

# UNITED STATES PATENT OFFICE.

RICHARD MACDONALD, OF NEW ORLEANS, LOUISIANA.

IMPROVEMENT IN PROCESSES FOR BLEACHING AND IMPROVING COTTON-SEED OILS.

Specification forming part of Letters Patent No. **189,867**, dated April 24, 1877; application filed October 16, 1876.

*To all whom it may concern :*

Be it known that I, RICHARD MACDONALD, a resident of the city of New Orleans, Parish of Orleans, and State of Louisiana, have invented a certain new and useful Improvement in Process for Bleaching and Improving Cotton-Seed Oil; and I do hereby declare the following to be a full, clear, and correct description of the same.

This improved process relates more especially to the treatment of that class of cotton-seed oil which is known to commerce as the "summer yellow oil."

In order to whiten and otherwise improve the said oil, as well as to render it unaffected by cold, the practice heretofore has been to subject the same to what is termed the "winter straining process"—that is to say, the oil is frozen, or at least reduced in temperature until partially solidified, when it is strained through cloths, or other material, to separate from it the stearine contained therein. By the said process the quantity of oil is materially reduced, and, as the stearine is, comparatively speaking, of but little value, the manufacturer is rewarded with but little profit.

The object of my invention is to produce from the above-mentioned materials, without removing the stearine therefrom, an oil for table or other use, of delicate flavor and color, which will not in any manner be affected by cold, or a changing temperature; and my pro-

cess consists in subjecting the aforesaid oil, for a space of about three hours, to a temperature of about 300° Fahrenheit. This may be accomplished in either a close or open vessel furnished within with a coil of pipe, through which superheated steam is caused to flow. It is, however, evident that various forms of apparatus may be constructed in which to accomplish the object in view, which is, by heat, to dissolve the stearine and thereby entirely, or almost entirely, remove all traces of the same, and at the same time to decolorize the oil, and leave it in a limpid state, fit for table, burning, or other use.

The *rationale* of my process, it is believed, consists in breaking up the stearine into other hydrocarbons, which remain fluid at temperatures which would effect the solidification of the stearine.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The process herein described of bleaching cotton-seed oil and improving its quality, the same consisting in heating it to about 300° Fahrenheit, and maintaining it at that temperature for about three hours, substantially as described, and for the purpose set forth.

RICHARD MACDONALD.

Witnesses:

J. T. HARE,

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