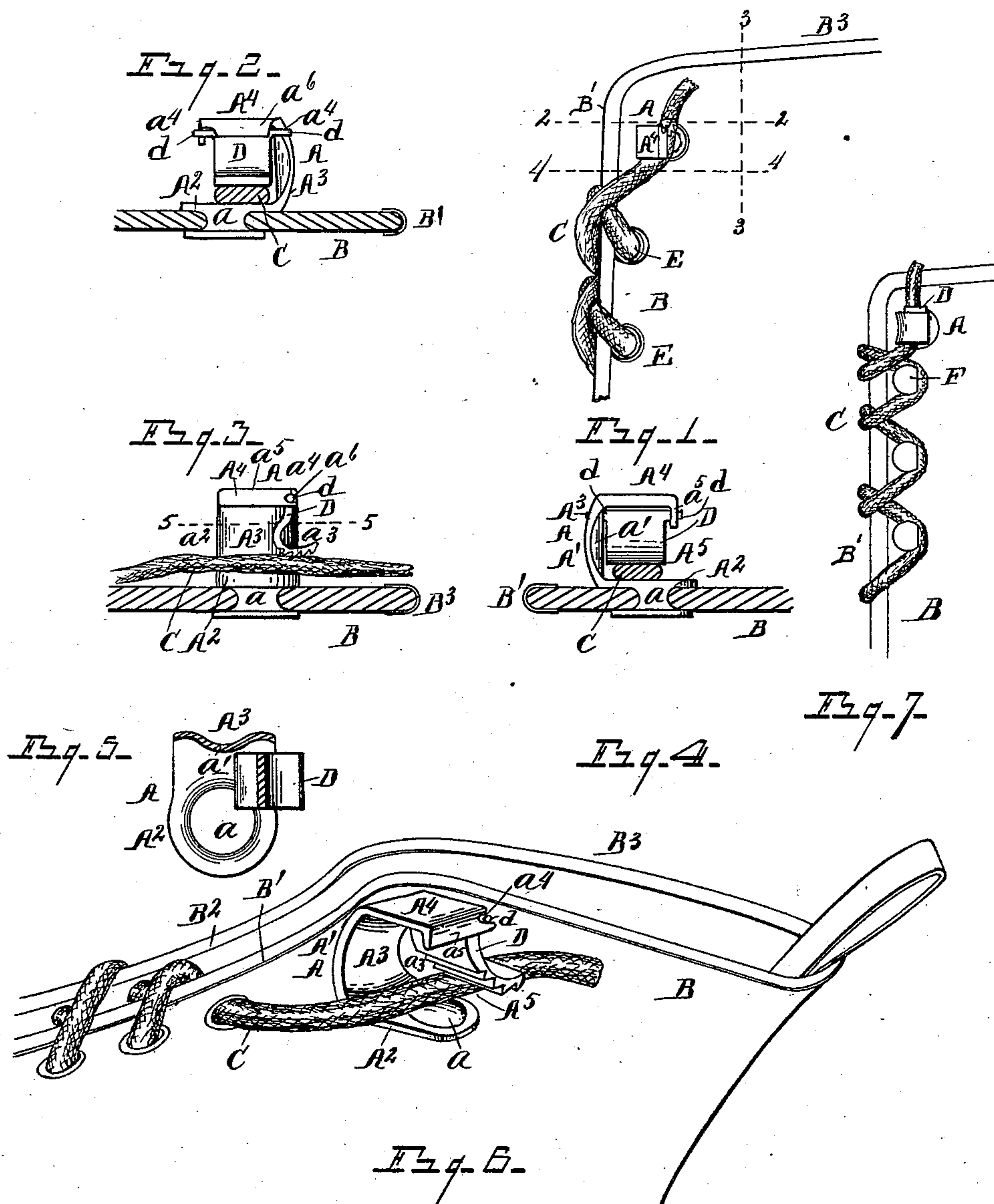


(No Model.)

H. J. STEVENS.  
LACING HOOK AND FASTENING.

No. 536,740.

Patented Apr. 2, 1895.



WITNESSES  
*Otto B. Baenziger.*

*M. A. Martin.*

INVENTOR  
*Herbert J. Stevens*

By *his* Attorney

*Newell S. Wright.*



# UNITED STATES PATENT OFFICE.

HERBERT J. STEVENS, OF DETROIT, MICHIGAN.

## LACING HOOK AND FASTENING.

SPECIFICATION forming part of Letters Patent No. 536,740, dated April 2, 1895.

Application filed April 20, 1894. Serial No. 508,259. (No model.)

*To all whom it may concern:*

Be it known that I, HERBERT J. STEVENS, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Lacing Hooks and Fastenings; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object a lace hook and fastening for shoes, gloves, corsets and other analogous articles, and it consists of the construction, combination, and arrangement of devices and appliances hereinafter specified and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation showing the combined hook and fastening upon a shoe. Fig. 2 is a view in elevation on the line 2—2, Fig. 1, looking toward the hook and fastening. Fig. 3 is a view on the line 3—3, Fig. 1, looking toward the hook and fastening. Fig. 4 is a view on the line 4—4, Fig. 1, looking toward my improved device. Fig. 5 is a sectional view on the line 5—5, Fig. 3. Fig. 6 is a view in perspective showing my improved device in place upon a shoe. Fig. 7 is a view similar to Fig. 1, but showing ordinary lacing hooks over which the lacing is passed.

Although my invention is designed for a variety of uses, I have shown it, and will hereinafter describe it as applied to a shoe or boot, but would have it understood that I do not contemplate its use upon shoes or boots alone.

My invention is more particularly designed as a combined lace hook and terminal fastening.

I carry out my invention as follows:

A represents my improved hook and fastening, B denoting a shoe or boot upon which my improved device is applied.

C is a lacing.

B' and B<sup>2</sup> denote the lacing edges of the shoe, and B<sup>3</sup> the upper edge of the shoe.

My improved hook and fastening is constructed with a body A' which may be formed of sheet metal and in a single integral piece,

the body being shaped to form a base or seating flange A<sup>2</sup> provided with any suitable means of engaging the said base upon the shoe or other article. Thus, for example, the flange or base A<sup>2</sup> is formed with an eyelet "a" engaged with the shoe or other article in the usual manner. The body of the hook and fastening is also formed with a back or side A<sup>3</sup> having its lateral edges curved toward the lacing edges of the shoe, the said back intermediate its edges being convex on its surface opposite the lacing edges of the shoe, as indicated in the drawings, as for example in the cross section, Fig. 5 at a'. The body A' is also constructed with a covering or top portion A<sup>4</sup> projecting at essentially right angles to the line of the lacing edges of the shoe. The body is formed with an opening thereinto, as at A<sup>5</sup>, on the side thereof opposite the lacing edges of the shoe. The upper and lower sides of the body are also open as shown, the body being thus essentially hook-shaped with the opening opposite the lacing edges of the shoe. This construction of the body forms a hook through which the lacing is led in the customary manner, or as the lacing would be led over any ordinary lacing hook. The curved edges of the back A<sup>3</sup> render the act of drawing the cord through the hook a simple and easy matter, the same as drawing the lacing through any lacing hook. In this respect the hook feature or portion of my device is every way analogous to the hooks now in customary use for shoe lacings, and my improved hook and fastening may occupy the same relative position upon a shoe as an ordinary hook, although it may be set a little farther back from the lacing edge if desired, and as I have indicated its position in the accompanying drawings. The openings of the hook on the upper and lower sides thereof are indicated more particularly in Fig. 3 at a<sup>2</sup> and a<sup>3</sup>.

Within the hook portion or chamber of the body A', I locate a swinging latch or cam D preferably toothed on its under surface. This latch has a hinged engagement in the top or upper portion A<sup>4</sup> of the hook and depends toward and adjacent to the base A<sup>2</sup> when in normal position. As shown in Figs. 3 and 6, more particularly the main portion of the latch extends downward at or adjacent to the



open side  $a^3$  of the hook, the open side  $a^3$  being the upper open side of the hook as the device is applied to a shoe.

While I do not limit myself solely to the particular manner of hinging the latch in the top  $A^4$  of the hook, I prefer that it should be hinged at the side thereof adjacent to the opening  $a^3$ . I prefer to form the hinge by recessing the portion  $A^4$  of the hook, as shown at  $a^4$ , on opposite sides thereof to receive spindles " $d$ " on opposite sides of the latch.

My invention contemplates forming the top  $A^4$  with a lip  $a^5$  at its free edge in which one of the sockets  $a^4$  is formed and also with a lip at right angles thereto, as shown at  $a^6$ . Said lip  $a^6$ , after the spindles " $d$ " have been engaged in their corresponding recesses  $a^4$ , is bent down over the top of the latch  $D$  to hold the latch in hinged position in the portion  $A^4$ .

It will readily be seen thus that the lacing readily enters the lower portion of the hook and as it is pulled up, lifts the latch permitting the lacing to ride under the latch. Any tension of the lacing in the opposite or downward direction, binds the toothed latch the more firmly upon the lacing. Thus the latch in combination with the hook effectually forms a terminal fastening for the lacing.

It will be seen that the toothed latch swings up in becoming loosened from the lacing cord or when the lacing cord is pulled upward, and swings downward to tighten upon the lacing. The latch is hung to swing essentially parallel with the lacing edges of the shoe. The lacing is engaged with the hook and fastening latch by simply drawing the lacing upward about the hook portion of the device in a ver-

tical line or parallel with the lacing edges. If a thin lacing were employed it might be necessary to raise it up against the toothed edge of the latch so that it would catch upon the teeth in order that the tension in the opposite direction would force the latch downward into locking position.

The views of the combined hook and fastening, presented in Figs. 2 to 6, are enlarged to more clearly permit the illustration of the various parts.

My improved hook and fastening may be employed with any other ordinary lace fastening. Thus, for example, in Fig. 1, the lace is shown engaged in eyelets  $E$ , and in Fig. 7 the lacing is engaged over ordinary hooks  $F$ . From the latter view it will appear more definitely how the hook portion of my device resembles that of a customary hook.

What I claim as my invention is—

A combined lace hook and fastening consisting of a base with means for engagement with the shoe or other article, a back having a convex portion  $A^3$ , a top, a depending portion from said top parallel with said back, recesses in said back and said depending portion, a swinging latch provided with spindles adapted to enter said recesses, and a lip  $A^6$  upon said top bent over the upper portion of the latch to hold the spindles in said recesses; substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

HERBERT J. STEVENS.

Witnesses:

N. S. WRIGHT,

O. B. BAENZIGER.