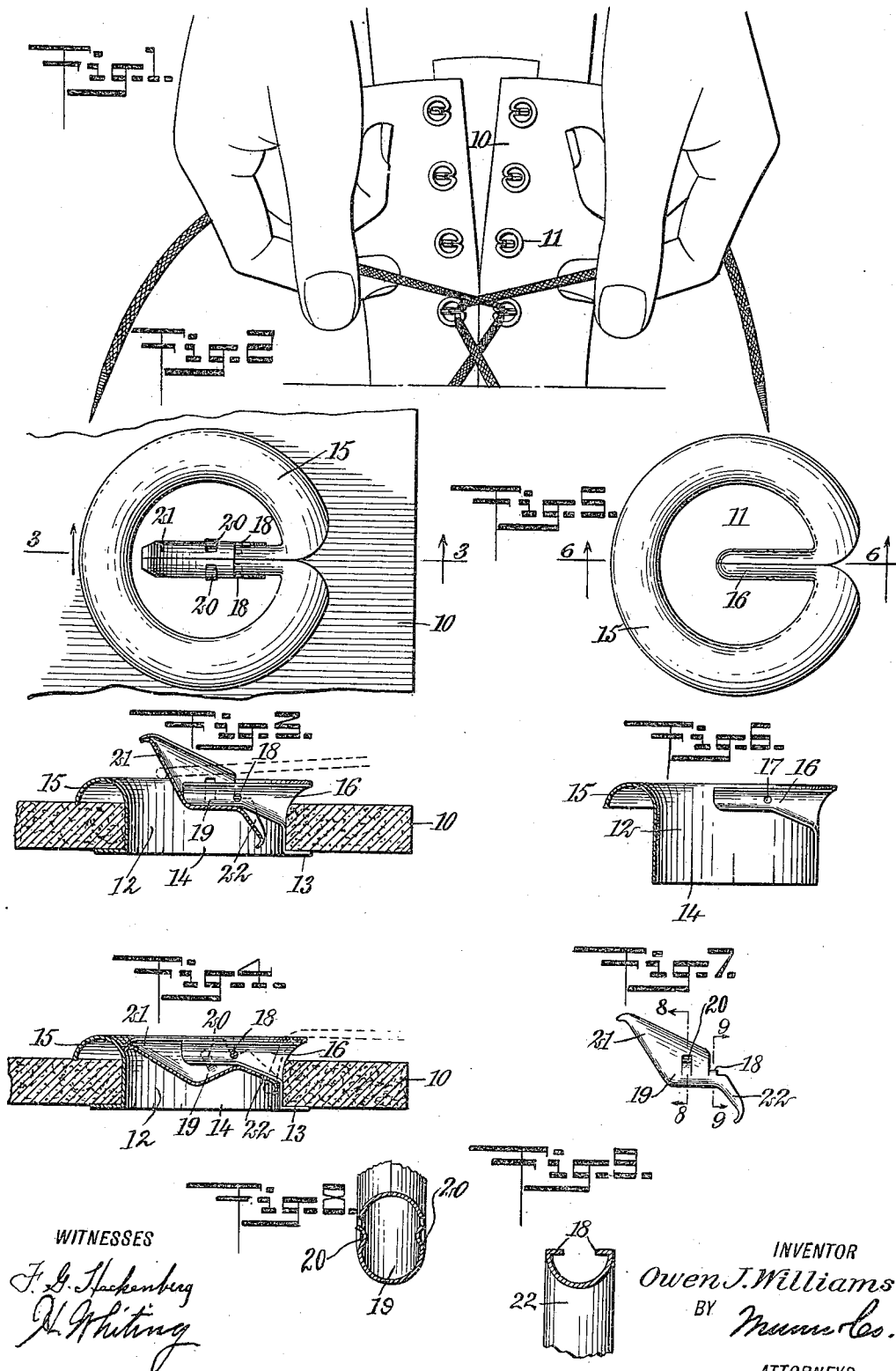


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DISAPPEARING HOOK.
APPLICATION FILED APR. 24, 1909.

961,566.

Patented June 14, 1910.



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OWEN J. WILLIAMS, OF BUFFALO, NEW YORK.

DISAPPEARING HOOK.

961,566.

Specification of Letters Patent. Patented June 14, 1910.

Application filed April 24, 1909. Serial No. 491,891.

To all whom it may concern:

Be it known that I, OWEN J. WILLIAMS, a citizen of the United States, and a resident of Buffalo, in the county of Erie and State of New York, have invented a new and Improved Disappearing Hook, of which the following is a full, clear, and exact description.

This invention relates to a lacing hook, adapted to be secured to boots, shoes, gloves, corsets or the like, in order to fasten the parts together.

The object of the invention is to provide a lacing hook which will be simple in its construction and in its operation, and also will be adapted to extend outwardly from the shoe or the like, to which it is attached, when not engaged by the lacing, and which will automatically disappear from its projected position when engaged by the lacing.

Generally speaking, the invention consists in a support or an eyelet, having a stud preferably integral therewith, to which is attached in a suitable manner, a hook, which, when not in use, is adapted to extend above the surface of the eyelet, and when in use to recede below the surface of the eyelet.

The invention further consists in the construction and combination of parts, to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 shows a number of hooks attached to a boot; Fig. 2 is a plan view of a hook and its eyelet; Fig. 3 is a vertical section on the line 3—3 in Fig. 2, showing the hook in the act of being engaged by a lacing; Fig. 4 is a view similar to Fig. 3, showing the hook in its lower position after having been engaged by the lacing; Fig. 5 is a plan view of the eyelet; Fig. 6 is a section on the line 6—6 in Fig. 5; Fig. 7 is a detail view of the hook; Fig. 8 is a section on the line 8—8 in Fig. 7; and Fig. 9 is a section on the line 9—9 in Fig. 7.

Referring more particularly to the separate parts of the device, 10 indicates the material to which the device is to be attached, which in this case is shown as the vamp of a shoe. The leather of the vamp 10 has perforations at suitable intervals, each of which is adapted to receive an eye-

let 11, which may be made in any suitable form and of any suitable material, but is preferably stamped out of a sheet of metal, and has a body portion 12, from which extend bottom flanges 13, that are bent over to engage the lower side of the leather, having suitable slits 14 therein, to allow for the increased periphery of the outer edge of the flange; and also has an upper flange 15, which curves upwardly and outwardly and then downwardly and outwardly to engage the upper surface of the leather.

Integral with the eyelet 11 and stamped out of the same piece of metal, is formed an elliptically-shaped finger or stud 16, which extends inwardly into the hollow opening within the eyelet and has its upper surface slightly below the upper surface of the eyelet. This stud 16 is preferably elliptical in cross section, and has openings 17 in each side thereof, which are adapted to receive lugs struck out of and extending from an elliptical hook 19, which is preferably stamped out of sheet metal, and is bent in the form shown so that it will more readily co-act with the lacing, for the purpose desired. Extending inwardly from the sides of the hook 19 adjacent to the lugs 18, there is provided a pair of spring members 20, which curve inwardly and then outwardly, to form a suitable spring clasp, which is adapted to engage over the stud 16, to hold the hook in its raised position, as shown in Fig. 3. The edges of the hook 19 extend toward each other and meet above the stud 16 and cover the end thereof when the hook is in its lower position.

The hook 19 may be described as having a body portion, from which slopes upwardly an engaging portion 21, and from which extends downwardly in the opposite direction, a locking portion 22.

In the operation of the device, the hook is held up in its projecting position, as shown in Fig. 3, by means of the spring flanges 20, which engage the stud 16. The engaging member 21 is extended above the upper surface of the support or eyelet in a position in which it will be readily engaged by the lacing. When the lacing has been passed over the engaging member 21 and pulled tight, it slips down over the body portion onto the locking portion 22, where the tension tends to cant the hook about its pivoting lugs 18, so as to bring the engaging portion 21 down within the

eyelet and below the upper surface of said eyelet, as shown in Fig. 4, the dotted lines representing the lacing. When it is desired to remove the lacing, it is loosened, and
 5 thus brought under the engaging portion 21, and a slight pull thereon will bring the engaging portion of the hook above the surface of the eyelet, where it is snapped into its raised position and the lacing readily
 10 removed.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. In a device of the class described, the
 15 combination with an eyelet adapted to be secured to a shoe or the like, of a stud integral with said eyelet and extending inwardly within said eyelet and below the upper surface of said eyelet, a hook having
 20 lugs integral therewith adapted to pivotally engage said stud, and means for yieldingly locking said hook below the upper surface of said eyelet.

2. In a device of the class described, the
 25 combination with an eyelet, of a stud integral with said eyelet, a hook pivoted to said stud, and spring means integral with said hook adapted to secure said hook in either of its adjusted positions on said stud.

3. In a device of the class described, the
 30 combination with an eyelet formed of sheet metal, a stud integral with said eyelet and extending within said eyelet and having its upper surface below the upper surface of said eyelet, a hook having lugs integral
 35 therewith adapted to pivotally engage said stud, and spring flanges integral with said hook adapted to clamp said stud.

4. In a device of the class described, the
 40 combination with an eyelet, of a stud integral with said eyelet, a hook pivoted to said stud, an engaging portion integral with said hook adapted to extend above the upper surface of said eyelet, and a locking portion on
 45 said hook adapted to be engaged by the lacing, so as to withdraw said engaging portion from its extended position and a plurality of springs on said hook for locking
 50 said hook in its adjusted position on said stud.

5. In a device of the class described, the
 55 combination with an eyelet adapted to be fastened to a shoe or the like, of a stud integral with said eyelet, extending within said eyelet and having its upper surface below the upper surface of said eyelet, said
 60 stud having perforations therein, a hook having inwardly-extending lugs adapted to engage the perforations in said stud to pivot said hook to the stud, spring flanges integral
 65 with said hook curving inwardly and outwardly and adapted to embrace said stud to hold the hook in its raised position, an engaging portion on said hook adapted to
 70 extend above the upper surface of said eyelet, and a locking portion on said hook adapted to be engaged by the lacing, to withdraw said engaging portion from its extended position.

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

OWEN J. WILLIAMS.

Witnesses:

FRED. J. HOME,
 CLELLA A. HOME.