

Professor Bolza was deeply moved by this presentation and responded in terms indicating his genuine personal interest in his students and his gratitude and joy at such manifestation of their regard for him. He then gave an account of his university career in Germany and of his migration to this country and of his pleasant experiences at Johns Hopkins University, at Clark University and at the University of Chicago, attributing the making of his career to the unusual opportunities offered in America.

Following is the quotation from the presentation album:

To Dr. Oskar Bolza, for eighteen years professor of mathematics in the University of Chicago, a number of his former students whose names are written below, desiring to express in some tangible way their love and esteem, present herewith this loving cup.

While recognizing the inadequacy of such a method of expressing to him their feelings of loss and deep regret at his departure from the University of Chicago and from this his adopted country, they hope that the graceful curves of this loving cup and the luster of its pure metal, may serve to remind him and Mrs. Bolza, as they look upon it in years to come, of their host of loving and loyal friends in America.

Those among the students of Professor Bolza who have known him best are foremost in their appreciation of his unusual qualities as both a lecturer and in awakening the spirit of research. Faithful in precept and inspiring in example, he has been a tower of strength at the university for nearly two decades, while students by the hundreds, after drawing from him mathematical inspiration and power, have gone forth to all parts of this country, many of them to occupy positions of responsibility and trust in our leading colleges and universities.

As a genial friend whose hospitality we have all enjoyed, as an inspiring teacher whose peer we have seldom known, as a contributor to mathematical science whose reputation is established both here and abroad, as the man who with Professors Moore and Maschke made the University of Chicago from its earliest days one of the foremost of mathematical schools, we pay respectful tribute to Professor Bolza, and wish him and Mrs. Bolza the widest usefulness and the greatest happiness in their new "old home" in Freiburg.

It was announced by President Judson that the trustees had refused to erase Professor Bolza's name from the roll of the faculty, but instead made him non-resident professor of mathematics, thus strengthening the hope that from time to time he may return for a quarter's residence at the university.

Professor and Mrs. Bolza sailed for Germany during the last week of June.

H. E. S.

SCIENTIFIC NOTES AND NEWS

SIR WILLIAM CROOKES has received from the British government the order of merit, filling the place vacant by the death of Sir William Huggins.

DR. J. MARK BALDWIN has been elected a corresponding member of the French Academy of Moral and Political Sciences, to fill the place vacant by the advancement of Professor William James to be foreign associate.

PROFESSOR CHARLES PEREZ, of Bordeaux, has been elected a corresponding member of the Paris Academy of Sciences, in the section of anatomy and zoology.

SIR J. J. THOMSON, F.R.S., has been elected president of the Junior Institution of Engineers.

THE banquet to the five past-presidents of the Chemical Society, Professor W. Odling, F.R.S., Sir Henry E. Roscoe, F.R.S., Sir William Crookes, F.R.S., Dr. Hugo Müller, F.R.S., and Dr. A. G. Vernon Harcourt, F.R.S., who have attained their jubilee as fellows of the society will take place at the Savoy Hotel, London, on November 11.

THE Royal College of Physicians of Edinburgh has awarded its Cullen Victoria Jubilee prize to Dr. R. W. Philip, for his work on tuberculosis.

MR. ZACCHEUS DANIEL, of Princeton University, has been appointed assistant at the Allegheny Observatory, University of Pittsburgh, and Mr. R. J. McDiarmid, of the University of Toronto, has been appointed fellow in astronomy at the same institution.

DR. CHAS. S. PALMER, formerly of Colorado, now in Newtonville, Mass., has been appointed

chief consulting chemist of the Arlington Mills.

THE secretary of state for the colonies has selected Mr. Joseph Pearson, D.Sc., F.L.S., as director of the museum at Colombo, Ceylon, in succession to Dr. Arthur Willey, now appointed professor of zoology at McGill University, Montreal. Dr. Pearson's removal has created a vacancy in the zoological staff at the University of Liverpool which will be filled by the appointment of Mr. R. Douglas Laurie as senior demonstrator and assistant lecturer, while Dr. W. J. Dakin will join the staff as second demonstrator.

PROFESSOR ROBERT GANS has been appointed geologist in the Geological Bureau at Berlin.

DR. F. A. BATHER, F.R.S., will represent the British Museum of Natural History at the Stockholm International Geological Congress.

PROFESSOR R. DE C. WARD, of Harvard University, sailed for Brazil on July 20 in order to make a study of the economic climatology of the coffee region of São Paulo.

BOTANICAL field work in Mexico will be engaged in next September by a class now being organized by the department of botany at the University of Chicago. The class will be in charge of Dr. J. M. Coulter, head of the department, assisted by Assistant Professor C. J. Chamberlain and W. J. G. Land and J. G. Brown, instructors in botany.

PROFESSOR C. W. EDMUNDS, of the University of Michigan, is spending the summer at the Hygienic Laboratory, U. S. Public Health and Marine Hospital Service, Washington, doing special research work in pharmacology.

THE medical faculty of the Johns Hopkins University received during the session 1908-9 the sum of one hundred and fifty dollars from Dr. A. E. Malloch, of Hamilton, Ontario, with the request that it be awarded as a prize to the student presenting in competition the best essay upon "The Life and Work of Lister." The nine essays received were examined by a committee appointed by the faculty, who awarded the prize to Mr. Charles Chauncey Winsor Judd. The successful essay will be

published in the Johns Hopkins Hospital *Bulletin*.

A SERIES of lectures on the conservation movement by several of the government experts is in progress this summer at the University of Chicago, forming part of the program of public lectures which, according to custom, are open to all who care to attend. The subjects of the addresses thus far announced are "Conservation of Mineral Resources," "Reclamation of Waste Lands" and "Conservation of Forests." Among the speakers announced are: Charles W. Hayes, chief geologist of the United States Geological Survey; Frederick H. Newell, director of the Reclamation Service, and Chief Forester Henry S. Graves.

THE death is announced of Samuel Bowdler Green, dean of the school of forestry of the University of Minnesota, known for his publications on horticulture and forestry, at the age of fifty-one years.

GIOVANNI VIRGINIO SCHIAPARELLI, the eminent Italian astronomer, died on July 4, at the age of seventy-five years.

JOHANN GOTTFRIED GALLE, the great German astronomer, died on July 10, at the age of ninety-eight years.

DR. JULIUS WEINGARTEN, professor of mathematics at Freiburg, has died at the age of eighty-five years.

M. LOUIS RAFFY, professor of mathematics at the University of Paris, has died at the age of sixty-five years.

DR. HUGO ERDMANN, professor of chemistry in the Berlin School of Technology, has been drowned, at the age of forty-eight years.

IT is reported that the first output of radium from the Trenwith mine, St. Ives, Cornwall, has been obtained. It consists of about 24 grains of radium and is valued at \$150,000.

THE next meeting of the American Ornithologists' Union will be held in Washington, D. C., beginning Monday, November 14.

A SERVIAN Geographical Society has been founded at Belgrade, with Professor J. Cvijić as the first president. It will issue a quarterly publication.

THE joint summer meeting of the Institution of Mechanical Engineers and the American Society of Mechanical Engineers will take place in Birmingham and London on July 26 to 30. *Nature* states that the following papers are to be read and discussed: In Birmingham: "English Running-shed Practise," by Mr. C. W. Paget; "Engine-house Practise, or the Handling of Locomotives at Terminals to Secure Continuous Operation," by Mr. F. H. Clark; "Handling Locomotives at Terminals," by Mr. F. M. Whyte; "Handling Locomotives," by Mr. H. H. Vaughan; "American Locomotive Terminals," by Mr. W. Forsyth; "High-speed Tools, and Machines to Fit Them," by Mr. H. I. Brackenbury; "Tooth-gearing," by Mr. J. D. Steven; "Interchangeable Involute Gearing," a joint paper by members of the Committee of the A.S.M.E. on standards for involute gears. In London: "Electrification of Suburban Railways," by Mr. F. W. Carter; "Cost of Electrically-propelled Suburban Trains," by Mr. H. M. Hobart; "Economics of Railway Electrification," by Mr. W. B. Potter; "Electrification of Trunk Lines," by Mr. L. R. Pomeroy; "Electrification of Railways," by Mr. G. Westinghouse.

THE program of the annual meeting of the British Medical Association has been published. The meeting will be held in the University of London and the adjacent collegiate buildings at South Kensington on July 22 and 23 and during the following week. The general meeting will open on July 22, under the presidency of Sir William Whitla, and will be adjourned until July 26, when the president-elect, Mr. H. T. Butlin, will be inducted and will deliver his address. The representative meeting will assemble in the Guildhall on July 22, 23, 25 and 26. The council meeting will be held on July 26 and July 27. On the latter date and the two days which follow the scientific business of the meeting will be conducted in 21 sections. The address in medicine will be delivered on July 27 by Dr. J. Mitchell Bruce, of London, and the address in surgery on July 28, by Mr. H. G. Barling, of Birmingham. The annual

service will be held on the afternoon of July 27 in Westminster Abbey, and in the evening of that day the lord mayor and corporation will give a *conversazione* at the Guildhall. The annual dinner will take place on July 28. The sections, with their presidents, are as follows: Anesthetics, Dr. F. W. Hewitt; Anatomy, Professor Arthur Keith; Bacteriology, Dr. C. J. Martin; Dermatology, Dr. Phineas Abraham; Diseases of Children, Dr. A. E. Garrod; Gynecology and Obstetrics, Dr. Mary A. D. Scharlieb; Laryngology, Mr. Herbert Tilley; Medical Sociology, Dr. J. A. Macdonald (Taunton); Medicine, Dr. R. W. Philip (Edinburgh); Navy, Army and Ambulance, Colonel Andrew Clark; Odontology, Mr. J. H. Mummery; Ophthalmology, Mr. Charles Higgs; Otology, Dr. Edward Law; Pathology, Mr. S. G. Shattock; Pharmacology and Therapeutics; Professor A. R. Cushny; Physiology, Professor W. H. Thomson (Dublin); Psychological Medicine and Neurology, Dr. T. B. Hyslop; Radiology and Medical Electricity, Mr. J. M. Davison; State Medicine, Sir Walter Foster; Surgery, Sir Victor Horsley; Tropical Medicine, Dr. F. M. Sandwith.

WE learn from *Nature* that Lord Crewe, secretary of state for the British Colonies, has appointed a committee, formed of representatives of the Colonial Office and of the Natural History Branch of the British Museum, to consider the protection of plumage-birds. The main object in view is to consider to what extent it may be practicable to prevent, either by legislation or by departmental control, the indiscriminate slaughter of such birds now prevalent in certain parts of the empire. Action of this nature can be effectual only by the cooperation of the governments of all the countries included in the British Empire, and it is hoped that this may be obtained.

A FIRST circular concerning the tenth International Geographical Congress to be held next year in Rome has been issued by the organizing committee and is summarized in the *Geographical Journal*. The date fixed is the week from October 15 to 22, in which month it is thought that the business of the meeting can be carried on without undue

interruption from the commemoration of the proclamation of the Kingdom of Italy, with which the congress is being purposely associated. The general regulations of the congress, which are printed in the circular, follow the same broad lines as those of previous congresses. Eight sections, representing the principal branches of geography, will be constituted, and communications may be made in Italian, French, German or English. Abstracts of communications proposed for presentation to the meeting must be sent in not later than April 30, 1911, and reports on subjects brought up at previous congresses or suggested by the executive sub-committee must be received in full not later than August 31, 1911. The time allowed for the reading of communications will not exceed fifteen minutes. Delegates may be nominated by governments, public departments, societies or other institutions concerned with geography, and all votes of sections must be confirmed by the meeting of delegates. Intending members are invited to send in their names at an early date. On payment of the amount of subscription they will receive their ticket of membership, with the necessary instructions and documents. Meanwhile information as to travel, etc., can be obtained from the "Ufficio viaggi ed informazioni gratuite," 372-373, Corso Umberto I., Rome. A special program of excursions will be issued later, and a complete program of the congress will be sent to all who have enrolled themselves as members. The president of the congress is the Marquis Raffaele Cappelli, president of the Italian Geographical Society.

THE fifth meeting of the International Congress of Mathematicians, which is held every four years and met on the last occasion in Rome in 1908, will take place at Cambridge in 1912. The London *Times* states that in connection with one of the sections of the congress an International Commission on Mathematical Teaching has been constituted, which includes delegates appointed by the various governments interested in the congress, and a series of national sub-commissions has been established to assist the International Commission. The president of the

Board of Education has appointed Sir George Greenhill, M.A., F.R.S., Professor W. W. Hobson, Sc.D., F.R.S. and Mr. C. Godfrey, M.A., to be the British delegates, and he has further appointed an Advisory Committee to assist the Commission in the collection of reports and papers on the teaching of mathematics, and this committee, which is to act also as the British Sub-Commission, has been constituted as follows: C. E. Ashford, Esq., M.A., Sir G. H. Darwin, F.R.S., LL.D., D.Sc., C. Godfrey, Esq., M.A., Sir George Greenhill, M.A., F.R.S., G. H. Hardy, Esq., M.A., F.R.S., Professor W. W. Hobson, Sc.D., F.R.S., C. S. Jackson, Esq., M.A., Sir Joseph Larmor, D.Sc., LL.D., F.R.S., Professor A. E. H. Love, M.A., D.Sc., Professor G. A. Gibson, LL.D., F.R.S.E. Mr. C. S. Jackson is honorary secretary to the sub-commission. Copies of the reports and papers approved by the Advisory Committee will be at the disposal of the International Commission above named, and it is intended that they shall ultimately be published as a volume or volumes in the board's series of special reports on educational subjects.

FROM the annual reports of German chemical factories Consul-General Richard Guenther notes continued high dividends and trade activity. The works at Biebrich earned \$1,000,000 in 1909 (capital stock about \$2,000,000), paid 32 per cent. dividends, and gave \$100,000 as gratuities to directors. Several others earned large sums and paid 12 to 27 per cent., with gratuities to directors. The Farbenfabriken-Bayer Company, of Elberfeld, whose capital is \$8,500,000, made a profit of over \$5,000,000, declared a 24 per cent. dividend, and an extra dividend of 21 per cent. from overgrown reserve funds, which still contain \$4,355,000 after the disbursement. This concern states that it has perfected an artificial rubber. The Badische Anilin and Soda-fabrik Works (capital, \$8,500,000) paid 24 per cent. It does an excellent business with the United States. Owing to the new British patent law it has erected works in England, and has also built extensive works in Norway for extracting nitrogen from air. It is well known that the German chemical industry is

the result of scientific research and that large numbers of trained research chemists are employed.

UNIVERSITY AND EDUCATIONAL NEWS

PROFESSOR WILLIAM TRUFANT FOSTER, who holds the chair of education at Bowdoin College, has accepted the presidency of the Reed Institute, a college to be established at Portland, Oregon, through a fund given by Mrs. Amanda Reed, now amounting to about \$3,000,000.

THE board of regents of the University of Texas has approved the plans submitted by the faculty of the medical department for building and equipping a laboratory of preventive medicine and public health.

ACCORDING to statistics of attendance at the University of Chicago for the year ending in June, 1910, which have just become available, an increase is shown over that for the preceding year, the actual figure being 6,007 students for the year 1909-10, as against 5,659 for the year 1908-9.

THE London County Council has made a maintenance grant of £8,000 to the Imperial College of Science and Technology, South Kensington, and in return it secures the privilege of nominating 25 students for one year's free instruction at the college.

MR. H. O. ALLISON, for a number of years connected with the department of animal husbandry of the University of Illinois in beef cattle investigations, has been elected to the position of assistant professor of animal husbandry in the University of Missouri. His special work will be the development of the breeding herds of beef cattle and the cattle feeding experiments in the experiment station.

MR. C. M. HILLIARD (Dartmouth and Massachusetts Institute of Technology) has been appointed assistant tutor in biology at the College of the City of New York.

MR. HENRY LEIGHTON, of the New York State Museum, has been appointed instructor in mining geology in the University of Pittsburgh School of Mines.

PROMOTIONS at the Johns Hopkins University have been made as follows: Charles K.

Swartz, Ph.D., collegiate professor of geology; John B. Whitehead, Ph.D., professor of applied electricity; Edward W. Berry, associate in paleobotany; Rheinart P. Cowles, Ph.D., associate in biology; Knight Dunlap, Ph.D., associate in psychology; William W. Holland, Ph.D., associate in chemistry; Carroll M. Sparrow, A.B., instructor in physics; Donald R. Hooker, M.D., associate professor of physiology; Carl Voegtlin, Ph.D., associate professor of pharmacology; George H. Whipple, M.D., associate professor of pathology; Eliot R. Clark, M.D., associate in anatomy; Herbert M. Evans, M.D., associate in anatomy; John H. King, M.D., associate in pathology; Arthur H. Koelker, Ph.D., associate in physiological chemistry; Milton C. Winternitz, M.D., associate in pathology; Charles R. Essick, M.D., instructor in anatomy; Thomas P. Sprunt, M.D., instructor in pathology.

DISCUSSION AND CORRESPONDENCE

THE PROFESSORIAL QUESTION

IT seems unfortunate that so important a contribution as that of Mr. Chapman's should appear at a time when professors, on vacation bent, are trying to dismiss the professional aspects of their vocation. Yet the charge of timidity and weak concern for their closest interests, which is made with incontrovertible pertinence, is pertinent at any time. Mr. Chapman devotes his article particularly to calling attention to the unjust and unwise set of scruples that seem to stand in the way of the proper assertion of his rights on the part of the professor. I am similarly convinced that a combination of timidity and a distorted scruple is responsible for the reserve in question. Indeed, I agree so cordially with each one of the positions assumed that I find little to add except by way of enforcement of detail. In my opinion Mr. Chapman has not alone pointed out one of the most serious menaces in the educational situation, but so far as he goes, indicates correctly a few of the steps which seem promising in "unwinding this boaconstrictor" which is strangling scholars and their interests. The first step is to make it good form and a meritorious and generously commended act when a professor speaks of his