

# UNITED STATES PATENT OFFICE.

JAMES F. THOMPSON, OF ROCKLAND, ASSIGNOR OF ONE-HALF TO CHARLES F. BAKER, OF BOSTON, MASSACHUSETTS.

## COLORING AND BURNISHING COMPOSITION.

SPECIFICATION forming part of Letters Patent No. 473,679, dated April 26, 1892.

Application filed December 21, 1891. Serial No. 415,738. (No specimens.)

*To all whom it may concern:*

Be it known that I, JAMES F. THOMPSON, of Rockland, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Coloring and Burnishing Compositions, of which the following is a specification.

This invention relates to compositions employed upon surfaces of heels and other parts of boots and shoes to color or dye the same and to be acted upon by friction and impart a polish or luster upon the surface to which they are applied.

The invention has for its object to provide a coloring dye or composition that can be burnished or polished and is adapted to dry quickly upon the surface to which it is applied, to be burnished or polished while in a dried condition, and to impart a high gloss without having its color affected by the operation of polishing or burnishing.

The invention consists in the improved composition which I will now proceed to describe. I take a suitable wax—such as beeswax—and dissolve or cut the same in an alkaline solution composed, preferably, of sal-soda and fresh slaked lime, to which may be added a suitable oleaginous material, such as tallow or palm-oil. These ingredients, suitably colored, preferably with an aniline color or dye, constitute an operative composition which may be spread upon the surface of a heel or other part of a boot or shoe and after it has become dry may be burnished or polished by friction applied in any suitable way, such as by a yielding-surfaced polishing pad or roll or by a tool or roll of rigid construction operated either by power or by hand and heated or not.

The following proportions of the specified ingredients are preferred: Wax, twenty pounds; sal-soda, two pounds; fresh slaked lime, two pounds; tallow or other oleaginous material, two pounds; water, twenty gallons.

Caustic soda, potash, soda-lye, or any other suitable alkali may be substituted for the sal-soda and the oleaginous material may be omitted, the essential elements of the composition being wax held in an alkaline solution.

This composition is a substitute for the ordinary burnishing-inks, which are objectionable

for several reasons, of which may be mentioned the following: first, any burnishing-ink has to be burnished or finished while in a damp condition, thus involving a considerable amount of time and labor and rendering the parts composing the finished surface liable to check or crack when the surface becomes dry; second, the operation of burnishing an ink-surface creates dust or smut, which is scattered on and soils contiguous parts; third, a surface of burnished ink is ruined by acid, because it is composed largely of logwood and iron; fourth, the burnished ink chips off and turns dim or gray with age and by handling.

My improved composition is free from the objections above mentioned, and among its advantages may be mentioned the following:

First. It is adapted to be burnished or finished after it is dried, so that the time and labor involved are reduced to a minimum.

Second. The operation of burnishing a surface coated with the improved composition is entirely dustless, there being no dust raised and scattered by the operation.

Third. The burnished surface is waterproof and is not affected by the acids nor by the handling to which boots and shoes are subjected.

Fourth. The improved composition can be treated by any of the burnishing appliances now in use, including polish pads and rolls; also, hot-kit and the friction heel edge and shank burnishing machines and hand-operative tools.

Another important advantage is that the composition can receive any color or shade desired from light yellow to ebony-black, the shade being unaffected by the burnishing operation.

While the above-described composition is a good and practical one for the purpose described, I find that it is improved by the addition of a suitable gum dissolved in an alkaline solution, which may be composed of any suitable alkali and water, this solution being adapted to quick and thoroughly cut the gum. Any suitable gummy or resinous matter may be used.

I find that the addition of the alkaline solution of gum gives the composition the following advantages, viz: The composition dries



more quickly and constitutes a harder finish than it would without the gum.

Another important advantage I claim is that the ordinary burnishing-inks now in use have  
5 to be applied to the parts or surface, and when nearly dry a wax manufactured for this purpose has to be applied by hand or by a machine, making an extra operation, whereas my  
blackening contains the wax, thus saving one operation, and, being in liquid form, it is spread  
10 more evenly on the surface.

The preferred proportions of the gum and alkali are fifteen (15) pounds of gum and seven  
(7) pounds of alkali dissolved in twenty (20)  
15 gallons of water. A suitable proportion of aniline, with the above-mentioned proportions of gum and alkali, would be seven (7) pounds.

I claim—

1. The improved burnishing composition  
20 hereinbefore described, comprising an alkali-

line solution and wax dissolved therein, as set forth.

2. The improved coloring and burnishing composition hereinbefore described, comprising an alkaline solution, wax dissolved there-  
25 in, and coloring-matter, as set forth.

3. The improved coloring and burnishing composition hereinbefore described, comprising a solution of wax with an alkali, a solution of gum with an alkali, and coloring-mat-  
30 ter, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 17th day of December, A. D. 1891.

JAMES F. THOMPSON.

Witnesses:

C. F. BROWN,

A. D. HARRISON.