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United States Patent Office.

T. CHALKLEY TAYLOR, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 94,359, dated August 31, 1869; antedated August 20, 1869.

IMPROVED MODE OF BLEACHING GRANULATED SUGAR.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, T. CHALKLEY TAYLOR, of the city and county of Philadelphia, in the State of Pennsylvania, have invented a new and improved Method of Bleaching Sugar; and I do hereby declare that the following is a full, clear, and exact description of the method of conducting my improved process.

The object of this invention is to bleach or whiten sugar after granulation, by subjecting it to the fumes of burning sulphur, or a mixture of carbonic-acid gas and sulphurous gas, as may be desired.

I am aware that a patent was granted on the 6th day of December, 1859, for a method of bleaching or whitening sugar, by exposing it while in a liquid state in a boiler or vat, to the action of sulphurous-acid gas, which was forced through perforations made in a pipe or pipes that were arranged at the bottom of the vat. I do not therefore claim as my invention this method of treating sugar while in a liquid state and during defecation.

My improved process of bleaching is conducted as follows:

I take, say, fifty pounds of raw or granulated sugar, and spread it loosely upon the floor of a close apartment, or it may be spread upon the surfaces of shelves, composed of fine gauze, or reticulated work, arranged in a close room, so that the gas or gases used for bleaching can circulate freely over and through them.

While in this condition, I subject the sugar to the bleaching action of sulphurous-acid gas, which is caused to fill the room containing the sugar.

During this bleaching process, the sugar may be frequently stirred or agitated, to allow the gas to act equally upon the entire mass.

If desirable, the furnace in which the sulphur is heated may be placed in the apartment with the sugar, or the gas may be produced outside of the apartment and conducted therein through pipes or flues.

To facilitate the combustion of the sulphur, charcoal may be turned with it, which will afford carbonic-acid gas, that will also assist in the bleaching-process.

The proportions are about one pound of sulphur to about fifty pounds of sugar, and the time consumed in the process will be about thirty hours, or until the necessary degree of bleaching has been attained.

Having described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The method herein described of bleaching granulated sugar.

Witness my hand in the matter of my application for a patent for improved mode of treating sugar.

T. CHALKLEY TAYLOR.

Witnesses:

JULIUS HIRSCH,
J. N. CAMPBELL.