

United States Patent Office.

THOMAS M. FELL AND AMBROSE G. FELL, OF BROOKLYN, NEW YORK,
ASSIGNORS TO THEMSELVES AND WILLIAM BELL, OF NEW YORK, N. Y.

Letters Patent No. 66,137, dated June 25, 1867.

IMPROVEMENT IN THE MANUFACTURE OF WHITE LEAD.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that we, THOMAS M. FELL and AMBROSE G. FELL, both of the city of Brooklyn, and State of New York, have invented certain new and useful improvements in the Manufacture of White Lead; and do hereby declare the following to be a full, clear, and exact description thereof.

Our present improvements consist in treating a chloride or oxychloride of lead in the manner hereinafter described, thereby producing a superior white lead or carbonate of lead, to be used as a pigment.

We take a chloride of lead, for instance, the one described in Letters Patent heretofore granted to us on the eleventh day of April, 1867, and before drawing off the soda from such chloride or oxychloride of lead, reduce the mass into a thin paste by stirring, adding water to thin it still further, if necessary, then force into it carbonic acid gas, which causes a double action, namely, the carbonic acid unites with the soda, forming bicarbonate of soda, then this bicarbonate of soda reacts on the chloride of lead, forming carbonate of lead and chloride of sodium. The product then is well washed in order to free it from the chloride of sodium, and is afterwards dried in the same way as practised with ordinary white lead.

The proportion of carbonic acid that we have found to answer well is about twenty-two per cent. of the weight of litharge or oxide of lead used to form the chloride, but it is usual to add the acid until the whole mass is converted. A supply of the acid may be obtained by the usual method of burning limestone or marble in a closed stove or furnace, with coke, or by the combustion of any carbonaceous substance, the gas being drawn from the generator and forced into the pasty chloride by the usual mechanical contrivances.

What we claim as new in the manufacture of white lead, and desire to secure by Letters Patent, is—
The treatment of chloride of lead in the manner and for the purpose substantially as herein described.

THOMAS M. FELL,
AMBROSE G. FELL.

Witnesses:

WM. H. BISHOP,
A. DE LACY.