

J. L. JOYCE.

Manufacture of Boots and Shoes.

No. 141,357.

Patented July 29, 1873.

fig. 1

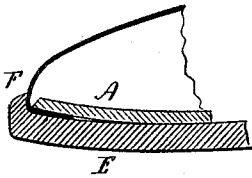


fig. 3

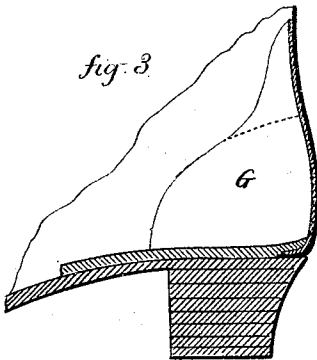


fig. 2

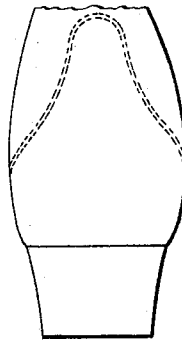
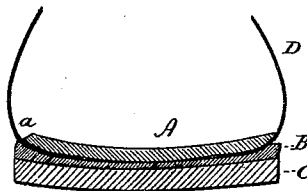


fig. 4



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Witnesses
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UNITED STATES PATENT OFFICE.

JOSEPH L. JOYCE, OF NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN THE MANUFACTURE OF BOOTS AND SHOES.

Specification forming part of Letters Patent No. **141,357**, dated July 29, 1873; application filed June 18, 1873.

To all whom it may concern :

Be it known that I, JOSEPH L. JOYCE, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in 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, a longitudinal section of the toe end of a shoe; Fig. 2, the heel; Fig. 3, a longitudinal section at the heel; Fig. 4, a transverse section of a shoe, illustrating the usual construction and my improvement.

This invention relates to an improvement in the manufacture of boots and shoes, the object being to protect the upper leather in the vicinity of the sole. In the usual construction of boots and shoes the upper leather, as it is turned up over the edge of the insole, is exposed upon the inside to the angle of the upper side of the insole and at the toe of the shoe, particularly in children's wear. This soon cuts through the leather, or, rather, forms a bearing against which the wear upon the outside soon takes away the upper. While this is more apparent at the toe, this peculiar wear occurs around the ball of the shoe. The object of this invention is to overcome this difficulty; and it consists in beveling the edge of the insole from the lower side back toward the top, so that the upper will not bear against the upper angle of the insole; also, in combining with this construction of insole a recessed outsole, the edge which forms the recess extending up onto the upper leather above the lower edge of the insole.

Upon the right side of Fig. 4 I illustrate the usual construction. A is the insole; B, the second sole; and C, the outsole. As there

represented, it will be observed that the upper leather D draws up over the edge of the insole, and is at that point exposed to wear. In my improved construction I bevel the insole back from the lower surface up, as denoted at *a* on the left of Fig. 4, so that the angle of the insole, around which the upper bears, will be down upon the outer sole—that is to say, there is no exposed angle in the upper against which the wear will come, as in the usual construction. This advantage is more apparent at the toe, as seen in Fig. 1. In this figure I also represent the outsole E as formed with an edge, F, projecting up onto the upper, around the toe, and above the insole, which leaves a slight space for the upper to play between this edge and the upper angle of the insole. This edge may be formed by cutting down the surface of the sole, or by attaching an independent strip thereto. By this construction, the angle against which the wear of the shoe is made being removed, it follows that the wear of the shoe will be much less than when the angle is present, as in the usual construction.

I claim as my invention—

1. In the manufacture of boots and shoes, the insole beveled from the lower side back toward the top, and from the upper, or so as to form a space between the edge of the insole and the upper, substantially as and for the purpose specified.

2. In combination with the insole beveled so as to form a space between the edge and upper, as described, the outsole formed with a recess or upwardly-projecting edge, substantially as and for the purpose described.

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Witnesses:

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