

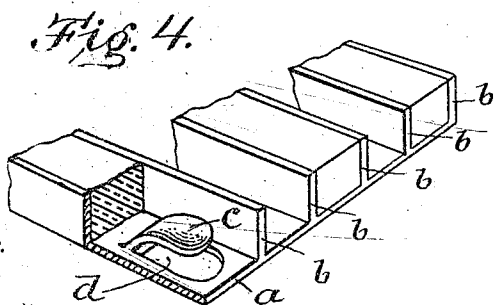
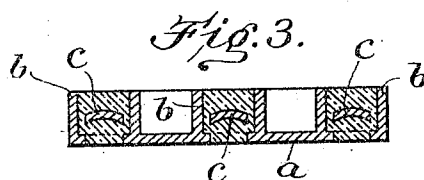
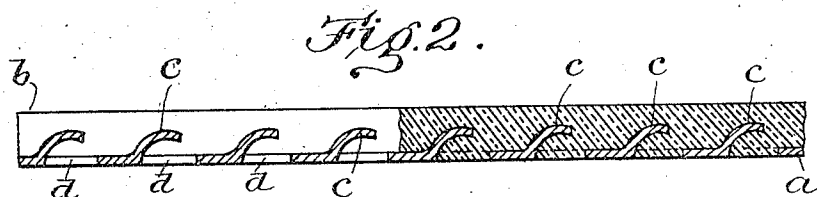
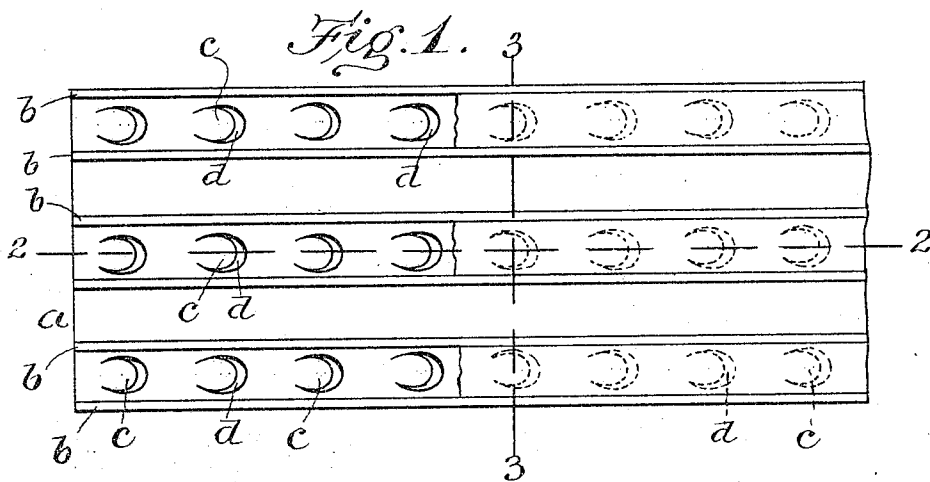
No. 838,247.

PATENTED DEC. 11, 1906.

T. P. FARMER.

SAFETY TREAD.

APPLICATION FILED OCT. 19, 1905



Witnesses.

C. C. Stecher
Horace Brown

Inventor.

T. P. Farmer

by *Wm. B. Brown*
Atty's.

UNITED STATES PATENT OFFICE.

THEODORE P. FARMER, OF SOUTHWEST HARBOR, MAINE, ASSIGNOR TO
PROTECTIVE TREAD COMPANY, OF BOSTON, MASSACHUSETTS. A
CORPORATION OF MAINE.

SAFETY-TREAD.

No. 838,247.

Specification of Letters Patent.

Patented Dec. 11, 1906.

Application filed October 19, 1905. Serial No. 283,426.

To all whom it may concern:

Be it known that I, THEODORE P. FARMER, of Southwest Harbor, in the county of Hancock and State of Maine, have invented certain new and useful Improvements in Safety-Treads, of which the following is a specification.

This invention has relation to safety-treads, and has for its object to provide certain improvements therein in consequence of which the frictional or antislipping material may be more securely locked in the sockets in the base-plate.

Referring to the accompanying drawings, Figure 1 represents in plan view a portion of a metallic safety-tread in which the sockets or grooves are partially filled with frictional or antislipping material. Fig. 2 represents a longitudinal section on the line 2 2 of Fig. 1. Fig. 3 represents a section on the line 3 3 of Fig. 1. Fig. 4 represents a perspective view of one end of the tread with one of the walls broken away to illustrate one of the locking-tongues.

The tread consists of a metallic base-plate provided with sockets for the reception of the frictional or antislipping material, which may consist of lead or any other equivalent substance. Preferably the sockets are in the form of grooves or channels; but this is not essential, although I consider it preferable.

In the embodiment of the invention illustrated on the drawings the base-plate *a* is provided with a plurality of upstanding parallel ribs *b*, which form a series of parallel sockets extending longitudinally of the plate. The plate itself may be "hot-rolled" or may be cast, being preferably made of ferruginous material. Each of the channels may be filled with frictional material; but in most cases I find it sufficient to fill the alternating channels or sockets.

For the purpose of securing or locking the frictional material in the sockets each is provided with one or more tongues, as at *c*. Where the plate is made of hot-rolled steel, these tongues may be formed by punching them from the base; but where the plate is cast these tongues may be cast integrally with the plate.

In the embodiment of the invention which I have illustrated the tongues are punched and died into the form and into the relative

positions, as illustrated, the tongues all extending in the same direction longitudinally of the channels or sockets. Each tongue is curved longitudinally and transversely, so that it is shaped somewhat like the bowl of a spoon, with the convex surface uppermost.

The lead or other antislipping material may be placed in the channels or sockets either when in a molten state (in which case it is to be poured in) or may be pressed thereinto from a sheet or strip. I consider it more desirable to draw the lead in sheets or strips from a reel and to crowd it into the grooves or channels by means of a roller or other suitable presser, so as to crowd the material underneath the tongues, as shown in Fig. 2.

I find that a safety-tread possessing the features thus described is simple in construction and cheap to manufacture. The antislipping material is securely held and locked against removal, either accidental or intentional. In the particular embodiment illustrated the antislipping material fills the apertures *d*, left by the formation of the tongues, and thus serves to still further insure against the removal of the antislipping material.

Having thus explained the nature of the invention and described a way of constructing and using the same, although without attempting to set forth all of the forms in which it may be made or all of the modes of its use, I declare that what I claim is—

1. A safety-tread comprising a base-plate having one or more sockets, said plate being provided with locking-tongues extending longitudinally into said sockets and terminating below the top thereof, and antislipping material located in said sockets above and below the longitudinal portions of the tongues and secured therein by said tongues.

2. A safety-tread comprising a base-plate having a plurality of channels, and a series of concavo-convex tongues projecting into said channels and extending longitudinally thereof and below the upper or tread surface, and antislipping material located in said channels above and below the longitudinal portions of the tongues and locked therein by said tongues.

3. A safety-tread comprising a base-plate having a plurality of upstanding walls forming sockets, and a plurality of tongues pro-

jecting from said plate upwardly and longitudinally into said sockets, and antislipping material located in said sockets above and below the longitudinal portions of the tongues
5 and held therein by said tongues, said tongues terminating below the upper surface of the tread.

In testimony whereof I have affixed my signature in presence of two witnesses.

THEODORE P. FARMER.

Witnesses:

JOHN E. WELSH,
C. C. STECHER.