

O. F. Case,

Shoe Sole,

Nº 59,357.

Patented Nov. 6, 1866.

Fig: 1.

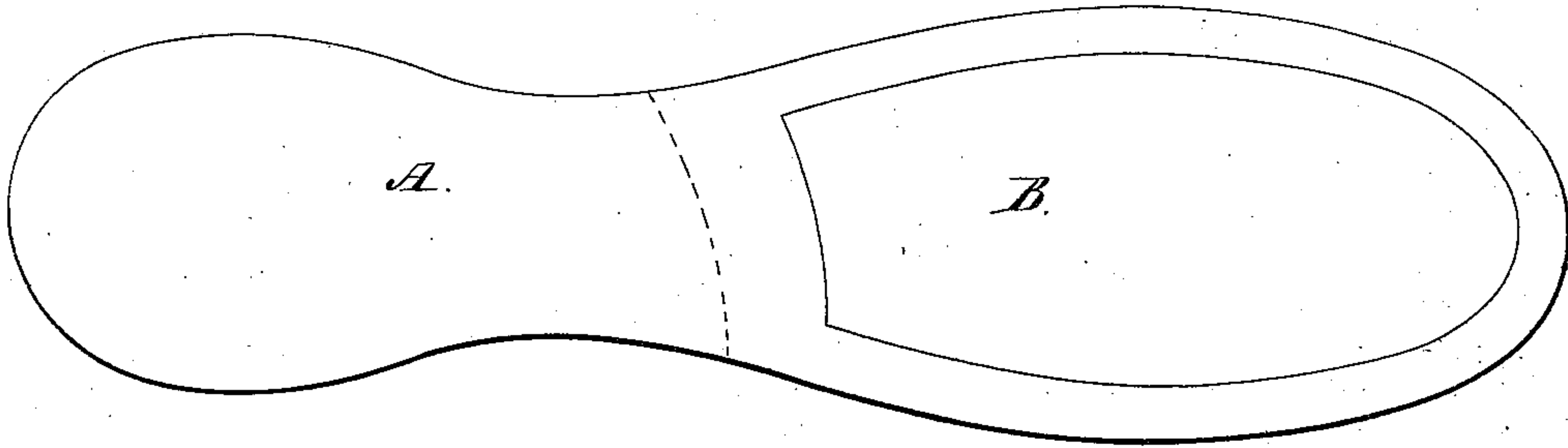


Fig: 2.



Fig: 3.



Fig: 4.



Witnesses:

John H. Shumway
A. J. Tibbets

Inventor:

Oliver F. Case
By his atty-
John E. Case

UNITED STATES PATENT OFFICE.

OLIVER F. CASE, OF NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN WATER-PROOF SOLES.

Specification forming part of Letters Patent No. 59,357, dated November 6, 1866.

To all whom it may concern:

Be it known that I, O. F. CASE, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Water-Proof Soles for Boots and Shoes; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1 an under-side view, and in Figs. 2, 3, and 4, longitudinal central sections illustrating my improvement.

My invention relates to an improvement in the soles for which Letters Patent were issued to John W. Coburn and myself, as the assignees of the said Coburn, on the 27th day of June, 1865; and consist in the formation of the sole from a whole piece of leather and filling only the ball with india-rubber; and also, in combining with a sole so formed, an insole of leather, the insole and outsole being cemented and vulcanized together.

To enable others skilled in the art to construct my improvement, I will proceed to describe the same as illustrated in the accompanying drawings.

A is the sole, cut in the usual manner and of any desired form from common sole leather, cutting out the ball, as denoted by the dark tint B, Fig. 1. This space B I fill with india-rubber gum, then place the sole in the curing-oven in like manner as described in the patent before referred to.

In many cases I find it desirable that an insole of leather should be combined with the water-proof sole, and, if so combined, would save much expense and trouble to the manufacturer. This I do by cutting another sole corresponding in form to the outer-sole, and coating one surface of each with india-rubber or similar gum, press the two firmly together, then place in the oven and cure as before described.

The insole is placed upon the outsole before the filling on the ball has been cured, so that the whole is cured at the same time. In order to do this it is first necessary that the leather be thoroughly dried.

The insole may extend over the whole sole, as seen in Fig. 2, or only the half-sole, as seen in Fig. 3, and for those soles which do not require an insole of leather, I cover the inner surface of the sole with a thin sheet of fabricated rubber, as seen in Fig. 4.

In the manufacture of soles having the insole attached as described I am enabled to use nearly all of the poorer or softer portion of the leather, which, when not so used, is nearly or entirely lost.

It is found in the use of whole soles, as described in our original patent—that is, whole soles of rubber formed with an edge of leather—that something more substantial is needed in the shank and heel than is obtained by filling the sole entirely with india-rubber. Hence my improvement.

By india-rubber I wish to be understood as including all kindred gums.

I am aware that india-rubber soles formed with an edge of leather and an insole of leather have been produced, as the patent of Chilcott and Snell, September 13, 1853, therefore I do not broadly claim a water-proof sole provided with an insole of leather; but,

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

1. A whole sole having the ball filled with rubber or allied gum, and vulcanized after having been so filled.

2. A whole sole having the ball filled with rubber or allied gum, in combination with a leather insole, substantially in the manner described, and the whole secured together by the process of vulcanization, as herein set forth.

OLIVER F. CASE.

Witnesses:

JOHN E. EARLE,
A. J. TIBBITS.