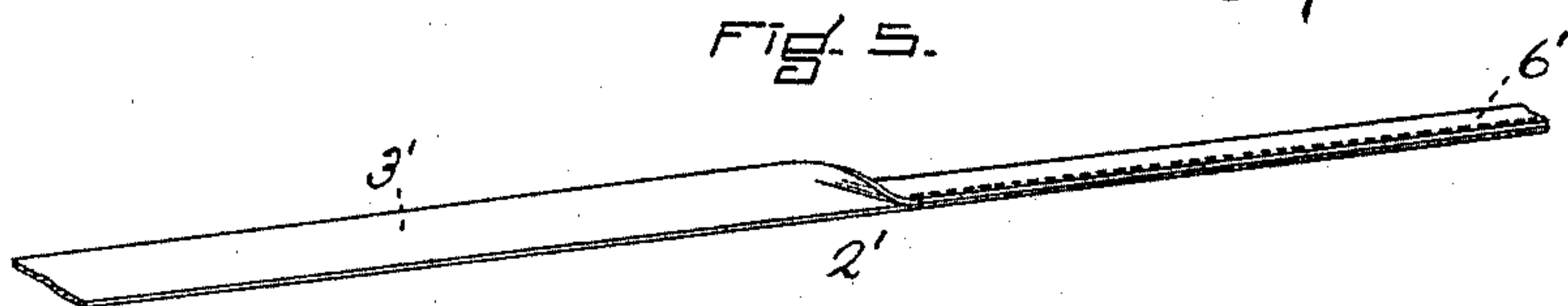
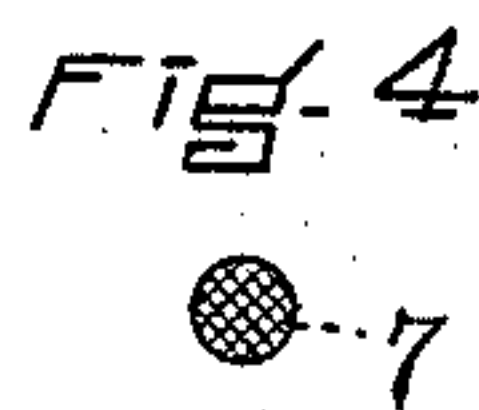
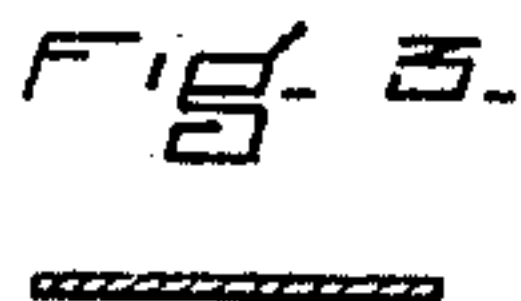
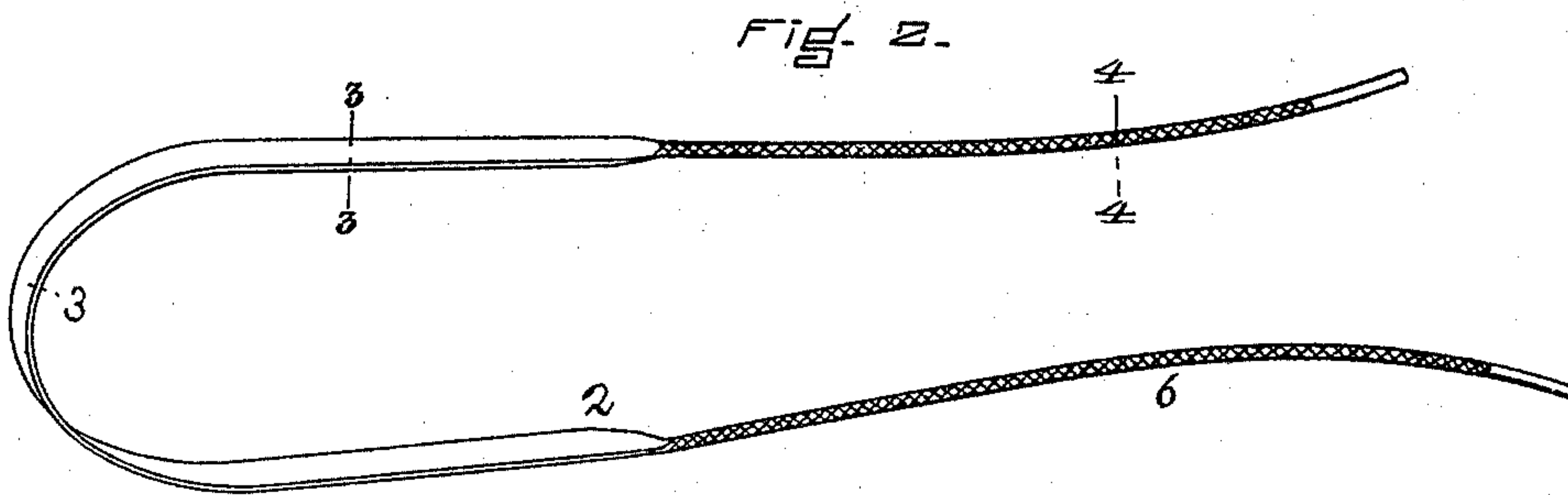
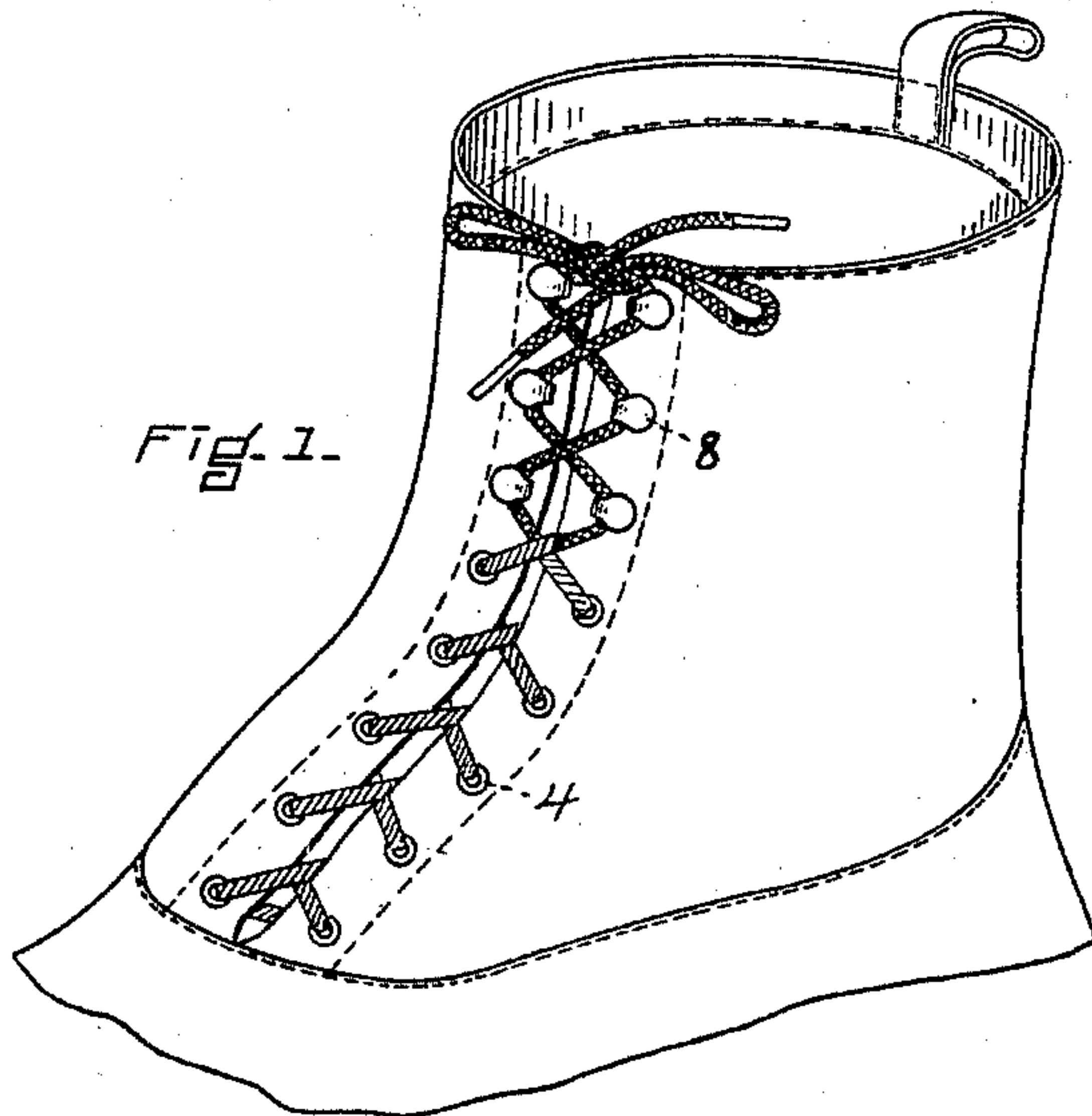


(No Model.)

I. M. SLOCUM.
SHOE LACING.

No. 584,421.

Patented June 15, 1897.



WITNESSES.

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UNITED STATES PATENT OFFICE.

ISAAC M. SLOCUM, OF BOSTON, MASSACHUSETTS.

SHOE-LACING.

SPECIFICATION forming part of Letters Patent No. 584,421, dated June 15, 1897.

Application filed July 3, 1896. Serial No. 597,979. (No model.)

To all whom it may concern:

Be it known that I, ISAAC M. SLOCUM, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Shoe-Lacings; and I 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 same, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

This invention relates to shoe-lacings, more particularly that class employed with shoes in which the laced-up portions or flaps are fitted in part with eyelets and in part with lacing-hooks.

My invention is embodied in the construction of the shoe-lacing, whereby the following advantages are obtained: primarily to avoid splitting of the lacing and prevent its catching or engaging about the lacing hook or stud, which prevents unlacing of the shoe; secondly, for increased strength at the point where it is most required, and, thirdly, to be of greater thickness at that portion which passes about the lacing-studs to prevent rolling and twisting.

The drawings herewith presented represent in Figure 1 a portion of a shoe fitted with a lacing embodying my invention. Fig. 2 is a plan of a lacing. Fig. 3 is a cross-section on line 3 3 in Fig. 2, and Fig. 4 is a similar view on line 4 4 in Fig. 2. Fig. 5 is a modified form of the same.

This invention relates to that class of shoe-lacing which is woven or braided and composed of some fibrous material, as cotton, linen, or the like.

As before premised, my invention is peculiarly adapted for that class of shoes where eyelets and lacing hooks or studs are employed conjointly. In the use of this particular class of fastening—the lacing-hook—a shoe-lacing to be used to the best advantage should be made of different cross-sections—that is, the portion entering the eyelets may be of band-like form or an oblong rectangle, or of greater breadth than thickness, and thus is adapted to lie flat, as shown in Fig. 1, and

present a neat appearance. On the contrary, that portion which engages the lacing-hooks should be preferably as thick as it is broad, or very nearly so, or may be circular or polygonal in cross-section, in order the more readily to prevent wear and afford greater strength, while from its shape it is better adapted to pass under the tip of the hook or stud and obviates the danger of splitting, the lacing in cross-section more nearly conforming to the space it occupies in the bend of the hook, and so avoids the rolling or twisting of the lacing which now frequently occurs.

In practice I propose to make the lacing of an integral length and have it consist of some textile material in which the central portion 3, or that which coöperates with the eyelets 4, is preferably proportioned in cross-section, as shown in Fig. 3—that is, the lacing is to be wider than it is thick; but in lieu of making this lacing uniform in cross-section for its entire length, as hitherto generally practiced, I change the form of the extremities or end portions 6, making them of such a shape that in cross-section the lacing shall be of a thickness greater than the middle portion, or as broad as it is thick, or it may be circular, as shown at 7 in Fig. 4, or polygonal, but I do not desire to be confined to the exact proportion. Thus, as before stated, the shape of those portions of the shoe-lacing which engage the lacing hooks or studs more nearly conform to the contour of the hook and rolling and twisting of the lacing are prevented. By this peculiar formation of the ends of the lacing increased strength is derived at a point where it is especially desired.

In lieu of weaving or forming the lacing, as shown in Fig. 4, an ordinary lacing 2' may be employed with a central portion 3', having a ribbon-like cross-section, but in such instances the ends 6' are folded over upon each other, as shown in Fig. 5, and the opposite edges now contiguous are secured together by stitches. This, I consider, embodies the subject of my invention; but I prefer to make the lacing in the manner illustrated in Fig. 2.

By the use of a shoe-lacing having the peculiar characteristics herein mentioned no twisting or rolling of the lacing occurs and

the central portion remains flat and presents at all times a neat and tidy appearance.

What I claim is—

1. A tie-up shoe-lace as a single length of
5 textile material, comprising three active portions, the end lacing portions being similar, but differing in cross-section from the central or middle lacing portion, substantially as set forth.
- 10 2. A tie-up shoe-lace composed of an integral length of textile fabric, the middle lacing portion in cross-section being wider than it is thick, and the end lacing portions in cross-section being of a thickness greater than
15 that of the middle portion, substantially as explained.
3. A tie-up shoe-lacing adapted for shoes

in which eyelets and lacing-hooks are employed conjointly, and consisting of a continuous length of woven or braided material in which the middle portion engaging the eyelets differs in cross-section from the active end portions which are clasped by the hooks, said middle portion in cross-section being of a width greater than its thickness, while the active end portions are circular or polygonal in cross-section, substantially as described.

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

ISAAC M. SLOCUM.

Witnesses:

H. E. LODGE,

E. K. BOYNTON.