

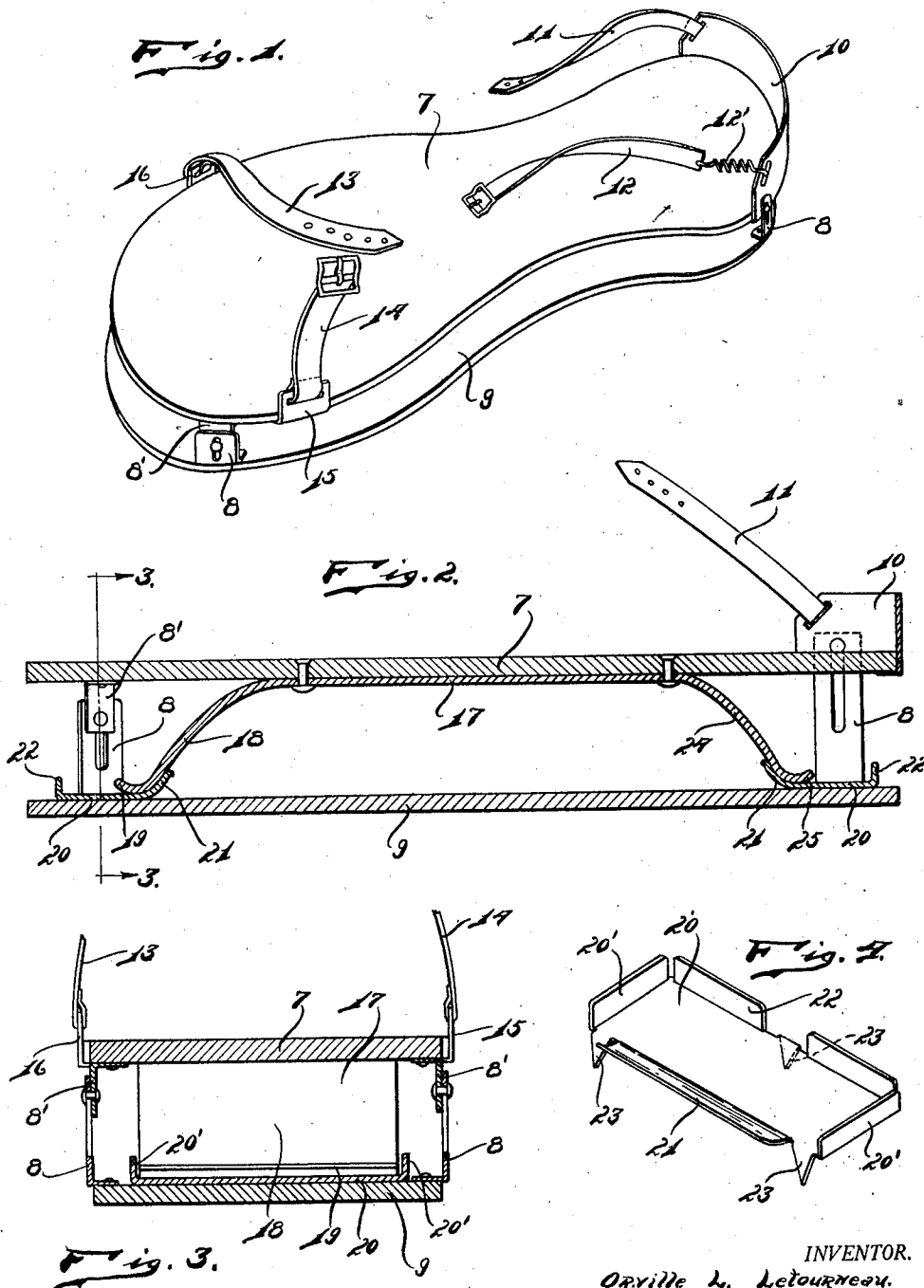
Nov. 19, 1929.

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1,736,609

FOOT ATTACHMENT

Filed Aug. 29, 1928



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## UNITED STATES PATENT OFFICE

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## FOOT ATTACHMENT

Application filed August 29, 1928. Serial No. 302,745.

My invention relates to a new and useful improvement in a foot attachment adapted for use by workers and others who find it necessary to spend considerable periods of time on hard surfaces, such as pavements, concrete floors, and the like.

It is an object of the present invention to provide a foot attachment which may be easily and quickly attached to the foot and which will relieve the individual from the jars and shocks incident to treading on non-yielding surfaces.

It is another object of the invention to provide a foot attachment in which a tread member is yieldably held in spaced relation to a foot engaging member and in which wear plates are provided for engaging the yieldable means and for limiting lateral relative movement of the tread member and the foot engagement member.

Other objects will appear hereinafter.

The invention consists in the combination and arrangements of parts hereinafter described and claimed.

The invention will be best understood by a reference to the accompanying drawings which form a part of this specification and in which,

Fig. 1 is a perspective view of the invention.

Fig. 2 is a longitudinal central sectional view of the invention.

Fig. 3 is a sectional view taken on line 3—3 of Fig. 2.

Fig. 4 is a perspective view of the wear plate used in the invention.

A foot engaging member 7 which is made preferably from leather or other suitable material is connected by means of slidable connecting members 8 and 8' to a tread member 9. A preferably metallic heel engaging member 10 is secured to the rear side of the foot engaging member 7. Retaining straps 11 and 12 project upwardly and are adapted for passing around the ankle of the wearer. Foot engaging straps 13 and 14 are also projected through clips 15 and 16 mounted on the foot engaging member and are adapted for extending around the toes of the foot to retain the device in position. Secured to the

under-surface of the foot engaging member 7 is a spring plate 17 having an angularly turned end 18 which is again angularly turned at 19 to provide an arcuate end which engages a wear plate 20 which is secured to the upper surface of the tread member 9 by means of the prongs 23 which are struck from the plate 20. An inclined guide 21 is formed on one edge of the plate 20 and an abutment 22 projects upwardly from the other edge, these abutments and guides, as well as the prongs and the side plates 20', being formed preferably from a single sheet of metal. The opposite end of the plate 17 is angularly turned as at 24 and this angularly turned end again angularly turned at 25 to provide an engaging portion which engages the wear plate 20.

When the foot is attached to a device of this nature and walking is effected, a relative approach and withdrawal of the members 7 and 9 may be effected against the resiliency of the spring plate 17, the member 8 flexing in the approach of the members 7 and 9 toward each other.

With a device of this kind attached to the foot of a wearer the effect of walking on a yieldable surface is produced, thus rendering walking less fatiguing and increasing the efficiency of workers who are compelled to remain for long periods of time on non-resisting surfaces, such as concrete floors, etc.

It is believed that the simplicity of structure and the economy of the device is apparent from the drawings and description.

While I have illustrated and described the preferred form of my invention, I do not wish to limit myself to the precise details of structure shown, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

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

1. A foot attachment of the class described, comprising: a foot engaging member; a tread member in spaced relation thereto; a slidable member for connecting said foot engaging member and said tread member; a leaf spring mounted on the undersurface of said foot en-

gaging member and having its ends angularly turned for extending downwardly toward said tread member; and wear plates on said tread member, each of said wear plates engaging, upon approach of said foot engaging member to said tread member, the angularly turned ends of said spring.

2. A foot attachment of the class described, comprising: a tread member; a wear plate mounted on the upper surface of said tread member adjacent each end; a guide portion on said wear plate projecting inwardly of said tread member; an upwardly projecting abutment on the opposite edge of each of said wear plates; prongs struck from said wear plate engaging in said tread member for securing said wear plate thereon; a foot engaging member positioned above said tread member; an elongated leaf spring secured to the undersurface of said foot engaging member, the opposite ends of said spring being downwardly offset and angularly turned and engaging said wear plate between said guide member and said abutment; and slidable means for connecting said foot engaging member with said tread member.

3. A foot attachment of the class described, comprising: a tread member; a wear plate mounted on the upper surface of said tread member adjacent each end; a guide portion on said wear plate projecting inwardly of said tread member; an upwardly projecting abutment on the opposite edge of each of said wear plates; prongs struck from said wear plate engaging in said tread member for securing said wear plate thereon; a foot engaging member positioned above said tread member; an elongated leaf spring secured to the undersurface of said foot engaging member, the opposite ends of said spring being downwardly offset and angularly turned and engaging said wear plate between said guide member and said abutment; slidable means for connecting said foot engaging member with said tread member; and means for attaching said foot engaging member in engagement with a foot.

4. A foot attachment of the class described, comprising: a tread member; a wear plate mounted on the upper surface of said tread member adjacent each end; a guide portion on said wear plate projecting inwardly of said tread member; an upwardly projecting abutment on the opposite edge of each of said wear plates; prongs struck from said wear plate engaging in said tread member for securing said wear plate thereon; a foot engaging member positioned above said tread member; an elongated leaf spring secured to the undersurface of said foot engaging member, the opposite ends of said spring being downwardly offset and angularly turned and engaging said wear plate between said guide member and said abutment; slidable means for connecting said foot engaging member

with said tread member; means for attaching said foot engaging member in engagement with a foot; and a metallic arcuate guide member secured to the rear edge of said foot engaging member and projecting upwardly therefrom.

In testimony whereof I have signed the foregoing specification.

ORVILLE L. LETOURNEAU.