No. 705,562. Patented July 29, 1902.

G. W. CHIPLEY.

LACING HOOK.

(Application filed Mar. 25, 1902.)

(No Model.)

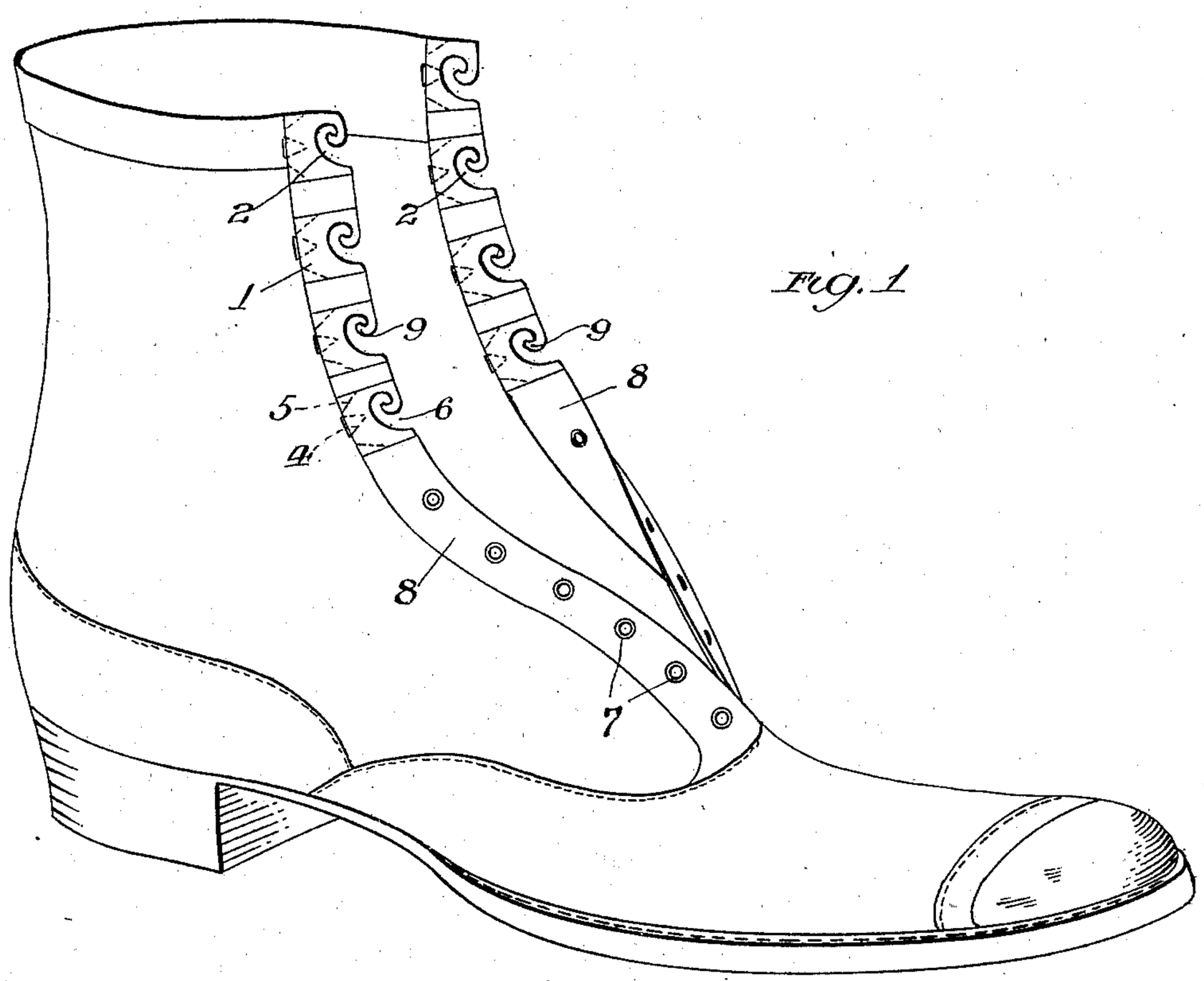


Fig. 1

Fig. 2

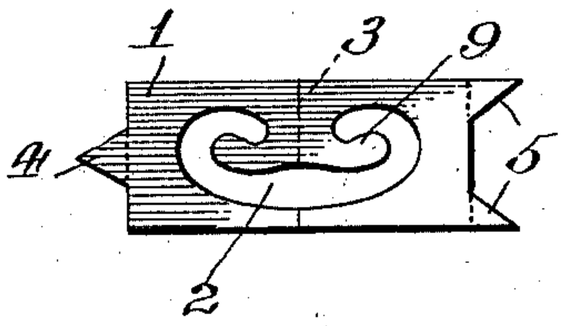


Fig. 3

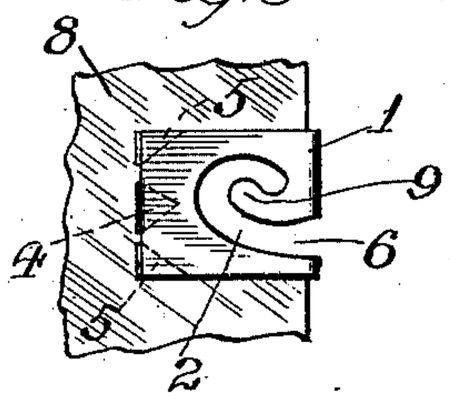


Fig. 4

Fig. 5

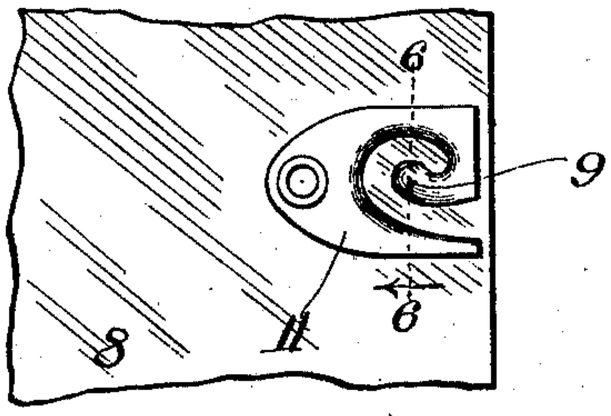


Fig. 6

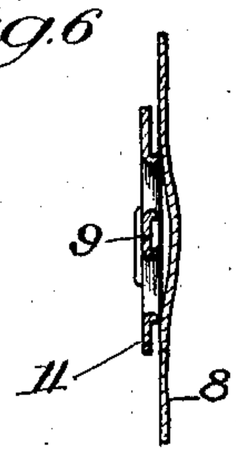
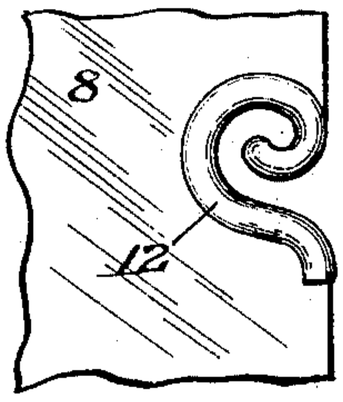


Fig. 7



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UNITED STATES PATENT OFFICE.

GARDINER W. CHIPLEY, OF CHICAGO, ILLINOIS.

LACING-HOOK.

SPECIFICATION forming part of Letters Patent No. 705,562, dated July 29, 1902.

Application filed March 25, 1902. Serial No. 99,873. (No model.)

To all whom it may concern:

Be it known that I, GARDINER W. CHIPLEY, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Lacing-Hooks, of which the following is a specification.

My invention relates to a lacing-hook; and its object is to provide a novel, efficient, and inexpensive hook for all kinds of lacings, but more particularly applicable to shoe-lacings and herein shown in connection with such particular kind of lacing.

The usual lacing-hooks of shoes project beyond the plane of the leather or material to be laced, and while such hooks are commonly used on men's shoes, yet their use on ladies' shoes is practically impossible, owing to the liability of skirts catching on them. My lacing-hooks are designed to obtain all the advantages of the hooks in common use and be capable of use on men's and ladies' shoes with equal advantage, and to this end my hooks instead of projecting beyond the plane of the leather or material to be laced lie in substantially the same plane therewith, whereby all liability of the catching of the skirts thereon is prevented.

In the accompanying drawings, Figure 1 is a perspective of a shoe having my lacing-hooks attached; Fig. 2, a plan view of one of the hooks before attachment to the shoe or material to be laced; Fig. 3, a plan view showing the hook attached to the shoe or material to be laced; Fig. 4, a plan view of a hook, illustrating a means of attachment different from that illustrated in Figs. 2 and 3; Figs. 5 and 6, plan and sectional views, respectively, of another form of hook, such section being taken on the line 6 6 of Fig. 5; and Fig. 7, a plan view and modified form of construction of hook.

The same figures of reference refer to corresponding parts in the different figures of the drawings.

While, as before stated, my lacing-hooks may be employed for different kinds of lacings, yet for convenience I will proceed to describe the same as shoe-hooks.

Referring to Figs. 2 and 3, the hook therein shown comprises a plate or strip 1, provided with the internal opening 2, extending substantially longitudinally and of peculiar formation. This opening 2 has a middle portion which runs substantially longitudinally of the plate and similar ends which are in the form of a spiral or scroll, such ends of the opening being of similar contour, with the result that when the plate is bent over on the middle transverse line 3 the two halves of the opening 2 will exactly register, as shown in Fig. 3. This plate may be formed in any suitable manner, as by stamping, and in order to provide simple means of attachment to the shoe points or teeth may be formed in the stamping operation or otherwise on the ends of the plate. In the present instance, as illustrated in Figs. 2 and 3, I have formed a single tooth 4 at one end of the plate and two teeth 5 at the other end. Inasmuch as the spirals or ends of the opening 2 are connected by the longitudinal portion, an entrance or opening 6 will be provided at the folded edge of the hook for the purpose of receiving the lace, which opening or entrance 6 is preferably made somewhat flaring and enlarged by swelling or enlarging the middle part of the longitudinal portion of the opening or slot 2.

The shoe may be provided, as usual, with the ordinary eyelets 7 on the lower portion of the edges 8 to be laced together, and my hooks are secured to such edges thereabove in place of the ordinary projecting hooks.

In attaching the form of hook shown in Fig. 3 each plate is folded over the edge 8, and the teeth 4 and 5 after being bent at right angles to the plate are forced through the material of such edge and then bent over, as illustrated in Fig. 3, the teeth 5 being folded down upon the outer face of the leather before the tooth 4 is forced through the material and folded down, so that the points of the teeth 5 will be unexposed. The material or leather of the edges 8 is preferably preliminarily prepared for the attachment of such hooks by stamping out therefrom a spiral portion corresponding to the spiral or curved opening shown in Fig. 3. When the shoe is laced, the lacing will enter the opening 6 of each spiral and when tightened and secured will be held in each hook by the upwardly-projecting portion 9 thereof. Other means of attachment of the hooks may be employed in lieu of the teeth 4 and 5—as, for

instance, the ends of the plate may be riveted together by a rivet or eyelet 10 passing through the material, as shown in Figs. 4 and 5.

As shown in Fig. 5, one-half of one of the plates, such as is shown in Fig. 4, may be used and attached to the outer face of the edge 8 of the shoe, in which case such edge is unprovided with an opening, but the lacing is passed between such edge and the hook-shaped portion 9 of the plate 11, the lacing leaving the plate 11 at the extreme inner end of the opening therein.

The edges of the hook-shaped portion 9 of the hook may be rounded in stamping them out, as shown in Fig. 6, to prevent the cutting of the lacing. Again, my hooks may be formed as shown in Fig. 7, where a spiral-shaped plate is bent around the correspondingly-shaped edges 8 of the shoe and clenched thereto. In all of the forms described, however, the hook lies in substantially the same plane as the material or leather to be laced and presents no surface or point for the catching of the skirt, and yet serves to effectually hold the lacing in a way common to lacing-hooks.

I claim—

1. A lacing-hook secured to and lying in substantially the same plane as the material to be laced and within the edge thereof; substantially as described.

2. A lacing-hook comprising a plate secured to the material to be laced and lying in substantially the same plane, said plate being provided with an opening which receives the lacing and enters within the edge of the material; substantially as described.

3. A lacing-hook comprising a plate secured to and lying in substantially the same plane as the material to be laced and provided with a curved opening entering an edge of the plate; substantially as described.

4. A lacing-hook comprising a plate lying in substantially the same plane as the material to be laced and having a spiral opening forming a hook-shaped portion 9 arranged within the line of the edge of the material; substantially as described.

5. A lacing-hook comprising a plate secured to and lying in substantially the same plane as the material to be laced and provided with an upwardly-extending spiral opening which receives the lacing and is located within the line of the edge of the material; substantially as described.

6. A lacing-hook comprising a plate having an opening whose portions on either side of a dividing-line are similar, said plate being adapted to be bent or folded over the edge of the material to be laced; substantially as described.

7. A lacing-hook comprising a plate secured to the material to be laced and having an opening 2, which, when the plate is folded has along the folded edge an entrance 6 for the lacing; substantially as described.

8. A lacing-hook comprising a plate to be secured to the material to be laced and having an opening which is longitudinal as to its middle portion and similarly upturned and curved as to its ends whereby when the plate is folded over said ends will register and an entrance will be formed at the folded edge for the lacing.

9. A lacing-hook comprising a plate to be secured to the material to be laced and having a substantially longitudinal opening with annular spiral-shaped ends, whereby when the plate is folded over at substantially its middle said ends will register, the middle portion of such opening being slightly enlarged to provide an enlarged opening 6 at the folded edge of the plate; substantially as described.

10. A lacing-hook comprising a plate 1 having an opening 2 and adapted to be bent transversely along the line 3 and teeth 4, 5, for securing the plate to the material to be laced; substantially as described.

11. A lacing-hook comprising a plate adapted to be folded over an edge of the material to be laced and provided with an opening or passage for the lacing.

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