where the journals were printed. This became later the Chemical Publishing Company, managed by Dr. Hart until his death. From it also started the Mack Printing Company, and thus Easton came to be one of the largest centers of scientific publication. He gave up his editorship of the journal in 1901. .

In 1881 he started with one of his pupils, John T. Baker, to manufacture pure chemicals. In a year they took into the firm another of his pupils, George D. Adamson, and thus was formed the firm of Baker and Adamson which grew until it was absorbed into the General Chemical Company in 1901 and into the Allied Chemical and Dyestuff Corporation still later. J. T. Baker Chemical Co. branched off, starting business across the Delaware River in Phillipsburg, N. J.

Few teachers have been connected with the same institution for fifty-seven years. Still fewer have shown so great versatility and energy. It is worthy of note that Dr. Hart did not win a bachelor's degree in course from any college, but no doubt his training with Judge Watson and Dr. Drown gave him the ability to impress Dr. Remsen with his merit, and some years later Lafayette College gave him an honorary B.S. and thus he became a graduate without classmates. He left a lasting imprint upon American chemistry. He also took a part in local affairs, having been president of the Board of Trade, of the Northampton County Motor Club, member of the City Council, progressive candidate for Congress. In 1924, there was held at Easton an Edward Hart celebration, when the college awarded him an LL.D. degree. At that time Dr. Wiley, Dr. Hildebrand, Dr. Nichols and Dr. Edgar F. Smith were among those friends who paid him honor. They have now all passed on.

EUGENE C. BINGHAM

LAFAYETTE COLLEGE

SHIBASABURO KITASATO

SHIBASABURO KITASATO, the founder of the Kitasato Institute of Tokyo, a pioneer in the field of bacteriological research and one of the outstanding figures of modern Japan, passed away suddenly, at the age of seventy-five, on June 13, 1931.

Kitasato was born in 1856, at Ogunigo, a mountainous village in Kiusiu, Southern Japan, where he received his early education. After studying at the then newly established Medical School in Komamoto, and at the Government Medical School at Tokyo, the forerunner of the present Faculty of Medicine of the Tokyo Imperial University, he entered the service of the Central Bureau of Public Health.

In 1885, he was sent to Germany by the Japanese government in order to study bacteriology under its founder, Robert Koch. Devoting himself to careful studies in this new field, he succeeded in obtaining the pure culture of the tetanus bacillus. Furthermore, he proved that the antitoxin produced in the animals which were immunized against tetanus toxin was a specific therapeutic agent. Kitasato's work on tetanus was published conjointly with that of von Behring on diphtheria under the title of "Production of Immunity to Diphtheria and to Tetanus in Animals." This was the foundation of serotherapy, by which the whole world was benefited.

While he was pursuing his work under Koch, particularly in the field of the study of tuberculosis, the time came for him to return to Japan. But the Emperor of Japan, learning of Koch's earnest desire to retain his assistant, granted Kitasato a fund which enabled him to continue his study in Koch's institute, under imperial patronage. When after seven years' sojourn in Germany he returned home in 1892, the German government conferred upon him the title of "Professor," the first honor given to a foreign scientist by the German government.

Through the generosity of Yukichi Fukusawa, one of the greatest figures of the Meiji era, Kitasato established a laboratory for the study of bacteriology, which was the first institution for scientific research in Japan. This laboratory, later brought under the control of the Hygiene Society of Japan, subsequently by continual enlargement developed into an institute in which research in bacteriology and the study of infectious diseases made steady and firm progress. Recognizing the services which it rendered, the government granted financial aid for a new building and in 1899 took over the institute under the control of the Ministry of the Interior. The work of the institute, organized and directed by Kitasato, was enlarged and finally the vaccine lymph farm and the serum institute, both of which had been established by the government, were amalgamated with the Institute for Infectious Diseases under Kitasato. New buildings were erected at Shirokane-daimachi in 1905. Meanwhile the institute had published the results of several important researches in bacteriology, and at the same time Kitasato had, at the request of the government, gone abroad on various missions. It is particularly noteworthy that during an epidemic of bubonic plague in 1894 he went to Hongkong and discovered the plague bacillus. In 1911, he visited Manchuria to study preventive measures against pneumonic plague, during the most violent epidemic experienced in recent years. At an International Plague Conference held at Mukden, Kitasato was elected its president to take charge of this important work.

In 1914, the Imperial Institute for Infectious Diseases, which Kitasato had established and directed, was transferred to the control of the Ministry of

Education and later was amalgamated with the Tokyo Imperial University. This administrative change was carried out without consulting its founder and director, and led to the resignation of Kitasato, followed by that of all the members of the institute.

In order to continue his life work, Kitasato then established, in cooperation with his well-trained and faithful pupils, a private laboratory known as the Kitasato Institute. This new organization was in reality the continuation of the institute which had been established some twenty-five years ago. The small institute building erected in 1914 in a corner of Shirokane Sankocho has since, under its trusted founder and director, grown into the present large establishment.

While he was engaged in the work of the new institute, the Keio-Gijiku University, also founded by Yukichi Fukusawa, invited Kitasato to organize a new medical faculty. He accepted the offer and organized the faculty in 1910, since when it has made steady progress and is now counted among the most prominent centers of medical education in Japan. When Kitasato resigned from his post as dean of the medical faculty, Dr. Kitashima, his lifelong associate, succeeded him.

In 1917, the Emperor appointed Kitasato a member of the House of Peers for his distinguished public service, and he entered into political life. After attempts lasting a number of years, he obtained the approval of the Diet for a bill organizing on a legal basis the Medical Practitioners' Association of Japan, and since the creation of the association some ten years ago, he served as its president. In recognition of his merits in science and in public service in improving the national health, Kitasato was elevated to the peerage and made a baron in 1924.

His scientific achievements and his valuable contribution to human welfare were recognized, not only in his native country, but abroad also. Many learned societies conferred honors upon Kitasato by granting him their fellowship or membership; he was a member of the Imperial Academy of Japan, foreign member of the Royal Society of London, Ehrenmitglied der Preussischen Akademie der Wissenschaften of Berlin, Associé Etranger de l'Académie de Médecine de France, etc.; and was awarded the Harben Gold Medal of the Royal Sanitary Institute of London.

On several occasions he went to Europe and America to attend international scientific congresses. Kitasato always had a firm belief that his mission in life was that of scientific investigation and the advancement of public health. Thus he continued his study on tuberculosis until the end of his life.

All of us who have been associated with him in his work hoped that Kitasato might yet live long years to guide us with his master mind to greater progress in medical science and public health. His sudden loss has deprived us of one of the most distinguished and influential leaders in both scientific and social circles in modern Japan.

In recollecting the dominant characteristics of this great man, I may mention one of his traits which has left us the deepest impression. Kitasato was a man of devoted affection toward his parents and his teacher. While Koch was in Japan, Kitasato always attended him with the utmost respect, as though serving his own father. When Koch died, Kitasato built a shrine in the inner court of the institute in remembrance of his great teacher. Each year, on the day of Koch's death, Kitasato commemorated, with an appropriate Shinto ceremony, the memory of the departed soul. Now that he himself has passed beyond the horizon of life, the two great souls may meet in eternity. Beyond the changes which may come to human life and institutions, the spirit of the great man lives forever.

MIKINOSUKE MIYAJIMA

KITASATO INSTITUTE,
TOKYO

RECENT DEATHS

DR. PER AXEL RYDBERG, for the last thirty-two years curator of the New York Botanical Garden in the Bronx, died on July 25. He was seventy-one years old.

DR. LEE K. FRANKEL, second vice-president of the Metropolitan Life Insurance Company, known for his work on statistics and welfare problems, died in Paris on July 25. He was sixty-five years old.

DR. PAUL TOMPKINS HARPER, since 1915 professor of obstetrics at Albany Medical College, died on July 11 at the age of forty-nine years.

THE death is announced on July 24 of Mrs. Lindsay Morris Sterling, sculptor and artist, who had been associated with the American Museum of Natural History for the last thirty years.

MISS HENRIETTA SCHMERLER, a candidate for the Ph.D. degree in the department of anthropology of Columbia University, aged twenty-three years, has been murdered on the Fort Apache Reservation, Arizona, where she was engaged in a study of the ceremonial and tribal home life of the Apache Indians.