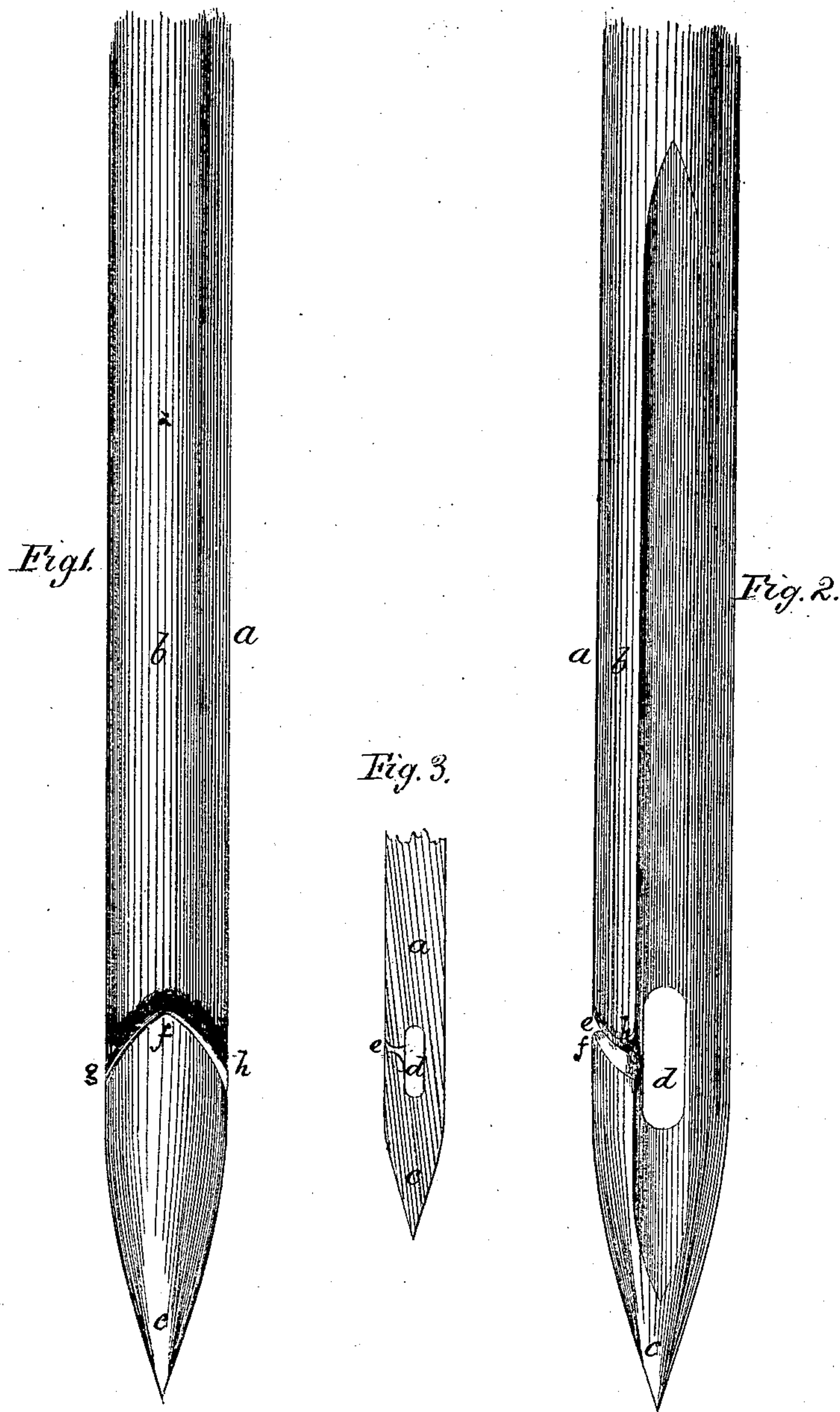


J. B. BLANCHARD.
Needle for Sewing Machines.

No. 103,549.

Patented May 31, 1870.



Witnesses.
Geo. A. Loring.
Edward Griffith

Joseph Boul Blanchard.
by his Attorney
Frederick Curtis

UNITED STATES PATENT OFFICE.

JOSEPH BOND BLANCHARD, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN NEEDLES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 103,549, dated May 31, 1870.

To all whom it may concern:

Be it known that I, JOSEPH BOND BLANCHARD, of Boston, in the county of Suffolk and State of Massachusetts, have made an invention of a new and useful Needle for Sewing-Machines; and I do hereby declare the following description to embrace the nature of said invention and the manner in which the same is to be performed, such description being illustrated by the accompanying drawings, which consist of front elevation in Figure 1 and side elevation in Fig. 2, Fig. 3 being a section of its lower part.

This invention or improvement, like others of its class, is intended to facilitate and expedite the threading of a sewing-machine needle—a result alike advantageous to those whose eye-sight is imperfect or failing, as well as to those possessing good eye-sight, but often obliged to thread a needle in poor light or in haste, the operation in both cases being effected in a fraction of the time required to effect it as of old.

I am aware that previous to the origin of my present invention various modes have been adopted for effecting an opening or entrance to the eye of a needle; but all have proved more or less inefficient, as well as difficult and expensive to manufacture.

Among several inventions of open-eyed needles, the character of which more or less approximates to that herein explained, is one exhibited in Letters Patent of the United States No. 37,996, and issued on the 24th day of March, 1863, to A. I. Ambler. This patented needle of Ambler's has a lateral orifice leading directly into the eye without deviation or irregularity, the result of which is to permit the thread constantly to escape from the eye with of course injurious effects. This direct opening into the eye, as shown in Ambler's patent, is a very economical one to produce, and allows an instant threading of the needle, and but for the liability of escape of the thread would leave nothing to be desired in the way of a "self-threading" needle, so called. The tendency to permit escape of the thread renders Ambler's needle impracticable, if not valueless; and the object I have had in view in originating the needle embodying the subject of this

patent has been to secure the advantages of a direct opening into the eye, with security against clandestine escape of thread therefrom, and to effect my purpose I cut through one side of the eye of a needle a passage, which, while being in one sense a direct one, nevertheless prevents escape of the thread.

The drawings before alluded to as accompanying this specification, and which illustrate my invention, represent at *a* a sewing-machine needle, of which *b* is the shank, *c* the point, and *d* the eye.

In carrying my invention into practice I cut or form through the wall of the needle, opposite the eye, a slot, such slot extending into the eye of the needle at a right angle, or nearly so, to the needle's length, but curved from one edge of the wall to the other, and in the direction of the length of the eye through the needle. The passage *e* is curved in order that the thread, once having been passed through it to the eye, cannot escape therefrom during the ordinary movements of the needle. This result is attained by the formation of the slot *e*, which upon both its outer and its inner edges is curved in the direction of its length, so as to present the points *f*, *g*, and *h*, by which the thread, in any of the positions it usually assumes, is effectually prevented during the various movements of the needle from passing out of the slot. By making the slot in the form of an arc of a circle it may be readily produced by means of a revolving cutter or endless saw fixed to a rotary disk.

My present invention possesses the characteristics of economy in manufacture, effectiveness in operation, and of enabling the threading of a needle to be instantaneously effected.

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

A sewing-needle having a lateral slot or opening, *e*, leading to the eye and curved in the direction of its length, substantially as described, so as to present the points *f*, *g*, and *h* for the purpose of preventing the escape of the thread from the eye, as set forth.

JOSEPH BOND BLANCHARD.

Witnesses:

FRED. CURTIS,
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