

being useful for illustrating lectures in molecular physics, the plates can also be employed to advantage in the construction of crystallographic, geological and other models.

Where the parallax, inevitable for glass plates, becomes annoying, it is possible to substitute wide-meshed cotton netting, stretched upon square frames of uniform thickness. The curves can be embroidered upon the net, as it were, with pieces of colored thread; although it is not quite so easy to make the lines conform to the drawing, the general effect remains the same.

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#### FOURTH GENERAL MEETING.

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Dec. 29th and 30th, 1891.

##### FIRST DAY'S SESSION.

The meeting was called to order at 11 A. M. in the chapel of the University of the City of New York, the president, Prof. Geo. F. Barker, in the chair.

Chancellor Henry M. McCracken, of the University of the City of New York, having been introduced by Prof. McMurtrie, the chairman of the Committee of Arrangements, welcomed the society to the University and to the city.

President Barker replied briefly, referring to the contributions which the University had made to science through the work of Morse and the Drapers.

The Secretary announced the various places of interest to be visited after the close of the session; the first being the Columbia College School of Mines (upon the invitation of Prof. Chandler), then the Ehret Brewery, the Works of the Brin Oxygen Process Co., etc.

The following gentlemen were nominated for membership:

E. H. Adams, of N. Y. Tartar Co., 9th St. and Gowanus Canal, Brooklyn, N. Y.

Wm. N. Berkeley, University of Va., Va.

Prof. J. S. Cassidy, Covington, Ky.  
 Geo. C. Davis, B. S., Pottsville, Pa.  
 Prof. Chas. T. P. Fennel, Cincinnati Coll. of Phar., Cinn., O.  
 Chas. R. Findley, Abingdon, Va.  
 Paul C. Freer, Ann Harbor, Mich.  
 John G. Hall, Natrona, Pa.  
 D. W. Hoyt, A. M., High School, Providence, R. I.  
 Chas. A. Harper, Cinn. Univ., Cincinnati, O.  
 Otis C. Johnson, Ann Harbor, Mich.  
 Dr. Jos. M. Locke, 58 W. 3d St., Cincinnati, O.  
 Horatio Loomis, Burlington, Vt.  
 Oscar Lowman, Ph. D.  
 W. J. Matheson, 178 Front St., New York.  
 Chas. G. Merrell, B. S., Mass. Inst. Tech., Boston.  
 Dr. S. B. Newberry, Cornell Univ., Ithaca, N. Y.  
 David J. Ogilvy.  
 Pedro J. Sosa, Panama, Columbia, S. A.  
 Prof. G. G. Pond, State College, Pa.  
 Prof. Victor C. Vaughan, Ann Arbor, Mich.  
 Fred. J. Walling, Smith and Bergen Sts., Brooklyn, N. Y.  
 Prof. A. V. E. Young, Northwestern Univ., Chicago, Ill.

It was moved that the polls for the annual election be closed a half hour after the close of the day's session instead of at five o'clock as announced on the programme. Carried.

The chair called for open nominations if members desired to add to those offered by the Nominating Committee. None were made.

The names of the Committee on Revision of the Constitution were read and on motion a meeting of this committee was called at two o'clock.

Letters were read from Dr. C. A. Goessmann, Dr. J. W. Mallet, Dr. A. B. Prescott, Dr. T. Sterry Hunt, and others regretting their inability to be present.

The following papers were read:

I.—The Post Mortem Diffusion of Arsenic, a result of Em balming, by C. A. Doremus.

II.—On the Composition of Baryto-celestite, by C. W. Volney.

On motion the meeting was then adjourned until ten o'clock Wednesday morning, Dec. 30.

DURAND WOODMAN,  
Recording Secretary.

SECOND DAY'S SESSION.

Wednesday, Dec. 30, 1891.

The meeting was called to order at 10:45 A. M. in the chapel of the University, President G. F. Barker in the chair.

It was announced that a luncheon would be served at one o'clock, through the courtesy of the University authorities.

An invitation was extended by Professors R. Ogden and Chas. A. Doremus to visit the College of the City of New York, and by Professor Leeds to visit the Stevens Institute.

A telegram from Prof. S. W. Johnson was read, regretting his inability to be present.

An invitation was received from Dr. Torrey to visit the U. S. Assay Office.

A letter of regret was read from Prof. Springer, of Cincinnati.

The following papers were read :

I.—On the Advance in Fractional Analysis of Silicates, by F. W. Clarke.

II.—An Alchemical Chart by W. P. Mason.

III.—On Disulphotetraphenylene, by C. E. Lineburger. Read by the secretary in absence of the author.

IV.—On the properties of matter considered as Periodic Functions of the Atomic Weights, by A. R. Leeds.\*

Prof. Breneman suggested that an informal discussion be held in order to test the sense of the meeting in regard to an International Congress of Chemists at Chicago in 1893.

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\*A preliminary notice. The paper is reserved by the author for completion. Will appear in a later number.

The Chair: "A Congressional Commission has, I understand, been appointed and should be coöperated with. Invitations will be issued in the name of the Columbian Exhibition only."

Prof. A. V. E. Young, of Chicago Northwestern University, a member of the Chicago Committee of Chemists already formed to consider the subject, stated that a World's Congress of scientific men had been provided for covering a wide range of scientific interest. Different interests are to have stated times devoted to them during the Columbian Exhibition. The question now is how best to obtain the coöperation of existing organizations, and further, how best to attract people to this congress. The Congresses on Science and Philosophy are set down for the last two weeks in July, 1893.

A discussion then took place as to what action should be taken by the Society.

The polls were closed at twelve o'clock and Prof. J. H. Appleton and Prof. W. L. Dudley were appointed tellers to ascertain the result of the election.

Prof. McMurtrie offered the following resolution :

*Resolved*, That a committee of five be appointed by the chair to arrange for a general meeting of this Society, to be held in Chicago in the Summer of 1893, and to offer the coöperation of the Society to the authorities of the Columbian Exposition in arranging for an International Congress of Chemists and that this committee have power to add to its number. Carried.

At 12:50 an adjournment was taken for luncheon.

At 1:30 the meeting was again called to order.

The chair appointed Messrs. McMurtrie, Chandler, Prescott, Wiley and Munroe, a Committee on General Meeting at Chicago in 1893.

Prof. Caldwell, chairman of the Committee on Revision of the Constitution and By-laws, reported that a copy of the Constitution, Charter and By-laws would be mailed with each copy of the next number of the JOURNAL, and asked an expression of opinion from members as to changes desired.

A letter was read from Prof. Springer suggesting that the Society consider the methods of milk analysis and recommend the adoption of a uniform method.

Prof. McMurtrie moved that the Society endorse the methods of milk analysis adopted by the Association of Official Agricultural Chemists, and urge their adoption by the chemists of the country.

Prof. Loeb moved to lay this motion on the table. Seconded.

Prof. Caldwell thought it unwise to take up the matter of milk analysis in the condition in which it now stands at the hands of the Association of Official Agricultural Chemists. He was able to say, as one of them, that not a great deal of work had been done in this direction.

Prof. Loeb entered a protest against giving any opinion, either by vote or otherwise, favorable to anything about which the majority of the members knew nothing in particular, and objected to the Society, as a body, giving its endorsement to anything.

Dr. Chandler : I agree with Dr. Loeb and think we should end in disaster if we begin to endorse any special methods of analysis.

Prof. Caldwell then offered the following resolution as a substitute for the previous resolutions:

*Resolved*, That it is inexpedient for this Society to take action looking towards the official endorsement of any methods of technical analysis. Seconded and carried.

Prof. Loeb moved that all authors sending papers to the Society be requested to send specimens of all new substances descriptive of such papers to the Society. Carried.

The tellers announced the result of the elections.\*

*President.*

G. C. CALDWELL.

*Vice-Presidents.*

A. A. BRENEMAN, A. R. LEEDS, E. WALLER.

EDWARD HART, C. B. DUDLEY, E. S. WOOD.

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\*A second ballot was taken for the election of President, Treasurer, one member of the Board of Directors, and one member of the Advisory Council, with the following results :

President, G. C. Caldwell.

Treasurer, C. F. McKenna.

Member of board of directors, Wm. McMurtrie.

Member of advisory council, Alfred Springer.

*Corresponding Secretary*, A. C. HALE.

*Recording Secretary*, DURAND WOODMAN.

*Treasurer*, C. F. MCKENNA.

*Librarian*, C. E. MUNSELL.

*Curators.*

W. H. KENT, F. VANDERPOOL, A. H. SABIN.

*Committee on Papers and Publications.*

A. C. HALE, A. A. BRENNEMAN, J. F. GEISLER.

*Committee on Nominations.*

A. H. SABIN, C. A. DOREMUS,  
A. P. HALLOCK, W. H. KENT,  
LUCIUS PITKIN.

*Board of Directors.*

G. C. CALDWELL, DURAND WOODMAN,  
A. A. BRENNEMAN, A. P. HALLOCK,  
E. WALLER, J. H. STEBBINS, JR.,  
A. R. LEEDS, L. H. FRIEDBURG.  
A. C. HALE, WILLIAM MCMURTRIE,  
R. W. HALL, J. F. GEISLER,  
C. F. MCKENNA.

*Advisory Council.*

F. W. CLARKE, H. W. WILEY,  
ALFRED SPRINGER, G. F. BARKER.

It was moved that the thanks of the Society be given to the local committee for the efficient provision that had been made by them for the convenience and entertainment of the members during attendance at the meeting.

A vote of thanks was also offered to the Chancellor and the authorities of the University for all the courtesies received by the Society at their hands.

It was further moved that the thanks of the Society be tendered to the Ehret Brewing Co., the Mutual Gas Light Co., the Equitable Gas Light Co., the Brin Oxygen Co., the De La Vergne Refrigerating Co., the Chemical Manufacturers of New York and to all others from whom the Society has received courtesies. Seconded and carried.

The retiring president, Prof. Barker, expressed his sense of the pleasing relations that had marked his term of office and congratulated the Society upon the election of his successor.

A motion to adjourn was then made and seconded, and the fourth general meeting was adjourned.

DURAND WOODMAN,  
Recording Secretary.

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## ON DISULPHOTETRAPHENYLENE.

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BY C. E. LINEBURGER.

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Since the work of Stenhouse<sup>1</sup> and Graebe<sup>2</sup> on Disulphodiphenylene and its derivatives, no one, so far as I know, has taken up the investigation of the subject, except Friedel and Crafts, who have effected the synthesis of the compound by means of the reaction of the sulphur chloride on benzene in the presence of aluminium chloride. These chemists have not studied the substance further. Still the constitution of the compound seems to be such as to lend itself easily to synthesis, and now that it can be so easily prepared by means of the Friedel-Crafts reaction, nothing prevents its further study. I have therefore tried to carry out some of the reactions of which disulphodiphenylene seemed capable.

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(1) Liebig's Ann., **140**, 284 and **156**, 332.

(2) Liebig's Ann., **174**, 177; **179**, 178, and **180**, 234.