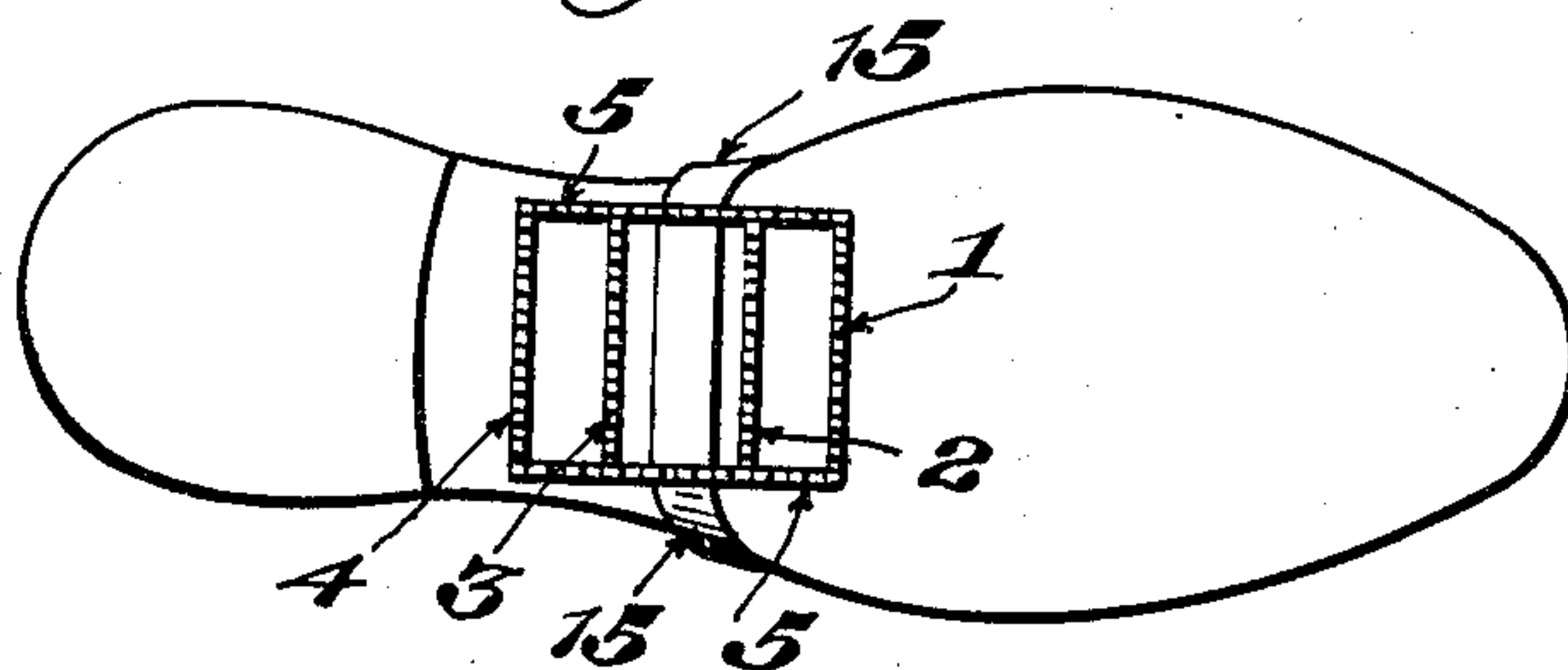


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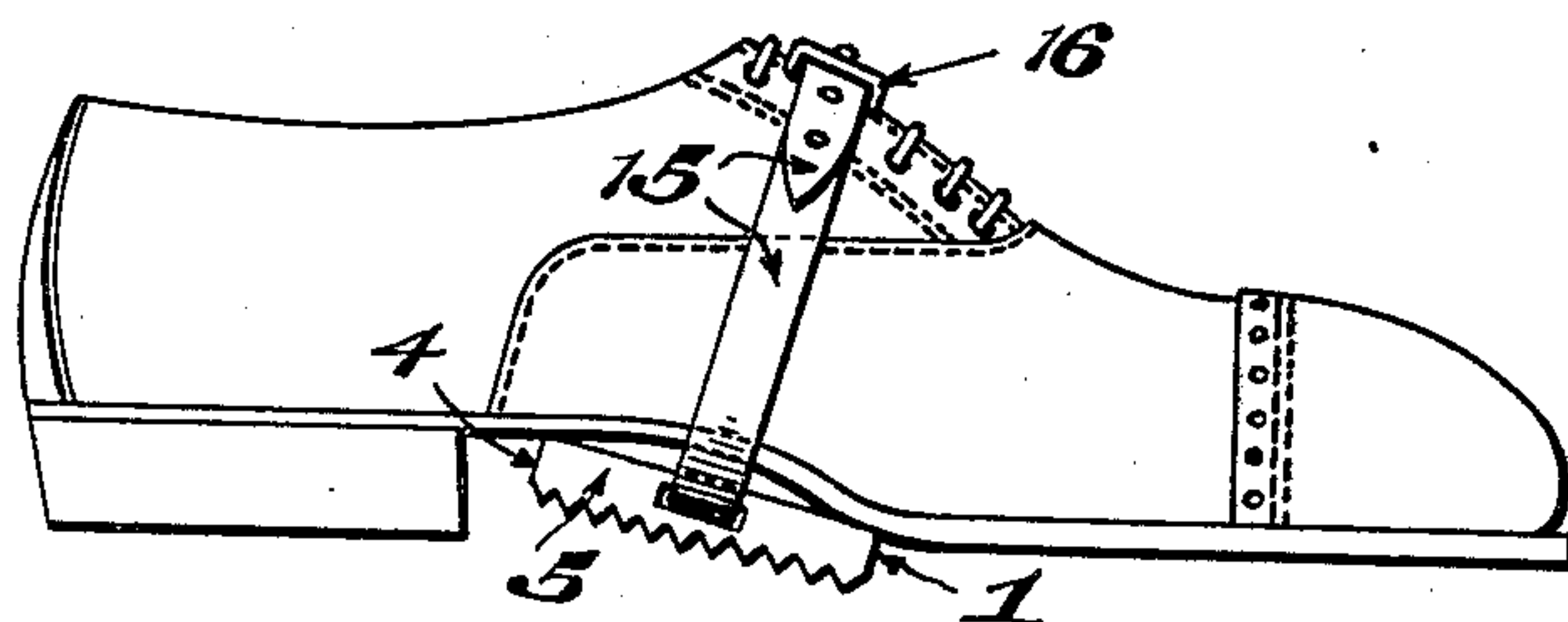
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DETACHABLE ANTISLIPPING DEVICE FOR USE ON  
EITHER SHOES OR OVERSHOES  
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2,343,373

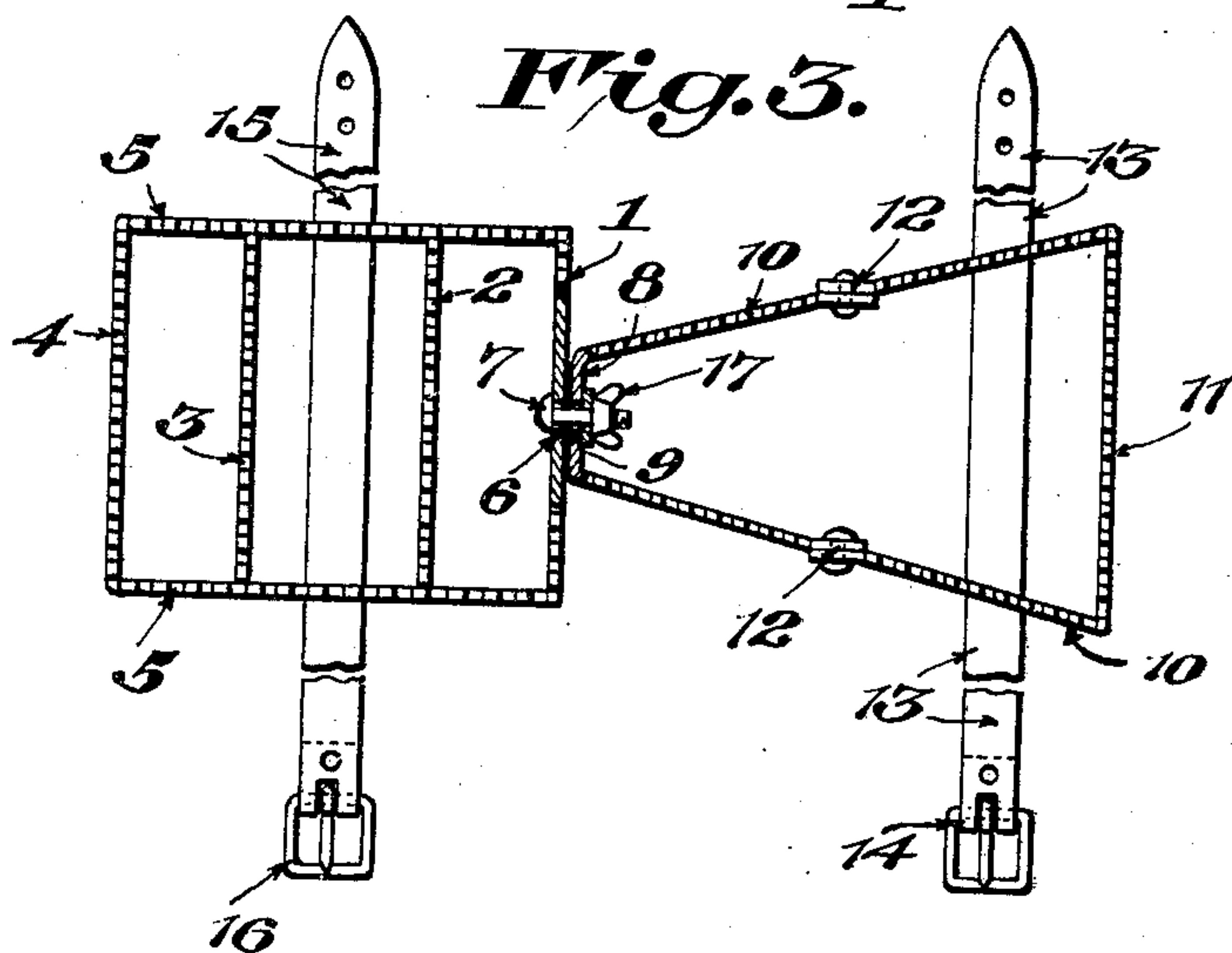
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



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## UNITED STATES PATENT OFFICE

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DETACHABLE ANTISLIPPING DEVICE FOR  
USE ON EITHER SHOES OR OVERSHOES

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5 Claims. (Cl. 36—62)

The object of my invention is to provide a novel detachable slipping device for use on either shoes or overshoes, to provide a device of this type which can be quickly attached and also to provide a device which can be folded into a compact bundle for carrying in the pocket.

I attain these and other objects of my invention by the mechanism illustrated in the accompanying drawing, in which—

Figure 1 is a bottom plan view of the invention applied to a shoe or overshoe;

Fig. 2 is a side elevation of same;

Fig. 3 is a bottom plan view of a modification of the invention having a hinged section to permit of its being folded into a more compact form when detached.

Like numerals designate like parts in each of the several views.

Referring to the accompanying drawing, I provide a shank anti-slipping section comprising a plurality or preferably a multiplicity of spaced transverse tooth bars 1, 2, 3, and 4 and spaced longitudinal tooth bars 5, which bars may be integrally formed or welded together as may be more convenient. The forward transverse bar is provided with a slot or opening 6 to receive bolt 7. I also provide a short transverse bar 8 having a similar slot 9 to receive the bolt 7. Integral with the short transverse bar are outwardly extending integral diverging tooth bars 10, which at their outer ends are connected by a transverse bar 11. This transverse bar 11 may be either integral or affixed to bars 10 or may be detachable therefrom. The aforesaid diverging tooth bars 10 in the modified form of my invention are provided with opposite hinges 12 to permit of their being folded into more compact form for carrying in the pocket.

Affixed to the diverging tooth bars 10 are strips 13, one of which carries a buckle 14. Likewise, affixed to the longitudinal bars 5 of the shank section are like straps 15 which carry a buckle 16. The bolt 7, if desired, may be provided with a wing nut or nuts 17 to facilitate detaching shank section from the sole section of the device for carrying in the pocket.

The device does not have to be firmly attached to the sole of the shoe as is required by many anti-slipping devices of the prior art, but may be readily attached under a shoe or overshoe by strap and buckle or equivalent means.

What I claim is:

1. The combination in a detachable anti-slipping device, of a plurality of spaced transverse toothed bars, a pair of spaced longitudinal toothed bars affixed to the transverse bars to form a unit, a strap and buckle attached to said bars, the aforesaid bars being of suitable size to seat under the shank of a shoe or overshoe.

2. In a detachable anti-slipping device, the combination of hingedly connected pairs of diverging toothed bars, and a transverse bar at the forward end of the aforesaid diverging bars, of suitable size to seat under the sole of a shoe, and a strap connected to the forward pair of toothed bars for detachably securing the device to the sole of a shoe or overshoe.

3. In combination with the device defined in claim 1, a pair of diverging toothed bars, each having hingedly connected sections, a strap and buckle attached to the forward section, a short transverse bar connecting the rear portion of said diverging bars, a forward transverse bar connecting the outer ends of said diverging bars, and means for detachably securing the short rear transverse bar to the forward transverse bar of the shank unit, whereby the device can be readily detached and made into a compact package.

4. In a detachable anti-slipping device adapted to be worn over either shoes or overshoes, the combination of unitary toothed bars of suitable size to seat under the shank of a shoe or overshoe, a strap and buckle connected to same for detachably fastening the device to the foot, a pair of outwardly extending diverging toothed bars adapted to seat over the sole of the foot, a transverse toothed bar connected to the outer end of said bars, and means for detachably connecting said device to the toothed bars disposed under the shank, and a strap and buckle for detachably connecting the said bars under the sole of the shoe or overshoe.

5. In combination with the device defined in claim 4, the aforesaid diverging toothed bars consisting of aligned sections, and hinges connecting said sections to permit of their being folded into a compact package for carrying in the pocket.

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