UNITED STATES PATENT OFFICE.

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LACING STUD OR HOOK.

SPECIFICATION forming part of Letters Patent No. 695,961, dated March 25, 1902.

Application filed December 19, 1901. Serial No. 88,513. (No model.)

To all whom it may concern:

Be it known that I, JOHN D. STIRCKLER, a citizen of the United States, residing in Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Lacing Studs or Hooks, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention relates to a lacing stud or hook designed and adapted, among other uses, to be employed on boots and shoes, gloves, and like articles, and has for its object to provide a lacing stud or hook which is free from sharp or substantially sharp edges, whereby the danger of cutting or abrading the lacing or the garments of the wearer is avoided.

The invention further has for its object to provide a lacing stud or hook having a button finish without impairing the effectiveness of the stud or hook for holding or retaining the lacing-cord, and also has for its object to provide a lacing stud or hook having these desirable features which can be manufactured from sheet metal at a minimum expense.

These and other features of this invention will be pointed out in the claims at the end of this specification.

Figure 1 is a side elevation of a sufficient portion of a fabric provided with a lacing stud or hook embodying this invention to enable the same to be understood; Figs. 2 to 10, inclusive, details illustrating the process of manufacture of the stud or hook shown in Fig. 1; Fig. 11, a sectional view, on an enlarged scale, to be referred to; and Fig. 12, a sectional view, on an enlarged scale, of a modification to be referred to.

The lacing stud or hook herein shown as embodying this invention consists of a head or button a, a tubular post b, a base c, and an eyelet or fastening d, which parts are formed from a sheet-metal blank e. (Shown in Figs. 2 and 3.)

The head or button a is provided with a smooth round edge or circumference, whereby danger of abrading or cutting the garments of the user or of the lacing-cord is avoided, and the said head is supported by the post b, the exterior of which is smooth and round and which is located eccentrically with relation to the button head, so that a considerable portion of the latter projects beyond the post to form the hook proper, thereby providing a lacing hook or stud with a button or finished head, which has the functions of a hook, and with a smooth round post or shank, against which the lacing-cord may bear without danger of being cut or abraded.

The head or button a and the post b, as shown, are integral with the base or plate c, below which projects the hollow fastening d, which may and preferably will be eccentric to the button or head a and to the post b, (see Fig. 11,) and while I prefer this construction I do not desire to limit my invention in this respect, as good results may be obtained with the eyelet or fastening d concentric with the head or button a. (See Fig. 12.)

The base or plate c may be left solid, so as to cover the top of the hollow fastening or eyelet d, as represented in Fig. 11, or, if desired, the plate or base c may have a portion cut away substantially in line with the hollow fastening d. The hollow eyelet or fastening projection d is shown in Fig. 11 as passed through the fabric and not clenched; but in practice it will be bent to form the clamping-flangeshown in Fig. 1.

In the manufacture of the lacing hook or stud shown in Fig. 1 I start with a sheet-metal blank (shown in Figs. 2 and 3) and form therein the nubs 12 13. (Shown in Figs. 4 and 5.) These nubs are further manipulated and brought into substantially the shape shown in Figs. 6 and 8, the nub 12 being opened at its top by cutting out a portion thereof. The nub 13 is further manipulated and brought into the condition shown in Figs. 7 and 9 and becomes the head a and post b of the finished product, after which the blank e is folded or bent, as represented in Fig. 10, so as to bring the hollow nub 12 under the base c, in which position it becomes the hol-
low fastening projection d, which may be securely held to the base c by clamping lugs or ears 15 on the said base, or, if desired, the ears 15 may be omitted.

5 The button or head a may be formed round, as shown in Figs. 1 and 11, or, if desired, its upper portion may be flattened or dished to facilitate the retention of plastic or other material with which the heads of the stud or 10 hook are usually covered.

I prefer to locate the fastening projection or eyelet d eccentric to the post b, as by so doing the base c or top of the eyelet will remain stationary and will not tip or tilt, so as 15 to produce an uneven appearance in the fabric when strain is put upon the post b by the lacing-cord.

From the above description it will be seen that the lacing stud or hook may be formed at a minimum expense from sheet metal; that it is provided with a head having a button finish with a round edge which does not catch and retain the garments of the user; that it has a hollow post of sufficient strength to withstand the strain placed upon it and whose exterior surface is round and smooth and will not cut or abrade the lacing-cord, and that its base remains stationary under strain and does not produce a non-desirable appearance 30 in the fabric.

By the expression “button finish” herein employed I desire to be understood to mean a head which when looked down upon does not show the shank or post, and by reference to the drawings it will be seen that the post or shank b is within the circumferential edge of the head a.

I claim—

1. A lacing stud or hook made from sheet metal and provided with a head having a round circumferential edge, and a hollow post eccentrically attached to said head, substantially as described.

2. A lacing stud or hook made from sheet metal and provided with a head, a round hollow post eccentric to said head, a base, and an eyelet or fastening projection located below said base, substantially as described.

3. A lacing stud or hook made in one piece from sheet metal and comprising a base, a hollow post, and a head eccentric to said post, substantially as described.

4. A lacing stud or hook made in one piece from sheet metal and comprising a head, a hollow post eccentric thereto, a base-plate having a folded under portion provided with a hollow fastening projection, substantially as described.

5. A lacing stud or hook made in one piece from sheet metal and comprising a head, a hollow post eccentric thereto, a base-plate having a folded under portion provided with a hollow fastening projection eccentric to said head, substantially as described.

6. A sheet-metal lacing stud or hook provided with a head, a hollow post eccentric thereto and a base, the said head having a rounded edge, and the said post having a smooth round exterior surface, substantially as described.

7. A sheet-metal stud or hook provided with a head, a post, a base, and a fastening projection located below said base and eccentric to said head, substantially as described.

8. A lacing stud or hook made from sheet metal and provided with a head, and with a hollow post eccentrically attached to said head, substantially as described.

9. A lacing stud or hook made from sheet metal and provided with a chambered head provided with upper and lower walls integral with each other, and a hollow post integral with the lower wall of said chambered head and eccentric with relation thereto, substantially as described.

10. A lacing stud or hook made from sheet metal and comprising a hollow head circular in form, and a hollow post eccentrically attached to the lower wall of said hollow head within the circumferential edge of the same, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

Witnesses:

JAS. H. CHURCHILL,
J. MURPHY.