

Such is a sketch of our present knowledge of the ions of the atmosphere. With the publication of Mr. Wellisch's and Mr. Sutherland's investigations we have reached a definite idea of the small ion in air—a molecule, which, as the attraction of its charge brings about collisions which would otherwise not occur, acts as if it were one of more than the normal size—the conception enabling our experience to be not only simply but exactly described. Of the large ions, no such definite picture can as yet be drawn. Ions similar in character have been observed in gases from flames and in other cases, and it is to be hoped that the material which is now being collected may soon prove sufficient, in the hands of those specially skilled in the methods of the kinetic theory of gases, for a discussion of the life history of these molecular clusters. The study of the natural ions has a special interest, as a wider determination of the facts of the ionization of the air means an advance towards a more comprehensive knowledge of atmospheric electricity.

J. A. POLLOCK

UNIVERSITY OF SYDNEY

THE ELIZABETH THOMPSON SCIENCE FUND

THE thirty-fourth meeting of the board of trustees was held at Harvard College Observatory, Cambridge, Mass., on April 29, 1909. The following officers were elected:

President—Edward C. Pickering.

Treasurer—Charles S. Rackemann.

Secretary—Charles S. Minot.

It was voted to close the records of the following grants, the work having been completed and publications made: No. 115 to H. S. Carhart, and No. 128 to L. J. Henderson; and to close upon receipt of publications the accounts of the following grants: No. 96, H. E. Crampton; No. 103, E. Anding; No. 112, W. J. Moenkhaus; No. 126, L. Cuénot; and No. 132, W. G. Cady.

Reports of progress were received from the following holders of grants:

No.	No.
98. J. Weinzirl.	137. C. H. Eigenmann.
111. R. Hürthle.	138. Mme. P. Šafarik.
117. E. Salkowski and C. Neuberg.	139. J. Koenigsberger.
119. J. P. McMurrich.	140. K. E. Guthe.
123. E. C. Jeffrey.	141. J. T. Patterson.
131. F. W. Thyng.	142. W. J. Hale.
133. J. F. Shepard.	143. R. W. Wood.
135. A. Negri.	144. G. A. Hulett.
136. H. A. Kip.	145. J. de Kowalski.
	146. M. Nussbaum.

The secretary stated that during the past year no reports had been received from the following holders of grants:

22, 27. E. Hartwig.	121. A. Debieerne.
109. A. Nicolas.	124. P. Bachmetjew.

It was voted to make the following new grants:

- No. 147. \$200 to Professor Johannes Müller, Mecklenburg, Germany, to investigate the physiological chemistry of inosit.
- No. 148. \$200 to Professor C. C. Nutting, Iowa City, Iowa, for a report on the Gorgonacea of the Siboya Expedition.
- No. 149. \$200 to Professor Ph. A. Guye, Geneva, Switzerland, for determinations of atomic weights.
- No. 150. \$100 to Professor Charles A. Kofoid, Berkeley, Cal., for an investigation of the life history of the Dinoflagellates.
- No. 151. \$150 to Professor Otto v. Fürth, Wien, Austria, for a research concerning the relation of the internal secretion of the pancreas to the general metabolism and especially to the combustion of carbohydrates.
- No. 152. \$150 to W. D. Hoyt, Esq., Baltimore, Md., to study the fruiting of the marine alga, *Dictyota dichotoma*.
- No. 153. \$250 to W. Doberck, Esq., Sutton, England, for a position micrometer to be used in astronomical observations.
- No. 154. \$100 to Dr. J. P. Munson, Ellensburg, Washington, for an investigation of the minute structure of the chelonian brain.

CHARLES S. MINOT,

Secretary

THE RETIREMENT OF PRESIDENT ELIOT

THE faculty of arts and sciences of Harvard University has passed a minute on the services of President Eliot which reads as follows:

The faculty of arts and sciences records with gratitude its sense of the services which Charles William Eliot has rendered to Harvard University and to its own members. The changes he has wrought in the university will be remembered so long as the university endures. To this faculty he has been a guide and a friend no less than a leader. The qualities which mark him as great have nowhere appeared more clearly and spontaneously than in its meetings. He has shown judgment and resource, devotion to progress, love of truth, contempt for sham and indirection, and patience with those who differed or opposed. He has welcomed in catholic spirit every variety of intellectual ability, and has furthered the extension of every field of knowledge. He has been frank in the admission of evils, courageous and skilful in seeking for remedies; unflinchingly attentive to every detail, always mindful of the large question of policy; cogent and effective in debate, generous toward the arguments of others. In the university and in this faculty, as in the outer world, he has stood for freedom of opinion and expression. He has been a leader not through official position but by force of character and intellect. His dealings with the teaching staff have been open, equitable and liberal to the extent of every available resource. His close contact with the members of the faculty has deepened in their hearts, with every added year of his long term, confidence, admiration and warm regard; and they now part from him with reluctance, but with thankfulness for what has been achieved by him and under him, and with faith that his work will be maintained.

THE WINNIPEG MEETING OF THE BRITISH ASSOCIATION

THE local secretaries for the meeting of the British Association for the Advancement of Science beg to remind intending visitors from the United States that members of the American Association for the Advancement of Science will be admitted as full members of the British Association for the Winnipeg meeting (and entitled to receive the volume of proceedings), on payment of a fee of \$5. The meeting will be held from the twenty-fifth of August to the first of September, inclusive, and it is anticipated that a large number of visitors from the United States, as well as from Canada and Europe, will attend. It is important

that those intending to be present should send in their names to the local secretaries, University of Manitoba, Winnipeg, as soon as possible; printed matter bearing on the meeting will gladly be furnished, as well as postcard forms giving various details of use to the local committee. The secretaries are in communication with the various passenger associations in connection with reduced fares via the United States, but for the present no definite statement can be given, except that the special fares in force in connection with the exposition at Seattle may be taken advantage of. A concession of single fare for the return journey has been secured on all Canadian railways, and those entering Canada should be able to obtain from the agent at the port of entry the standard convention certificate enabling them to secure this privilege. Circulars of information upon this and other matters will be forwarded upon application to the local secretaries.

SCIENTIFIC NOTES AND NEWS

DR. IRA REMSEN, president of the Johns Hopkins University, has been elected president of the Society for Chemical Industry for the meeting to be held next year in Glasgow.

MR. LAZARUS FLETCHER, F.R.S., the keeper of the department of mineralogy since 1880, has been appointed to the post of director of the natural history departments of the British Museum, vacant since the retirement of Dr. E. Ray Lankester.

AMONG the honorary degrees awarded by Columbia University at its recent commencement was that of master of science on Mr. B. B. Lawrence, the mining engineer; a doctorate of science on Dr. S. F. Emmons, of the U. S. Geological Survey; a doctorate of letters on Dr. Mary Whiton Calkins, professor of philosophy and psychology at Wellesley College, and a doctorate of laws on Dr. A. Lawrence Lowell, president of Harvard University.

NEW YORK UNIVERSITY has conferred its doctorate of laws on Dr. Borden P. Bowne, professor of philosophy in Boston University.

DR. S. O. MAST, associate in biology at the Woman's College of Baltimore, has received