(No Model.)

D. S. GRANT.

SHOE NAIL.

No. 377,805.

Patented Feb. 14, 1888.



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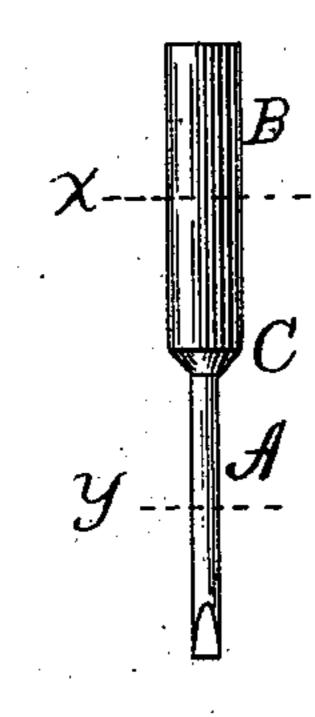


Fig 2

ma B

FI S

@ A

Fi 🗀. 4

WITNESSES. John Thomas. David S. Grant.
By his Atty.

Henry W. Williams

## United States Patent Office.

DAVID S. GRANT, OF LAWRENCE, MASSACHUSETTS.

## SHOE-NAIL.

SPECIFICATION forming part of Letters Patent No. 377,805, dated February 14, 1888.

Application filed December 1, 1887. Serial No. 256,640. (No model.)

To all whom it may concern:

Be it known that I, DAVID S. GRANT, of Lawrence, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Shoe-Nails, of which the following is a specification.

This invention is an improved nail for use in nailing the soles onto boots or shoes by machinery.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a view of my improved shoe-nail. Fig. 2 is an enlarged elevation of the same. Figs. 3 and 4 are respectively sections taken

This nail is made of the ordinary thickness or diameter from the point or entering end upward for about one half its length. At that point it broadens greatly, forming a shoulder, 20 and the thickness or diameter is relatively very large between said shoulder and the head of the nail. The lower thin portion of the nail I have lettered A, the upper thick portion B,

and the shoulder C. Now, when this nail has I

been driven into a shoe-sole by suitable machinery, the great thickness of this portion B of course has a tendency to prevent the sole from wearing away; but, what is more important, the great length of said portion B makes it practically impossible that a shoe in any ordinary 30 wear could wear the nail away up to the shoulder C. An important feature about the shoulder is that it effectually prevents the nail from working up into the foot.

Having thus fully described my invention, 35 what I claim, and desire to secure by Letters Patent, is—

The herein-described improved shoe-nail, consisting, essentially, of the relatively thin lower or entering portion, A, of even thick- 40 ness or diameter above the point, and the relatively thick upper portion or shank, B, of even thickness or diameter, substantially as and for the purpose set forth.

DAVID S. GRANT.

Witnesses:

FRANK G. PARKER, J. M. HARTNETT.