

# UNITED STATES PATENT OFFICE.

FRANZ O. MATTHIESSEN, OF NEW YORK, N. Y.

## IMPROVEMENT IN PROCESSES OF REFINING SUGAR.

Specification forming part of Letters Patent No. 162,244, dated April 20, 1875; application filed April 12, 1875.

### CASE C.

*To all whom it may concern :*

Be it known that I, FRANZ O. MATTHIESSEN, of New York, N. Y., have invented an Improved Process of Refining Sugar, of which the following is a specification :

My improvement relates to a modification of that process of refining sugar whereby the entire sugar-mass is converted into coffee-sugar without leaving any fluid remainder in the form of sirup. As I have invented several modifications in that process, for which I am about applying for patents, I shall, for convenience, designate the present application as Case C.

The modification of the process to which my present application refers includes the boiling of the clarified sugar-liquor in the vacuum-pan until the usual crystallization has taken place, and the cooling and hardening of the sugar-mass discharged from the vacuum-pan, and the subsequent disintegration thereof, and the division of such disintegrated sugar into small masses or thin layers, but instead of re heating such small masses or thin

layers *in vacuo*, I subject them to a gentle heat in the open air, which is continued until nearly all the water they contain is evaporated and they have acquired the condition of a granular material, substantially like what is known as free-grained coffee-sugar. In thus applying heat to the disintegrated material the temperature should not be allowed to exceed 212° Fahrenheit. The distinctive characteristic of my improvement is the subjection of the cold disintegrated sugar-mass to a gentle heat applied in the open air.

I claim as my invention—

The improved process of refining sugar herein described, which, in addition to boiling the clarified sugar-liquor in the vacuum-pan and disintegrating the product discharged from the vacuum-pan after it is cooled and hardened, consists in subjecting the cold disintegrated sugar-mass to gentle heat applied in the open air, as set forth.

Witnesses: F. O. MATTHIESSEN.

M. L. SENDERLING,

O. H. KRAUSE.