

all above 200 (thallium not reported on),\* exhibit radio-active properties, are doubtless closely associated and have to do with the eventual composition of matter. I have unverified observations which go to show the existence of at least one element with a very high atomic weight. If it be confirmed, then we have them now or they are making, and probably breaking up, as shown by that marvelous class of elements in the discovery of which the Curies have been pioneers.

If our ideas that all known elements come from some primordial material be true, then it stands to reason that we are coming in time, perhaps, to that fixed thing, a frozen ether, the fifth state of matter. I may make use of dangerous analogy and liken our known elements, arranged in a perfected natural system, to the visible material spectrum, while electrons, etc., constitute the ultra-violet and *cosmyle* composes the infra-red, either one of the latter by proper conditions being convertible into perceptible elemental matter. No positive evidence supports these ideas, but I like to fancy scientific endeavor as the sea—calm and serene, supporting and mirroring that which is below it, bearing that which is upon it, reaching to and reflecting that which is above it, moving all the while; yet, torn and rent at times by conflict from without and contest within, it runs; it beats against the shores of the unknown, making rapid progress here, meeting stubborn resistance there, compassing it, to destroy but to rebuild elsewhere; and the existence of those within it! 'Like that of Paul, our life should be a consecrated unrest.'

CHARLES BASKERVILLE.

\* See the exquisite paper by Madame Curie on 'Radioactive Substances,' also 'Radio-active Lead,' Hofmann and Strauss, *Berichte*, 34, 3033, Pellini (*loc. cit.*) on 'Radio-active Tellurium'; Strutt, *Phil. Mag.*, 6, 113, Elster and Geitel, Giesel, Marekwald, etc., etc.

#### MEETINGS OF AFFILIATED SCIENTIFIC SOCIETIES AT PHILADELPHIA.

THE Association of American Anatomists, the Society of American Bacteriologists, the Society for Plant Morphology and Physiology, the American Physiological Society, the American Society of Zoologists (Eastern Branch), the American Society of Vertebrate Paleontologists, met in Philadelphia, Pa., December 28–31, 1903. All of these societies except the last, which was organized only one year ago, have heretofore been affiliated with the American Society of Naturalists, and, with the exception of the annual discussion and dinner which the Society of Naturalists holds, the meetings this year were wholly similar to those which have been held by these societies during the past ten or twelve years.

On Monday evening there were informal meetings of the members of the various societies. The Society for Plant Morphology and Physiology was given a reception at Biological Hall, University of Pennsylvania; the American Physiological Society held a smoker at the Hotel Walton, while the other societies held smokers at the 'Rathskellar.'

Tuesday morning and afternoon, sessions of all the societies were held at the University of Pennsylvania, and all the societies except the physiologists held morning and afternoon sessions there on Wednesday also. The Physiological Society met on Wednesday at Jefferson Medical College. Luncheon was served by the University of Pennsylvania to all the societies on Tuesday and to all except the physiologists on Wednesday; on this day the latter society was entertained at luncheon at the Philadelphia Club.

Tuesday evening all the societies were the guests of the local committee at a smoker at the University Club.

Wednesday evening a lecture was given

before the members of the various societies at the Academy of Natural Sciences by Professor W. B. Scott, on 'The Miocene Fauna of Patagonia and the Problem of the Southern Hemisphere.' After the lecture a brilliant and most enjoyable reception was given to the members of the societies by Dr. and Mrs. Horace Jayne.

About two hundred members of the various societies attended the meetings, and the papers presented were numerous and, in some of the societies at least, more than usually interesting.

The following officers were elected for the ensuing year:

*Association of American Anatomists:* *President*, Professor Charles S. Minot, of Harvard University; *First Vice-President*, Professor George A. Piersol, of the University of Pennsylvania; *Second Vice-President*, Professor J. M. Flint, of the University of California; *Secretary and Treasurer*, Dr. G. Carl Huber, of the University of Michigan; *Executive Committee*, Dr. Franklin P. Mall, Dr. George S. Huntington.

*Society of American Bacteriologists:* *President*, Dr. F. G. Novy, of the University of Michigan; *Vice-President*, Dr. E. O. Jordan, of the University of Chicago; *Secretary and Treasurer*, Dr. F. P. Gorham, of Brown University. Dr. William H. Welch was elected a delegate to the Council of the American Association for the Advancement of Science.

*Society for Plant Morphology and Physiology:* *President*, Dr. G. T. Moore; *Vice-President*, Professor Clara E. Cummings; *Secretary and Treasurer*, Professor W. F. Ganong.

*American Physiological Society:* *President*, Professor Russell H. Chittenden, of Yale University; *Secretary and Treasurer*, Professor Frederic S. Lee, of Columbia University; *Members of Council*, Professor William H. Howell, of Johns Hopkins University; Professor Warren P. Lombard, of the University of Michigan; Professor William T. Porter, of Harvard University; Professor Frederic S. Lee, of Columbia University.

*American Society of Zoologists, Eastern Branch:* *President*, Professor E. A. Andrews, of Johns Hopkins University; *Vice-President*, Professor W. E. Castle, of Harvard University; *Secretary and Treasurer*, G. A. Drew, of the University of Maine; *Executive Committee*, Professor H. S. Jennings, of the University of Pennsylvania; T. H. Mont-

gomery, Jr., of the University of Texas; H. C. Bumpus, of the American Museum of Natural History.

*American Society of Vertebrate Paleontologists:* *President*, Professor Henry F. Osborn, of Columbia University and the American Museum of Natural History; *Secretary*, Dr. O. P. Hay, American Museum of Natural History; *Executive Council*, Professor Bashford Dean, of Columbia University; Professor Loomis, of Amherst College; Dr. C. R. Eastman, of Harvard University.

#### AMERICAN MATHEMATICAL SOCIETY.

THREE meetings of the American Mathematical Society were held during the Christmas holidays. On December 19 the San Francisco Section met at the University of California; the annual meeting of the society was held at Columbia University, December 28-29; and the winter meeting of the Chicago Section was held at St. Louis, in connection with that of the American Association for the Advancement of Science December 31 to January 1.

Reports of the sectional meetings will appear in a later number of SCIENCE. At the annual meeting in New York officers for the society for 1904 and members of the council to serve for three years were elected as follows:

*Vice-Presidents*—Oskar Bolza and J. M. Van Vleck.

*Secretary*—F. N. Cole.

*Treasurer*—W. S. Dennett.

*Librarian*—D. E. Smith.

*Committee of Publication*.—F. N. Cole, Alexander Ziwet, D. E. Smith.

*Members of the Council*—Maxime Bôcher, Florian Cajori, M. B. Porter, J. H. Tanner.

The president of the society, Thomas S. Fiske, continues in office, the presidential term being two years.

The following persons were elected to membership in the society: R. F. Deimel, Columbia University; C. S. Forbes, Columbia University; O. T. Geckeler, Georgia School of Technology; E. A. Hook, Columbia University; L. A. Martin, Jr.,