

J. H. MUMAW.
SHOE FASTENER.
APPLICATION FILED FEB. 8, 1911.

994,187.

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Fig. 1.

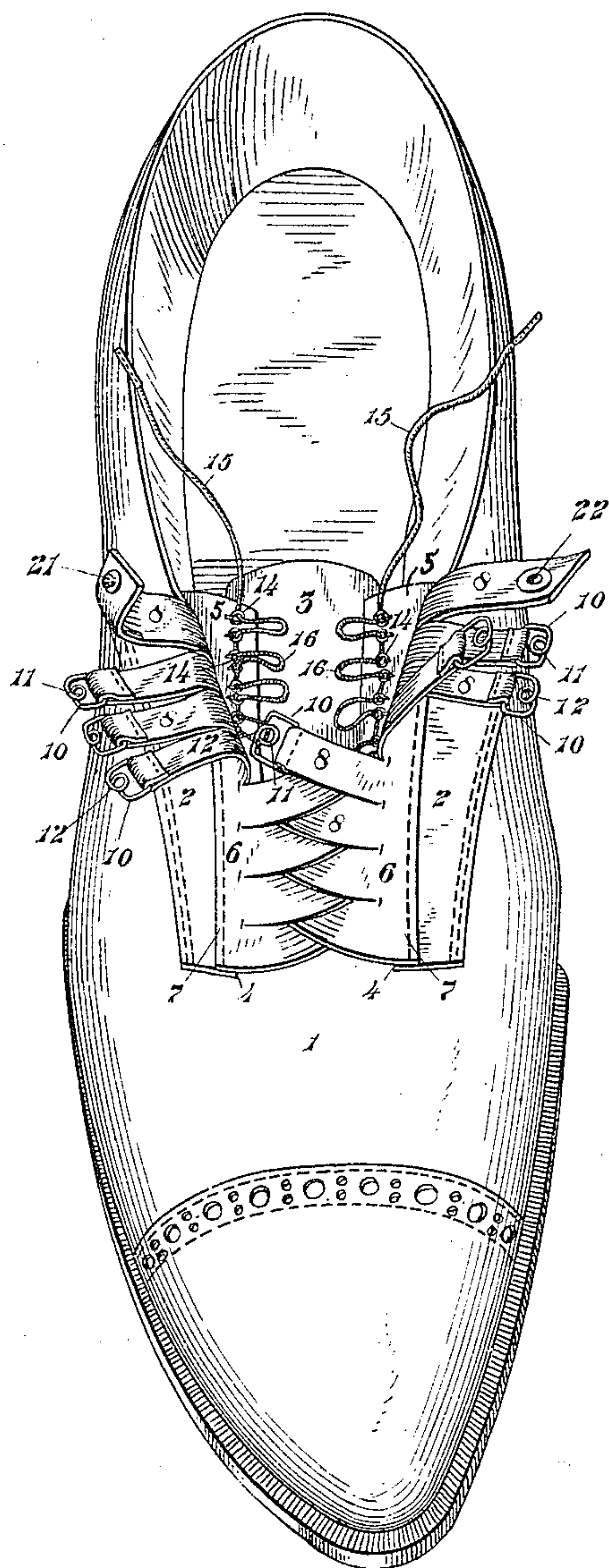


Fig. 2.

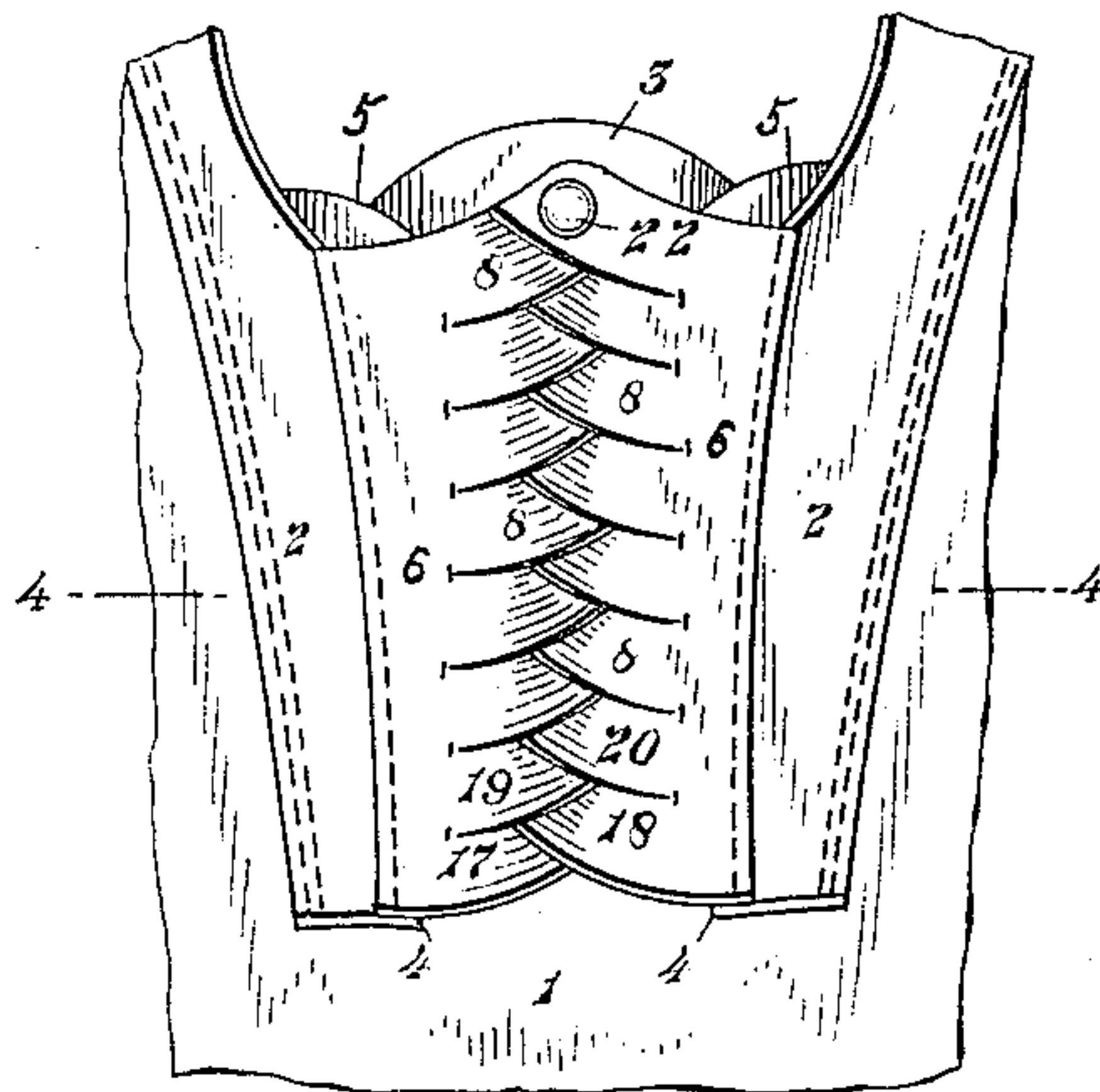
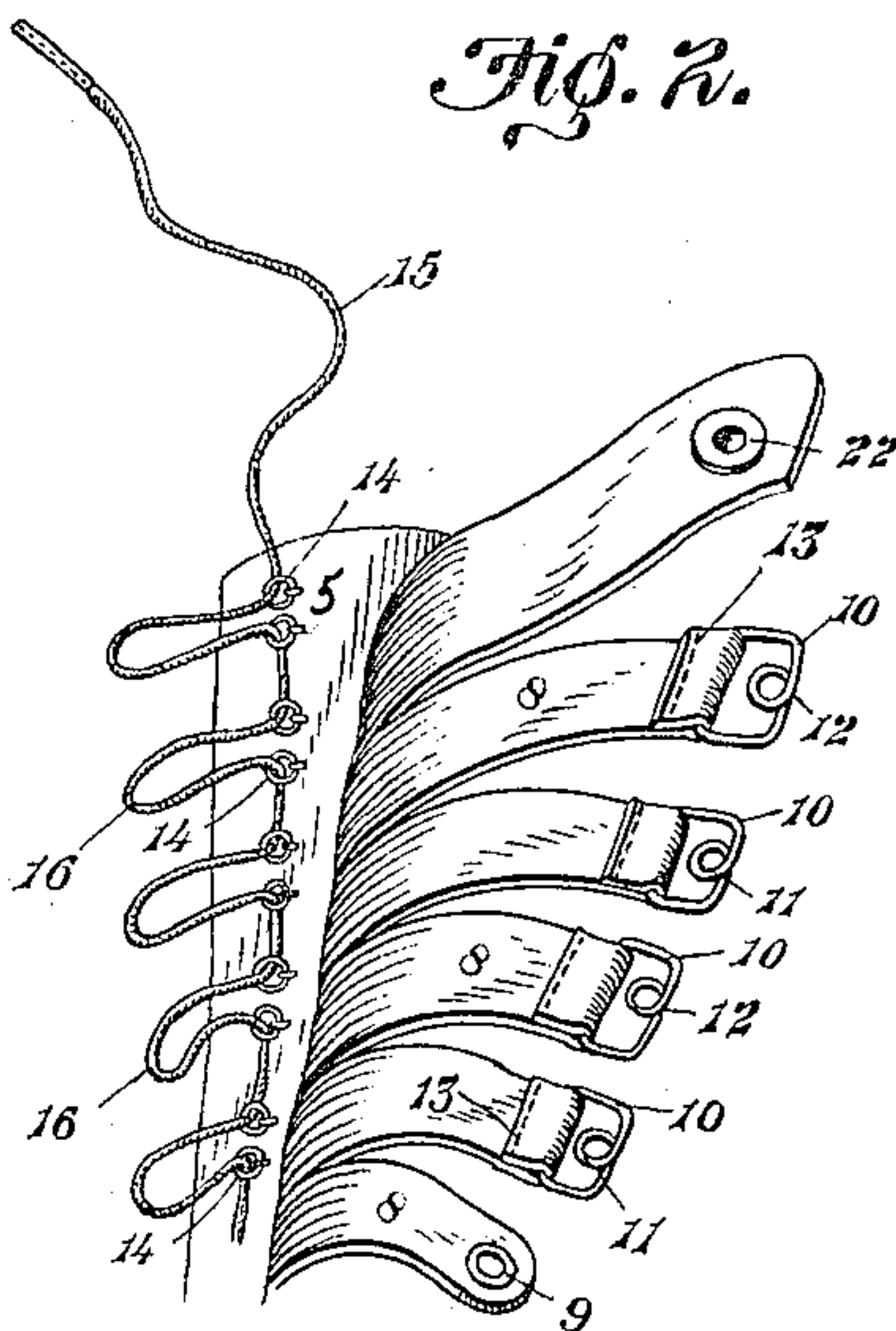


Fig. 3.

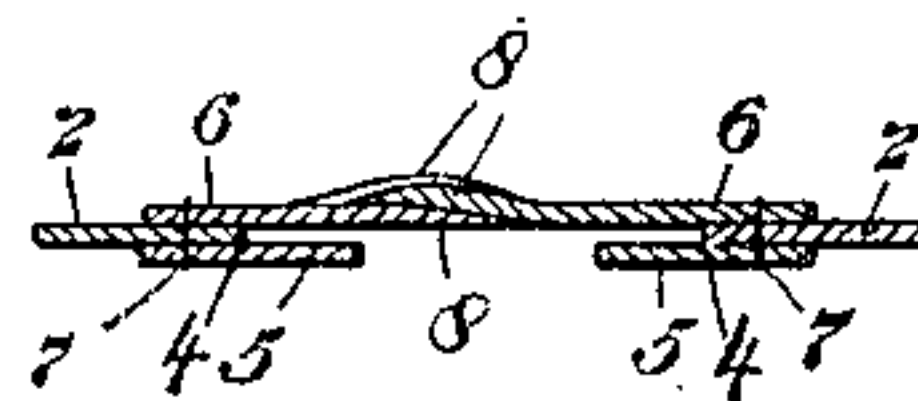


Fig. 4.

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UNITED STATES PATENT OFFICE.

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SHOE-FASTENER.

994,187.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN H. MUMAW, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented a new and useful Shoe-Fastener, of which the following is a specification.

My invention relates to improvements in fastening devices for articles wherein separated edges or portions are adapted to be brought together and connected, as by means of lacing and the like, for the purpose of closing said article and fastening said separated edges or portions to each other.

The most common application of the invention is in the connecting and fastening of the separated edges or portions of shoes and my invention peculiarly relates to shoe fasteners, although the invention is admirably adapted for use on many other articles such, for instance, as gloves and other articles of wearing apparel.

The objects of my invention are to generally improve devices of the character mentioned and to provide a simple, strong, durable and efficient fastening device of very neat appearance and having many advantages over the usual kinds of fastening devices, some of which advantages will hereinafter more fully appear. These objects, together with other objects, readily apparent to those skilled in the art, I attain by the construction illustrated in the accompanying drawings; although my invention may be embodied in other forms, the construction illustrated being chosen by way of example.

In the drawings Figure 1 is a front view of an Oxford shoe embodying my invention. Fig. 2 is a fragmentary perspective view of a portion of the shoe, showing a part of one of the front edges on a larger scale. Fig. 3 is a fragmentary front view illustrating my shoe fastener as it appears when entirely closed or fastened. Fig. 4 is a transverse section taken on the line 4—4 of Fig. 3.

Throughout the several views similar reference numerals indicate similar parts.

The shoe illustrated in the drawing is of the Oxford type, having an opening between the front or lacing edges of the upper at the median line.

The numeral 1 indicates the vamp and 2 the foxing of the upper. To the vamp at the bottom of the median opening is connected in the usual way the tongue 3 which, as

usual, is formed of a broad and thin piece of leather or other material and is adapted to underlie the opening and the edges thereof. The front edges of the foxing 2 are separated from each other a distance slightly greater than that in the usual construction of Oxford shoes of the Blucher type, the edges of the foxing 2 in the drawing being shown at 4.

On the inside of the foxing 2 the inner flaps 5, extending beyond the edges 4 of the foxing, are provided, said inner flaps being connected to the foxing by stitching or otherwise. On the outer side of the foxing 2 the outer flaps 6 are connected by the stitching 7. By means of this construction the inner flaps 5 and the outer flaps 6 will be separated from each other a distance equal to the thickness of the foxing 2. This is clearly illustrated in Fig. 4.

Each flap 6 is provided with a vertical series of integral fastening tongues 8, said tongues being of course flexible and having their side edges upwardly curved from their bases to their free ends. The first few fastening tongues from the bottom up on each side are provided at their free ends with eyelets 9. The remaining fastening tongues on each side are each provided at the free end with a small wire fastening loop 10 provided with an integral turn 11 which extends backwardly toward the base of the tongue to which the loop is attached, the said turn 11 and the loop of which it is a part lying substantially in the same plane, although it will be understood that by reason of the construction of the loop from wire there will of necessity be a slight turning from an exact plane by reason of the crossing of the wire at the point 12 in the formation of the turn 11. Each turn constitutes a fastening hook or bill as will hereinafter appear. The loops 10 may be connected to the fastening tongues in any workman-like manner, as for instance by extending the free end of the tongue through the loop, folding said end upon itself, and connecting the said free end to the body of the tongue by the stitching 13.

It should be understood that the fastening tongues on each side form an unbroken series from the bottom to the top of the opening, the edges of serially adjacent tongues being arranged side by side. Along the outer side of each inner flap from bot-

tom to top thereof is arranged a series of
 lacing rings 14. At the lower or bottom
 end of the series one ring only is provided
 opposite each fastening tongue having an
 5 eyelet. Opposite the fastening tongues pro-
 vided with the loops 10, or in other words
 in the top portion of the series, the rings
 14 are arranged in vertically disposed pairs,
 each two rings constituting a pair being
 10 located close to each other and opposite one
 of the fastening tongues provided with a
 loop 10 on the other side of the opening. A
 thin, smooth, flexible, preferably round lace
 15 is fastened at the bottom end of each in-
 15 ner flap in any suitable and well known
 manner and extends through the eyelet 9
 of the lowermost fastening tongue on the
 opposite side, then through the first single
 ring 14, then through the eyelet of the next
 20 fastening tongue, then through the next lac-
 ing ring, etc., for all of the fastening tongues
 provided with eyelets. The lace then ex-
 tends serially through the rings arranged in
 pairs so that between each two of the rings
 25 the lace may be drawn out laterally form-
 ing the free loops 16 which loops may be
 drawn up or shortened by pulling upon the
 free end of the lace, as will be readily un-
 derstood.
 30 In unfastening the shoe for the purpose
 of putting it on or taking it off of the foot,
 the fastening tongues provided with the
 eyelets 9 are not entirely detached from the
 lace, the lace being sufficiently loosened to
 35 permit the shoe to be put on or taken
 off without inconvenience. The fastening
 tongues on the two sides of the opening al-
 ternately over-lying each other as will be
 apparent from an inspection of the draw-
 40 ings. In Fig. 3 for instance, the lower-most
 fastening tongue 17 on the left-hand side is
 first arranged with the lace on the right-
 hand side extending through its eyelet, then
 the lower-most fastening tongue 18 on the
 45 right-hand side is brought over the outer
 side of the tongue 17 and the lace on the
 left-hand side extended through its eyelet,
 which will dispose the end of the tongue 18
 under the base of the second tongue 19, on
 50 the left-hand side. The tongue 19 is then
 brought over the tongue 18 and has its end
 similarly fastened by the lace on the right-
 hand side, the end of the tongue 19 being
 disposed under the base of the tongue 20.
 55 In this manner all of the lower fastening
 tongues provided with eyelets are arranged,
 alternately over-lying each other from bot-
 tom to top of the series. The laces 15 are
 then extended through the remaining lac-
 60 ing rings 14 as hereinbefore described and
 when it is desired to fasten or unfasten the
 shoe the wearer needs to individually fasten
 only the remaining fastening tongues which
 are provided with the loops 10. This is ac-
 65 complished by taking a fastening tongue

from one side and fastening it by means of
 its loop 10 to its appropriate loop 16 of the
 lace on the other side, then taking the next
 fastening tongue on said other side, bring-
 70 ing it over the fastening tongue just fast-
 ened and attaching it to its corresponding
 loop 16 of the lace on the first mentioned
 side by means of the loop 10. By alter-
 nately fastening the fastening tongues on
 one side and the other in this manner they
 75 will be caused to alternately over-lie each
 other with their fastened ends entirely hid-
 den from view under the bases of the op-
 posite fastening tongues so that when all of
 the tongues have been fastened the appearance
 80 of the structure shown in Fig. 3 will be pre-
 sented. It will be readily understood that the
 free loops 16 may be very easily hooked over
 the turns or coils 11 and that after a loop has
 been so hooked over one of said turns the
 85 free end of the lace may be drawn up, thus
 shortening or contracting the loop 16 and
 drawing the attached fastening tongue over
 closer to the lacing rings. By arranging
 the lacing rings in pairs opposite those fas-
 90 tening tongues provided with the loops 10
 the lace may be more freely drawn taut
 after the turn 11 has been attached and the
 loop 16 of the lace may be more readily
 drawn out for engagement with the turns 11
 95 than if but single lacing rings were em-
 ployed.

It will be noted that the top fastening
 tongues are not provided with eyelets 9 or
 loops 10 but on one side the top fastening
 100 tongue is provided with the button portion
 21, while on the other side the fastening
 tongue is provided with the socket portion
 22 of a snap fastener or clasp such as is com-
 monly used on gloves and the like so that
 105 the two fastening tongues may be very
 quickly and conveniently connected. In
 fastening up the shoe when all of the fasten-
 ing tongues except the top ones have been
 connected to the laces 15 the free ends of
 110 said laces are drawn up until all of the
 fastening tongues have been drawn taut and
 into place in a snug manner, when the free
 ends of the laces may be tied in the ordinary
 115 manner, or otherwise fastened and any re-
 maining free portions of said laces snugly
 arranged under the top fastening tongues,
 which are then brought together and detach-
 ably connected to each other by the snap
 120 fastener above mentioned. The lace will
 then be entirely out of sight and the com-
 pleted shoe fastener will present the appear-
 ance shown in Fig. 3. It will be noted from
 an inspection of said Fig. 3 that the fastener
 125 presents a practically continuous and rel-
 atively smooth and unbroken outer surface,
 the fastening tongues snugly fitting in their
 alternately over-lapped positions insuring
 protection and comfort as well as giving a
 neat appearance. The inner flap 5 being
 130

spaced from the outer flap 6 the thickness of the foxing 2, a space is formed sufficiently large to readily accommodate the lacing rings, laces and loops 10 so that the fastener is in no wise bulky or uneven, thus preventing any unequal or undue pressure against the foot of the wearer and insuring a neat external appearance.

While the construction illustrated and above described appears at present to be the preferable construction I do not desire to be limited to the details shown and described. This is especially true of the loops 10 and the method of connecting the ends of the fastening tongues to the inner flaps 5, as other forms of construction in this particular will suggest themselves to those skilled in the art. It should also be noted that some other method of connecting the two top fastening tongues may be employed without departing from the spirit of the invention.

I claim:—

1. A shoe fastener comprising in combination with a shoe having the front edges of the foxing separated from each other at the median line, inner flaps connected to the inner side of said foxing, outer flaps connected to the outside of said foxing, said outer flaps provided with fastening tongues, the tongues of the two outer flaps on the two sides of said opening being adapted to alternately over-lie one another, considering said tongues serially from bottom to top of the opening, with the free ends of said fastening tongues under-lying the bases of certain of the fastening tongues on the opposite side, and means for drawing the free ends of said fastening tongues toward said inner flaps.

2. A shoe fastener comprising in combination with a shoe having the front edges of the foxing separated from each other at the median line, inner flaps and outer flaps connected to said foxing on both sides of

the opening, said outer flaps provided with fastening tongues, the tongues of the two outer flaps adapted to alternately over-lie one another considering said tongues serially from bottom to top of the opening, and means for attaching the free ends of said fastening tongues to said inner flaps.

3. A shoe fastener comprising in combination with a shoe having the front edges of the foxing separated from each other, a series of fastening tongues connected to said foxing on each side of said opening, said tongues on each side forming a continuous and unbroken series, with lateral edges immediately adjacent from bottom to top of said opening, means located beneath the bases of the tongues for connecting the tongues on each side to the foxing on the other side of the opening, and said tongues adapted to be arranged in alternate overlapped position with the free ends of said tongues and said fastening means hidden from view beneath the bases of said fastening tongues.

4. A shoe fastener comprising in combination with a shoe having the front edges of the foxing separated from each other, fastening tongues arranged in unbroken series on each side of said opening and connected to said foxing on both sides of the opening, the individual fastening tongues on each side adapted to over-lie certain individual tongues of the other side and to extend across said opening, and means for fastening the ends of the tongues on the inner side of said foxing on both sides of said opening.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

JOHN H. MUMAW.

Witnesses:

WILLIAM H. MILLER,
IRENE LUTZ.