(No Model.)

C. H. PECK.

METHOD OF ATTACHING NEEDLES TO THREADS, &c.

No. 348,047. Patented Aug. 24, 1886.

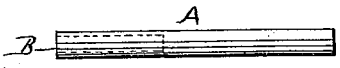

FIG. 1.

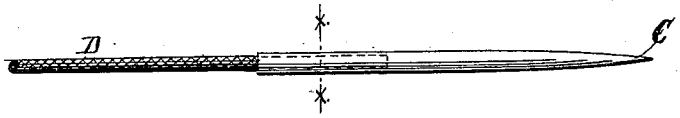

FIG. 2.

FIG. 3.

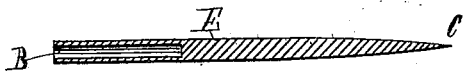

FIG. 4.

WITNESSES.

B. Frank Babcock

Samuel Cairns

INVENTOR.

Charles Henry Peck

By Henry Marsh Jr.
his Attorney

UNITED STATES PATENT OFFICE.

CHARLES HENRY PECK, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO IRA F. PECK, OF SAME PLACE.

METHOD OF ATTACHING NEEDLES TO THREADS, &c.

SPECIFICATION forming part of Letters Patent No. 348,047, dated August 24, 1886.

Application filed September 16, 1885. Serial No. 177,239. (No model.)

To all whom it may concern:

Be it known that I, CHARLES HENRY PECK, a citizen of the United States, and a resident of the city and county of Providence, in the State of Rhode Island, have invented a new and useful Lacing-Needle, of which the following is a specification.

The object of my invention is to provide a lacing-needle which, presenting a smooth, even, and regular surface, will securely retain the cord and will pass freely and unobstructedly through the fabric, carrying the cord after it and reducing the cost of production to a minimum.

I attain the object aforesaid by the special construction hereinafter and in the accompanying drawings shown and explained.

Prior to my invention inventive thought and ability had been devoted to the production of a lacing-needle which, of cheap construction, would carry a cord through fabrics easily and freely. Many devices have resulted therefrom which in practical use have proved unsatisfactory and objectionable on account of the expense involved in their manufacture, as well as on account of the obstructions which the modes employed of securing the cord to the needle presented to the free passage of the needle and engaged cord through the fabric.

Needles have been made of wire pointed at one end and flattened for a short distance near the other end, said flattened end being adapted to be wound spirally about the cord for retaining and carrying purposes. Such spiral winding of the flattened wire does not insure a sufficiently reliable fastening for the cord, and the spirals present an uneven and broken surface to be drawn through the fabric. Needles have also been constructed from a flat blank of metal tapered to a point at one end, and the blank folded upon itself and the cord to retain the latter and form the needle. They have also been made of wire, with one end flattened for a short distance and folded over upon itself and the cord to retain the latter. Both these latter present a seam lengthwise of the needle entirely or partially throughout its length.

In my invention I take a solid wire of suitable length, preferably a little shorter than it is intended to have the finished needle. I swage one end of this blank to a suitable point and bore a hole in the other end of suitable depth to recieve the cord endwise, and of a diameter slightly larger than that of the cord. I then insert the cord endwise in the hole and swage the blank down upon it, thereby drawing the blank out to the proper length for the needle and reducing the diameter of the hole, and compressing the metal of the needle-body firmly and uniformly upon and around the engaged portion of the cord. I then have produced a lacing-needle of even and regular surface, and one which will firmly and reliably retain the cord and pass freely and unobstructedly through the fabric and carry the cord after it.

In the drawings, Figure 1 is a plan view of the blank. Fig. 2 is a like view of the needle and its engaged cord. Fig. 3 is a cross-section on line *x x* of Fig. 2, and Fig. 4 is a central longitudinal section of the needle.

Similar letters denote like parts where they occur in the drawings.

A represents the blank, which has bored into one end of it longitudinally an orifice or recess, B.

C is the point, which is swaged or otherwise formed on the blank A.

D is the cord, which is inserted endwise in the recess B of the blank before the latter is swaged and drawn out to form the needle E.

By using a solid wire and boring the recess B, as described, I am enabled to produce the completed needle with fewer manipulations and with consequent material reduction in cost.

I claim as my invention—

The improvement in the art of securing metallic needles to textile threads or cords, the same consisting in making a point upon one end of a section of wire and longitudinally boring into the opposite end, then inserting in the bore the end of the thread or cord to be attached, then uniformly reducing the diameter of the metal surrounding the bore upon the thread or cord, substantially as described.

In testimony whereof I have hereunto set my hand, in presence of two witnesses, this 2d day of September, 1885.

CHARLES HENRY PECK.

Witnesses:
HENRY MARSH, Jr.,
JOHN F. CLARK.