(No Model.)

C. K. BRADFORD.

LASTING AWL.

No. 376,939. Patented Jan. 24, 1888.

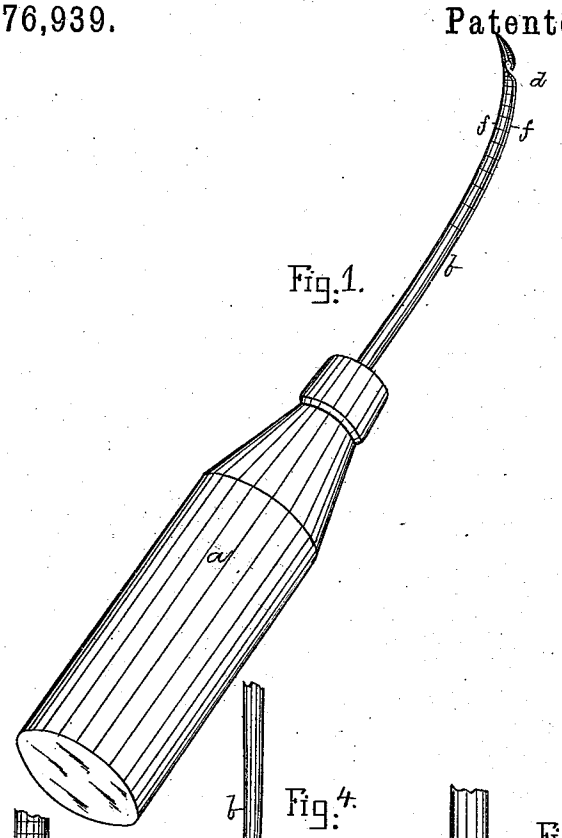


Fig. 1.

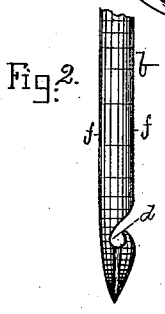


Fig. 2.

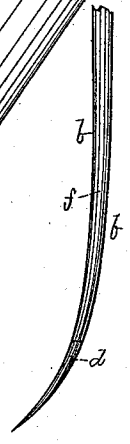


Fig. 4.

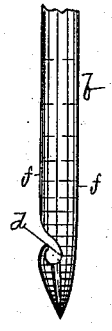


Fig. 3.

Witnesses:

Lawrence K. Muller.

John R. Snow.

Inventor:

Charles K. Bradford,

by his attorney,

J. E. Maynadier

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

CHARLES K. BRADFORD, OF LYNNFIELD, ASSIGNOR TO GEORGE H. P. FLAGG AND GEORGE A. FULLERTON, BOTH OF BOSTON, MASSACHUSETTS.

LASTING-AWL.

SPECIFICATION forming part of Letters Patent No. 376,939, dated January 24, 1888.

Application filed May 20, 1886. Serial No. 202,752. (No model.)

To all whom it may concern:

Be it known that I, CHARLES K. BRADFORD, of Lynnfield, in the county of Essex and State of Massachusetts, have invented a new and useful Tool, of which the following is a specification.

My invention is a new tool more especially adapted for lasting boots and shoes. It is a curved awl having near its outer end a thread-carrying hook with an inwardly-inclined point, the hook being formed in the edge of the curved portion of the awl—that is to say, not upon the outer nor the inner surface of the curved part but upon the edge of the curved part.

In the drawings, Figure 1 is a perspective view of my new tool, and Figs. 2, 3, and 4 are enlarged views of its shank and point.

a is a stock or handle adapted to receive the awl *b*, which is curved and provided with the hook *d* on one of the edges *f* of the curved part of the awl. This hook *d* is to carry the thread which the workman places in it after puncturing the material on which he is operating; and as the point of hook *d* (which is on the edge of the curved part of the awl) is inclined inwardly—that is, toward the back of the hook, as shown—the point of the hook does not catch on the material from which it is withdrawn after puncturing. This inward inclination of the hook I have found to be an important feature of my awl, because it does away with all danger of the point of the hook catching in the stock when the awl is withdrawn; and this catching of the hook's point in the stock sometimes injures the stock, and is a serious hinderance to the workman, as will be plain to all skilled in the art.

I am aware that a straight awl having a hook-shaped notch near the point is described in Patent No. 189,934, dated April 24, 1877; but such an awl cannot be used in doing many kinds of work, as will be readily understood; and my tool differs essentially from such an awl in being curved and in having its hook on the edge of its curved part, whereby it is adapted for many kinds of work impossible to be done with an awl of the class to which that described in said Letters Patent belongs. My awl also differs essentially from the awl described in Stickel's patent, No. 296,084, dated April 1, 1884, in having its hook on the edge of the curved part, as above explained. The notch in Stickel's awl is on the under side of the curved part of the awl, and consequently Stickel's awl is practically worthless as a lasting-tool.

I am aware, also, that a curved "notch-pointed" needle is shown in Dunham's patent, No. 36,396, dated September 9, 1862; but this needle is practically worthless as an awl for lasting, because the point of its hook is not inclined inwardly.

I am aware of Strain's patent, No. 106,092, dated August 2, 1870, for a sewing-machine needle.

I disclaim all that is described in the patents above mentioned.

The handle or stock *a* is preferably made of metal, or weighted and faced with metal, so that it can be used conveniently as a hammer.

What I claim as my invention is—

The awl *b*, curved, as shown, and having on the edge of its curved part the hook *d*, with an inwardly-inclined point, substantially as and for the purpose set forth.

CHAS. K. BRADFORD.

Witnesses:
EDWARD S. BEACH,
JOHN R. SNOW.