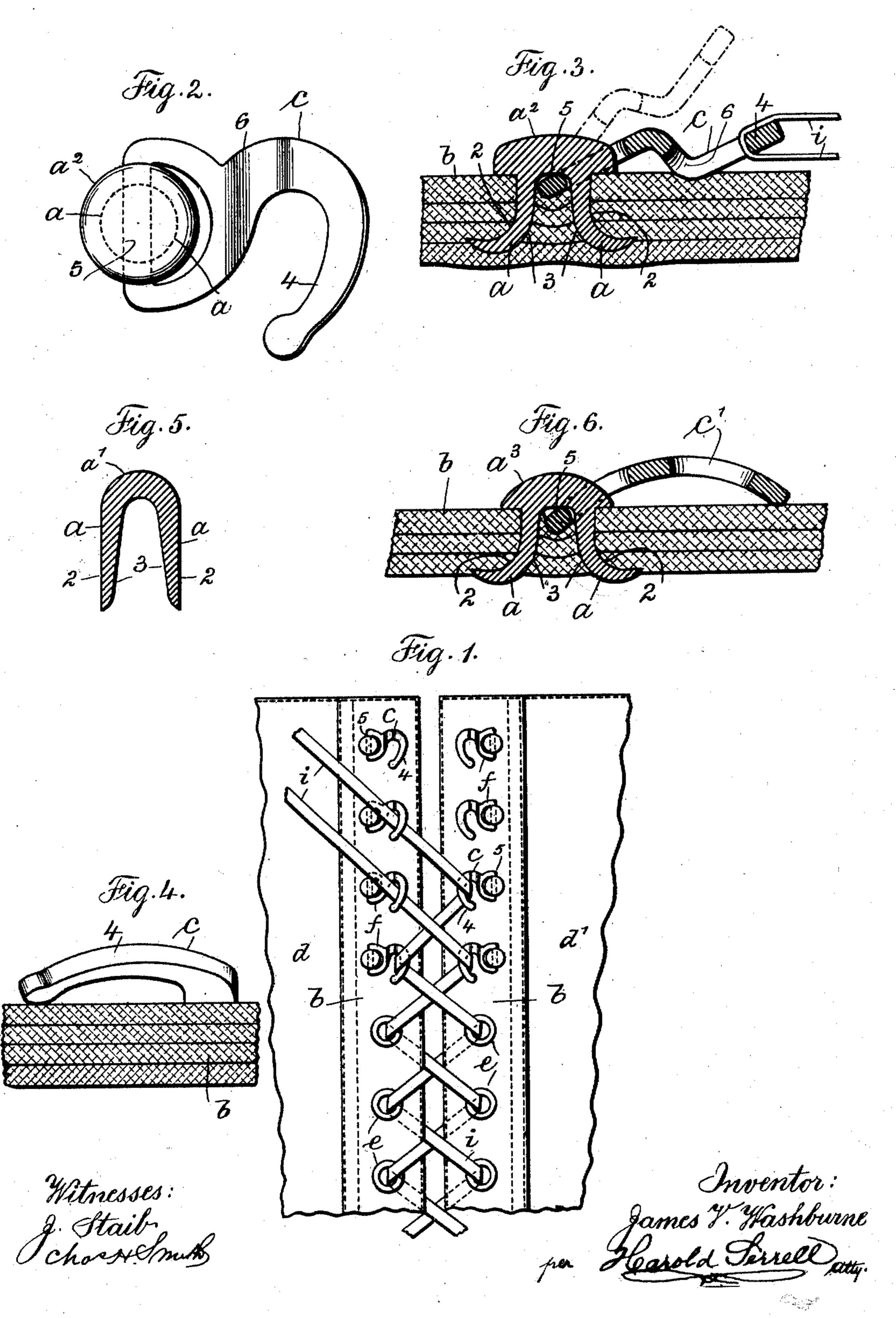
## J. V. WASHBURNE. LACING HOOK.

APPLICATION FILED OCT. 8, 1903.

NO MODEL.



## UNITED STATES PATENT OFFICE.

JAMES V. WASHBURNE, OF WATERBURY, CONNECTICUT.

## LACING-HOOK.

SPECIFICATION forming part of Letters Patent No. 759,049, dated May 3, 1904.

Application filed October 8, 1903: Serial No. 176,238. (No model.)

To all whom it may concern:

Be it known that I, James V. Washburne, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented an Improvement in Lacing-Hooks, of which the

following is a specification.

My invention relates to devices employed in conjunction with laces for fastening and looking together the lacing edges of shoes or garments with the object of increasing the efficiency, reducing the cost, and lessening the liability of the correlated parts in devices of similar character in this art separating or breaking under strain; and my invention embodies a modification of the flat pivotal lacing-hook and headed-post devices shown and described in my application for Letters Patent of even date herewith, filed October 8, 1903, Serial No. 176,237.

In carrying out my invention I provide a bifurcated post and a hook device having a pivotal relation with the post. The post has penetrating prongs which diverge and are 25 overturned to engage the material of a shoe or garment and which posts come immediately at opposite sides of the pivotal connection with the hook and which when outwardly bent, as connected to the material, lie flat next 30 the stockings or other garments near the flesh and produce no inconvenience. The prongs of the post also come intermediate of the extreme diameter of the hook. The post may be headed or the end rounded, and the hook 35 is offset, curved, or bent from a flat plane. Consequently while employing posts that are alike the hooks are made rights and lefts for the opposite edges of the shoe-uppers or garment.

In the drawings, Figure 1 is a front elevation of the upper or ankle portion of a shoe provided with the fastenings of my invention applied thereto at the upper portions of the shoe uppers or quarters. Fig. 2 is a plan in larger size of the post and hook. Fig. 3 is a vertical section of a form of the post and hook with the post connected to material and the hook bearing against the surface thereof.

Fig. 4 is an edge elevation of the hook shown in Fig. 3 and section of the material. Fig. 5 50 is a vertical section of the simpler form of post. Fig. 6 is a vertical section of a form of post and hook with the post connected to material and the hook bearing upon the surface of the material.

The post is composed of a bifurcated stem a of two prongs, preferably formed by cutting longitudinally into a round bar. The outer exterior faces 2 are rounded, and the opposite inner faces 3 are flat, and these latter 60 faces at the ends diverge sharply to points at the outer faces 2. The post, Fig. 5, is simply a round bar, with a rounded end a' to form the head portion. In Fig. 3 the bar has been formed with a head  $a^2$ , with edges that ex- 65 tend beyond the prongs. In Fig. 6 the post is also formed with a head  $a^3$ ; but the head is of a different surface configuration from the head in Fig. 3. In the posts of Figs. 3 and 6, however, the bifurcation-groove is shown 70 as in the same plane as the under surface of the head. Consequently when the head and hook are in position the portion of the hook which passes through the bifurcation-groove is pressed down into the material, and the ma- 75 terial exerts a friction on this pivotal part of the hook to prevent the same moving too freely and also assists in holding the hook when not in use approximately in the dotted position, Fig. 3.

b, Figs. 3, 4, and 6, represents layers of material to which the post is connected.

c, Figs. 2, 3, and 4, and c', Fig. 6, represent the hooks. The hook c is provided with a point or engaging portion 4, a pivot portion 85, and an intermediate offset or bent portion 6, the pivot portion being produced by cutting out of the material of the hook an aperture through which one of the prongs of the post passes. There is therefore formed in the hook 90 an integral bar passing through the bifurcation-groove of the post, so that the prongs of the post come immediately at opposite sides of the pivotal connection of the hook and the post comes intermediate of the extreme disparence of the hook.

The hook c' is curved, so that the outer edge lies closely adjacent to or against the material b. In Fig. 3 I have shown a lace i as passing around the engaging portion 4 or 5 point of the hook c. This offset hook is peculiar in that when the bent portion thereof on the under side touches the material the central portion is raised for the free passage of the lace i, while the extreme point comes 10 in contact with the material, so as to prevent either clothing or the lower end of a dress or skirt engaging the hook, as from Fig. 4 the location of the parts will be apparent, the same showing the point in contact with the 15 material.

In Fig. 1, d d' represent the shoe uppers or quarters; e, eyelets of usual construction; f, the series of lacing devices according to my invention, while i represents the lace em-20 ployed, passing first through the eyelets e and then engaging the lacing devices f. These lacing devices are at the upper end of the shoe and extend along so much of the shoe uppers or quarters as is usually entirely unlaced in

25 taking off or putting on the shoe.

In my present invention the posts are all alike; but the hooks are made as rights and lefts, and from Figs. 3 and 6 it will be apparent that the pressure of the material upon 30 the bearing portion of the hooks has a tendency to keep the hooks to one side and prevent them accidentally turning over. In the operation of connecting the posts to material the prongs of the post turn steady and true 35 and the rounded outer surfaces bear against the leather or other material and because of their configuration do not cut in, and at the same time the flat inner surfaces, which come toward the stockings, the body, or other garments, do not produce any appreciable pressure or inconvenience, especially when the same are covered over with another layer of fabric or material.

I claim as my invention—

1. A fastening for laced shoes or garments, comprising a bifurcated post with adjacent opposite penetrating prongs which diverge and turn over to engage the material, and a hook device including a substantial body portion hav-5° ing a pivotal relation with the post, the hook being bent appreciably out of a plane bringing the pointed end of the hook close to the material and the prongs of the post coming immediately at opposite sides of the pivotal 55 connection with the hook.

2. A fastening for laced shoes or garments, comprising a bifurcated post with adjacent opposite penetrating prongs which diverge and turn over to engage the material, a hook de-60 vice including a substantial body portion having a pivotal relation with the post, the hook being bent appreciably out of a plane, bringing the pointed end of the hook close to the material and the prongs of the post coming immediately at opposite sides of the pivotal 65 connection with the hook, and in which the post comes intermediate of the extreme diameter of the hook.

3. A fastening for laced shoes or garments, comprising a bifurcated headed post and a 70 hook device having a pivotal relation with the post and the hook having portions bent so as to be out of a plane, the post having penetrating prongs which diverge and turn over to engage the material, and in which said pen- 75 etrating prongs have rounded outer surfaces to bear against the material, and opposite or inner surfaces that are flat and exposed at the

turned-over portions.

4. A fastening device for laced shoes or gar- 80 ments, comprising a bifurcated post and a hook device having a pivotal relation with the post, the hook device stamped out of sheet metal and bent slightly out of a plane, and the post having penetrating prongs which come 85 immediately at opposite sides of the pivotal connection with the hook and intermediate of the extreme diameter of the hook and when fastened to material force the pivotal connection of the hook down into the material so 90 that the pressure of the material thereon has a frictional function in controlling the position of the hook.

5. A fastening device for laced shoes or garments, comprising a hook device having an 95 engaging portion, a pivot or integral bar along one edge formed by producing an aperture in the metal, and an intermediate offset portion, and a bifurcated post having penetrating prongs between which the pivot of the hook 100 is received and journaled to swing, the said post-prongs coming immediately at opposite sides of the pivotal connection with the hook and intermediate of the extreme diameter of the hook.

6. A fastening device for laced shoes or garments, comprising a hook device having an engaging portion, a pivot or integral bar along one edge formed by producing an aperture in the metal, and an intermediate offset portion, 110 and a bifurcated post having penetrating prongs and a head portion with the bifurcation-groove in the same plane as the under surface of the head, the pivot portion of the hook being received in the bifurcated groove 115 between the penetrating prongs and therein journaled to swing, the said post-prongs coming immediately at opposite sides of the pivotal connection with the hook and intermediate of the extreme diameter of the hook.

7. A fastening for laced shoes or garments, comprising a post with penetrating prongs, and a hook device having an engaging portion, and a pivotal portion along one edge formed

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by producing an aperture in the metal, and an intermediate portion not in a common plane with the aforesaid portions, the said pivotal portion being within the extreme diameter of the hook, the pivotal portion of the hook being received and journaled between the prongs of the post, which prongs come immediately at opposite sides of said pivotal portion and

the post intermediate of the extreme diameter of the hook.

Signed by me this 5th day of October, 1903.

JAS. V. WASHBURNE.

Witnesses:

GEO. T. PINCKNEY, S. T. HAVILAND.