

S. E. HARTHAN.
Dies for Compressing Heel-Blanks for Boots and Shoes.

No. 157,822.

Patented Dec. 15, 1874.

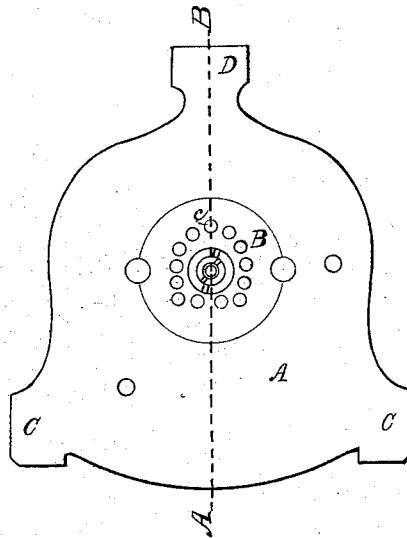


Fig. 1.

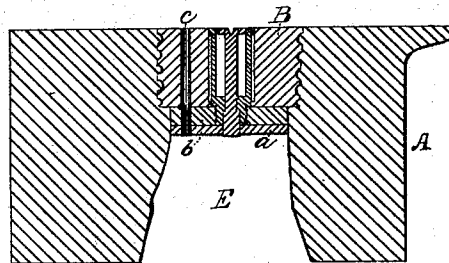


Fig. 2.

Witnesses;
Edwin E. Moore
Fred. C. Goulding

Inventor;
Silas E. Hartman

UNITED STATES PATENT OFFICE.

SILAS E. HARTHAN, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO
HORACE H. BIGELOW, OF SAME PLACE.

IMPROVEMENT IN DIES FOR COMPRESSING HEEL-BLANKS FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. **157,822**, dated December 15, 1874; application filed
November 2, 1874.

To all whom it may concern:

Be it known that I, SILAS E. HARTHAN, of the city and county of Worcester and Commonwealth of Massachusetts, have invented a certain new and useful Improvement in Dies for Pressing Heels in the Bigelow Heel-Compressing Machine; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 represents a top or plan view of the die; and Fig. 2 represents a vertical central section on line A B, Fig. 1.

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it more in detail.

In making the dies as they were originally used in the Bigelow heel-compressing machine, the part B was cast with and formed a part of the part A, and the awl-holes *c* were drilled through such cast-iron part, for the purpose of pricking the heel which was compressed in the open space E. In using the die thus constructed a difficulty arose: said awls and nail driven would wear the cast-iron part or web between the holes *c*, so that it would break out. To remedy this difficulty I combined a steel plug, B, with the part A, and bored the

awl and nail holes *c* through this plug. The result was that the objections previously met with were overcome, and the die rendered very durable and lasting.

The plug B may be inserted in a hole bored in the part A after it has been cast; but I prefer to provide the center edge of the plug with a coarse screw, and then place it in the mold and cast the part A about it, after which the upper part of plug B may be hammered or headed down; and, also, one or more pins may be inserted in the holes drilled partly in the plug and partly in the part A. The face of the die is then planed off, and the nail-holes *c* drilled, and the die otherwise finished, as respects the parts C D and *a b*, in the usual manner.

Having described my improvement in dies for the Bigelow heel-compressing machine, what I claim therein as new and of my invention, and desire to secure by Letters Patent, is—

A die or mold for receiving and compressing heel-blanks for boots or shoes, provided with a steel plug, B, substantially as and for the purpose described.

SILAS E. HARTHAN.

Witnesses:

EDWIN E. MOORE,
FRED. L. GOULDING.