(No Model.)

E. MAYNZ.

MANUFACTURE OF LACING HOOKS.

No. 247,087. Patented Sept. 13, 1881.

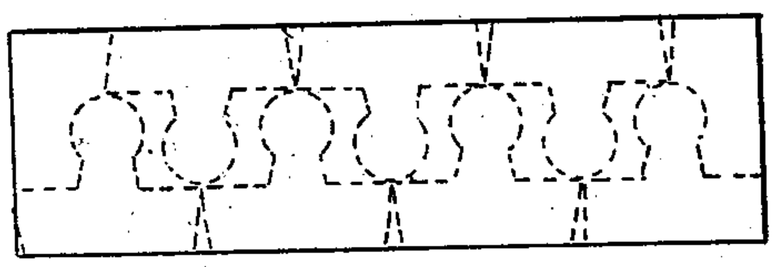

Fig. 1.

Fig. 2.

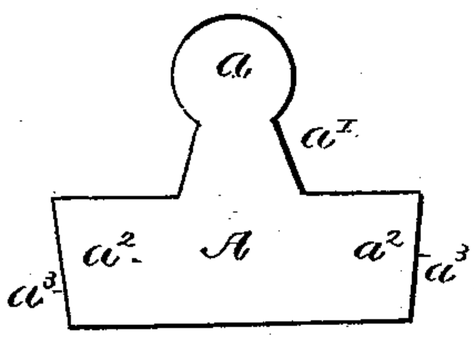

Fig. 3.

Fig. 4.

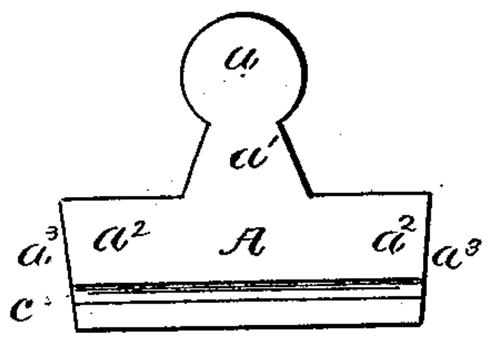

Fig. 5

Fig. 6.

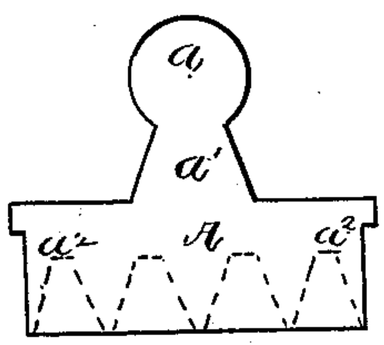

Fig. 7.

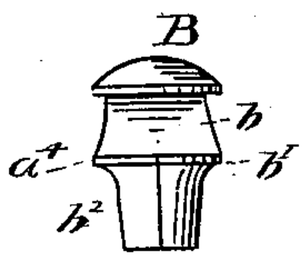

Fig. 8.

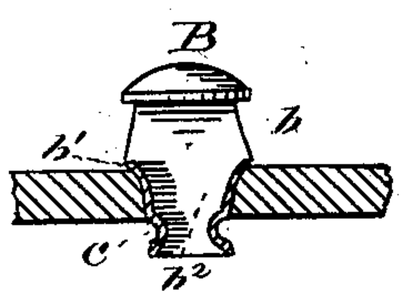

Fig. 9.

WITNESSES

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MANUFACTURE OF LACING-HOOKS.

SPECIFICATION forming part of Letters Patent No. 247,087, dated September 13, 1881.

Application filed July 12, 1880. (No model.)

To all whom it may concern:

Be it known that I, EDWARD MAYNZ, of the city of Boston, in the county of Suffolk, in the Commonwealth of Massachusetts, have invented an Improvement in the Manufacture of Lacing-Hooks, of which the following is a specification.

This invention has for its object the following-described improvement in the manufacture of lacing-hooks, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature, in which—

Figure 1 is a plan of a blank-strap, showing blanks in dotted outline. Fig. 2 is a cross-section of a blank-strap. Fig. 3 is a plan of a blank. Fig. 4 is a cross-section, showing metal reduced in thickness for the eyelet. Fig. 5 is a plan of a modification of a blank. Fig. 6 is a cross-section thereof. Fig. 7 is a plan of a blank. Fig. 8 is an elevation of a complete eyelet. Fig. 9 represents the eyelet inserted in the material, to which it is to be fastened, but not clinched.

This invention relates to that class of lacing-hooks known as the "eyelet" lacing-hook, and it is made from a flat blank by substantially the following manipulations.

A represents the blank. It is punched from a flat strip or plate of metal, and it is provided with the head-forming portion a, the neck a', and the wings a^2. The ends a^3 of the wings may be inclined, as represented in Figs. 3 and 5, or not, as described. The blank is then shaped by suitable machinery into the complete hook shown in Fig. 8, and in the process the wings are curved outwardly or struck up at the upper edge to provide the seat a^4 of the hook, and are then brought together so that the two edges a^3 abut or overlap. The formation of the seat, by striking up or drawing or otherwise, may be accomplished after the wings have been curved to form the eyelet. The abutted edges may be united by being dipped in japan or a solution of tin, or in any other desirable manner.

The complete lacing-hook will have the button-head B, either rounded or flat; the neck b, either curved or flat; the annular or other shaped seat b', and the eyelet b^2, projecting downwardly therefrom, and having substantially a vertical seam.

The blanks may be punched from a flat strip of metal with very little waste, in the manner represented in Fig. 1.

By this construction iron may be used in lieu of composition or brass, whereby a stronger lacing-hook is obtained at a less cost than if brass or composition were employed.

Before the formation of the eyelet from the wings the wings may be made thinner than the remainder of the hook, in order that the eyelet may be sufficiently thin to bend easily in clinching; or the wings may be provided with one or more grooves, c, for determining the line of bend of the lower portion of the eyelet when it is being clinched.

One method of obtaining a blank having wings of less thickness than the remainder of the blank is shown in Fig. 2, in which the strip from which blanks are cut is decreased in thickness from or near the center toward the edge.

The wings, instead of being shaped to form an eyelet when curved and lapped, may be provided with fastening-prongs, substantially as shown in Fig. 7 in dotted lines.

It will be observed that the eyelet of the complete lacing-hook has one transverse seam or joint, d, only, and that this seam or joint is obtained by bringing the edges of the wings together or overlapping them.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. A lacing-hook blank having the head-forming portion a, the neck a', and the wings a^2, the said wings being thinner than the neck and head-forming portion, all for the purposes set forth.

2. The process of making a lacing-hook, consisting in punching from sheet metal the blank A, striking up the portions $a\,a'$ to form the head B, and the neck b, and the wings a^2, curved transversely and at right angles to the neck to form the annular seat b' and the open eyelet b^2.

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