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G. H. SMITH & J. STIEGLITZ.

SHOE FASTENER.

APPLICATION FILED JUNE 14, 1904.

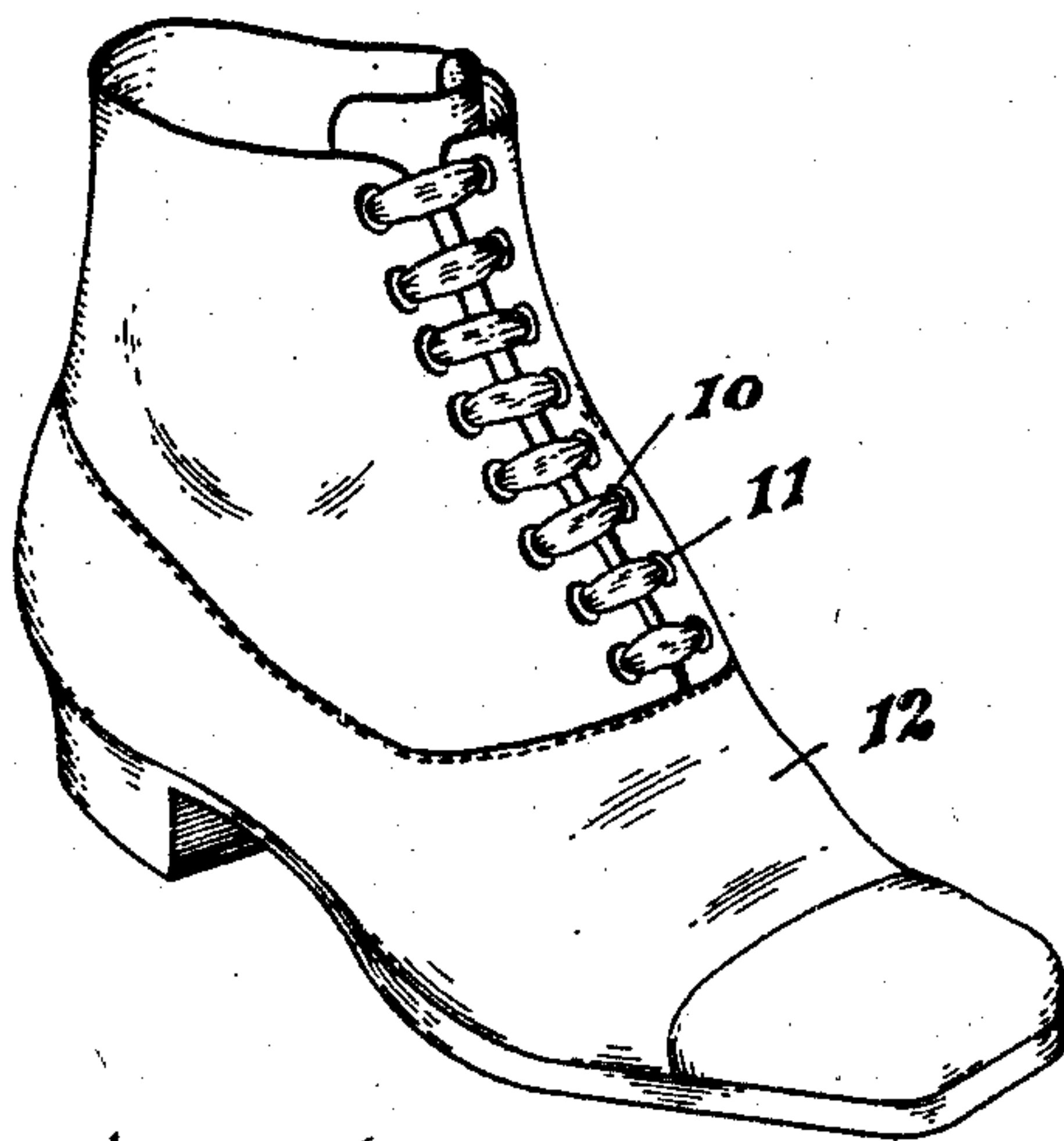


Fig. 1.

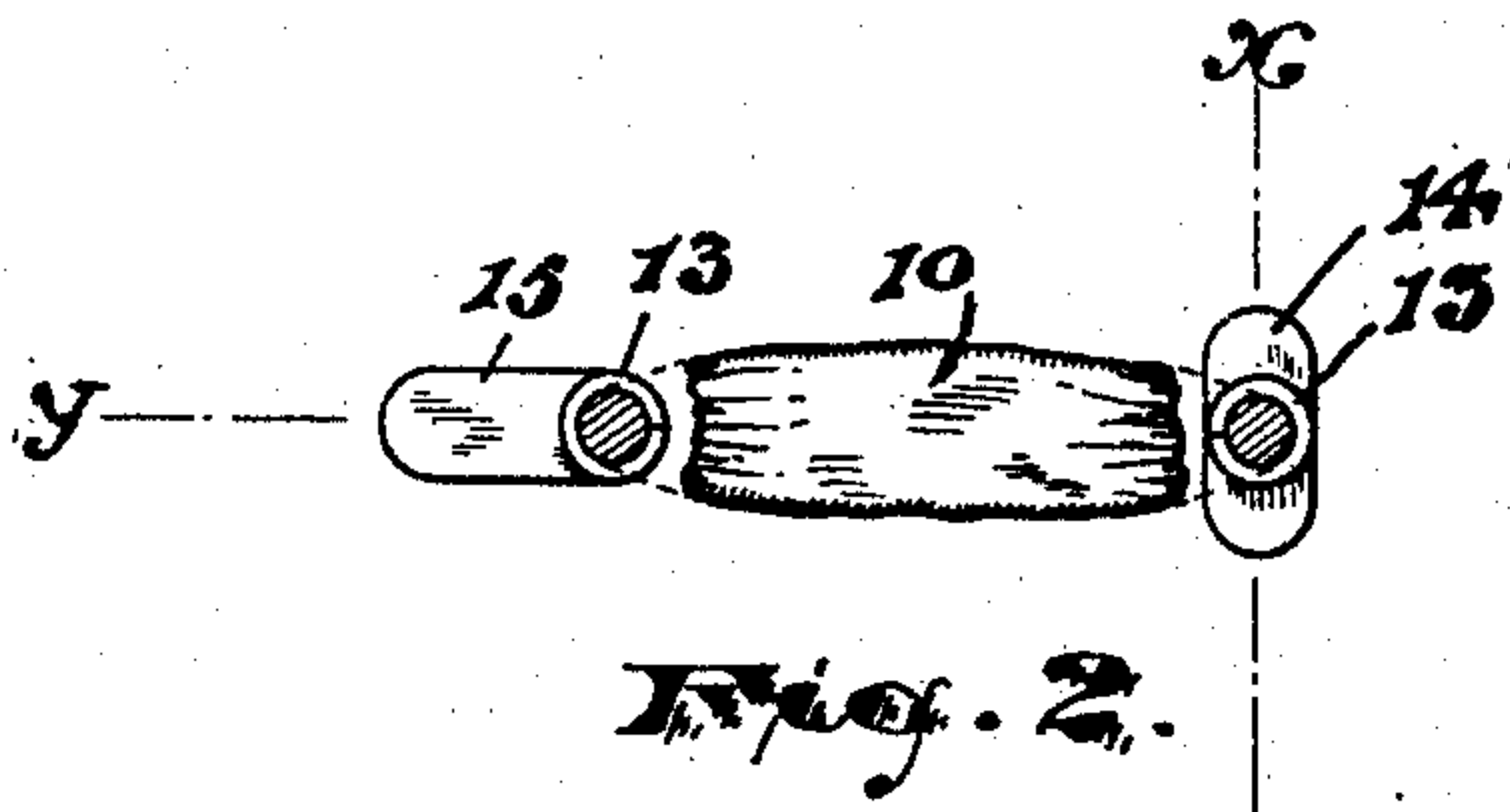


Fig. 2.

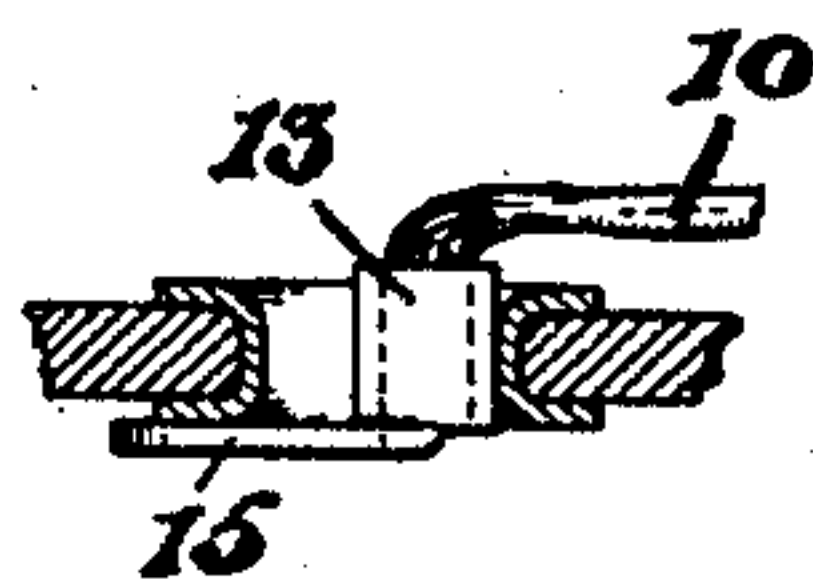


Fig. 3.

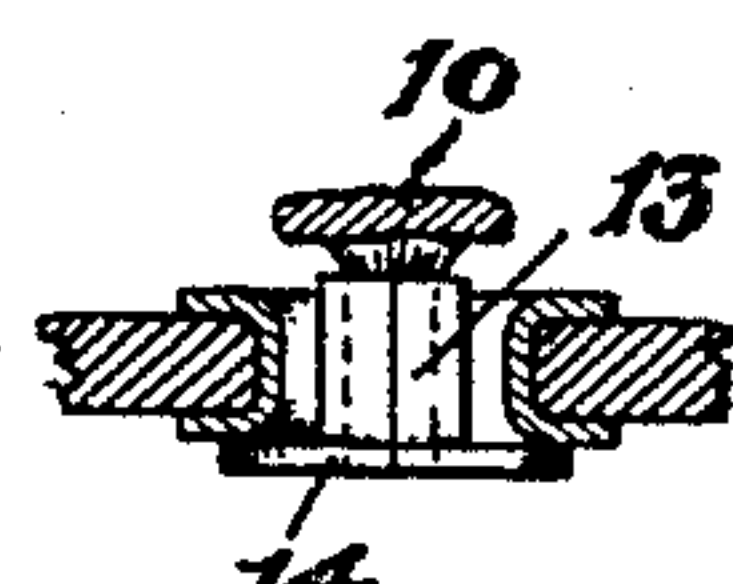


Fig. 4.

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SHOE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 794,128, dated July 4, 1905.

Application filed June 14, 1904. Serial No. 212,553.

To all whom it may concern:

Be it known that we, GEORGE H. SMITH and JACOB STIEGLITZ, citizens of the United States, residing at Yonkers, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Shoe-Fasteners; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to numerals of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in that class of shoe-fastening devices having, when in use on the shoe, the appearance of ordinary lacing-strings, but adapted to be used in a series on the shoe, each fastener being separate and independent of the other fasteners of the series and having certain advantages over such lacing-string, the objects of the invention being to reduce the cost of constructing this class of fasteners; to secure a more simple and neat structure and one more closely resembling the appearance of the ordinary shoe lace or string in the shoe; to provide a fastener of this class which will lie more closely against the shoe and present to view less of the metal attachments thereof; to enable shoes having eyelets near the edges of their uppers to be fastened by a series of independent fasteners, particularly in men's shoes, and to secure other advantages and results, some of which may be referred to hereinafter in connection with the description of the working parts.

The invention consists in the improved fastener for shoes and in the arrangements and combinations of parts thereof, all substantially as will be hereinafter set forth, and finally embraced in the clauses of the claim.

Referring to the accompanying drawings, in which like numerals of reference indicate corresponding parts in each of the several figures, Figure 1 is a perspective view of a shoe having a series of our improved fasteners. Fig. 2 is a plan of one of the fasteners adapted to be employed in connection with the eyelets

of the shoe, the textile woven portion of said fastener being broken away to show the metallic parts at its extremity more clearly. Fig. 3 is a section on line *y*, and Fig. 4 is a section on line *x*, of Fig. 2, Figs. 3 and 4 showing the eyelets of the shoe-upper with the end catches of the fastener therein.

In said drawings, 10 indicates a flexible and elastic cord, lacing, band, or strap, preferably of textile or woven fabric, at the opposite ends of which are means for fastening the same in the eyelets 11 of the shoe. The fasteners at opposite ends have metallic catches or stays which are adapted to engage the eyelets of the uppers. The said catches or stays at opposite ends of the lacing-cords are each provided with tubular clamps 13, in which the ends of said cords are inserted and firmly and securely grasped or held. The tubular clamp at one end of each cord is provided with a cross-head 14. The tubular clamp at the opposite end is provided with a finger 15, which when the fastener is in its normal position extends, when viewed in plan, as in Fig. 2, longitudinally or in the longer axis of the device. The cross-head 14 comprises flat horizontal arms, which in plan, as in Fig. 2, project in a direction perpendicular to the said longitudinal axis and in elevation, as in Fig. 4, perpendicular to the longitudinal axis of the tubular clamp, and thus when the fastener is in place on the shoe the tubular part lies in the eyelet 11 and the flat arms of the cross-head lie underneath or against the inside of the shoe. The parts 14 and 15 extend away from the inner ends of the tubular clamps, while the cord connecting said clamps projects from the opposite ends of said clamps, the body of the cord and extending parts 14 15 lying approximately in parallel planes. The single flat finger 15 at one end of the fastener permits the said fastener to be inserted through the eyelets; but the cross-head will not pass therethrough. The said tubular clamps are short and do not project to any material degree beyond the upper outer end or side of the eyelet, the projection being somewhat exaggerated in the drawings for the purpose of illustration.

In applying the fastener to the shoe the finger 15 is first thrust endwise through an eyelet, its clamp 13 and the string or lacing-cord 10 following after, said parts being drawn until the metallic clamp at the opposite end of said cord enters said eyelet and the cross-head 14 is brought into engagement with the inner side of the shoe. Ordinarily we prefer to permit the cross-head to remain in substantially this relation, and when unfastening the shoe from time to time the clamp having the finger 15 is alone manipulated. Continuing the fastening operation the finger 15 is thrust into the eyelet 11 opposite the one contiguous to the cross-head 14, and when the tubular clamp 13 in connection with said finger 15 enters the last-mentioned eye the tension on the lacing-cord holds the parts neatly and securely in fastened relation. Other cords with the described metallic parts at their ends are likewise inserted in other of the eyelets. The fingers 15 lie at right angles to the axis of the tubular clamp, and thus when tension of the string or lace 10 is brought upon said clamp lying in its eyelet the finger 15 tends to press upward against the under side of the upper, as will be understood upon reference to Fig. 3; but because of the construction and arrangements of parts said finger 15 prevents detachment or withdrawal of the metallic catch from its eyelet.

Having thus described the invention, what we claim as new is—

1. The combination with the elastic lace or cord, of metallic end clamps one having a metallic cross-head and being fastened at one end of the said lace or cord and the other having a metallic finger and lying at the opposite end,

said finger extending in the line of the lace or cord, in plan, substantially as set forth. 40

2. The combination with the elastic lace or cord, of metallic end clamps one having a metallic cross-head and being fastened at one end of the said lace or cord and the other having a metallic finger and lying at the opposite end, said finger extending in the line of the lace or cord, in plan, the metallic cross-head and finger being flat to lie against the under sides of the eyelets of the shoe without inconvenience or injury to the foot, substantially as set forth. 45 50

3. The combination with the elastic lace or cord, of tubular end clamps one having a cross-head and being fastened at one end of the said lace or cord and the other having a finger and lying at the opposite end of said finger extending in the line of the lace or cord, in plan, substantially as set forth. 55

4. The combination with the lacing-cord, of short tubular end clamps adapted to enter the eyelets of the shoe, said tubular clamps being firmly secured on said cord, at opposite ends, the cord passing out from one end of said tubular clamps and the other ends of said clamps being provided one with a flat cross-head and the other with a finger extending at right angles to the axes of said tubular clamps, substantially as set forth. 60 65

In testimony that we claim the foregoing we have hereunto set our hands this 26th day of May, 1904.

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Witnesses:

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