(No Model.)

F. F. RAYMOND, 2d.

BOOT OR SHOE SOLE.

No. 340,358. Patented Apr. 20, 1886.

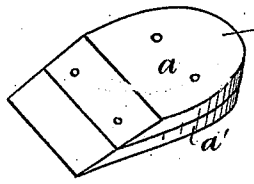

Fig. 1.

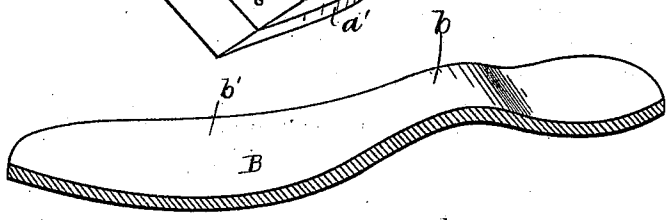

Fig. 2.

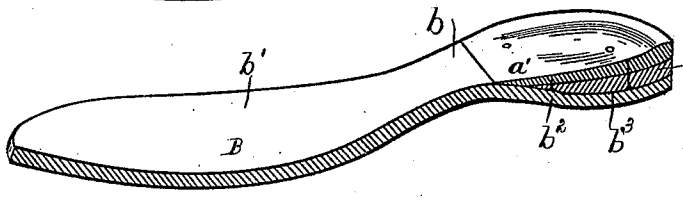

Fig. 3.

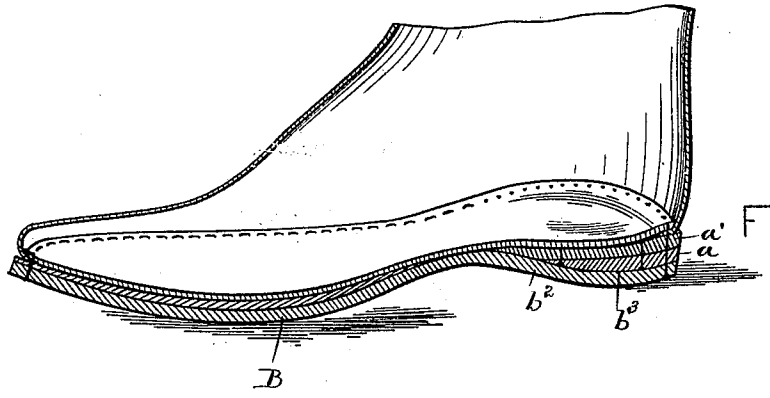

Fig. 4.

WITNESSES:

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FREEBORN F. RAYMOND, 2D, OF NEWTON, MASSACHUSETTS.

BOOT OR SHOE SOLE.

SPECIFICATION forming part of Letters Patent No. 340,358, dated April 20, 1886.

Application filed January 14, 1886. Serial No. 188,538. (No model.)

To all whom it may concern:

Be it known that I, FREEBORN F. RAYMOND, 2d, of Newton, in the county of Middlesex and State of Massachusetts, a citizen of the United States, have invented a new and useful Improvement in the Manufacture of Boots and Shoes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

The invention relates especially to the manufacture of spring-heel boots and shoes; and it consists in taking a spring-heel blank of proper shape and uniting it to the outsole before the outsole is secured to the insole, in order that the work or labor of attaching the spring-heel and outsole to the insole may be lessened, expedited, and cheapened.

Referring to the drawings, Figure 1 represents in perspective a spring-heel blank. Fig. 2 represents an outsole formed by molding in suitable forming-dies to receive the spring-heel blank. Fig. 3 shows the spring heel blank secured thereto. Fig. 4 is a section of a shoe representing the outsole with the attached spring-heel secured to the upper and insole.

A represents the spring-heel blank. It is made, preferably, of two lifts, *a a'*, shaped and secured together as described in my application for Letters Patent of even date herewith. This spring-heel blank, instead of being secured to the upper and insole at the same time that the heel end of the outsole is so secured, is first attached to the outsole, and in the drawings B represents the outsole. It is molded to the shape represented in Fig. 2 in suitable dies or sole-molding devices, and it is thus provided with a shank-section, *b*, from which extends the front section, *b'*, and the rear or heel section, b^2, which is made somewhat rounded both in cross and longitudinal section. I secure to the upper surface, b^3, of the heel end of the sole as thus formed the spring-heel blank A by means of cement, glue, or metal fastenings, which do not extend through the sole, and the heel-blank and the heel end of the outsole may be submitted to the action of compressing-dies to consolidate the blank and sole together, if desired, although I consider that this is not essential.

The sole as thus fitted will have the formed shank *b*, forward sections, *b'*, and rear section, b^2, provided with the spring-heel attached thereto, and this provides a ready means of securing the spring-heel and outsole to the upper and insole without the fitting and trimming which are now necessary in spring-heeling where the spring-heel is built upon the insole and upper and the outsole subsequently applied thereto; and the outsole, with the spring-heel blank previously attached thereto, can be secured to the upper and insole as readily and as quickly as if the spring-heel were not used.

I am aware of the patent to Bradshaw, No. 242,872, describing and claiming a heel-guard for spring-heel shoes; but I do not claim the invention therein shown and described, as I do not employ a heel-guard, and as the spring-heel which I use is not fastened to the upper part of the sole by a heel-guard, but by independent or separate fastenings or sewing.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

As an improved article of manufacture, an outsole, B, having a spring-heel blank, A, comprising the lifts *a a'*, shaped substantially as described, and attached to the upper section of the heel-section b^2 by metal fastenings, cement, or other means, and before the outsole is attached to the insole, substantially as described.

FREEBORN F. RAYMOND, 2D.

Witnesses:

J. M. DOLAN,

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