

# UNITED STATES PATENT OFFICE.

JAMES WALTON MAXEY, OF LOUISVILLE, KENTUCKY.

## METHOD OF STRAIGHTENING WOODEN HANDLES.

No. 812,350.

Specification of Letters Patent.

Patented Feb. 13, 1906.

Application filed February 21, 1905. Serial No. 246,763.

*To all whom it may concern:*

Be it known that I, JAMES WALTON MAXEY, a citizen of the United States, residing at Louisville, county of Jefferson, and State of Kentucky, have invented certain new and useful Improvements in Methods of Straightening Wooden Handles, fully described and represented in the following specification, forming a part of the same.

10 The invention consists in a new method of straightening crooked white-hickory or similar wooden handles, by which the natural color of the handle is preserved.

15 In the manufacture of white-hickory handles for axes, picks, hammers, and the like a large number of handles are twisted or warped, and it has heretofore been impossible to straighten these handles without discoloring them, so that they are necessarily 20 classed as low-grade handles and of little value, so that the practice has been to treat such crooked handles as waste.

It is necessary to soften the handles to make them pliable before straightening, and 25 steaming has been tried for this purpose; but such processes have not been successful and have been abandoned because the handles cannot thus be made pliable without discoloring badly.

30 The process forming the present invention secures the straightening of such twisted or warped handles without any discoloration, so that the handles retain fully their natural color and are first-grade handles; and the invention consists in soaking the handles in boiling or substantially boiling water for a short 35 time and while they are still hot straightening them to their proper shape, which they retain permanently.

The time for which the handles are soaked 40 may be varied somewhat, according to the dryness and size of the handle; but it is necessary that they should not be soaked too long, or discoloration will follow, and I have found in practice that from three to four 45 minutes in boiling water is the proper time and should not be exceeded much for ordinary ax or pick handles. I find in practice that about five minutes is the limit of time 50 that they can be soaked without discoloring. It is important that the water should be at substantially the boiling temperature, as otherwise the handles will not be made pliable for straightening without soaking them so long 55 as to injure and discolor them.

The straightening may be done by any suitable means—as, for instance, by putting the hot handles in a vise and twisting them to proper shape with a wrench.

What I claim is—

60 The method of straightening crooked handles of white hickory or similar wood which discolors if steamed or loses elasticity if soaked in hot water too long, which consists in soaking them in substantially boiling water for a 65 time less than that which discolors them, substantially as specified, and then straightening the handles into proper shape.

In testimony whereof I have hereunto set my hand in the presence of two subscribing 70 witnesses.

JAMES WALTON MAXEY.

Witnesses:

FRANK MILLER,  
A. J. CARROLL.