

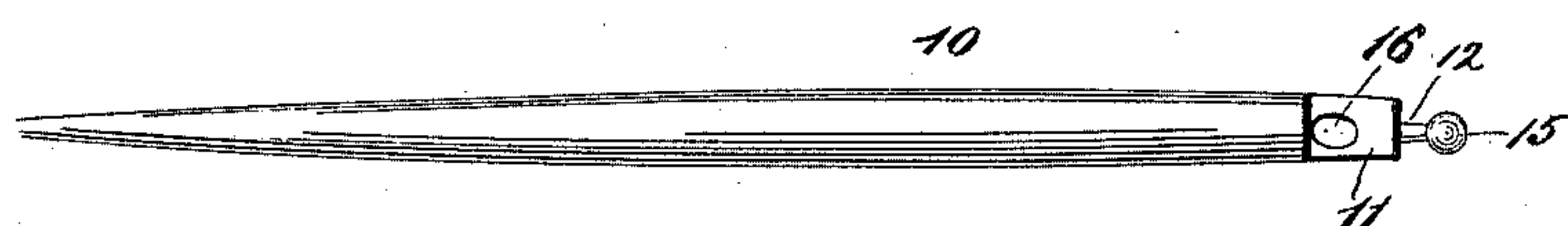
(No Model.)

H. BOSWORTH.  
BELT LACING NEEDLE.

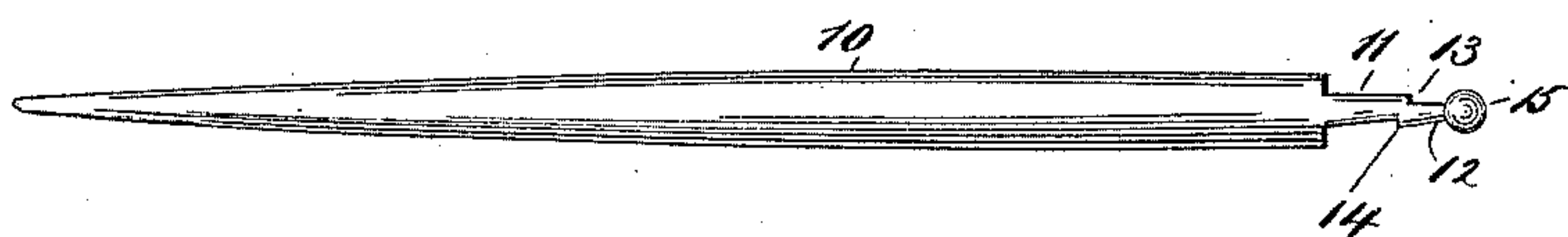
No. 418,393.

Patented Dec. 31, 1889.

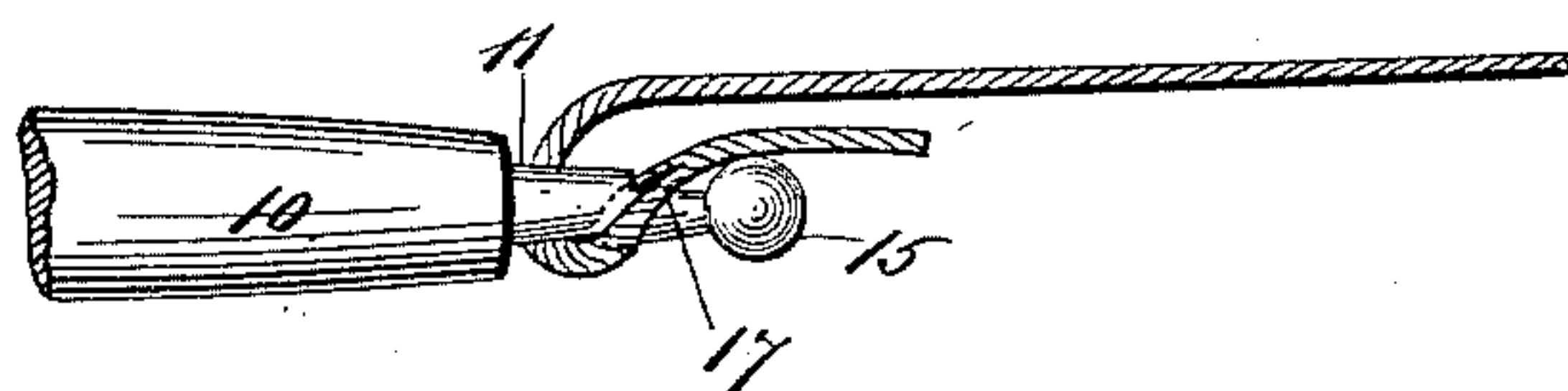
*Fig. 1*



*Fig. 2*



*Fig. 3*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

HARVEY BOSWORTH, OF PLATTSBURG, NEW YORK.

## BELT-LACING NEEDLE.

SPECIFICATION forming part of Letters Patent No. 418,393, dated December 31, 1889.

Application filed June 26, 1889. Serial No. 315,627. (No model.)

*To all whom it may concern:*

Be it known that I, HARVEY BOSWORTH, of Plattsburg, in the county of Clinton and State of New York, have invented a new and useful Improvement in Needles, of which the following is a full, clear, and exact description.

My invention relates to an improvement in needles, especially to that class of needles used in lacing belts or sewing sails or similar heavy fabrics.

The object of the invention is to provide a needle capable of being expeditiously threaded, and to so construct the head of the needle that when the lace, cord, or thread to be used in sewing has been passed through the eye of the needle it will be so attached that the needle may be even carelessly handled without danger of the thread or lace slipping from the eye thereof.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of the improved needle. Fig. 2 is a side elevation, and Fig. 3 is a partial enlarged side elevation illustrating the application thereto of the cord or lace.

In carrying out the invention the body of the needle may be of any desired shape or length, and the said body at the head is so flattened upon opposite sides and shaped as to provide a central reduced extension 11 parallel with the longitudinal axis of the body, and a second extension 12, the upper surface of which is below the plane of the upper surface of the extension 11, and the lower surface at the forward end below the plane of the equivalent surface of the said extension 11, as best illustrated in Fig. 2, whereby two diagonally-opposite shoulders 13 and 14 are produced in the head. The extension 12 of the head is preferably made to terminate in a ball 15; or the outer end of said extension may be otherwise enlarged.

In the extension or section 11 of the head the eye 16 of the needle is produced. It will thus be observed that the body of the needle at the head is provided with a stepped or angular shank. The lace, cord, or other material made use of in sewing, if used single, is cut longitudinally at or near one end to form a slot or opening 17. The slotted end of the lace or cord is then passed through the eye of the needle, and the ball or enlarged end of the shank 15 is passed through the opening in the lace or cord, and the body of the cord is thereupon drawn outward from the needle until the lace or cord at the opening will contact with the shoulders 13 and 14, as shown in Fig. 3. By this means it will be observed that it is impossible to draw the cord or lace through the eye of the needle, even though considerable tension be brought to bear upon the body of the cord in sewing. If the thread or lace is to be used double, an opening or slot 17 is produced in the thread or lace at or near the center of the same.

I desire it to be understood that instead of flattening the sections of the shank, as heretofore stated, the said shank may be made cylindrical or oval, if desired, and the eye may be made in the head of the needle, as heretofore, in which event the shank is straight, or essentially so, being provided with an enlargement at the outer end.

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

1. A lacing-needle having an eye in its butt-end and a reduced shank extending beyond the eye in the direction of the length of the needle and provided with an enlargement at its extremity, the said shank and enlargement being of less width at their points of greatest width than the diameter of the butt of the needle, substantially as set forth.

2. A lacing-needle having its butt reduced and provided with an eye, and a shank or extension projecting from the said reduced portion in the direction of the length of the needle of less diameter than said reduced portion and having an enlargement at its extremity, substantially as set forth.

3. A lacing-needle having its butt-end reduced, as at 11, and formed with a shank 12 of less diameter than the said reduced portion, extending in the direction of the length of the needle and terminating in a circular head 15, diagonally-opposite shoulders 13 14 being formed at the juncture of the said parts 11 12, and an eye in the reduced portion 11, substantially as set forth.

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Witnesses:

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