

hogs and of cattle than of human beings. The first legislative step to be taken is that for the concentration of the proper bureaux into one of the existing departments. I therefore urgently recommend the passage of a bill which shall authorize a redistribution of the bureaux which shall best accomplish this end.

WOLCOTT GIBBS

DR. OLIVER WOLCOTT GIBBS, from 1863 to 1887 Rumford professor of applied science and later emeritus professor in Harvard University, past president of the National Academy of Sciences and of the American Association for the Advancement of Science, died at his home in Newport, R. I., on December 9, in his eighty-seventh year. We hope to print later an adequate appreciation of Professor Gibbs's contributions to chemistry. A biographical note, prepared by him about two years ago and given to his nephew, Dr. Alfred Tuckermann, with the request that it be published after his death, is as follows:

Oliver Wolcott Gibbs was born in New York, February 21, 1822. He was the second son of George and Laura Wolcott Gibbs and grandson of Oliver Wolcott, secretary of the treasury during part of the presidency of Washington and of John Adams. His father, Colonel George Gibbs, owned a large estate on Long Island known as Sunswick, a few miles from the then small city of New York. He was one of the earliest American mineralogists, devoted to that branch of science, and an active and successful horticulturist. Wolcott, like his elder brother, inherited his father's tastes: He was often occupied with making volcanoes with such materials as he could obtain and in searching the stone walls on the estate for minerals, and the gardens and fields for flowers. His mother was an artist of no mean ability, and often won the praises of Gilbert Stuart by her work. At the age of seven, Wolcott went to reside in Boston with his aunt, Miss Sarah Gibbs, who, at that time, with her brother-in-law, Dr. Channing, and her sister, occupied a fine mansion in Mount Vernon Street during the early spring and

winter months. The boy was sent to a school kept by Mr. Leverett, a prominent Latin scholar. Among his fellow pupils were William M. Evarts, the two brothers Perkins, Greenough, Samuel Eliot and others who in time became distinguished. Miss Gibbs and the Channings spent the summers and autumns at Oakland, a large estate about five miles from Newport, Rhode Island, which, under their care, became, as it still is, very attractive. The summer home was a most hospitable one and Dr. Channing's fame brought many foreign visitors. When about twelve years of age, Wolcott, whose father had died in 1833 at Sunswick, was sent to a celebrated school at Flushing, Long Island, kept by the Rev. Dr. Muhlenberg. He was two years at this school of which he entertained always an affectionate remembrance. In 1835 the estate at Sunswick was sold and the family moved to New York. Wolcott was sent to the grammar school of Columbia College and in 1837 he entered Columbia College as a freshman.

In 1841 he graduated and later became assistant to Dr. Robert Hare who held the chair of chemistry in the medical school of the University of Pennsylvania. After some months in the laboratory, Wolcott commenced the study of medicine with the view of qualifying himself to hold the chair of chemistry in a medical school. After two years of study at the College of Physicians and Surgeons in New York, he received the degree of Doctor of Medicine in 1845, and shortly after sailed for Hamburg. He took up his residence in Berlin and entered, as a student, the laboratory of Professor Carl Rammelsberg. After some months with him, he entered the laboratory of Heinrich Rose, where he remained about a year. He then went to Giessen where he spent one semester with Liebig. Thence to Paris, where he attended lectures by Laurent and Dumas, and especially by Regnault. He returned to New York in the fall of 1848, having received from the College of Physicians and Surgeons an offer of an assistant professorship of chemistry, Dr. John Torrey being full professor. In 1849 he was elected professor of chemistry and

physics in the newly created Free Academy, now the College of the City of New York, and in 1853 married Josephine, daughter of Oroondates and Martha Eddy Mauran. He remained professor for fourteen years, when he was elected Rumford professor in Harvard University, to fill the vacancy occasioned by the resignation of Professor E. N. Horsford and removed to Cambridge in August, 1863. At the outbreak of the civil war, he took an active part in the creation of the Union League Club. In 1887 he resigned the Rumford professorship in Harvard University and built and equipped a laboratory near his residence at Newport, Rhode Island. Dr. Gibbs received the degree of LL.D. from Columbia College, Harvard University, the University of Pennsylvania and the Columbian University of Washington. He was an honorary member of the German, English and American Chemical Societies, of the Royal Society of Berlin and of the Philosophical Society of Philadelphia.

PRESIDENT ROOSEVELT'S AFRICAN TRIP

IN March, 1909, Mr. Roosevelt will head a scientific expedition to Africa, outfitted by the Smithsonian Institution and starting from New York City. This expedition will gather natural history materials for the government collections, to be deposited by the Smithsonian Institution in the new United States National Museum, at Washington, D. C.

Besides the president and his son, Kermit Roosevelt, who will defray their own expenses, the personnel of the party, on leaving New York, will consist of three representatives of the Smithsonian Institution: Major Edgar A. Mearns, Medical Corps, U. S. Army (retired), Mr. Edmund Heller and Mr. J. Alden Loring. On arriving in Africa, the party will be enlarged by the addition of Mr. R. J. Cuninghame, who is now in Africa preparing the president's outfit. He will have charge of a number of native porters, who, with necessary animals, will be formed into a small caravan.

Mr. Roosevelt and his son will kill the big game, the skins and skeletons of which will be prepared and shipped to the United States by

other members of the party. Mr. Kermit Roosevelt is to be the official photographer of the expedition.

The national collections are very deficient in natural history materials from the Dark Continent; and an effort will be made by the expedition to gather general collections in zoology and botany to supply some of its deficiencies; but the main effort will be to collect the large and vanishing African animals.

Mr. R. J. Cuninghame, who is now engaged in assembling the materials for Mr. Roosevelt's use, has been employed to act as guide and manager of the caravan. Mr. Cuninghame is also an experienced collector of natural history specimens, having made collections for the British Museum in Norway and Africa. He is an English field man, who has guided numerous hunting parties in Africa and who was chief hunter for the Field Columbian Exposition.

Mr. Edmund Heller, a graduate of Stanford University, class of 1901, is a thoroughly trained naturalist, whose special work will be the preparation and preservation of specimens of large animals. Mr. Heller is about thirty years of age. His former experience, when associated with Mr. D. G. Eliot and Mr. Ackley, of the Field Columbian Museum, in collecting big game animals in the same portions of Africa which Mr. Roosevelt will visit, will be a valuable asset to the expedition. Mr. Heller has had large experiences in animal collecting in Alaska, British Columbia, United States, Mexico, Central America and South America. In the year 1898 he made a collecting trip of eleven months to Gallapagos Islands, starting from San Francisco. He is the author of scientific papers on mammals, birds, reptiles and fishes. At present he is assistant curator of the Museum of Vertebrate Zoology of the University of California.

Mr. J. Alden Loring is a field naturalist, whose training comprises service in the Biological Survey of the Department of Agriculture, and in the Bronx Zoological Park, New York City, as well as on numerous collecting trips through British America, Mexico and the United States. He is about thirty-eight years