canning industry became seriously alarmed. Gilbert came to the aid of British Columbia and produced a series of admirable papers on the life history of the most valuable species (*Oncorhynchus nerka*), the Sockeye, and laid the foundation for the scientific study of the other species found in the rivers of the coast.

Since the salmon interests of the State of Washington and of British Columbia were inextricably linked in any scheme of regulative treatment, it was clear that only by the creation of a joint body representing both the United States and Canada could satisfactory results be attained. Dr. Gilbert was one of those who actively urged the calling of a conference for the consideration of this proposal, and in the spring of 1925 a representative body assembled at Seattle. From this there sprang into being the International Pacific Salmon Investigation Federation under the chairmanship of Mr. Henry O'Malley, the U.S. Commissioner of Fisheries. One of the important lines of investigation decided upon was the migrations of salmon to Alaska and an estimate of the spawning stocks necessary for the maintenance of the fisheries, and this work was naturally put into Dr. Gilbert's hands. The biological work generally is in charge of Dr. Willis Rich, of the U.S. Bureau of Fisheries, a worker who has repeatedly collaborated with Dr. Gilbert in recent years.

The Federation has suffered a great loss in the death of one of its most thorough and trustworthy investigators. W. L. C.

DR. HIDEYO NOGUCHI.

WE much regret to see the announcement that Dr. Noguchi died at Accra on May 21, of yellow fever contracted in the course of his investigation of the cause and mode of transmission of that disease. Our readers will recall that Prof. Adrian Stokes died in the same way in September last, and some of them may remember the death of that brilliant young man, Walter Myers, when he went to Para on the same errand so long ago as 1901.

During the last ten years Dr. Noguchi has been extensively engaged on the parasitology of yellow fever as it occurred in Central and South America, working in conjunction with the sanitary campaign by which the International Health Board have very nearly succeeded in eradicating the disease in those parts. In Ecuador in 1918 he found a spirochæte which could be grown in pure culture and with which a disease resembling yellow fever could be produced in guinea-pigs and some other animals. The organism had been seen in the kidney of a fatal case some years before by Stimson, but his account was published briefly in an official report, and no particular importance was attached to it. Noguchi produced cumulative evidence that his *Leptospira icteroides* was distinct from other similar organisms and etiologically related to yellow fever, which was very strong if not entirely conclusive: a convenient summary by him will be found in the *Lancet* (1922, vol. i. p. 1185). The well-established facts that the disease can be transmitted by an ultramicroscopic agent either by injection or through the mosquito are quite in harmony with his thesis, for other spirochætes are known to have invisible phases. With his cultures he prepared vaccines and sera, but there has, we believe, been no satisfactory opportunity for getting a conclusive test of their value in prevention and treatment. The American commission which for the past two years has been investigating the disease as it occurs in West Africa, to which Prof. Stokes was attached, found that the indigenous monkeys and other animals were quite immune to the disease, but by the use of highly susceptible *Macacus* imported from India they have provided further experimental proof that the disease is transmissible by mosquitoes, and that the virus is invisible. Of the *Leptospira* they could find nothing, possibly because yellow fever in Africa is not the same thing as yellow fever in the Americas. It was doubtless this discrepancy which led Dr. Noguchi to Accra last November with such unhappy results.

Dr. Noguchi was born in Japan in 1876, and educated at Tokyo University and the Institute for Infectious Diseases. He went to the United States in 1901 as lecturer on pathology in the University of Pennsylvania, and afterwards worked at the Carnegie Institution. Since 1914 he has been one of the most distinguished members of the staff of the Rockefeller Institute. Apart from yellow fever, he will be remembered for his pioneer work on the cultivation of spirochætes outside the body and their specific differentiation, for his demonstration of the *Spirochæta pallida* in the brain which gave the final proof that general paralysis was syphilitic, and for his work on vaccine virus. The successive volumes of the *Journal of Experimental Medicine* are good enough evidence of his fertile brain and clever hands. Lately he has been working out the cause of oroya fever in Peru, which seems to be due to a minute parasite inside the red blood corpuscles.

WE regret to announce the following deaths:

Mr. A. R. Bennett, a well-known telephone engineer who was responsible for many inventions connected with the telephone in its early days, on May 24, aged seventy-eight years.

Dr. William F. M. Goss, past president of the American Society of Mechanical Engineers and formerly professor of railway engineering and dean of the college of engineering at the University of Illinois, on Mar. 23, aged sixty-eight years.

Dr. John Horne, F.R.S., formerly assistant director in Scotland of the Geological Survey, on May 29, aged eighty years.

Prof. C. W. Howard, director of the Government Bureau for the Improvement of Sericulture in Kwongtung Province, who had recently been appointed head of the Department of Biology at Wheaton College, Illinois, and was an entomologist of wide experience in the United States, South Africa, and China, on Mar. 1, aged forty-six years.

Prof. Otto Nordenskjöld, an honorary corresponding member of the Royal Geographical Society, leader of the Swedish Antarctic expedition of 1902–3, on June 2, aged fifty-eight years.