On his return to Japan in 1891, he founded a private bacteriological institute in 1892, and a year later it was subsidised by the Government of Japan. From 1899 until 1914 this great bacteriological institute—the Imperial Japanese Institute for Infectious Diseases—was directed by Kitasato with skill and success. Many of his pupils have attained a wide reputation in Europe.

For his valuable services to his country, Prof. Kitasato was chosen a member of the Japanese House of Peers in 1916, and was raised to the peerage with the title of Baron in 1923.

The impression he made was one of great dignity and seriousness, but he talked freely in German on bacteriological subjects. His knowledge of English was negligible.

Kitasato has created for himself by his high-class scientific work an enduring name not only in

On July 25 occurs the centenary of the death of the astronomer, Fearon Fallows, the first director of the observatory founded at the Cape of Good Hope through the action of the Commissioners of Longitude. Born in July 1789, at Cockermouth, Cumberland, the birthplace of Dalton, Fallows was brought up to his father's trade of weaving, but by study and the assistance of a clergyman was able to become a school teacher and then to proceed to Cambridge. Entering St. John's College, he graduated as third Wrangler in 1813, Sir John Herschel being Senior Wrangler, and became mathematical lecturer at Corpus Christi College. On Oct. 20, 1820, he was chosen director of the proposed observatory at the Cape, and to him fell the lot of choosing the site and of installing the first instruments. Immediately on arrival in 1821, with small instruments made by Dollond and Ramsden, he began observations of the principal southern stars, the results of which are contained in his catalogue of 273 stars contributed to the Royal Society in 1824. Later on, he published an account of a series of pendulum experiments. His work was done with but little assistance and in discouraging circumstances. He himself suffered from the effects of sunstroke, and his death at the early age of forty-two years was brought about through scarlatina and dropsy. He died at the naval base, Simons Town, but his grave, marked by a slab of black Robben Island stone, is near the observatory. He left some four thousand observations, which were afterwards reduced by Airy. His successors at the Cape have included Henderson, Maclear, Stone, and Sir David Gill.

ON July 17, in the Public Library of Kingston-on-Thames, a portrait memorial tablet was unveiled to commemorate the work of Eadweard Muybridge, one of the pioneers of modern cinematography. Born at Kingston-on-Thames in 1830, Muybridge emigrated to America, and, joining the staff of the United States Coast and Geodetic Survey, he rose to be director of the photographic surveys. About 1872, a discussion arose among some horse-lovers at the Sacramento racecourse, California, as to whether a horse ever had all Japanese medicine but also over the whole world. He was admitted a foreign member of the Royal Society in 1908. W. B.

WE regret to announce the following deaths :

Lieut.-Col. Sir Charles Bedford, formerly director of the Central Excise Laboratory for India, known for his work on the manufacture and excise control of alcohol in India, on July 8, aged sixty-five years.

Dr. E. G. Echeson, known for his work in electrometallurgy and chemistry, formerly assistant to Edison, on July 6, aged seventy-five years.

Prof. C. H. Kauffman, emeritus professor of botany and emeritus director of the herbarium of the University of Michigan, on June 14, aged sixty-two years.

## News and Views.

four feet off the ground at once. A wager having been made, Muybridge was asked to settle the point with the aid of the camera. Placing on one side of the track a long white screen and on the other twenty-four cameras, he stretched threads across the track which were broken by the horse and released the camera shutters. The results were conclusive and showed that a galloping horse did, at times, have all four feet off the ground. Muybridge's interest was stimulated by this work and he carried on his investigations. publishing a book, "The Horse in Motion", and inventing apparatus for projecting pictures at rates between 12 and 32 pictures a second. In 1880 he invented his zoopraxiscope; in 1881, in Paris, where he met Marey, he also produced moving pictures, and the following year he lectured on the subject at the Royal Institution. He died twenty-seven years ago, bequeathing his zoopraxiscope and lantern slides to Kingston Museum.

AT the ninety-ninth annual meeting of the British Medical Association held at Eastbourne on July 17-25. the president, Dr. W. G. Willoughby, Medical Officer of Health of the town, took as the subject of his address, "Public Health-To-day and To-morrow". Respecting to-day, the situation is not altogether satisfactory, for the Registrar-General's returns for England and Wales demonstrate that there are still far too many deaths at early ages; and that, though the vitality of the nation has steadily improved, the expectation of life is still only fifty-five years for males and fifty-nine years for females. Coincidently with the 40,000 annual deaths of children who escape the risks of infancy, there must be a large amount of sickness among the survivors, causing much indifferent health and permanent physical defects. That this is so is confirmed by the reports of national health insurance and by the wholesale rejections of would-be recruits for the fighting services. In the outlook for the future, owing to the reduction in the birth and death rates, we now have to deal with a population increasingly older than in the past; and as the population becomes older the prospect of a further reduction