

J. P. Davis,

Shoe Pegs.

N^o 14,854.

Patented Nov. 1, 1864.

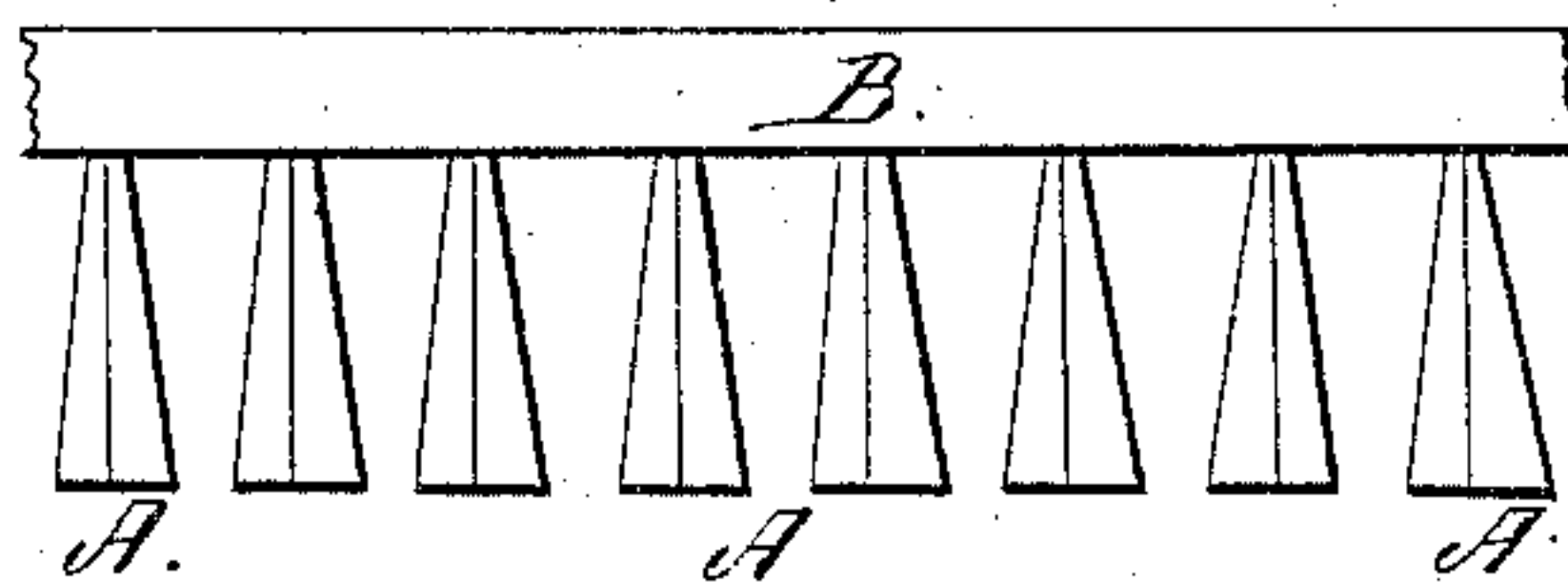
Fig. 1.



Fig. 2.



Fig. 3.



Witnesses:
Chas E. Hove
H. A. Allen

Inventor:
J. Phelps Davis
By Chas P. How
Atty

UNITED STATES PATENT OFFICE.

J. PHELPS DAVIS, OF MIDDLETOWN, CONNECTICUT.

IMPROVEMENT IN MAKING SHOE-NAILS.

Specification forming part of Letters Patent No. 44,854, dated November 1, 1864.

To all whom it may concern:

Be it known that I, J. PHELPS DAVIS, of Middletown, in the county of Middlesex and State of Connecticut, have invented a new and useful Improvement in Shoe-Nails; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side view of a shoe-nail constructed according to my improved plan. Fig. 2 is a plan of the same exhibiting the transverse form of the nail. Fig. 3 is an illustration of the manner in which the nails are molded or cast.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to a shoe-nail formed in such manner and by such a process as to possess the following advantages: First, they are more durable than nails of this character as hitherto constructed; secondly, they are not liable to undergo any chemical action which might have a deleterious effect upon the leather; thirdly, they may be driven with the greatest facility.

In order that others skilled in the art to which my invention appertains may be enabled to fully understand and use the same, I will proceed to describe it.

I construct shoe-nails of iron by casting in a sand-mold and cast the heads of the nails upon a chill for the purpose of hardening them, so that they shall be better adapted to undergo the rough usage to which they are necessarily subjected. I make the nails in a two part flask, the patterns for the nails being attached to a plate by the head thereof. This plate is laid down in the bottom of the flask with the nail pattern projecting upward. The sand is then sifted in and rammed into place and the flask cleaned off level with the points, the flask being of a proper height to facilitate such an operation. The parting sand is then put on and a pattern, corresponding with the plate B, Fig. 3, is then laid upon the points of the nail-patterns. Another part of the flask being put on, the sand is rammed down upon it and the mold properly

gated to allow the metal to be poured in. The mold is then separated and the pattern taken out, which operation may be performed by molders with facility. The place of the plate to which the patterns for the nails are attached is thus supplied by a chill. The mold is put together and the metal being poured in, the nails A are formed with the plate B, as represented. The nails thus formed may be disconnected from the plate B either by the fingers or a stiff wire brush, or by giving the said plate a brisk tap on the end with a hammer. Nails made in this manner are exceedingly hard at the head, where they are subject to friction against the hard substances of which sidewalks are composed. Hence, they are much better adapted to perform their function than shoe-nails, which are made of an equal degree of hardness throughout, as are the common wrought-iron nails generally used for the purpose, which my improved nails are intended to serve.

I have found that the peculiar inequalities or slight irregularities in the surface of the nails, resulting from the casting, serve to give the nail a more secure hold when driven into the leather. Their form obviates the necessity of employing an awl previously to driving them through. This, of course, is optional with the user. After the nails are formed, as above described, I cover them with a coating of copper or other adequate material by the galvanic process or otherwise, in order to prevent them from corroding by the action of water and thereby discoloring and impairing the leather. The nails in their transverse section have the form of a diamond and taper in such manner that they may be driven with facility.

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

As a new article of manufacture, a shoe-nail constructed in the manner and by the process herein described.

J. PHELPS DAVIS.

Witnesses:

B. F. CHAFFEE,
SAMUEL T. CAMP.