## United States Patent Office.

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

## METHOD OF BURNISHING.

SPECIFICATION forming part of Letters Patent No. 494,943, dated April 4, 1893.

Application filed January 19, 1893. Serial No. 459,001. (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 5 new and useful Improvements in Methods of Burnishing Heels and other Parts of Boots or Shoes, of which the following is a specification.

This invention has for its object to provide ic an improved process of burnishing the surfaces of heels and other parts of boots and shoes, and it consists in the succession of steps which I will now proceed to describe.

In burnishing a heel I first apply to the sur-15 face thereof a composition composed of carnauba wax, a solution adapted to cut or dissolve the wax, and coloring matter, the whole constituting a composition of such consistency that it can be readily applied to the heel 20 by means of a brush, and will constitute when applied, a coating of suitable thickness, without having a tendency to flow from the surface to which it has been applied. A suitable composition may be made by dissolving 25 twenty pounds of carnauba wax in an aqueous alkaline solution which may be composed of two pounds of caustic soda and ten gallons of water, and then adding one and one half pounds nitrate of iron, two pounds of aniline 30 coloring matter, four ounces of tannin or tannic acid and a suitable quantity of gum arabic. I do not limit myself however to this composition. After applying a coating of said composition to the surface of the heel, I 35 dry said coating thoroughly, and then subject the coated surface to the action of a rapidly rotating brush or other yielding polishing tool adapted to produce a gloss or polish on the said surface by friction. The burnished 4c surface thus produced is very durable and is not liable to fade or become discolored.

An important step in the process, is the drying of the coating before it is burnished. Heretofore heels have been burnished by first 45 dyeing the surface, then applying wax, and then polishing with a rapidly moving yielding surfaced tool, the polishing being neces-

sarily performed while the surface of the heel is damp or in temper. The result is that after the heel has been burnished, its surface 50 is liable to check or crack as it parts with its moisture. In my improved process the surface is thoroughly dried before polishing, so that the burnished surface is much less liable to check or crack than heretofore.

The use of carnauba wax is also an important feature. I find after a long series of experiments that there is no other wax known to me that will combine with a solvent solution in forming a composition adapted to be 60 burnished or polished after being dried upon the surface to which it has been applied.

Heretofore a method of burnishing heels has been practiced consisting in first dyeing or coloring the surface to be burnished, then 65 burnishing the dyed surface, then applying wax to said surface, and then again burnishing the same, said process involving such a series of operations that it requires much more time than my improved process. It will 70 be observed that I apply the coloring matter and wax at one operation, and burnish at one operation; hence I am enabled to materially reduce the time required for carrying out the process.

I claim—

The improved process hereinbefore described of burnishing heels and other parts of boots and shoes, the same consisting in taking a coating composed of carnauba wax and 80 coloring matter held in solution by a suitable solvent and applying the same at one operation to the surface to be burnished, then drying said coating, and finally subjecting the same to a rapidly moving yielding surface, as 85 set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 16th day of January, A. D. 1893.

JAMES F. THOMPSON.

Witnesses:

A. D. HARRISON, WALTER S. McLEOD.