

# UNITED STATES PATENT OFFICE.

BENJ. H. LIGHTFOOT, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVED METHOD OF OILING WOOL.

Specification forming part of Letters Patent No. **46,006**, dated January 24, 1865.

*To all whom it may concern:*

Be it known that I, BENJAMIN H. LIGHTFOOT, of Philadelphia, Pennsylvania, have invented an Improvement in Oiling Wool; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists in the use for oiling wool of prepared petroleum or other oily hydrocarbons; also, in the use for the same purpose of petroleum or other oily hydrocarbons in combination with oleine-oil or lard-oil or other equivalent material.

After repeated experiments I have found that oily hydrocarbons, when properly prepared, may be used to great advantage for cleaning wool or for oiling the same prior to carding it.

Oily hydrocarbons, being solvents of gummy matters, readily remove from wool all traces of such substances which may remain after the wool has been washed, and thus render the wool less liable to spontaneous combustion than the materials usually employed for a similar purpose.

As regards economy, it will be evident to those familiar with the process that a great saving of expense is effected by the practice of my invention.

Although other oily hydrocarbon may be used, I have found that the most efficient for the purpose is the ordinary petroleum, refined until it has reached a gravity of from 30° to 40° Baumé.

By mixing the petroleum or other oily hydrocarbon with about one-third of its weight of oleine oil or lard-oil a very excellent composition for cleaning and oiling wool is produced, the oleine or lard oil having a tendency to deodorize the hydrocarbon, while the latter dissolves the gummy matter in the oleine or lard oil. Attempts to use such oils on wools have heretofore failed, either because of the difficulty of removing the hydrocarbon from the wool after its manufacture into goods or because such oils have not been so prepared as to remove their disagreeable odor. I have overcome these difficulties, and have prepared oils which are neither offensive nor dangerous to use, and which may be easily removed from the manufactured article.

I claim as my invention, and desire to secure by Letters Patent—

1. The application of prepared petroleum or other oily hydrocarbons to the oiling of wool.
2. The application to the oiling of wool of oily hydrocarbons, in combination with oleine or lard oil or other equivalent material.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

BENJAMIN H. LIGHTFOOT.

Witnesses:

CHARLES E. FOSTER,  
JOHN WHITE.