

(No Model.)

C. C. SMALL.
SHOE NAIL.

No. 461,853.

Patented Oct. 27, 1891.

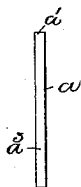


Fig. 1-

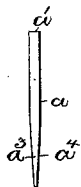


Fig. 2-



Fig. 3-

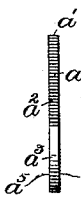


Fig. 4-

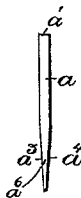


Fig. 5-



Fig. 6-

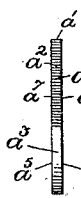


Fig. 7-

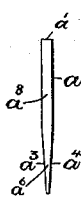


Fig. 8-



Fig. 9-



Fig. 10-



Fig. 11-



Fig. 12-

WITNESSES.

F. F. Raymond
J. H. Dolan

INVENTOR.

Chester C. Small

UNITED STATES PATENT OFFICE.

CHESTER C. SMALL, OF NEWTON, MASSACHUSETTS, ASSIGNOR TO FREEBORN
F. RAYMOND, 2d, OF SAME PLACE.

SHOE-NAIL.

SPECIFICATION forming part of Letters Patent No. 461,853, dated October 27, 1891.

Application filed February 11, 1889. Serial No. 299,403. (No model.)

To all whom it may concern:

Be it known that I, CHESTER C. SMALL, 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 Shoe-Nails, 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 to a shoe-nail made from wire and having a long-drawn point and a shank substantially square in cross-section, and two surfaces of which are roughened or corrugated.

In the drawings, Figure 1 is a view in side elevation, Fig. 2 is an edge elevation, and Fig. 3 a view in section, of my improved nail. Figs. 4, 5, and 6 are the same views illustrating the sides of the shank of the nail as roughened or corrugated. Figs. 7, 8, and 9 are similar views showing the nail as having slightly-concaved edges. Figs. 10, 11, and 12 illustrate a shorter nail.

Referring to the drawings, *a* represents the shank of the nail. It preferably is of square

section and of uniform size from the upper end of the point-forming section to the head *a'*. The shank also has two at least of its sides provided with corrugations *a²* or otherwise roughened. The point of the nail is long and tapering on the two surfaces *a³* *a⁴* and straight edges *a⁵* *a⁶*. The edges *a⁷* *a⁸* of the shank of the nail may be slightly concave, if desired, to decrease the weight of the nail by decreasing the amount of metal used in making it.

A nail of this construction holds well, drives well, and is cheaply made.

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

A shoe-nail having two smooth sides of equal width, two of tapered form to provide a point and obtained by drawing, and a square shank provided with transversely-roughened surfaces *a²* and two smooth surfaces, substantially as described.

CHESTER C. SMALL.

In presence of—

J. M. DOLAN,

F. F. RAYMOND, 2d.