

Physiology in the Rockefeller Institute, a position which he held until his death in 1924. Founder of the modern school of physiology, his early experiments in artificial parthenogenesis startled the scientific world by producing the fatherless sea-urchin and the fatherless frog. He investigated the effects of various stimuli upon living matter, and followed this by extensive research on proteins. Although a brilliant experimentalist, his philosophical ideas, particularly as stated in his "Mechanistic Conception of Life", aroused considerable criticism and opposition.

Loob's contemporary, Theobald Smith (1859-1934), of Albany, New York, occupies an honoured place in medical science for his pioneer work investigating the transmission of disease and immunization. Inspired by the work of Koch, in 1889 he discovered the parasite responsible for Texas fever in cattle, and in his classic report of 1893 gave the first account of the transmission of a parasitic protozoan by a blood-sucking parasite. Later, he clearly differentiated between the bovine and human types of tubercle bacilli. He was the first occupant of the chair of comparative pathology at Harvard, and was eventually appointed director of the Department of Animal Pathology in the Rockefeller Institute. He was elected a foreign member of the Royal Society in 1932.

Two well-known British geologists were born in 1859, namely, Alfred Harker and G. W. Lamplugh. Harker, while retaining his lectureship at Cambridge,

was for ten years attached to the Scottish Geological Survey. This period was devoted to mapping the volcanic rocks of Skye and other islands of the Inner Hebrides, and his descriptions of these rocks became classics in geological literature. His later more general works on igneous rocks and metamorphism also exerted a lasting influence on petrological thought. He died in 1939, six months after the celebration of his eightieth birthday. G. W. Lamplugh had his first geological paper, on glacial drift in Yorkshire, published when he was only nineteen. He joined the Geological Survey in 1892, and during the next five years completed almost single-handed the mapping of the Isle of Man. Afterwards he carried out an extensive examination of the Irish glacial deposits. He retired from the Survey in 1920 and died six years later. Both Harker and Lamplugh were Fellows of the Royal Society and each had occupied the presidential chair of the Geological Society.

A rather controversial figure in the history of science is that of the Russian physicist, A. S. Popov (1859-1905), a pioneer in the field of radio telegraphy, whose success in signalling has been claimed as antedating that of Marconi. Others born in 1859 include the organic chemists, J. B. Cohen and L. Knorr, the American chemist H. Y. Castner, whose name is associated with the Castner-Kellner process for the manufacture of chlorine and the extraction of sodium, and Florian Cajori, historian of mathematics.

NEWS and VIEWS

Contributions to Nature

DURING the first year of the publication of *Nature* (November 1869-November 1870), the number of original communications (mainly "Letters to the Editor", together with some special articles, though not the general ones) was 378. These came from 17 different countries. In certain selected years afterwards, the number of original communications were as follows (number of countries in parenthesis): 1910, 285 (19); 1920, 422 (17); 1930, 568 (27); 1937, 648 (31); 1949, 1,066 (35). During last year (1958), the number of such communications was 2,362, and these were submitted from 59 different countries. These were distributed as follows:

Argentina	2	Japan	80
Australia	128	Kenya	13
Austria	2	Malaya	7
Belgian Congo	3	Mauritius	1
Belgium	41	Mexico	1
Brazil	6	New Zealand	53
British Borneo	1	Nigeria	9
British Honduras	1	Norway	14
British West Indies	11	Pakistan	2
Canada	67	Philippines	1
Ceylon	3	Poland	13
Chile	3	Portugal	1
China	1	Puerto Rico	1
Costa Rica	1	Roumania	5
Czechoslovakia	53	Sarawak	1
Denmark	14	Sierra Leone	3
Egypt	8	South Africa	37
Finland	4	Spain	7
Formosa	1	Sudan	2
France	16	Sweden	44
Germany	25	Switzerland	10
Ghana	4	Tanganyika	3
Greece	1	Uganda	18
Hawaii	5	United Kingdom	959
Holland	43	United States	407
Hungary	24	U.S.S.R. (Russia)	10
India	96	Venezuela	2
Indonesia	1	Yugoslavia	6
Ireland	18	<i>Total No. of countries</i>	<i>59</i>
Israel	19	<i>Total No. of communications</i>	<i>2,362</i>
Italy	40		

New Science Officers for American Embassies

SEVEN distinguished scientists have been appointed by the U.S. Department of State to serve as science officers in the American Embassies in London, Paris, Rome, Bonn, Stockholm, and Tokyo. Although assigned to a specific embassy, the science officer will also provide scientific assistance in embassies in adjacent areas. The men selected are: Dr. Thomas H. Osgood, dean of the School for Advanced Graduate Studies, Michigan State University, for London; Dr. Edgar L. Piret, professor of chemical engineering, University of Minnesota, for Paris; Dr. Edward H. Cox, retired head of the Department of Chemistry, Swarthmore College, as deputy science officer for Paris; Dr. Walter Ramberg, chief of the Mechanics Division, National Bureau of Standards, for Rome; Prof. Ludwig F. Audrieth, professor of chemistry, University of Illinois, for Bonn; Dr. Julian E. Mack, professor of physics, University of Wisconsin, for Stockholm; and Prof. Willis R. Boss, professor of zoology, Syracuse University, for Tokyo. The appointments, which will be for a period of two years, constitute the first of a series for the Science Programme of the Department of State under Dr. Wallace R. Brode, science adviser to the Secretary. Still to be appointed are science officers for the U.S.S.R., India and South America, and deputy science officers for all the posts with the exception of Paris, to which Dr. Cox is being assigned. Leaders in science who have had experience as educators, research workers and administrators have been especially selected for these posts because of their international scientific reputation, and their knowledge of the status of science and acquaintance with scientists in the country of assignment. Each of those appointed