(No Model.)

F. A. KING & G. F. BRAND.

NON SLIPPING SHOE.

No. 377,431. Patented Feb. 7, 1888.

Fig. 1.

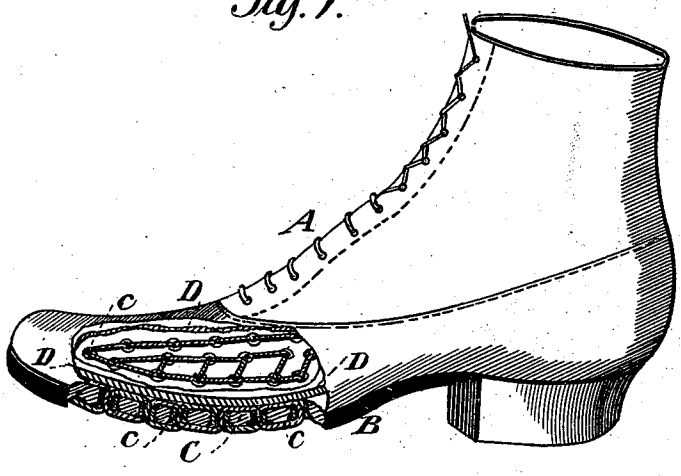
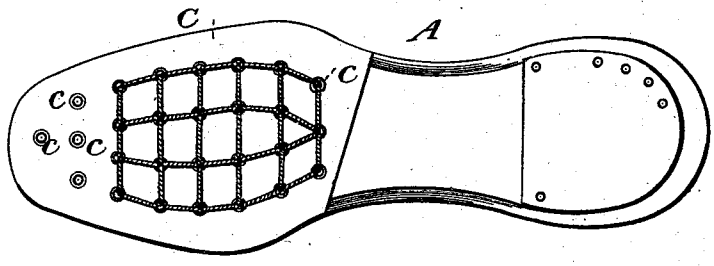


Fig. 2.



Witnesses.
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Alfred V. Gage.

Inventor.
Francis A. King, and
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by Franklin H. Hough Atty.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

FRANCIS A. KING AND GEORGE F. BRAND, OF YORK, PENNSYLVANIA.

NON-SLIPPING SHOE.

SPECIFICATION forming part of Letters Patent No. 377,431, dated February 7, 1888.

Application filed October 3, 1887. Serial No. 251,274. (No model.)

To all whom it may concern:

Be it known that we, FRANCIS A. KING and GEORGE F. BRAND, citizens of the United States, residing at York, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Non-Slipping Shoes; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in shoes; and it has for its object to provide a simple and efficient means for preventing shoes or boots from slipping upon icy surfaces. To accomplish this object many forms of "ice-creepers" and other devices intended to be clamped or locked to the sole of the boot or shoe have been used. These devices are often both expensive and cumbersome, and by their use the shoe to which they are attached is liable to injury from contact with the locking devices which are employed to secure them in place. We have found that a shoe can be so constructed as to adapt it to be readily and quickly converted into a perfect non-slipping shoe, when occasion requires, with the expenditure of but a few moments' time, and without detracting from the appearance of the shoe or in any manner inconveniencing the wearer.

To this end, and to such others as the invention may relate, the same consists in the peculiar combinations and in the construction, arrangement, and adaptation of parts, all as more fully hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a shoe constructed in accordance with our invention, the same being shown partly in section and with parts broken away. Fig. 2 is a plan view of the outer sole, in which a portion of the eyelets are shown as threaded.

Referring, now, to the details of the drawings, A represents a shoe, the sole B of which is composed of the outer and inner soles, C D. The outer sole, C, is provided with a series of eyelets or holes, *c*, extending through the same. These eyelets may be arranged either in rows, as I have shown them in the drawings, or, if desired, they may be so arranged as to form stars, circles, or other fanciful designs. The inner sole, D, is so constructed as to fit perfectly within the shoe, and at the same time it is adapted to be removed when it may be desired to obtain access to the perforations or eyelets *c*.

When it is desired to render the sole non-slipping, the inner sole is removed and the eyelets are threaded with a heavy cord, preferably linen. The inner sole is then replaced. The roughened surface formed upon the surface of the sole of the shoe by the cord renders the shoe perfectly non-slipping, and the wearer will be able to maintain a secure and firm footing upon the most slippery pavement.

Having thus described our invention and set forth its merits, what we claim to be new, and desire to secure by Letters Patent, is—

1. In a non-slipping shoe, the combination, with a perforated sole, of a cord passed through said perforations to form a roughened surface, substantially as and for the purpose described.

2. In a non-slipping shoe, the combination, with an outer sole provided with a series of openings or eyelets adapted to receive the cord, of a solid removable inner sole, substantially as described, and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

FRANCIS A. KING.
GEO. F. BRAND.

Witnesses:
B. F. FRICK, Jr.,
J. B. DAILEY.