

Dr. H. M. Smith, commissioner, U. S. Bureau of Fisheries: "The Need for a National Institution for the Technical Instruction of Fisherfolk."

L. L. Dyche, state fish and game warden, Kansas: "One Year's Work at the Kansas Fish Hatchery," "The Possibilities of an Acre Fish Pond."

Jacob Reighard: "A Plea for the Preservation of Records concerning Fish," "Improvement of Fishing through a Knowledge of the Breeding Habits of Fish."

Phil C. Zalsman: "Experiments in Fish Culture while in the Employment of the Michigan and Wisconsin Fish Commissions."

Charles H. Nerley: "Small Mouth Black Bass."

J. P. Snyder: "Notes on Striped Bass."

J. T. Nichols: "Concerning Young Bluefish."

Dr. George W. Field, chairman, Massachusetts Fish and Game Commission: "The Alewife Fishery of Massachusetts."

Dr. T. H. Bean, state fish culturist, New York: "The Rearing of Small-mouthed Black Bass."

N. R. Buller, commissioner, Pennsylvania Fisheries Department: "The Work of the Pennsylvania Fisheries Department."

Charles G. Atkins, superintendent, U. S. Fisheries Station, Craig Brook, Maine: "The Atlantic Salmon."

Dr. Irving H. Field, Clark University, Worcester, Massachusetts: "The Development of the Salt Water Mussel Industry."

Professor Henry B. Ward, Urbana, Illinois: "Fish Refuges."

W. E. Meehan, director, Philadelphia Aquarium: "The Establishment of an Aquarium in Philadelphia."

Professor E. E. Prince: "Some Animals and Conditions Inimical to Fish Eggs and Larvæ in the Sea," "A Perfect Fish Pass; Some Suggestions as to Defects in Fish Passes and How to Overcome Them."

Henry C. Rowe, president, Oyster Growers and Dealers Association of North America: "The Oyster Industry."

David L. Belding, biologist, Massachusetts Fish and Game Commission: "Conditions Influencing the Growth of Clams (*Myra arenaria*)."

Professor G. H. Parker, Harvard University: "The Senses of Fishes."

The next annual meeting will be held in New Orleans beginning on September 30, 1914.

CHEMISTRY AT THE ATLANTA MEETING OF THE AMERICAN ASSOCIATION

At the meeting of the American Association for the Advancement of Science to be held in Atlanta, it is planned to hold sessions of Section C (Chemistry), of which no sessions were held at Cleveland in 1912. The general idea is to endeavor to have before Section C papers on chemical topics of wide and general interest, especially to workers in other branches of science and to laymen, leaving to the American Chemical Society the field which they already occupy, namely, the presentation of chemical papers to and for chemists. In pursuance of this plan it is proposed to have some short addresses, each of which will either deal with some general topic or be of the nature of reports of recent progress in some of the large branches of the subject of chemistry. A second day may, if it prove desirable and practicable, be devoted to a joint meeting of Section C with the local sections of the American Chemical Society, in which case papers dealing with more special subjects would be read. The secretary of Section C is Dr. John Johnston, Geophysical Laboratory, Washington, D. C.

SCIENTIFIC NOTES AND NEWS

THE University of Birmingham on September 11 conferred its doctorate of laws on the following foreign representatives in attendance at the meeting of the British Association: Madame Curie (Sorbonne, Paris), Professor H. A. Lorentz (Leyden), Professor Keibel (Freiburg), Professor R. W. Wood (Johns Hopkins) and Professor Svante Arrhenius (Stockholm).

THE evening discourses at the Birmingham meeting of the British Association were given by Sir Henry Cunynghame, of the Home Office, on "Coal Dust Explosions and the Means of Preventing Them," and by Dr. Smith Woodward, F.R.S., of the British Museum, on "Missing Links among Extinct Animals."

DR. WILHELM OSTWALD, the distinguished physical chemist and philosopher, celebrated his sixtieth birthday on September 2.

DR. G. S. FULLERTON, professor of philosophy at Columbia University and exchange professor with Austria, will lecture at Vienna six weeks in the autumn and six weeks in the spring. He will lecture also at Graz and Innsbruck.

THE Walker prizes in natural history of the Boston Society of Natural History have been awarded this year as follows: the first prize, amounting to \$100, to Dr. Reynold A. Spaeth, for his essay on "An Experimental Study Concerning the Chromatophores of Fishes," and the second prize of \$50 to Professor O. D. Von Engeln, for his essay on the "Effects of Continental Glaciation on Agriculture." Prizes for 1914 and 1915 will be awarded for original and unpublished research work in any biological or geological subject. The memoirs must be in the hands of the secretary on or before April 1.

THE University of Munich has awarded a prize of 3,000 Marks to Dr. Joseph Golling for his research entitled anthropological investigations on the bones of the nose in man.

PROFESSOR NEUBERG has been appointed a demonstrator in the chemistry division of the Kaiser Wilhelm Institute for Experimental Therapy in Dahlem, near Berlin.

DR. R. LÖWENHERZ, docent for chemistry at Königsberg, has been appointed curator of the chemical museum of the Berlin Technological Institute.

PROFESSOR A. KOLB, of the Technical Institute of Darmstadt, has retired to engage in industrial chemical work in Berlin.

MR. H. L. VIERECK, formerly with the Bureau of Entomology at Washington, is at present working with the Minnesota state entomologist, Professor F. L. Washburn.

THE annual meeting of the Association of Military Surgeons of the United States was held in Denver, Colo., September 16-19, under the presidency of Surgeon W. C. Braisted, U.S.N.

At the twenty-third annual meeting of the American Electrotherapeutic Association, held in New York on September 2, 3 and 4, the

following officers were elected: president, Dr. George E. Pfahler, of Philadelphia; vice-presidents, Dr. Albert C. Geyser, of New York, Dr. Frank B. Granger, of Boston, Dr. John D. Torbett, of Marlin, Texas, Dr. William L. Clark, of Philadelphia, and Dr. Frederick P. Tice, of Roanoke, Va.

PRESIDENT SCHURMAN, who has been on leave of absence from Cornell University for the past year, representing the United States at Athens as minister to Greece, has returned to the university.

PROFESSOR B. K. EMERSON, owing to an injury to his knee, will be unable to conduct the New England Intercollegiate Geological Excursion which was planned for the vicinity of Dalton, Mass., and consequently the meeting will not be held this year.

WE learn from *Nature* that a ship has been purchased for an Austrian expedition to the South Polar regions, and that funds are being collected in aid of the object. The expedition is to be under the leadership of Dr. F. König, of Graz, and the proposal is that it shall leave Trieste in May next. A large donation to the funds has been given by the Vienna Academy of Science, and the Austrian Geographical Society has promised an annual subsidy.

THE Philadelphia Alumni Society of the medical department of the University of Pennsylvania has issued an appeal for funds to endow a scholarship which it is planned to establish in memory of the late Dr. Roland G. Curtin.

KING GEORGE received recently at Buckingham Palace the members of the Scott Expedition and presented them with the antarctic medal and clasp. He also presented Lady Scott, Mrs. Wilson, Mrs. Evans and Mrs. Brinsenden with the medal and clasps which had been awarded to their late husbands, and to Mrs. Bowers the medal and clasp awarded to her son, the late Lieut. H. R. Bowers. At the request of the late Captain Oates's mother, the medal and clasp awarded to her son were received on her behalf by Commander Evans.

A MEMORIAL to the lost Russian explorer, Baron E. von Toll, is to be set up on the west

coast of Kotelnai Island, in the New Siberia group—the starting-point of the explorer and his companions on their last journey.

PROFESSOR JOHN MILNE has left his books, albums and scientific instruments relating to seismology to the British Association; and subject to his wife's interest £1,000 to the chairman of the seismology committee of the association, for the study of earth physics.

DR. ALEXANDER MACFARLANE, formerly instructor in physics in Edinburgh University and professor of physics in the University of Texas, recently residing in Chatham, Ontario, known for his contributions to vector analysis and quaternions, died on August 28, aged sixty-two years.

DR. HUGH MARSHALL, F.R.S., professor of chemistry in University College, Dundee, died on September 6, aged forty-five years.

DR. GEORGE FRIEDRICH KINKELIN, the geologist of the Frankfurt Senckenberg Natural History Society, has died at the age of seventy-eight years.

DR. BERNHARD BARDENHAUER, professor of surgery at Cologne, has died at the age of seventy-three years.

DR. WILHELM MUTHMANN, professor of chemistry in the Technical School at Munich, known for his work on the rare earths, has died at the age of fifty-two years.

DR. FRIEDRICH SEILER, professor of pharmaceutical chemistry at Lausanne, has died at the age of fifty years.

DR. O. M. REUTER, emeritus professor of zoology in the University of Helsingfors, died on September 2, at the age of sixty-three years.

COLUMBIA UNIVERSITY opened its 160th academic year on September 24, when Professor James F. Kemp, head of the department of geology, made the address, his subject being "The Appeal of the Natural Sciences."

THE sum of 90,000 francs has been bequeathed to the Pasteur Institute at Paris for the founding of a prize for the best original work in the treatment of meningitis.

THE sixth annual meeting of the Association of Official Seed Analysts will be held in

Washington, D. C., November 14 and 15, at the time of the meetings of the Agricultural Group of Societies.

THE Prussian ministry of education, which a short time ago made grants of money to the university clinics at Berlin, Halle and Kiel, enabling them to procure radium or mesothorium for the treatment of cancer, is now said to have placed \$200,000 in the estimates of next year for further purchases.

IT is stated that the Maharaja Scindia of Gwalior is giving special attention to the archeological relics and treasures in his state, and is taking steps to create an archeological department in Gwalior. In furtherance of this object he has sought the advice and cooperation of the director-general of archeology in India.

LORD MURRAY, of Elibank, has concluded with the government of Ecuador a contract for the development of the oil resources of the republic. Under this contract Lord Murray undertakes to spend £100,000 within ten years in exploring for oil in Ecuador. Work is to begin within a year of the publication of the proposed law, and competent geologists and engineers are to be employed who are to supply the government with detailed maps of the country they survey and to keep the government specially informed as to discoveries of artesian water.

A FURTHER grant of £5,000, making £10,000 in all, has been made by the federal government of the commonwealth of Australia towards completing the work of the Mawson Antarctic Expedition and bringing the explorers back.

THE *Journal* of the American Medical Association says that the initiative of the medical profession of Philadelphia and Pennsylvania has brought into legal existence large new institutions that will bring the city and state well into the advance along social lines: Mentally defective women of childbearing age, of whom at least 15,000 are known to be within the state, will now be permanently segregated in a great farm colony in a remote mountain forest reserve, thus preventing further multi-

plication. A home for alcohol and drug habitués, long agitated, is provided for in another forest reserve as, elsewhere, is an industrial home for women.

It is stated in *Nature* that the Italian archaeological mission to Crete, under the leadership of Professor Halbherr, announces the discovery at Cortina of a temple dedicated to Egyptian deities, bearing the dedication by Flavia Philyra, the foundress. In the inner cella were found images of Jupiter, Serapis, Isis and Mercury, with fragments of a colossal statue, supposed to be that of the foundress. A little flight of steps leads down to a subterranean chamber in which ceremonies of purification were performed. The excavation of the numerous prehistoric sites in the island of Malta is being actively prosecuted under the direction of Professor T. Zammit. The most important discovery is that of a series of well tombs of the Punic type at the Kallilia plateau, northwest of Rabat. A large number of skeletons, with pottery, lamps, spindle-whorls and a circular bronze mirror, has been unearthed. A partial exploration of the Ghar Dalam cave, conducted by Professor Tagliaferro and Mr. C. Rizzo, produced bones of a hippopotamus and a deer, above which lay a quantity of prehistoric sherds. The museum, by the bequest of the late Mr. Parnis, has received a large collection of books about Malta and numerous antique objects.

UNIVERSITY AND EDUCATIONAL NEWS

It is announced that the scheme for the establishment of a school of tropical medicine in Calcutta is now so far advanced towards fulfilment that there is every reason to hope that it will be opened in the autumn of next year.

PROFESSOR ALEXANDER T. ORMOND has resigned the McCosh professorship of philosophy at Princeton University to accept the presidency of Grove City College.

PROFESSOR ALEXANDER SMITH, head of the department of chemistry in Columbia University, who has been elected professor of chem-

istry at Princeton University, will not assume his new duties until the academic year 1914-1915.

THE vacancy created at Vassar College by the resignation of Professor Clark Wells Chamberlain, in order to take the presidency of Denison University, has not been filled; Associate Professor Edna Carter will act as head of the department of physics for the present year.

At Lehigh University the following promotions in the faculty are announced: George C. Beck, to be assistant professor of quantitative analysis; Sylvanus A. Becker, assistant professor of civil engineering; Joseph B. Reynolds, assistant professor of mathematics and astronomy; Rollin L. Charles, assistant professor of physics; Stanley J. Thomas, instructor in biology. The following appointments have been made: Ferdinand F. Hintze, assistant professor of geology; Siegfried Fischer, instructor in metallurgy; Wallace G. Matteson, instructor in geology; Edgar C. Weinsheimer, instructor in geology; M. S. Knebelman, instructor in mathematics; James B. Arthur, instructor in electrical engineering.

At Rutgers College Stanley E. Brasefield, Ph.D. (Cornell), and William Beverly Stone, Ph.D. (Univ. of Va.), have been appointed assistant professors of mathematics.

L. C. PLANT, who has been at the head of the department of mathematics in the University of Montana for the past six years, has resigned, to accept the position of head of the department of mathematics in the Michigan Agricultural College. He has been succeeded by Dr. N. J. Lennes, of the department of mathematics of Columbia University.

DR. WALTER KRUSE, of Bonn, has been appointed professor of hygiene at Leipzig.

DISCUSSION AND CORRESPONDENCE

BIT OF HISTORY

IN the issue of *SCIENCE* for August 15, 1913, there is quoted from *The Independent* of fifty years ago the statement that "Professor Wollcott Gibbs" had been chosen to the Rumford