

zoologists. Dr. Wardell Stiles, of Washington, announced that the Committee on Zoological Nomenclature, which had been appointed at Leyden, had drawn up a report. The Committee were not unanimous, and he thought it would save much time if the subject were not discussed at the present Congress. After the circulation of the Committee's proposals a more profitable discussion could be hoped for at the next Congress. Dr. Sclater, as senior member of the Committee, proposed that the report be referred back for further consideration to the Committee, with powers to add to their number. He thought this step necessary, as the last committee were not unanimous in their conclusions. The Committee had been too small. It consisted of six members, one from each of the leading nationalities, of which never more than four had met. He thought the Committee should consist of at least two representatives of each nationality. Dr. Sclater's motion was carried unanimously.

Numerous entertainments were promised, including a reception at the Cambridge Guildhall, a reception by the Master of Downing College and Mrs. Hill, and a concluding banquet at which speeches were made by Professors Möbius, Waldeyer, Blanchard, Milne-Edwards, Marsh, Osborn and Hubrecht.

Before adjournment Professor Möbius, the senior member of the German delegation, extended a formal invitation to the Congress to meet in Germany three years hence.

THIRD INTERNATIONAL CONGRESS OF APPLIED CHEMISTRY, VIENNA, 1898.

THE sessions of this Congress, extending through a week's time, were opened on July the 28th by a public reception held in the Aula of the University of Vienna, Austria.

The opening address was delivered by the President of the Committee on Organization, Professor Dr. von Perger, who took occasion in his remarks to refer to the importance, to the aims and the objects of Applied Chemistry.

Among the speakers who followed von Perger in addressing the assemblage were Professor A. Bauer; Director F. Strohmmer, Secretary-General of the Congress; Dr. C. Lueger, burgomaster of Vienna, and Dr. Lieben, representing the Imperial Academy of Sciences.

The Austrian Ministers of State were appointed Honorary Presidents, and some of the delegates of foreign countries were honored by their election to the office of Honorary Vice-Presidents of the Congress.

After the motion made by C. Huck, Halle a. S., that the Committee of Organization be continued in office, had been unanimously adopted, Professor E. Buchner, Tübingen, delivered a most interesting lecture: Fermentation without Yeast-cells.

His exposition, freely illustrated with experiments, was followed by all present with the closest attention; all discussion of the subject was, however, deferred to a later and more opportune occasion.

This ended the morning's doings. In the afternoon organization of the various sections was speedily effected, and thereafter most of these held sessions both mornings and afternoons during continuance of the Congress.

These gatherings of the members were most truly international in their make-up. Predominating in number in most of them were naturally the Austrians, the courteous hosts of the occasion.

To select, at hap-hazard, but a few of the many who took an active part in the proceedings: Strohmmer, Wolfbauer, Kutschera, Ludwig, Jolles, Stift, Heger, Murmann, Strache, Tecl, Seidel, Werber

and Schwackhöfer. Germany had among its eminent representatives A. Herzfeld, Weinstein, Beckurts, Dietrich, F. Fischer, Winkler, Caro, Vogel, von Lippmann, Le Blanc, H. Claassen, C. Huck and Holde. France counted among her deputies Moissan, Tommasi, Gallois, Dupont, Aulard, Pellet, Dehérain, Durin, Weisberg, Sailard, Carnot, Aimé, Lindet and Deutsch.

From Russia there had come Wróblewski, Slaski, Jawein and Fischmann; Greece was represented by Christomanos, of Athens; Italy by Nasini; Holland by Lobry de Bruyn, van Ekenstein and van 't Hoff; Denmark by Sörensen.

Among the Americans present were Dr. Flint, representative of the U. S. Navy; H. W. Wiley, Washington, representing the United States; Rising, California; Watts, Philadelphia; Krause, Wyatt and Wiechmann, New York.

The principal sections, twelve in number, were:

General analytical chemistry and chemical instruments.

Chemistry of food, medical and pharmaceutical chemistry.

Agricultural chemistry.

Sugar industry.

Zymology.

Oenochemistry.

Chemical industry of inorganic substances.

Metallurgy, Explosives.

Chemical industry of organic substances.

Chemistry of the graphic industry.

Questions of instruction and general affairs of chemistry.

Electrochemistry.

A list of the papers presented and of the discussions held would not be in place here. Many of the European technical journals are giving accounts of the proceedings. The German *Chemiker-Zeitung*, for instance, is publishing valuable abstracts of the papers offered, and reference to its files is advised, pending issue of the complete

transactions, promised at the hand of the Secretary-General.

The social features of the meeting were by no means overlooked. An informal evening reception preceded the formal opening of the Congress, previously referred to. A public reception and lunch were given at the *Rathhaus* (City Hall) of the city, by its burgomaster, Dr. Lueger. This gathering was largely attended by the members of the Congress and their ladies.

Several excursions to neighboring places of interest had been arranged; social meetings were held at various places of amusement, and private banquets were held, to which some of our countrymen were bidden a cordial welcome.

The last meeting of the Congress took place August the second, again in the Aula of the University.

Director F. Strohmer, to whose care and efforts the brilliantly successful outcome of the Congress must, in great measure, be credited, took this opportunity to make his report on the work done and the results achieved. He and his able assistants were certainly fully deserving of the gratitude and the appreciation extended to them for their efforts by the grateful members of the Congress.

The next International Congress of Applied Chemistry will take place in Paris two years hence, and Professor Moissan has been charged with the selection of the French Committee of Organization.

It was thought taken of the Grand Exposition to be held in Paris in 1900 that decided the majority of members to cast their vote in favor of Paris in preference to Berlin, although this city also presented strong claims and petitions for the coveted honor of having the coming Congress take place within its walls.

May the day be not far distant when it shall be the pleasure and the good fortune of the United States to welcome to her

shores those men of all nations whose names stand for progress and advance in Applied Chemistry, that branch of our noble science to which America owes no small share of her magnificent development and prosperity.

FERDINAND G. WIECHMANN.

AMERICAN MATHEMATICAL SOCIETY.

THE fifth Summer Meeting of the Society was held at the Institute of Technology, Boston, Mass., on Friday and Saturday, August 19th and 20th. The attendance exceeded that at any previous meeting of the Society, reaching about seventy, including fifty-three members. The number of papers presented also shows a material increase. Nearly all the officers of the Society were present. The President, Professor Simon Newcomb, occupied the chair at the opening session, and was relieved later by the Vice-Presidents, Professors R. S. Woodward and E. H. Moore. The Council announced the election of four new members and the receipt of six applications for membership. A committee of five was appointed by the Council to consider the question of securing improved facilities for the publication of original mathematical papers in this country.

Two years ago a Colloquium was held in connection with the Summer Meeting at Buffalo. At the Toronto meeting last year it was not convenient to retain this feature. But this year it was decided to revive it, and in the week following the regular session twenty-eight members of the Society met at Cambridge to attend the courses of lectures offered by Professors W. F. Osgood and A. G. Webster. The title of Professor Osgood's course was: 'On Some Methods and Problems of the General Theory of Functions;' that of Professor Webster's was: 'The Partial Differential Equations connected with Wave Propagation.' The success attending the Colloquium will prob-

ably ensure the retention of this feature at the future summer meetings.

The most cordial relations prevailed between the Society and Section A of the American Association. The latter body set apart a special day (Thursday) for the reading of the chief mathematical papers, an arrangement which was greatly appreciated by those members of the Society who wished to attend both the Colloquium and the meeting of Section A.

The following is a list of the papers presented at the Fifth Summer Meeting:

- (1) DR. E. M. BLAKE: 'On the ruled surfaces generated by the plane movements whose centrodes are congruent conics tangent at homologous points.' (Illustrated by models.)
- (2) PROF. T. F. HOLGATE: 'A second locus connected with a system of coaxial circles.'
- (3) DR. J. I. HUTCHINSON: 'On the Hessian of the cubic curve.'
- (4) DR. VIRGIL SNYDER: 'Asymptotic lines on cubic scrolls.'
- (5) PROF. ALEXANDER CRESSIN: 'Relative motion considered as disturbed absolute motion.'
- (6) PROF. A. L. BAKER: 'Fundamental algebraic operations.'
- (7) PROF. ALEXANDER CRESSIN: 'On the development of the perturbative function in terms of the mean anomalies.'
- (8) PROF. E. O. LOVETT: 'Note on the differential invariants of a system of $m+1$ points by projective transformation.'
- (9) PROF. W. F. OSGOOD: 'Note on the extension of the Poincaré-Goursat proof of a theorem of Weierstrass's.'
- (10) PROF. W. F. OSGOOD: 'Supplementary note on a single-valued function with a natural boundary, whose inverse is also single-valued.'
- (11) PROF. MAXIME BÔCHER: 'The theorems of oscillation of Sturm and Klein.'
- (12) PROF. A. L. BAKER: 'Space concepts in mathematics.'
- (13) DR. T. P. HALL: 'An algebra of space.'
- (14) PROF. E. H. MOORE, 'The subgroups of the generalized modular group.'
- (15) PROF. L. L. CONANT: 'An application of the theory of substitutions.'
- (16) DR. J. H. BOYD: 'A method for finding an approximate integral for any differential equation of the second order.'
- (17) DR. H. F. STECKER: 'Non-euclidean cubics.'