

THE AMERICAN CHEMICAL SOCIETY.

XLII.—PROCEEDINGS.

Regular Meeting, Thursday, November 4th, 1880.

Dr. A. R. LEEDS in the chair.

In absence of a quorum, regular business was deferred, and the following papers were read:

1. "Isomorphous Salts and Fractional Crystallization." By LUCIUS PIRKIN.

2. "On the Production of Ozone, by Heating Substances containing Oxygen." By Dr. A. R. LEEDS.

3. "On the Action of Hyponitric Anhydride upon Organic Bodies." (Second Paper.) By Dr. A. R. LEEDS.

In discussing Mr. PIRKIN's paper, Dr. ENDEMANN stated that he was glad that the incidental remarks made by him on a previous occasion had led Mr. PITKIN to prove, beyond doubt, the existence of real chemical compounds.

After which Mr. STREBBINS made some statements on "New Coloring Matters, produced by the Action of Nitrosodiummethylaniline hydrochlorate on Sulphuretted Phenols."

After which Mr. CASAMAJOR made a communication "On a Process for Detecting Starch Sugar, mixed with Commercial Cane Sugar."

The report of Committee on the Nomination of Officers was then read by Mr. CASAMAJOR. The names of the President and Vice-Presidents were left out, as is the usual custom, and the other officers nominated are as follows:

Corresponding Secretary:

P. CASAMAJOR.

Recording Secretary:

ALBERT H. GALLATIN.

Treasurer:

W. H. NICHOLS.

Curators:

WM. RUPP,

A. J. ROSSI,

A. A. FESQUET.

Committee on Papers and Publications:

ARNO BEHR, GIDEON E. MOORE, A. R. LEDOUX.

*Committee on Nominations:*WILLAM GEYER, O. KRAUSE,
JAS. H. STEBBINS, ARTHUR H. ELLIOTT,
J. C. BATTERSHALL.*Board of Directors:*P. CASAMAJOR, C. F. CHANDLER,
ALBERT H. GALLATIN, H. MORTON,
W. H. NICHOLS, W. M. HABIRSHAW,
E. WALLER, M. ALSBERG,
A. R. LEDOUX. J. GOLDMARK.

Mr. STEBBINS announced a paper for the next meeting "On some New Azo-Colors."

A vote of thanks to Mr. FESQUET for the microscope presented to the Society, was carried unanimously.

After which the meeting adjourned.

ARTHUR H. ELLIOTT,

Recording Secretary.

XLIII.—ISOMORPHOUS SALTS AND FRACTIONAL CRYSTALLIZATION.

BY L. PITKIN.

In discussing a paper of mine read before this Society at the May meeting, Dr. Endemann suggested that the substances described by me might not be definite chemical compounds, but mixtures of isomorphous salts. This explanation, while accounting for both bromine and chlorine in the same salt, and under some circumstances a plausible one, can not to my mind explain the phenomena described.

Two facts, neither of which can, I think, be disputed, stand out prominently in considering the subject of isomorphism. The first is, that the resulting mixed crystal has a composition dependent on the ratio, one to the other, of the isomorphous salts in solution, or the constituents forming these salts.

The second fact may be formulated as follows: When two isomorphous salts, together in solution, are subjected to fractional