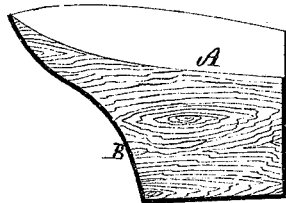


C. H. ORCUTT.

Improvement in Enameling Boot and Shoe Heels.

No. 114,470.

Patented May 2, 1871.



Witnesses.

D. J. Hunter

Charles H. Orcutt

by his Attorney

Frederick Curtis

# United States Patent Office.

CHARLES HENRY ORCUTT, OF LEOMINSTER, MASSACHUSETTS.

Letters Patent No. 114,470, dated May 2, 1871.

## IMPROVEMENT IN ENAMELING BOOT AND SHOE-HEELS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all to whom these presents shall come :*

Be it known that I, CHARLES HENRY ORCUTT, of Leominster, in the county of Worcester and State of Massachusetts, have made an invention of a new and useful Process of Finishing or Enameling the Heels of Boots and Shoes; and do hereby declare the following to be a full, clear, and exact description thereof, due reference being had to the accompanying drawing, which is a vertical section of a boot-heel containing my invention.

This invention, which is chiefly intended for finishing wooden heels, but which may be applied with good results to other substances capable of withstanding the requisite heat, consists in applying, by means of a considerable degree of heat, a black or other enamel which shall possess the properties of great durability, of elegance in appearance, and of being entirely impervious to moisture.

Heretofore wooden boot-heels have either been covered with leather, or have been stained and varnished in the ordinary manner of finishing wood for various purposes.

Heels thus prepared upon being exposed to moisture, dirt, cleaning, &c., soon lose their coat of varnish, and become rusty and rough as the grain of wood is allowed to swell and raise.

In carrying out this invention the heel is first finished in a proper manner, and then a coating of a suitable composition applied to it, which, upon being subjected to the action of from two to three hundred degrees of heat, shall assume a very hard, black, and brilliant surface, and one impervious to moisture.

The composition which I employ in coating the heel is composed as follows:

One gallon linseed-oil; one pound asphaltum; one-half pound gum sandarac; one pint tar-oil; one-quarter pound India rubber.

The oils dissolve the rubber, and the whole mass is

to be thoroughly incorporated into a uniform consistency, which should be about equal to ordinary paint.

The linseed-oil aids in dissolving the rubber, and it is a vehicle for mixing and applying the other ingredients.

The gum sandarac and tar-oil prevent cracking and peeling of the enamel, and aid, to some extent, in rendering the mass water-proof.

The asphaltum, and to some extent the gum sandarac, has the effect of hardening the mass, while the India rubber renders it impervious to moisture.

The first coating applied to the heel should contain a sufficient quantity of lamp-black to produce a black color; but in the finishing coat this lamp-black should be omitted, as it injures, to some extent, the surface of the enamel.

After applying each coating to the heel it is to be subjected to about two hundred and fifty degrees of heat, as before stated.

A surface thus produced closely imitates an ordinary leather heel, but is much preferable to such a heel, inasmuch as it will retain this black surface under all circumstances, and is much lighter.

Should the surface of the above-described enamel be found too brilliant it may be subjected to a coating of acid, which diminishes its luster.

The accompanying drawing exhibits at A the body of the heel, and at B its outer-coating or enamel.

### *Claim.*

I claim—

The herein-described process of enameling the heels of boots, the materials employed and the mode of application being as set forth.

CHARLES HENRY ORCUTT.

Witnesses:

CHAS. H. MERRIAM,  
GEORGE E. LINCOLN.