

S. J. GORDON.

BOOT AND SHOE SOLES.

No. 186,126.

Patented Jan. 9, 1877.

Fig. 1.

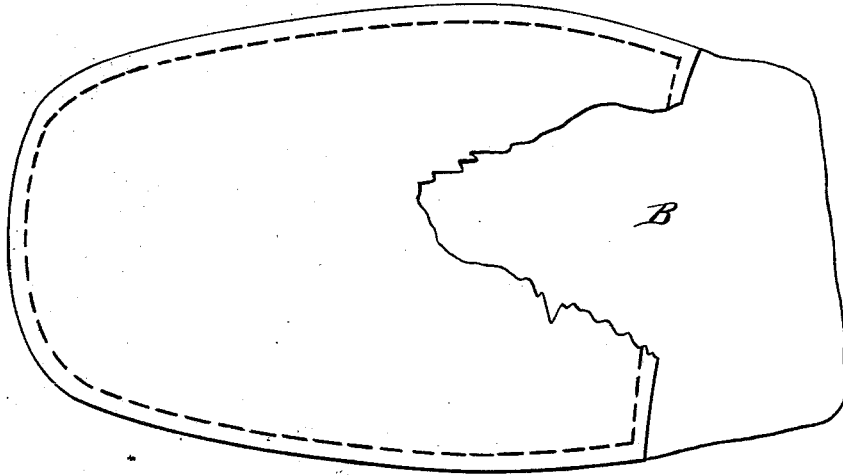


Fig. 2.



Witnesses.
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SOLOMON J. GORDON, OF NEW YORK, N. Y.

IMPROVEMENT IN BOOT AND SHOE SOLES.

Specification forming part of Letters Patent No. **186,126**, dated January 9, 1877; application filed November 13, 1876.

To all whom it may concern:

Be it known that I, SOLOMON J. GORDON, of the city, county, and State of New York, have invented a new and Improved Sole for Boots and Shoes; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, and the letters of reference marked thereon, in which the same letter represents the same thing in each figure.

Figure 1 is a view of the inner sole of a shoe, partially broken away, to show the "usudurian." Fig. 2 is a longitudinal section of the same.

B represents the usudurian.

The object of my invention is to produce a water-proof sole of great durability, capable of being united by stitches or pegs as readily as leather, protecting the entire surface of the foot, and susceptible of a perfect finish on the edges as ordinary leather soles.

Heretofore attempts have been made to use india-rubber, but it was impossible to sew or peg it satisfactorily, because the holes made by the awl closed upon its withdrawal, rubber softened with use, spread, or came off in strings, and it was incapable of smooth finish on the edges of the soles. When a leather edge was used, by which to secure the rubber to the boot or shoe, that width of the sole was not water-proof, and the desired end was only partially obtained.

I propose to overcome these objections by employing on the exterior of the sole, or between the thicknesses of leather, a sheet of what is known as usudurian packing, a composition of rubber, or some vulcanizable gum, sulphur, earths, oxides, or metallic filings; about ten parts rubber or gum to twenty of plumbago, six of white or red lead, six of brass filings, and two of sulphur, more particularly described in the Letters Patent of the United States, No. 142,908, to Christopher L. Frink, September 16, 1873.

An awl passes through a sheet of usudurian as easily as through leather. The holes do not close when it is withdrawn. The entire bottom surface of the shoe is protected. The edges can be trimmed and polished as perfectly as leather. The sole is at first soft, pliant, and water-proof, but hardens in firmness and consistency, precisely in proportion as the shoe upon or off the foot is subject to heat.

What I claim, and desire to secure by Letters Patent, is—

In a boot or shoe sole, the combination, with one or more thicknesses of leather, of a layer of the compound described, all substantially as set forth, for the purpose stated.

S. J. GORDON.

Witnesses:

JOHN W. RIPLEY,
GEORGE D. RIPLEY.