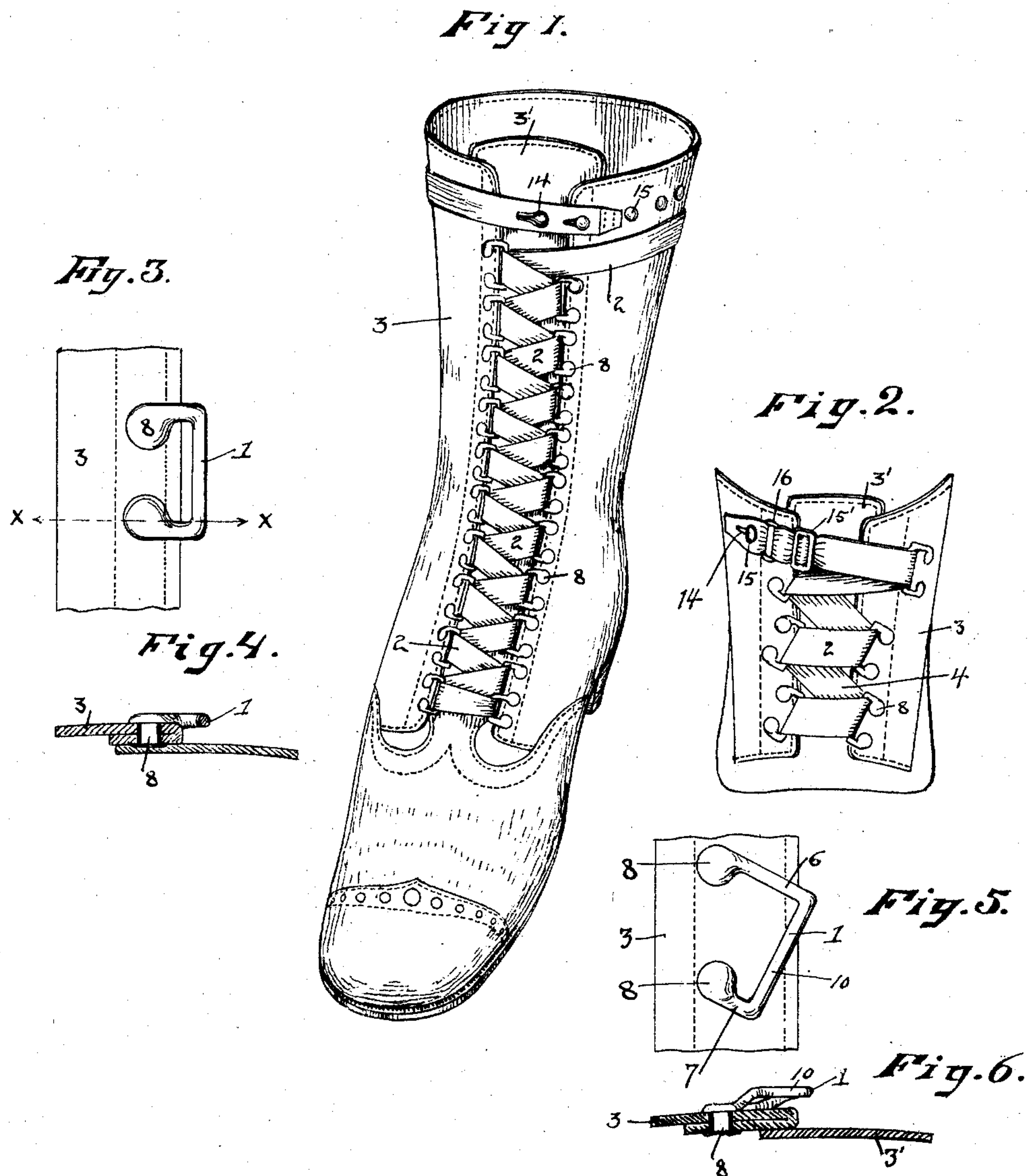


No. 864,774.

PATENTED SEPT. 3, 1907.

F. F. DUMKE.
SHOE FASTENING.

APPLICATION FILED SEPT. 13, 1906.



WITNESSES:

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FRANK F. DUMKE, OF MILWAUKEE, WISCONSIN.

SHOE-FASTENING.

No. 864,774.

Specification of Letters Patent.

Patented Sept. 3, 1907.

Application filed September 13, 1906. Serial No. 334,517.

To all whom it may concern:

Be it known that I, FRANK F. DUMKE, a citizen of the United States, residing at Milwaukee, county of Milwaukee, and State of Wisconsin, have invented
5 new and useful Improvements in Shoe-Fastenings, of which the following is a specification.

My invention relates to improvements in shoe fastenings and it pertains to that class in which a single broad lacing loop is employed, the lacing loop being
10 so constructed and attached to the shoe upper that the tape will lie flat and extend its full width therein without liability of being drawn together into a cord-like shape at one end or corner of the loop, also to the inclined position of the bearing of the opposing series
15 upon the respective sides of the shoe upper; they being so arranged that the lacing tape may be drawn in a zigzag course from the loops of one series to the loops of the opposing series with but slight friction, whereby the slack of the tape throughout the entire length
20 of both series of loops may be taken up and the respective sides of the shoe upper drawn together by drawing upon the upper free end of the tape.

My invention also pertains to the device for fastening the upper free end of the tape to the top of the
25 shoe.

The construction of my invention is further explained by reference to the accompanying drawings in which,

Figure 1 is a perspective view of a shoe provided
30 with my improved fastenings. Fig. 2 is a detail showing a front view of a modified form of fastening preferably used in connection with the so-called blucher shoe. Fig. 3 is an enlarged front view of one of the fastening loops. Fig. 4 is a section drawn on line
35 $x-x$ of Fig. 3 through a portion of the shoe upper and the tubular loop retaining eye at a point beneath the loop, in which figure a side view of the loop is shown above the retaining eye and upper. Fig. 5 is a modified form of one of the shoe fastenings in which one
40 of the loop retaining arms is made longer than the other, whereby the desired angle is given to the loop, while the fastening eyelets of the several loops of the series are arranged in line with each other, and Fig. 6 is a side view part in section of the preferred form
45 of fastening loop.

Like parts are identified by the same reference figures throughout the several views.

My invention pertains among other things, first, to the shape of the tape retaining loop 1, whereby the
50 tape 2 is supported above and substantially free from contact with the respective sides of the upper 3 and the tongue 3', whereby the friction incident to contact with such parts is avoided and the lacing tape is adapted to be drawn freely and with but slight fric-

tion through all of the several retaining loops of the
55 series upon the respective sides of the shoe upper.

My invention pertains also further to the peculiar relative arrangement of the lacing loops 1 to each other upon the respective sides of the shoe upper, whereby those upon one side alternate with those
60 upon the other side, and whereby the angle of the lacing tape as it passes from right to left and from left to right across the intervening space between the two series of loops, is substantially uniform, and whereby the lace is not only given a symmetrical appearance
65 but the same is more easily drawn through the several loops and the friction of the loops thus arranged is less than it would otherwise be were said loops located opposite to each other.

My invention pertains, third, to the construction and
70 arrangement of the central portion of the lacing loops at an angle to the marginal edge of the shoe upper, whereby when the loops upon the respective sides of the upper are set opposite to each other in sets of two substantially upon the same horizontal plane, as shown
75 in Fig. 2, the under fold 4 of the tape which passes in a diagonal course from one set of said loops to the other will be drawn freely around the central portion of said retaining loops and will have a less tendency to slide toward either side of said loops as it might otherwise do
80 were said loops set or formed parallel with the edges of the shoe upper. The lacing loops are thus given the required angle to the edge of the shoe upper in two different ways either by forming the fastening arms 6 and 7 of different lengths, as shown in Fig. 5 or by forming
85 said arms in uniform lengths as shown in Figs. 1 to 3 inclusive. When the arms are formed of different lengths as shown in Fig. 5 all the retaining eyelets 8 of the several loops are secured to the upper in line with each other at uniform distances from the marginal edge
90 of the shoe upper. When, however, said arms 6 and 7 are formed of uniform lengths as shown in Figs. 1 to 3 inclusive, said retaining fastening eyelets 8 of the respective loops may be connected with the upper on different vertical planes at an angle to the edge of the up-
95 per, as shown in Fig. 2, whereby it is obvious, as stated, that the under fold 4 of the tape when drawn from the loop of one series to the loop of the opposite series will pass directly around said loops and will have less tendency to be drawn out of place when fastening the shoe,
100 and whereby the upper fold of said loops will be drawn from one side of said upper to the other at right angles to their marginal edge as shown in Fig. 2.

It will be obvious that by the preferred form of loop, shown in Fig. 6, the central portion 10 of said loop
105 around which the tape is drawn is located on a higher plane than the sides of said loop, whereby the tape as it is being drawn through a series of said loops is pre-

vented from being brought in contact with the upper surface of the respective sides of the shoe upper or with the tongue 3' and the friction incident to the contact of the tape with such parts is greatly diminished. When the shoe is in place upon the foot of the wearer the respective sides are brought together by simply drawing upwardly on the upper end of the tape 2. The upper end of the tape is preferably provided with one or more eyelets 14 and the shoe upper is provided with a plurality of buttons 15 upon which said eyelets are adapted to engage. To provide for adjusting the shoe tape so as to fit the ankle and give the required tension to the said tape I preferably provide the upper end thereof with ordinary fastening clasps and loops 15' and 16 respectively, which are connected with the upper end of the tape in the ordinary manner, whereby the end of the tape may be folded back upon itself. Thus by moving the clasp 15' toward or from the loop 16 the tape when buttoned may be given the required tension. The same object, however, may be accomplished by providing a plurality of buttons at various distances from the edge of the shoe or a plurality of eyelets at various distances from the end of the tape, as indicated in Fig. 1, when the eyelet may be engaged on one of such buttons as will give the lacing tape the required tension.

The eyelets 8 are of the ordinary tubular construction and inserted through perforations provided therefor in the margin of the shoe when the inside of the eyelet is upset and turned back against the surface of the leather, whereby said eyelets are permanently secured in place in the ordinary manner.

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

1. The combination with the respective sides of a shoe upper, of a series of lace retaining loops, each loop comprising a broad central portion for the reception of a broad lacing tape, two fastening arms formed at substantially right angles to the central portion, a fastening eye connected with each of said arms for securing said loops to the respective edges of a shoe upper, a single broad flat lacing tape permanently connected at its lower end to the shoe upper at the lower end of said series of

lace retaining loops and passing from thence alternately through the loops of the respective series, and means for securing the upper ends of said lacing tape when taut to the upper portion of the shoe upper.

2. The combination with the respective sides of a shoe upper of a series of lace retaining loops, each loop comprising a central portion and two fastening arms formed at an angle thereto, the respective ends of said arms being provided with fastening eyelets by which said loops are secured to the respective edges of the shoe upper, the central portion of each of the loops of one series being positioned in a plane parallel with the central portion of the loops of the opposite series whereby the lacing tape may be drawn from the loops of one series to the loops of the opposing series with but slight friction, a single broad lacing tape permanently connected at its lower end to the shoe upper near the lower end of said series of loops and passing from thence alternately through the loops of the respective series and means of securing the upper end of said tape when taut to the upper portion of the shoe upper.

3. The combination with the respective sides of a shoe upper, of a series of lace retaining loops, each loop comprising a central portion and two fastening arms formed at an angle thereto, the respective ends of said arms being provided with fastening eyelets by which said loops are secured to the respective edges of the shoe upper, the central portion of each of the loops of one series being positioned in a plane parallel with the central portion of the loops of the opposite series whereby the lacing tape may be drawn from the loops of one series to the loops of the opposing series with but slight friction, the fastening arms of said loops being respectively curved upwardly and forwardly from said eyelets, whereby the central portion of said loops are brought on a higher plane at a slight distance from the plane of a shoe upper to which said eyelets are attached and the lacing tape is prevented from rubbing against the upper surface of the shoe upper and tongue, a single broad lacing tape permanently connected at its lower end to the shoe upper near the lower end of said series of loops and passing from thence alternately through the loops of the respective series and means of securing the upper end of said tape when taut at different points of adjustment to the upper portion of the shoe upper.

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

FRANK F. DUMKE.

Witnesses:

JAS. B. ERWIN,
O. R. ERWIN.