

UNITED STATES PATENT OFFICE.

WILLIAM P. KOOKOGEY, OF BROOKLYN, NEW YORK, ASSIGNOR TO THE
KOOKOGEY ELECTRIC COMPANY.

METHOD OF PREPARING SOLUTION COMPOUNDS FOR GALVANIC BATTERIES.

SPECIFICATION forming part of Letters Patent No. 395,837, dated January 8, 1889.

Application filed August 13, 1888. Serial No. 282,627. (No specimens.)

To all whom it may concern:

Be it known that I, WILLIAM P. KOOKOGEY, of the city of Brooklyn, county of Kings, and State of New York, have invented a new and
5 useful Improvement in Methods for Preparing Solution Compounds for Galvanic Batteries, of which the following is a specification.

My invention relates especially to that class of battery compounds composed of bichromate of soda, sulphate of soda, and sulphuric acid, which are designed to be kept in the dry state and converted into solutions for use by merely dissolving them in water. The character of the ingredients is such that at first
15 the mass is in a liquid or semi-liquid state, but gradually changes into a coarse powder upon stirring. Heretofore in the mixing of these ingredients the bichromate of soda has been dissolved in the acid, or rather in acid
20 and the water of crystallization supplied by the sulphate.

My present invention consists, in general, of dissolving the bichromate of soda in a small quantity of boiling water before mixing it with the other ingredients.
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It has been difficult to dissolve bichromate of soda in sulphuric acid when used in the proportions necessary for this compound; but I have discovered that if the bichromate is
30 first dissolved in a little water it may be mixed with the sulphate and the acid in that form, and that the result is still a dry compound and as efficient as if water were not present, though somewhat more deliquescent.
35 Owing to the character of the bichromate, the quantity of water necessary to hold it in a

supersaturated solution is so small that the compound comes out as a substantially dry substance, capable of being packed and transported as such, and at the same time the advantage of the process in the saving of time and labor of manufacture is very great. 40

To describe the process more in detail, take eight parts (by weight) of sulphate of soda, eight parts of bichromate of soda, and fourteen parts of sulphuric acid, (66° Baumé.)
45 Dissolve the bichromate in a small quantity of boiling water—say two parts. Dissolve the sulphate in the acid. Add the bichromate solution to the acid and the sulphate, and stir vigorously until the mass solidifies. After the mixing and during the stirring the compound may be kept heated in order to drive off as much as possible of the water. 50

I claim as my invention—

The process of making a battery compound whose ingredients are sulphate of soda, bichromate of soda, and sulphuric acid, consisting of the following steps, namely: first dissolving the bichromate in just enough hot
60 water to hold it in supersaturated solution and then mixing therewith the sulphuric acid and sulphate of soda, to be used substantially as described.

In witness whereof I hereunto set my hand, 65
in the presence of two witnesses, this 10th day of August, 1888.

WM. P. KOOKOGEY.

Witnesses:

SALLIE S. CLARK,
GEO. C. BRAINERD.