of arts, literature and science are compelled to take on additional work to meet their economic needs. Those entrusted with the education of youth and the increase of knowledge still follow their high calling amid financial discouragements, and, because of un-

PROFESSOR JOHN A. MANDEL

ON Sunday, May 5, 1929, Professor John Alfred Mandel died after an illness of two years' duration. His death was due to myocarditis, and he bore the slow and insidious developments of this disease with fortitude.

Professor Mandel was born on October 18, 1865, in Stockholm, Sweden, and was brought to this country by his parents at the age of five. The family settled in Boston, Massachusetts, where he received his early education in the public schools and the English High School of Boston. Later he studied at the University of Berlin, specializing in chemistry and allied sciences. He received the degree of doctor of science from New York University in 1901.

He was married in 1891 to Paula A. Heinrich, of Berlin, Germany, who survives him.

His academic career began in 1884 when he became the assistant to Professor Charles Doremus at the Bellevue Hospital Medical College. In 1894 he accepted the appointment as professor of chemistry in the New York College of Veterinary Surgeons, and held this position until 1897. From 1897 to 1898 he was assistant professor of chemistry and physics at the College of the City of New York, and at the same time was adjunct professor of chemistry at the Bellevue Hospital Medical College. From 1898 until his death he was professor of chemistry in the University and Bellevue Hospital Medical College of New York University.

Throughout his career Professor Mandel took active interest in scientific societies here and abroad. He was a member of the following: American Chemical Society, American Physiological Society, American Association for the Advancement of Science, Society of Biological Chemists, Society for Experimental Biology and Medicine, Harvey Society, Deutsche Chemische Gesellschaft and an associate fellow of the New York Academy of Medicine. In addition, he was a member of the Century Association of New York, and the Nu Sigma Nu and Phi Gamma Delta fraternities. He attended practically all the International Physiological Congresses for the past twentyfive years.

He was a man of broad culture and an indefatigable research worker in chemistry, having contributed many original papers to the chemical journals. favorable financial prospects, able and inspiring young men and women are still deterred from devoting their lives to teaching.

(Further contributions to the discussions, by Professor Rodney H. True and Professor Harold F. Clark, will appear in the next issue of Science.)

OBITUARY

His researches were carried out independently in part, as well as in collaboration with Carl Neuberg, P. A. Levene, E. K. Dunham and Hans Oertel.

The principal field of his researches was the chemistry of nucleic acid, and he published papers on nucleic acids and glutathionic acid of the mammary glands; on nucleic acids and their cleavage products and also on the origin of glycuronic acid.

Professor Mandel's translation of Hammarsten's well-known "Lehrbuch der Physiologischen Chemie" was first done in 1893, and he translated five subsequent editions of the book, thereby furnishing a most valuable aid to the biological chemists of this country and England. He also translated Arnold's "Repetitorium der Chemie."

His own works include a "Handbook for the Biochemical Laboratory," 1896 (J. Wiley and Sons); "Handbuch für das Physiologische-Chemische Laboratorium," 1897 (M. Krayn, Berlin), and "Micrometrische Methoden der Blutuntersuchung," in collaboration with Dr. Steudel, Berlin, 1921, first edition (translated into Italian, 1924), 1924 second edition.

In 1912 Professor Mandel was created a Knight in the Order of the North Star by King Gustave of Sweden for his scientific work and writings, and received in 1914 the Rote Kreuz Medaille from Emperor Francis Josef of Austria for his work in the Austrian Red Cross. In 1923 the honorary degree of doctor of agriculture was conferred upon him by the University of Berlin, and in 1926 he was elected a member of the German Academy of Natural Sciences of Halle. In 1924 he was made an honorary member of the Berliner Physiologische Gesellschaft. He was a frequent and welcome guest in many of the cultural centers of Europe, especially in Germany, where he carried on investigations in numerous laboratories, and but a short time ago was the recipient of an invitation from the George Speyer Laboratory for Chemotherapy, the scene of Paul Ehrlich's activities, which extended to him its courtesy for a whole year.

Professor Mandel will be best remembered by his thousands of students for his eloquent and forceful teaching. He was a splendid and inspiring lecturer and had the rare ability to impart his knowledge. Many of his students will remember his kindly sympathy and ready help in their difficulties. His life is best summed up as one of devotion to his students and science. His death is a profound loss and is mourned by his friends, associates and students who revere his memory.

W. C. MACTAVISH

RECENT DEATHS

DR. PAUL A. LEWIS. of the department of animal pathology of the Rockefeller Institute for Medical Research, Princeton, N. J., who has been studying yellow fever in Brazil, died of the disease in Bahia on June 30. Dr. Lewis was born in Chicago in 1879. and held the medical degree of the University of Wisconsin. He was professor of pathology at the University of Pennsylvania from 1910 to 1923.

WILLIAM SYMES ANDREWS, an Englishman who came to the United States to work with Mr. Edison in 1879, and who for thirty-five years has been associated with the General Electric Company, especially in investigations on X-rays, died on July 6, in his eighty-second year.

DR. WILLIAM A. GIFFEN, a former president of the American Dental Association, has died at the age of sixty-three years.

THE death is announced at the age of sixty-eight years of Dr. Robert John Harvey-Gilson. emeritus professor of botany in the University of Liverpool.

SCIENTIFIC EVENTS

THE OPENING OF DOWN HOUSE

DOWN HOUSE, the home of Charles Darwin, at Downe, in Kent, which has been presented to the British Association by Mr. Buckston Browne as a national memorial of the great naturalist, was declared open to the public on June 7 by Sir Arthur Keith. .The London Times reports that the opening was attended by a large company, who traveled to Downe from Burlington House in motor-omnibuses, the village being remotely situated, four miles from Orpington, the nearest railway station, and unserved by public conveyance. After leaving the high-road, the way to the house lies through miles of country lanes.

As the Times recalls, Down House was purchased for Darwin by his father, Dr. Darwin, and he took up his residence there on September 14, 1842. Darwin was then in his thirty-fourth year, and three years previously he had married his cousin, Emma Wedgwood. His reason for moving into the country was. as he said, that attendance at scientific societies and ordinary social duties in London threw too great a strain on his rather indifferent health.

Darwin worked continuously at Down House for almost forty years. Preparations for the "Origin of Species" went on from 1842 until the work received its final form in 1858-59. As has been well said, from Down Charles Darwin shook the world and gave human thought an impress which will endure for all time. Down was also the home of a large and happy family, perhaps the most gifted family ever born in England. There the great naturalist died on April 19, 1882, in his seventy-fourth year.

Mr. Buckston Browne has preserved numerous articles associated with Darwin's daily life. Among them are the snuff-jar which Darwin kept, not in his study but in the hall, in the vain hope of breaking himself of the habit, and the grand piano on which

Mrs. Darwin used to play when her husband came to the drawing-room after his regular periods of two hours' work. In the study is his circular revolving writing table fitted with many drawers, and his chair. In other rooms there are replicas of the portraits of Darwin and Huxley, painted by Mr. John Collier, commissioned by Mr. Buckston Browne. The bust of Darwin by Mr. Charles Hartwell, R.A., now in the Royal Academy, is to be removed to Down House as a present from Dr. Joseph Leidy, representing the American Association for the Advancement of Science. Another interesting gift is the microscope given by Darwin to John Lubbock (afterwards Lord Avebury) when he was a boy.

Sir William Bragg, president of the British Association, presided at the opening and addresses were made by Mr. Buckston Browne, Sir Arthur Keith, Dr. Joseph Leidy, representing the American Association for the Advancement of Science, and Professor R. Anthony, representing France.

THE JOINT MEETING OF THE FRENCH AND BRITISH ASSOCIATIONS AT HAVRE¹

IN 1914, while the British Association was meeting in Australia, the delegates of the corresponding societies were invited as guests at the conference of L'Association Française pour l'Avancement des Sciences, then being held at Havre. Those who were present will remember the hospitable way in which they were entertained at the Hotel Frascati, at the meetings and excursions, though as day by day passed there seemed to be something mysterious going on; the hotel gradually emptied, there were signs and whisperings, the members were impressed by the enormous accumulation of foodstuffs in the warehouses, and before the meeting was closed the declaration of war explained a good deal. The members had to find their way back 1 Nature.