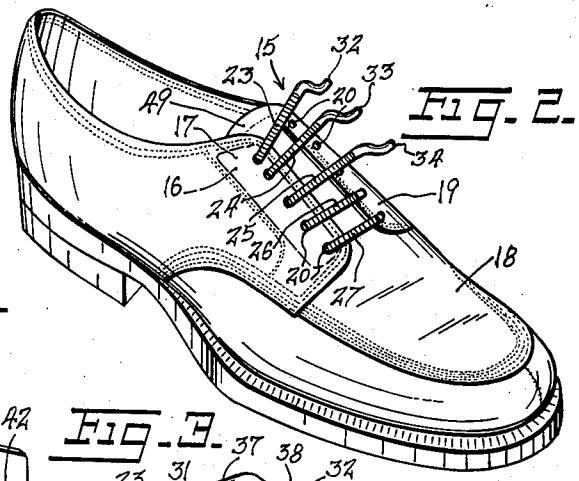


Fig. 2.

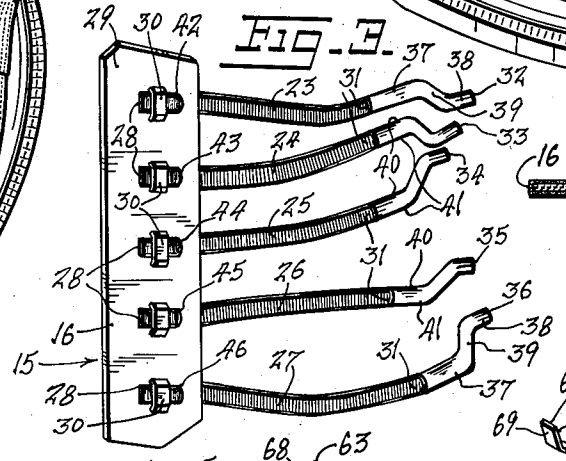


Fig. 3.

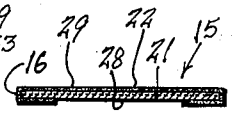


Fig. 5.

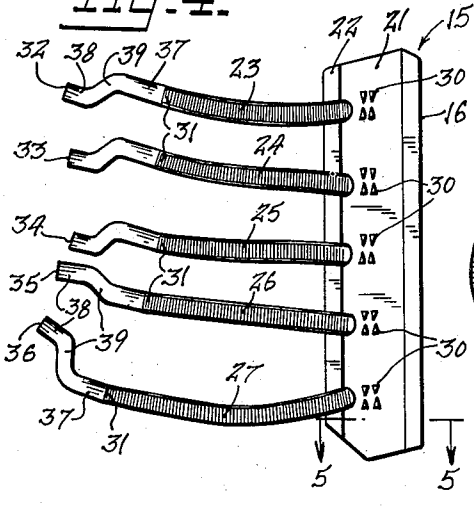


Fig. 4.

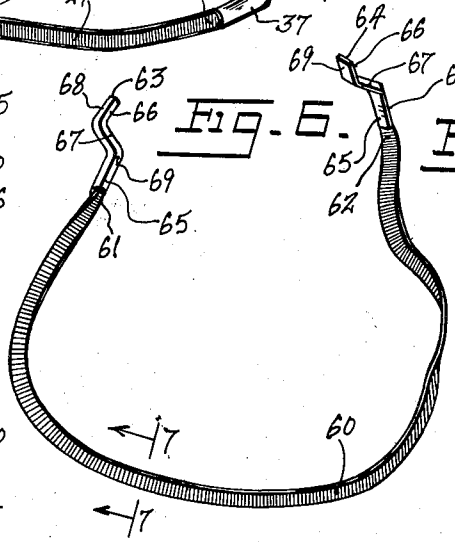


Fig. 6.



Fig. 7.

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SHOELACE STRUCTURE

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1 Claim. (Cl. 24—73)

This invention relates to new and useful improvements in shoestrings or lacing devices for shoes.

More particularly, the present invention proposes the construction of an improved shoelace device which can be used easily and conveniently by adults or children to lace shoes without tying the laces.

As a further object, the present invention proposes forming the lace device with an elastic lace or laces and with a stiff plastic or metal tip member for each lace bent or otherwise formed with end portions extending in substantially parallel planes and a connecting portion all constructed and arranged for the tip member quickly and securely to be removably anchored in the lace opening of a shoe.

Still further, the present invention proposes constructing the lace device with an anchor plate member adapted to underlie one of the lace opening flaps of a shoe and with a plurality of spaced elastic laces with stiff tip members, each lace being fixed at one end to the anchor plate member and adapted to pass through and span across opposed lace openings on the two lace opening flaps of a shoe for the tip member to be self-anchored in one of the lace openings.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claim in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is a front top view of a shoe having a lace device constructed and arranged in accordance with the present invention.

Fig. 2 is a perspective side view of the shoe and lace device shown in Fig. 1 but with three of the laces unfastened.

Fig. 3 is an enlarged front perspective view of the lace device shown in Figs. 1 and 2.

Fig. 4 is a rear face view of the structure shown in Fig. 3.

Fig. 5 is a sectional view taken on line 5—5 of Fig. 4.

Fig. 6 is a perspective view similar to Fig. 3 but illustrating a modification of the present invention.

Fig. 7 is a sectional view taken on line 7—7 of Fig. 6.

The lace device, in accordance with the first form of the invention illustrated in Figs. 1 to 5, inclusive, is designated generally by the reference numeral **15**.

Lace device **15** has a flat anchor plate member **16** which is adapted to fit under and underlie lace openings flap **17** of shoe **18**, as shown in Figs. 1 and 2. The shoe **18** has the usual two lace opening flaps **17** and **19** with spaced lace openings or eyelets **20**, the lace openings **20** on one flap being opposite those on the other flap in the customary manner.

Anchor plate member **16** includes a stiffener sheet **21** and a cover sheet **22**. The cover sheet **22** is of flexible material such as cloth, buckram, leather or the like and

the stiffener sheet may be of heavy cardboard, plastic, metal or other thin, stiff material.

Elastic laces **23**, **24**, **25**, **26** and **27** all identically or similarly constructed, are provided. Each lace has one end **28** secured to the anchor plate member **16** on the front face **29** of the anchor plate member. Staples or other fastener members **30** secure the ends **28** in spaced relation and fix the laces to the anchor plate member.

Laces **23**, **24**, **25**, **26** and **27** each has a free end **31** and to these free ends **31** are secured stiff tip members **32**, **33**, **34**, **35** and **36**, respectively. The tip members may be of plastic or metal or like material and are similarly or identically constructed.

Each tip member **32**, **33**, **34**, **35** and **36** has two offset spaced end portions **37** and **38** which are disposed substantially in parallel planes, and a connecting portion **39** which is either inclined or substantially perpendicular to the end portions **37** and **38**. Preferably, the end portions **37** and **38** have opposed flattened faces **40** and **41**.

Anchor plate member **16** is provided with spaced openings **42**, **43**, **44**, **45** and **46** adjacent one side edge and the laces **23**, **24**, **25**, **26** and **27** extend through these openings to the front face **29** of the anchor plate member **16**.

The use of the device is simple. The anchor plate member **16** is placed under one of the shoe flaps **17** or **19** and the stiff tip members **32**, **33**, **34**, **35** and **36** are passed through the lace openings **20** of that flap to dispose the laces on the outside of the flap. The laces are then stretched or placed over the tongue **49** of the shoe to span the space between the opposed lace openings **20** on the two flaps **17** and **19**.

Stiff tip members **32**, **33**, **34**, **35** and **36** are then inserted to the extent of their free end portions **38** down into the lace openings **20** on the flap opposite that under which the anchor plate member lies. The tip members are each inserted so that their connecting portion **39** extends through the lace opening and the end portions **37** and **38** overlie and underlie respectively the flap to anchor this end of the lace to that flap.

The modification of the invention illustrated in Figs. 6 and 7 is characterized by an elastic lace **60** adapted to lace through the lace openings of a shoe in the regular manner and having ends **61** and **62** to which are secured stiff tip members **63** and **64**, respectively. The stiff tip members are similarly constructed with offset end portions **65** and **66** disposed in substantially parallel planes and a connecting portion **67** diagonally or substantially perpendicularly disposed. The end portions **65** and **66** have flattened faces **68** and **69**. The lace **60** may be made of any length and can be made of a length sufficient only to span between a single set of opposed lace openings, a number of the laces being provided corresponding to the number of sets of lace openings in a shoe. Or the lace **60** can be used to close the upper set of lace openings of a shoe while the lace device shown in Figs. 1 to 5, inclusive, closes the lower or remaining sets of lace openings.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claim.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

A shoelace device comprising an elastic lace adapted to pass through and span across opposed shoelace openings of a shoe, a stiff tip member secured to one end of the lace, said stiff tip member having two offset end portions disposed in substantially parallel planes and a connecting portion angularly disposed relative to the end

portions between said end portions, said end portions being adapted to lie on and under a lace opening flap of a shoe when said connecting portion of the tip member is extending through a shoelace opening in the flap, and a flat anchor plate member having openings therein and being adapted to underlie one of the lace opening flaps of a shoe, said lace having another end extending through one of said openings and being fixed to the front face of the anchor plate member, and a plurality of additional laces each having two ends wtih one end extending through another of said openings and being fixed to the front face of the anchor plate member and spaced from the other laces, and additional tip members secured one

to each of the free ends of the additional laces, all of said stiff tip members having flattened opposed side portions and being identical in construction.

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