

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.

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#### 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.

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#### 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

the Cartwright prize of \$500 for his work on "The Effect of Light on the Movements of Lower Organisms," awarded by the College of Physicians and Surgeons, Columbia University.

THE Linnean Society has presented its gold medal to Dr. F. O. Bower, F.R.S., regius professor of botany in the University of Glasgow.

PROFESSOR W. F. OSGOOD, of Harvard University, has been elected corresponding member of the Mathematical Society of Charkow.

M. E. BOUDIER has been elected a corresponding member in the Paris Academy of Sciences in the section of botany.

DR. GEORGES DREYER, professor of pathology in the University of Oxford, has been elected a member of the Danish Royal Academy of Letters and Science.

DR. W. W. DANIEL, professor of chemistry at the University of Wisconsin, has retired from the chair which he has held since 1868. His former students have presented the university with a portrait by Mr. J. C. Johansen, of New York.

THE trustees of Columbia University have awarded the Ernest Kempton Adams research fellowship, for the year 1909-10, to Professor C. W. Chamberlain, of Vassar College.

At a meeting of the board of directors of the Rockefeller Institute for Medical Research, held on May 29, the following promotions and appointments were made: Associate, Paul A. Lewis (pathology); Assistant, F. Peyton Rous (pathology); Scholar, Angelia M. Courtney (chemistry).

DR. C. D. PERRINE, of the Lick Observatory, has proceeded to Buenos Ayres to assume the directorship of the Argentine National Observatory at Cordobe, vacant by the death of Dr. Thome. His address will be Observatorio Nacional, Cordoba, Argentina.

THE secretary of the Smithsonian Institution and Mrs. Charles D. Walcott sailed on June 5 to attend the commemoration of the centenary of the birth of Charles Darwin as the representative of the institution. During his stay in Great Britain, Dr. Walcott will visit the northwest coast of Scotland to collect and study specimens of Cambrian fossils found

in that locality. He will return to Washington on July 3, after which he will proceed to British Columbia to continue there his field work.

PROFESSOR L. H. BAILEY, director of the College of Agriculture, Cornell University, has leave of absence for next year. Professor Herbert J. Webber will act as director.

DR. A. M. TOZZER, of Harvard University, has been given leave of absence for 1909-10 to carry on archeological investigations in Guatemala.

DR. NETTIE M. STEVENS, associate in experimental morphology at Bryn Mawr College, who has been studying at the Zoological Station in Naples and the University of Würzburg as the Alice Freeman Palmer research fellow for the year 1908-9, will resume her work at the college next year.

DR. PAUL C. FREER, director of the Bureau of Science, Manila, has left, in April, for Europe by the Trans-Siberian route. Dr. Freer will spend some time studying the laboratory methods of the leading scientific institutions of Europe. He will return to the Orient after two months in this country.

DR. CHARLES L. EDWARDS, professor of natural history at Trinity College, will spend next year in Europe.

DR. F. O. GROVER, professor of botany at Oberlin College, will spend next year abroad.

LIEUTENANT SHACKLETON is expected to reach England about the middle of June. Several members of the *Nimrod* expedition have reached England, including Mr. Raymond E. Priestley, of Bristol, the geologist; Mr. G. E. Marston, of London, the artist; Mr. Ernest Joyce, London, who was in charge of the supporting party; Mr. Frank Wild, of Bedfordshire, who accompanied Lieutenant Shackleton furthest south, and Mr. Bernard Day, of Leicester, who had charge of the motor car.

DR. HENRY P. WALCOTT, chairman of the Massachusetts State Board of Health, will preside at the International Congress of Hygiene and Demography, which it is proposed to hold in Washington next year.

DR. W. H. HOWELL, dean of the Johns Hopkins Medical School, will give the anniversary

address at the Yale Medical School, his subject being "The Medical School as Part of the University."

DR. CHARLES S. MINOT, of the Harvard Medical School, delivered on May 27, at St. Louis, the commencement address in medicine for Washington University. The address was entitled "On Certain Ideals of Medical Education," and will be published shortly.

DR. DICKINSON S. MILLER, professor of philosophy at Columbia University, will give the Phi Beta Kappa address at Hobart College.

PROFESSOR I. WOODBRIDGE RILEY, of Vassar College, delivered the annual address before the American Medico-Psychological Association at Atlantic City on June 2. The subject was "Mental Healings in America."

*The Electrical World* states that an unfortunate complication has arisen concerning the location of the memorial statue to Lord Kelvin in his native city of Belfast. It has been decided to erect the statue in the grounds of the Queen's College, but it was subsequently pointed out that such use of the grounds would be legally a breach of trust under the terms of tenure of the property. In the meantime, some of the subscribers to the memorial have served formal notice restraining the Lord Mayor from expending any of the money subscribed until the questions regarding the site have been satisfactorily determined.

DR. WILHELM ENGELMANN, professor of physiology at Berlin, has died at the age of sixty-five years.

DR. GEORGE VON NEUMAYER, the eminent meteorologist, has died at Neustadt at the age of eighty-three years.

TABLES at the laboratory of the United States Bureau of Fisheries, at Beaufort, North Carolina, will be available for the use of investigators after July 1. Requests for further information should be addressed either to the commissioner of fisheries, Washington, D. C., or to the director of the laboratory, Beaufort, N. C.

THE third annual geographical conference was held, on the invitation of Professor Davis, in the Geographical Laboratory of Harvard University on Saturday, May 29, and was at-

tended by over forty teachers from the schools of Boston and neighboring cities. Recent proposals regarding the teaching of geography in secondary schools were discussed, and an excursion to the coastal plain of Maine was planned for June 26.

At the last meeting of the International Physiological Congress, which was held at Heidelberg, in 1907, it was decided to hold the next Congress at Vienna in 1910, at Whitsuntide. The *British Medical Journal* states that it has been found that at this time of the year it would be impossible for a large number of physiologists to attend the congress, and the local committee of the congress at Vienna has therefore, after consulting the local secretaries in the various countries, determined to change the date of the congress. In accordance with the general wish, it will be held from September 26 to 30, 1910.

It has been arranged to transfer the whole of the Vatican Observatory to the summit of the Vatican Hill, 100 meters above the square of St. Peter's, where a section of the observatory has been for some years.

FOREIGN papers state that the central committee of the Austrian Alpine Club has by the authorities of Munich been put in possession of a large building with excellent accommodation and well situated on the banks of the Isar. The club proposes to inaugurate an Alpine museum in its new building.

THE Pacific coast will soon be the scene of an interesting tree-growing experiment. The United States Forest Service is planning to introduce a number of the more important eastern hardwoods into California, and will this year experiment with chestnut, hickory, basswood, red oak and yellow poplar or tulip trees. Small patches of these trees will be planted near the forest rangers' cabins on the national forests, and if these do well larger plantations on a commercial scale will soon be established on wider areas. There are over 125 different species of trees in California, a number of which produce some of the most valuable varieties of lumber in the country. Although considerably over one half of the species are hardwood or broad-leaved trees, yet, with the exception of the exotic eucalyptus,

there is not a single species of hardwood here ranking in commercial importance with the leading eastern hardwoods. Climatic conditions in many parts of California are favorable for the growth of a number of the valuable hardwoods, and the absence of these trees is due mostly to unfavorable factors of seed distribution.

#### UNIVERSITY AND EDUCATIONAL NEWS

THE General Education Board has offered to give the Johns Hopkins University \$200,000 on condition that a million dollars be raised for the removal of the university to its new site at Homewood.

MR. N. W. HARRIS has promised to give Northwestern University \$155,000 if the college will procure the remainder of a million dollars during the coming year.

THE New York *Evening Post* states that Mrs. D. G. Richardson, who in the past has contributed liberally to the medical school of Tulane University, has recently given property valued at \$55,000, and yielding an income of \$3,000 for the endowment of the chair of botany. Professor R. S. Cocks fills the newly created chair.

THE debt of Columbia University contracted in part payment of its new site and buildings has been funded, and the United States Trust Company has taken a mortgage of \$3,000,000 on the blocks owned by the university on Fifth Avenue between forty-ninth and fifty-first streets. The university will pay off this debt in thirty annual installments.

PROFESSOR IRVING HARDESTY, the head of the department of anatomy at the University of California, has been appointed to the head of the department of anatomy in Tulane University, Louisiana.

DR. GEORGE H. LING, adjunct professor of mathematics at Columbia, has accepted the professorship of mathematics in the newly-established University of Saskatchewan.

DR. FRANK G. SPECK, instructor in anthropology, has accepted the position of assistant professor of anthropology in the University of California.

WALTER K. VAN HAAGEN, assistant in chemistry at Lehigh University, has been

elected associate professor of chemistry at the University of Georgia.

PROFESSOR J. A. BROWN has resigned his position at Dartmouth College to accept the chair of physics at the Protestant College of Beirut, Syria.

MR. CHARLES B. GATES, assistant in chemistry at the University of Wisconsin, has been chosen instructor in chemistry at the Michigan College of Mines.

PROFESSOR G. ELLIOT SMITH, F.R.S., of the Government School of Medicine, Cairo, has been appointed to the chair of anatomy in the University of Manchester.

#### DISCUSSION AND CORRESPONDENCE

##### ON THE TEACHING OF THE ELEMENTS OF EMBRYOLOGY

IN 1893 Professor A. Milnes Marshall wrote in the preface to his "Vertebrate Embryology":

Great attention has of recent years been given to the study of embryology, and yet it is curiously difficult to find straightforward accounts of the development even of the commonest animals. . . . In works professing to deal with human embryology it is more common than not to find that the descriptions, and the figures given in illustration of them, are really taken, not from human embryos at all, but from rabbits, pigs, chickens or even dogfish.

This latter practise is a most unfortunate one, and has been the cause of much confusion. The student is led to suppose that our knowledge is more complete than is really the case, while at the same time he finds the greatest difficulty in obtaining definite information on any particular point in which he is interested.

This very temperate statement needs to be repeated to-day with greater emphasis, for the attention given to the study of embryology has increased with the years; it is required from practically every student of medicine and of biology, and it is as difficult as ever, if not more so (for old accounts grow out of date), to find straightforward accounts of the development even of the commonest animals. Now, as then, our text-books leap from fish to man, back to *Amphioxus*, and forward again, with stops at intermediate stations, amphibians, reptiles and birds, in such a way as to