

(No Model.)

M. BRAY.
Lacing Hook for Boots, Shoes, &c.

No. 239,926.

Patented April 12, 1881.

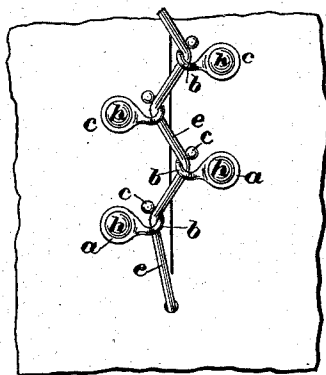


Fig. 1.



Fig. 3.

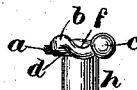


Fig. 4.

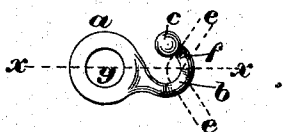


Fig. 2.



Fig. 5.

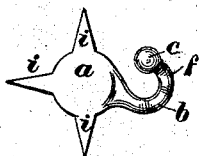


Fig. 6.

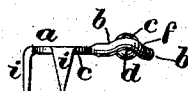


Fig. 7.

Witnesses:

W. C. Lombard.
E. E. Chandler.

Inventor:

Mellen Bray
by W. C. Lombard
Attorney.

UNITED STATES PATENT OFFICE.

MELLEN BRAY, OF NEWTON, MASSACHUSETTS.

LACING-HOOK FOR BOOTS, SHOES, &c.

SPECIFICATION forming part of Letters Patent No. 239,926, dated April 12, 1881.

Application filed November 22, 1880. (No model.)

To all whom it may concern:

Be it known that I, MELLEN BRAY, of Newton, in the county of Middlesex and State of Massachusetts, have invented a new and useful Method of Lacing Boots and Shoes, and a Lacing-Hook therefor, of which the following, taken in connection with the accompanying drawings, is a specification.

The object of my present invention is the production of a lacing adapted to use on ladies' side-lace boots, for lacing the wrists of gloves, and for other purposes, which can be readily laced and unlaced, and that will not lock or catch together in walking when applied upon the inner or contiguous sides of the boot-legs or catch in or get entangled with fringes, laces, or other clothing when applied either to the boot or glove; and it consists in the employment of lacing-hooks arranged upon opposite sides of the slit or opening in the boot or glove, the bent or curved portions of which lie in planes parallel, or nearly so, to the outer surface of the material to which they are secured.

It further consists in the employment of a lacing-hook having its bent or hook portion curved in a direction parallel, or nearly so, to the outer surface of the material upon which it is to be secured, or to the portion which bears upon the material at or around the point of attachment, and also having formed therein a double reverse curve in a direction at right angles to the main curve of said hook, for the purpose of forming a space between said hook and the material upon which it is secured for the lacing-cord, and a recess or depression on its upper side to receive that part of the lacing-cord which passes over the hook.

Figure 1 of the accompanying drawings represents my improved lacing applied to a piece of leather, which may represent a portion of a shoe or boot upper. Fig. 2 is a plan of my improved lacing drawn to an enlarged scale. Fig. 3 is a side elevation of the same with a tubular rivet inserted therein as a means of attaching it to the boot or other article. Fig. 4 is an end view of same. Fig. 5 is a vertical longitudinal section of the same on line *xx* on Fig. 2. Fig. 6 is a plan of a partially-formed hook in which the hook and the means of attaching it are formed in one piece; and Fig. 7

is a side elevation of the same hook completed, ready to set.

The hook illustrated in Figs. 1, 2, 3, 4, and 5 has a thin and nearly circular disk, *a*, from one side of which projects a wire-like neck, *b*, bent horizontally or substantially parallel with the disk *a*, and terminating in the ball *c* at the end, as shown. The neck *b* is also curved upward and downward, or at right angles to the disk *a*, so as to form in its under side the arch *d* to span the cord *e*, which is passed between said hook and the surface of the article upon which it is secured, and upon its upper side, near the ball *c*, a depression, *f*, in which said cord, when it is passed over said hook, lies, as shown in Fig. 1, and indicated by dotted lines in Fig. 2. The rise of the metal of the hook upon either side of the depression *f* protects the lacing-cord *e* from injury by rubbing or chafing, and also prevents the cord from being slipped off from the end of the hook, while at the same time the act of drawing the lacing-cord taut to draw the two parts of the boot or glove together causes all of the hooks to hug closely to the surface of the boot or glove, thereby precluding the catching of the clothing under said hooks or the hooks on one boot catching into or interlocking with the hooks or lacing upon the opposite boot.

It will be observed by reference to Fig. 1 that these hooks must be made rights and lefts and arranged in pairs, with the open sides of all the hooks turned from the point where the lacing-cord is made fast to the boot, glove, or other article.

The hook represented in Figs. 1, 2, 3, 4, and 5 is provided with a hole, *g*, in the center of the disk *a*, in which is inserted the tubular rivet *h* as a means of securing it to the boot, glove, or other article by being passed through a perforation formed therein and clinched upon the inner or back side in a well-known manner. If desired, however, the hook may be made as illustrated in Figs. 6 and 7, where the hook proper and the means of securing it upon the boot, glove, or other article are made in one piece, the disk *a* being provided with two or more pointed prongs, *i*, which are bent at right angles to said disk, as shown in Fig. 7, and pass through the material and are

clined upon its back side. This makes a very good hook for some kinds of work; but for general use I prefer the tubular rivet-fastening. But as the mode of attaching the hook
5 forms no part of my present invention I do not claim either form of attachment; neither do I wish to be limited to either or both of the forms of attachment hereshown and described.

What I claim as new, and desire to secure
10 by Letters Patent of the United States, is—

1. A hook for lacing boots, gloves, and other articles, provided with a flat disk-like portion adapted to rest upon the material when applied for use, and a hook bent outward and
15 backward from said disk in a plane parallel, or nearly so, to the body of the disk, substantially as described.

2. A lacing-hook for boots, gloves, or other articles, having its neck bent in a plane parallel, or nearly so, with the flat surface of the
20 portion which rests upon the material when secured thereto, and also bent at right angles

to said surface to form the arch *d* and depression *f*, substantially as described.

3. As a means of lacing boots, gloves, or other articles of wearing-apparel, the combination, with a single lacing-cord secured by one end to the article to be laced, of two series of hooks having their necks bent in planes parallel, or nearly so, to the material to which they are secured, and arranged in pairs with their open sides all in the same direction, whereby the boot, glove, or other article may be so laced that the draft upon the lacing-cord shall tend to press the ends or points of said hooks close upon the article being laced, substantially as described.

Executed at Boston, Massachusetts, this 20th day of November, A. D. 1880.

MELLEN BRAY.

Witnesses:

WALTER E. LOMBARD,
E. E. CHANDLER.