

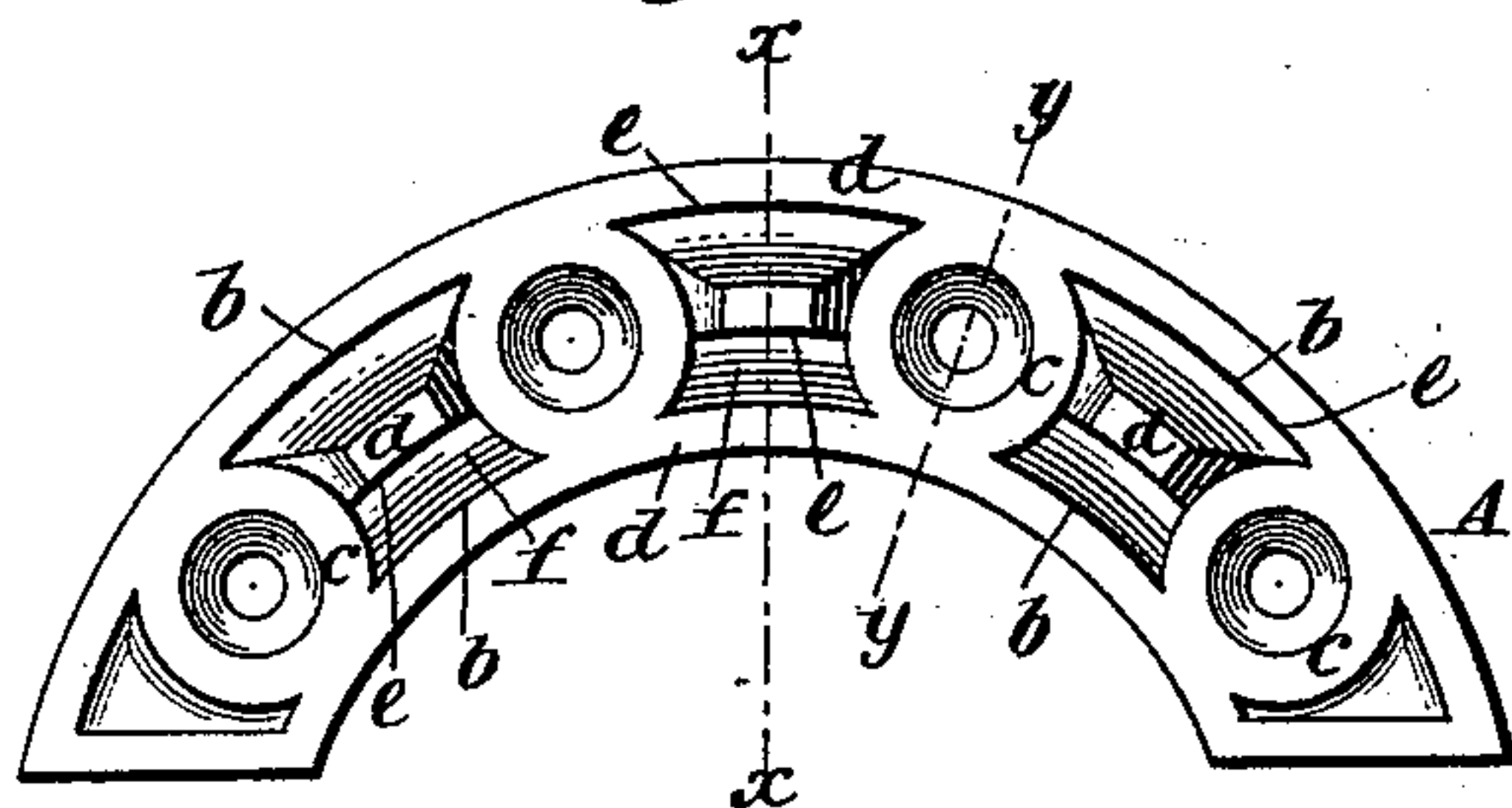
(No Model.)

C. WILLIAMS.  
SHOE SOLE PLATE.

No. 374,512.

Patented Dec. 6, 1887.

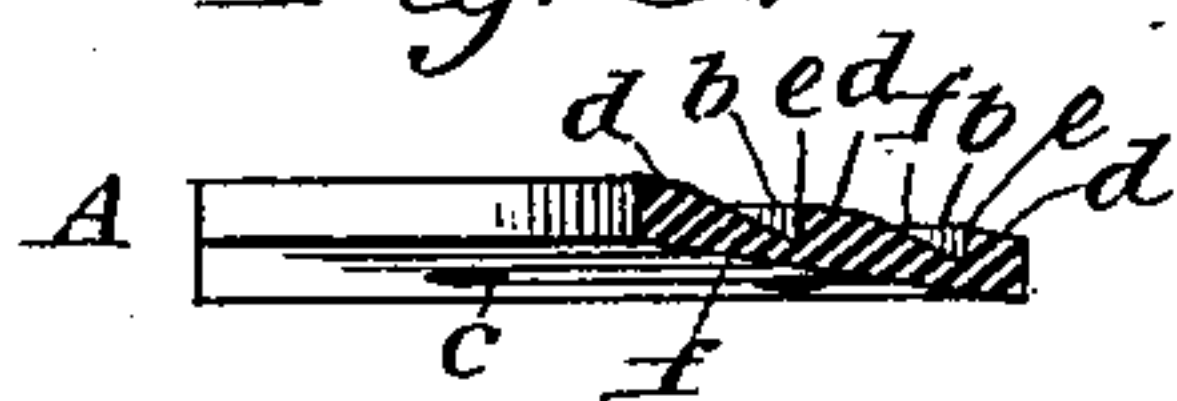
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES:

*J. Clark.*  
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# UNITED STATES PATENT OFFICE.

CHARLES WILLIAMS, OF BLENHEIM, MARLBOROUGH, NEW ZEALAND.

## SHOE-SOLE PLATE.

SPECIFICATION forming part of Letters Patent No. 374,512, dated December 6, 1887.

Application filed October 18, 1887. Serial No. 252,664. (No model.) Patented in England October 13, 1885, No. 12,152, and in New Zealand October 5, 1886, No. 2,047.

*To all whom it may concern:*

Be it known that I, CHARLES WILLIAMS, a subject of the Queen of Great Britain, and a resident of Blenheim, Marlborough, New Zealand, have invented a new and useful Improvement in Toe-Plates, (patented in England October 13, 1885, No. 12,152, and in New Zealand October 5, 1886, No. 2,047,) of which the following is a full, clear, and exact description.

10 This invention relates to toe-plates for boots, shoes, or clogs, to prevent slipping when walking on mountains, ice, bogs, or elsewhere, and is especially adapted for use by gold-diggers, gum-diggers, musterers, miners, and  
15 bushmen, and when applied serves to protect the toe of the boot, shoe, or clog.

The invention consists in a toe-plate for the above purpose or purposes of novel construction, substantially as hereinafter described,  
20 and pointed out in the claims, the same constituting what I term "a double grip or bar and grooved toe-plate," which will effectually prevent slipping, and which can readily be applied to a boot, shoe, or clog without alteration  
25 by the boot-maker.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

30 Figure 1 represents an inverted plan view of my improved toe-plate; Fig. 2, a back elevation or inner exterior marginal view of the same; Fig. 3, a transverse section upon the line *x x* in Fig. 1, and Fig. 4 a transverse section  
35 upon the line *y y* in Fig. 1.

A indicates the toe-plate, of a curved or suitable form to conform to the toe part of the boot, shoe, or clog to which it is designed to be applied. Said toe-plate is made of any  
40 suitable metal, including steel and wrought, cast, or malleable iron, and of any desired size and thickness. It is constructed on its under or ground-bearing surface with inner and outer grooves *b b*, extending nearly through-  
45 out the curved length of the plate, subject to interruption by apertured countersunk portions *c c*, which serve the purpose of receiving screws or other fastenings to attach the

toe-plate to the boot, shoe, or clog. The walls of these grooves *b b*, which latter virtually  
50 form ribs or bars *d d d*, are of peculiar construction. Thus the front walls, *e*, of each groove are vertical or straight, or, in other words, substantially at right angles to the surface of the plate, for the purpose of enabling  
55 the grooved portions of the plate to exert a better grip and retention of their hold, while the opposite or back walls, *f*, of the grooves are made beveling or inclining from the front margins of the rear ribs, *d d*, to the bottoms or  
60 bases of the front vertical walls, *e*, of the grooves. This inclined construction of the back walls of the grooves prevents the toe-plate from choking and makes it self-clearing. By means of this bar and grooved construc-  
65 tion the toe-plate is made to have a double grip.

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

70 1. The within-described toe-plate for boots, shoes, or clogs, constructed on its under surface with front and rear grooves, the front walls of which are made vertical or straight in direction of their depth and their rear walls  
75 beveling or inclining toward the bases of the front walls, substantially as specified.

2. The curved toe-plate A, provided with inner and outer or front and rear grooves *b b* on their under surface interrupted in direc-  
80 tion of their length by apertured countersunk portions *c* and forming bars or ribs *d d d*, the front walls, *e*, of said grooves being made vertical or straight and the rear walls, *f*, beveling or inclining toward the bases of the front  
85 walls, essentially as shown and described.

The above specification of my new and useful improvement in toe-plates signed by me, at Wellington, on the 31st day of August, 1887.

CHARLES WILLIAMS.

Witnesses:

T. KING,  
Clerk, Wellington, N. Z.

WILLIAM COCK,  
Clerk, Wellington.