



EBERHARD HARRSCH, OF NEW YORK, N. Y.

Letters Patent No. 90,359, dated May 25, 1869.

IMPROVEMENT IN THE MANUFACTURE OF COLORS.

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, EBERHARD HARRSCH, of New York, in the county and State of New York, have invented certain new and useful Improvements in Manufacture of Colors; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to improvements in my patent, March 30, 1869, for manufacture of colors; and, to this end, consists simply in the mixing of the solutions of the ores in question, in nitric, nitro-muriatic, and muriatic acids, with salts of baryta, strontia, or their equivalents.

To enable others skilled in the art to which my invention appertains, to make and use the same, I will now describe the ingredients used.

I dissolve the ores of zinc (Franklinite, Franklinite with red oxide of zinc, amorphous zinc-ore, or the residuum, after zinc-white is driven off,) in nitric, nitro-muriatic, or muriatic acids, and mix the solution with soluble salts of baryta, or carbonate of baryta, or the

same of strontia, or lime, or with the newly-precipitated oxide of zinc, or aluminium.

By precipitating any of these mixtures with ferrocyanide, bichromate, chromate, or carbonate of potassa, or soda, single or mixed, as the case may require, I gain a wider range of shades, brighter colors, and a cheaper article, than with the solutions of ores alone.

Having thus described my invention,

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

The production of colors, by dissolving the ores of zinc in nitric, nitro-muriatic, or muriatic acids, and mixing the solution with soluble salts of baryta, or its equivalents, substantially in the manner and for the purpose described.

In testimony that I claim the foregoing as my own, I affix my signature, in presence of two witnesses.

Witnesses:

EBERH'D HARRSCH.

A. S. WORTH,
JNO. A. ELLIS.