

UNITED STATES PATENT OFFICE.

ISAAC TYSON, JR., OF BALTIMORE, MARYLAND.

IMPROVEMENT IN MANUFACTURE OF CHROMATE OF POTASH.

Specification forming part of Letters Patent No. 4,224, dated October 9, 1845.

To all whom it may concern:

Be it known that I, ISAAC TYSON, JR., of the city of Baltimore, in the State of Maryland, manufacturing chemist, have made a new and useful Improvement in the Manner of Manufacturing the Salt known under the Name of "Chromate of Potash;" and I do hereby declare that the following is a full and exact description thereof.

My improvement in this process consists in the use of a large proportionate quantity of wood-ashes as a substitute for its equivalent of the carbonate of potash or other alkaline salt; and this substitution is not made for the mere purpose of lessening the quantity of the alkaline salts of commerce, which it may be necessary to employ, but I have proved by careful experiment that a larger quantity of the chromate is obtained from a given weight of the ore when wood-ashes are thus used than when the whole of the alkali is supplied by the salts of commerce, the foreign matters contained in the wood-ashes manifestly producing this effect. In other respects the process is managed as heretofore—that is to say, the ma-

terials are pulverized and then intimately mixed with the wood-ashes. The proportion of the respective ingredients will of course vary with their purity, which the manufacturers must ascertain by the usual modes. The proportions which I have generally found to answer well are one part, by weight, of the chrome ore and of the alkaline salt, and one and a half part, by weight, of the ordinary wood-ashes. I will observe, however, that in my improved process I have found that the heat may be increased with advantage.

Having thus fully described the nature of my improvement in the process of manufacturing the salts of chrome, what I claim therein as new, and desire to secure by Letters Patent, is—

The using of wood-ashes in mixture with the chrome ore and with the alkaline salt, for the purpose and in the manner herein fully set forth.

ISAAC TYSON, JR.

Witnesses:

WM. M. JITTON,
LLOYD NORRIS.