

3. That in the logarithmic subdivision of the spectrum the sections be called 'regions.' The visible region to include the part between 0.4μ and 0.8μ and bear the index 0, the infra-red regions having positive, and the ultra-violet, negative indices (thus, R_2 from 3.2μ to 1.6μ , R_1 from 1.6μ to 0.8μ , R_0 from 0.8μ to 0.4μ , R_{-1}^1 from 0.4μ to 0.2μ , etc.).

4. It is desirable to reserve the word *density* to designate the quotient of mass by volume.

The titles of the papers read were as follows :

'On anomalous propagation of electric waves,' by M. I. Pupin.

'A search after a new source of electromotive force,' by H. A. Rowland.

'The theory of certain magneto-optical phenomena,' by H. A. Rowland.

'On the heat of Arcturus, Vega, Jupiter and Saturn,' by E. F. Nichols.

'On cyanine prisms and a new method of exhibiting anomalous dispersion,' by R. W. Wood.

'On the propagation of cusped waves and their relation to the primary and secondary focal lines,' by R. W. Wood.

WILLIAM HALLOCK.

AMERICAN MATHEMATICAL SOCIETY.

THE American Mathematical Society held its seventh annual meeting at Columbia University, New York City, on Friday, December 28, 1900. About forty persons, including thirty-three members of the Society, were in attendance during the two sessions. Vice-President Thomas S. Fiske occupied the chair. A special feature of the meeting was the election of officers and other members of the Council. Under recent amendment of the Constitution, taking effect at this meeting, the president of the Society is elected for a term of two years and is ineligible for immediate reelection. The number of members of the Council elected annually is increased from three to four. This provision with the recent inclusion of ex-presidents as permanent mem-

bers brings the present membership of the Council up to twenty-four. The newly elected officers are : President, Eliakim Hastings Moore ; Vice-Presidents, Thomas S. Fiske and Henry S. White ; Secretary, F. N. Cole ; Treasurer, W. S. Dennett ; Librarian, Pomeroy Ladue ; Committee of Publication, F. N. Cole, Alexander Ziwet, Frank Morley ; Members of the Council to serve for three years, E. W. Brown, H. B. Fine, T. F. Holgate, W. F. Osgood ; Member of the Council to serve for two years, E. W. Hyde.

During the six years since its reorganization as a national body, the history of the Society has been one of constant and rapid development. The membership has grown from 244 in 1894 to 357 at present. In 1894 the number of papers read at the meetings was 24 ; in 1900 it was 115. Since 1894 summer meetings have been regularly held, supplemented on two occasions by colloquia or special courses of lectures. These have done much to bring the members together and to create a more general interest. The rapid expansion of the Society led in 1898 to the formation of the Chicago Section, which fosters the interest of the Society in the West. By the founding of the *Transactions*, which has just completed a very successful first year, improved facilities have been provided for the publication of important papers read before the Society. A gratifying recognition of the Society's usefulness and efficiency is found in the liberal financial cooperation of ten leading universities in the publication of the *Transactions*. The *Bulletin*, which was founded in 1891 as a historical and critical review, has been greatly enlarged, although confining itself more strictly than before to its special field.

The administration of the business of the Society has been wisely left from the beginning in the hands of the Council, the time of the meetings being thus economized for the purely scientific proceedings. The

finances of the Society are in a satisfactory condition, a moderate reserve fund having been slowly accumulated. The Society also possesses a considerable library, as yet of unbound journals and works. It is hoped that arrangement can soon be made for binding the books and making them accessible to the members.

At the annual meeting the following twenty-five persons were admitted as members of the Society.

Dr. G. N. Bauer, University of Minnesota; Dr. J. R. Benton, Princeton University; Dr. H. F. Blichfeldt, Leland Stanford University; Dr. G. A. Bliss, University of Minnesota; Professor Joseph Bowden, Adelphi College, Brooklyn, N. Y.; Professor D. F. Campbell, Armour Institute, Chicago, Ill.; Dr. J. E. Clarke, Gilbert School, Winsted, Conn.; Dr. Euplio Conoscente, New York, N. Y.; Mr. Arthur Crathorne, University of Wisconsin; Mr. H. W. Curjel, Birkdale, Eng.; Professor L. M. Defoe, University of Missouri; Mr. B. S. Easton, University of Pennsylvania; Dr. L. P. Eisenhart, Princeton University; Mr. U. S. Hanna, University of Indiana; Mr. L. I. Hewes, Yale University; Mr. A. M. Kenyon, Purdue University; Professor C. N. Little, Leland Stanford University; Mr. E. L. Milne, University of Illinois; Mr. H. B. Mitchell, Columbia University; Dr. Asutosh Mukhopādya, Calcutta, India; Mr. W. S. Nichols, New York, N. Y.; Professor J. M. Page, University of Virginia; Dr. T. H. Taliaferro, Pennsylvania State College; Miss R. H. Vivian, University of Pennsylvania; Dr. N. R. Wilson, Royal Military Academy, Kingston, Canada. Six applications for membership were received. The Annual Register of the Society, containing a complete list of members, the constitution and by-laws, reports of the secretary, treasurer and librarian, etc., is now in press.

The following papers were read at the annual meeting:

- (1) Dr. VIRGIL SNYDER: 'On some plane curves having factorable parallels.'
- (2) Professor E. D. ROE: 'On a formula of interpolation.'
- (3) Mr. W. B. FORD: 'Dini's method of showing

the convergence of Fourier's series and of other allied developments.'

- (4) Dr. EMORY MCCLINTOCK: 'A simplified solution of the cubic.'

- (5) Professor W. F. OSGOOD: 'On the minimum property of an external that meets its envelope.'

- (6) Mr. C. J. KEYSER: 'Theorems concerning positive definition of finite assemblage and infinite assemblage.'

- (7) Professor M. I. PUPIN: 'Wave propagation over bridged wave conductors.'

- (8) Professor MORLEY: 'On a point in Sylvester's theory of canonical forms.'

- (9) Professor HARRIS HANCOCK: 'On primary prime functions in several variables and a generalization of an important theorem of Dedekind's.'

- (10) Dr. J. I. HUTCHINSON: 'On some birational transformations of a Kummer surface into itself.'

- (11) Miss R. G. WOOD: 'The collineations of space which transform a non-degenerate quadric surface into itself.'

- (12) Professor H. E. SLAUGHT: 'The complete form system of invariants of the group of 120 quadratic Cremona transformations of the plane.'

- (13) Dr. JAMES MACLAY: 'Some geometrical theorems connective with a class of differential equations derived from Poisson's equation

$$\frac{\partial^2 z}{\partial t^2} = a^2 \left(\frac{\partial^2 z}{\partial x^2} - \frac{mz}{x^2} \right).$$

- (14) Mr. J. K. WHITEMORE: 'A note on cones of the second degree osculating developable surfaces.'

- (15) Professor E. O. LOVETT: 'The types of line-sphere transformation.'

- (16) Professor E. O. LOVETT: 'Note on differential geometry of n -dimensional space.'

- (17) Dr. L. P. EISENHART: 'A demonstration of impossibility of a triply asymptotic system of surfaces.'

- (18) Professor MAXIME BÔCHER: 'Some cases in which the identical vanishing of the Wronskian is a sufficient condition for linear dependence.'

After the meeting many of the members dined and spent the evening together.

The Chicago Section of the Society held its usual winter meeting at the University of Chicago on December 27th-28th. A report of the sectional meeting will appear later in this JOURNAL.

The next meeting of the Society will be held in New York on Saturday, February 23d. The Chicago Section will meet on

Saturday, April 6th. The summer meeting of the Society will be held at Cornell University, beginning on Monday, August 19th. Arrangements are being made for a colloquium in connection with the summer meeting. The committee in charge is now able to announce that Professor E. W. Brown will give a course of six lectures on 'The modern methods of dealing with the problems of dynamics and especially those of celestial mechanics,' consisting mainly of the work of Poincaré in this direction. A second course of lectures will also be arranged.

F. N. COLE,
Secretary.

THE AMERICAN CHEMICAL SOCIETY.

THE first session of the twenty-second general meeting of the American Chemical Society was held in Lewis Institute, Chicago, Ill., on Thursday, December 27, 1900. The session was called to order by President McMurtrie, in the chemical lecture-room of the Institute at 10.15 A.M. Dr. W. R. Smith, chairman of the Chicago section of the Society, was introduced and welcomed the chemists on behalf of the local section. He was followed by Howard S. Taylor, Esq., prosecuting attorney for the city of Chicago, who addressed a few words of welcome on behalf of the city and its citizens. President McMurtrie responded briefly on behalf of the Society, thanking the speakers for the cordial words of welcome.

After a few announcements a paper on 'Correction in the Determination of Urea by the Liebig Method,' was read by J. H. Long. This was followed by another paper by the same author, on 'Preliminary Note on the Optical Rotation of Certain Tartrates in Glycerol.' The latter paper was discussed by Messrs. W. A. Noyes and Long. A paper on 'The Decomposition of Sodium Nitrate by Sulphuric Acid, Part

Two,' by C. W. Volney, was read by the author. Edward Gudeman presented a brief paper on arsenical poisoning, which was discussed by Messrs. Springer, Volney and Gudeman, and Miss Fossler. Two papers by C. L. Parsons, entitled 'A Simple Test for distinguishing Oleomargarine from Butter,' and 'The Use of Metallic Sodium in Blow-pipe Analysis,' were read by the Secretary in the absence of the author.

A photograph of the assembled chemists was taken, and, after a few announcements, the morning session was adjourned. At the close of the session luncheon was served in the building, through the courtesy of the authorities of the Lewis Institute.

The Council of the Society met at the Lewis Institute at 1.30 P.M. Other members of the Society participated in visits to the works of Messrs. Frazer & Chalmers, the Consumers Ice Company, and the Eisendraht tannery of the American Hide and Leather Company.

The evening session of the Society was held in the banquet hall of the Auditorium Hotel. Dr. W. R. Smith, vice-president of the Society and chairman of the Chicago section, presided. The retiring president, Dr. William McMurtrie, delivered an address on 'The Condition, Prospects and Future Educational Requirements of the Chemical Industries.' After a few announcements the session adjourned, and the visiting chemists enjoyed a 'smoker' given by the members of the local section at the Technical Club, 230 South Clark street.

The session of the meeting on Friday was held in the chemical lecture room of the Northwestern University Medical and Pharmacy School, 2421 Dearborn Street. The meeting was called to order by President McMurtrie at 9.30 A.M.

The annual reports of the Secretary, the Treasurer and the Librarian were presented in order and read by the Secretary. These reports were accepted by the Society and