

UNITED STATES PATENT OFFICE.

CHARLES E. HORE, OF BROOKLYN, NEW YORK.

PROCESS OF MAKING CHROME-YELLOW.

SPECIFICATION forming part of Letters Patent No. 305,391, dated September 16, 1884.

Application filed January 15, 1884. (Specimens.)

To all whom it may concern:

Be it known that I, CHARLES E. HORE, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in the Manufacture of Chrome-Yellow, of which the following is a specification.

This invention relates to the manufacture of a chrome-yellow by the action of sublimed lead and bichromate of potash, as hereinafter more fully explained. Sublimed lead, or lead anhydrite, is a substance obtained from galena ores, and it is generally of the following composition:

15 Sulphate of lead.....	65.93
Sulphite of lead.....	1.98
Oxide of lead.....	31.13
Oxide of zinc.....	0.96
20 Total	100.00

It is used as a substitute for white lead.

In carrying out my invention I take five hundred pounds of sublimed lead, thin it with water, and pulp through a fine sieve to remove any coarse particles. Then I put the same into a mixer provided with a suitable agitator. I then take one hundred and eighty pounds of bichromate of potash and dissolve it in a sufficient quantity of water, and this solution I add, either in parts or all at once, to the sublimed lead contained in the mixer under constant stirring, and finally I apply

heat, either by steam or otherwise, and boil for three or four hours, until all the bichromate has combined with the sublimed lead, which may be ascertained by the absence of any bichromate in the mother-liquor. The supernatant liquor is then drawn off, and the coloring-matter is repeatedly washed until entirely free from the sulphate and sulphite of potash in solution. The resulting product may be dried in the usual way, and constitutes a bright and brilliant chrome-yellow color. It can be used in the same manner as chrome-yellow made from white lead; but it can be distinguished therefrom by the presence of zinc.

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

The process, substantially as described, for producing a chrome-yellow, said process consisting in mixing sublimed lead with a solution of bichromate of potash, boiling the mixture, and finally separating the insoluble coloring-matter from the soluble products, substantially in the manner set forth.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

CHAS. E. HORE. [L. S.]

Witnesses:

W. HAUFF,
E. F. KASTENHUBER.