

No. 837,880.

PATENTED DEC. 4, 1906.

E. J. PLAYFOOT.
NEEDLE.

APPLICATION FILED MAY 6, 1905.

Fig. 1

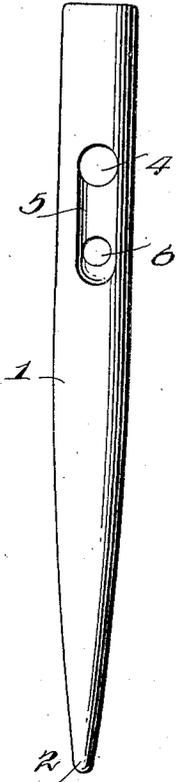


Fig. 2.

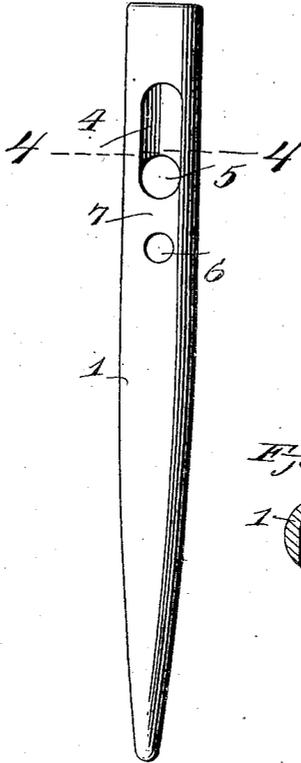


Fig. 3

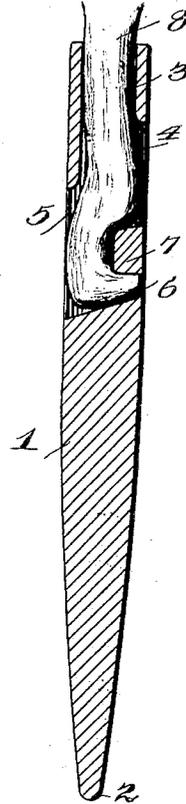
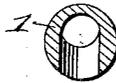


Fig. 4



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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EDWARD J. PLAYFOOT, a citizen of the United States of America, residing at Galeton, in the county of Potter and State of Pennsylvania, have invented new and useful Improvements in Needles, of which the following is a specification.

The invention relates to an improvement in needles designed primarily for use in lacing belt-sections or the like.

The main object of the present invention is the production of a needle constructed and arranged to receive the lacing-thread in a manner to prevent projection thereof beyond the surface of the needle, whereby the lacing of a belt may be readily accomplished.

The preferred details of construction will be described in the following specification, reference being had to the accompanying drawings, wherein—

Figure 1 is a side elevation of my improved needle. Fig. 2 is a similar view taken from the opposite side. Fig. 3 is a longitudinal section of the same, a single thread being shown in place therein. Fig. 4 is a section on line 4 4, Fig. 2.

Referring particularly to the drawings, my improved needle comprises a body 1 of any desired material, having a pointed end 2 for ready passage through the article to be laced. At the opposite end the body is formed with a longitudinal opening 3, arranged centrally of and concentric with the body, communicating forward of the rear end of the body, said opening 3 being bounded by an unbroken circumferential wall and with a lateral opening 4. Slightly forward of the opening 4 and diametrically opposite thereto is formed a second opening 5, which is in communication with the opening 3, the forward wall of opening 5 extending forward in advance of the forward wall of opening 4, though, as will be evident from the drawings, these openings are so arranged relatively as to provide an uninterrupted opening extending wholly through and directly transverse of the length of the needle. A laterally-extending opening 6, arranged forward of the opening 4 and in longitudinal alinement therewith, also communicates with the longitudinal opening 3, being about diametrically opposite the forward end of the opening 5. The wall forming the forward boundary of the openings 6 and 5 is inclined relative to the transverse plane of the body,

whereby to reduce the diameter of the opening 6 toward its mouth. The openings 4 and 5 are elongated, as shown, while the opening 6 is circular, though practically but slightly less in diametrical dimensions than the width of the openings 4 and 5. By the arrangement described I provide a longitudinal feed-opening 3, extending lengthwise the body of the needle and in communication with elongated lateral openings 4 and 5, arranged diametrically opposite each other, and with a smaller opening 6, the wall of which is practically a continuation transversely of the wall of the opening 5. An abutment 7, formed of an integral part of the needle-body, is provided between the openings 4 and 6, as clearly shown in Fig. 3, the abutment resulting from the longitudinal spacing of the openings 4 and 6, as will be evident.

In use the rawhide or other lacing 8 is fed terminally, the opening 3, with its free end passed around the abutment 7 and projected laterally through the small opening 6, being severed in alinement with the plane of the needle-body. This arrangement of the thread, due to the binding thereof about the abutment 7, with the end held within the narrow opening 6, serves to secure the lacing in place and permit its ready passage through the belt without liability of disengagement from the needle. The lateral openings 4 and 5 serve to permit the manipulation of the thread and causing the same to be passed around the abutment 7 and through the opening 6.

In the use of a needle constructed and arranged as described the thread or lacing designed to cooperate therewith is quickly and readily secured to the needle in manner to avoid any projecting thread portion, whereby the ready lacing of the article is facilitated.

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

A needle formed with a longitudinally-arranged feed-passage bounded by an unbroken circumferential wall, an opening extending laterally through the needle and communicating with the feed-passage, a second opening extending laterally through the needle and in communication with the feed-passage, said second opening being arranged at a point diametrically opposite the first opening with its forward wall extending

in advance of the forward wall of the first opening, an abutment forming the forward wall of the first opening, and a third opening formed in the needle in longitudinal alignment with the first opening and forward of the abutment, the wall of the third opening being coincident with the forward wall of the second opening and inclined to reduce the

diameter of the third opening toward its mouth.

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

EDWARD J. PLAYFOOT.

Witnesses:

FRANK L. SNYDER,
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