

Rhoda Peck Todd, and a descendant of Johnathan Edwards. He enrolled in Columbia College, New York, in 1870, and entered Amherst College in 1873, where he received the A.B. degree in 1875, with membership in Phi Beta Kappa. He received the honorary Ph.D. degree from Washington and Jefferson College in 1888. After an absence of six years, in which he served under Simon Newcomb at the U. S. Naval Observatory in Washington, he returned to Amherst, in 1881, to take the new chair of astronomy. He was appointed professor of astronomy in 1892; he also served as secretary of the faculty of the college from 1891 to 1909, and was professor of astronomy and higher mathematics in Smith College from 1882 to 1887. He became professor emeritus in 1920.

More than a hundred technical and popular articles were contributed by Dr. Todd to various periodicals; they relate to solar eclipse problems, the solar parallax as derived from the transit of Venus, the orbits of the four bright satellites of Jupiter, the search for a trans-neptunian planet and other subjects. He contributed to Webster's Dictionary and to the Encyclopaedia Britannica. His best-known book is the "New Astronomy," first published in 1897, which has gone into many editions and is translated into Hungarian, Turkish and Chinese. He was a fellow of the American Association for the Advancement of Science, a member of the American Astronomical Society, the Washington Philosophical Society, the Astronomische Gesellschaft and honorary fellow of the Sociedad Geografica de Lima, Peru. He designed and supervised the construction of the Observatory of Smith College, and was instrumental in procuring funds to build the Amherst College Observatory, completed under his supervision in 1905, and to equip it with the excellent 18-inch refracting telescope by the Clarks.

Dr. Todd's interest in solar eclipses led him to many parts of the world. He was in charge of the National Academy of Sciences expedition to Japan in 1887, the U. S. Scientific Expedition to West Africa in 1889, and the Amherst expeditions to Japan in 1896, to Tripoli in 1900, to the Dutch East Indies in 1901, to Tripoli again in 1905 and to Russia in 1914. He invented an automatic device for photographing eclipses, and his misfortune with clouds on some of these occasions led to the keeping of meteorological records at selected sta-

tions for several years in advance of the eclipse. In addition, he was invited to direct the observations of the transit of Venus of 1882 at the Lick Observatory, then under construction on Mount Hamilton, California, and he cooperated with the astronomers of the Lowell Observatory in an expedition to Chile to photograph the planet Mars around the favorable opposition of 1907.

Dr. Todd's hobby was aviation, beginning as early as the 1880's. He took part in a number of balloon flights. He was founder member of the Aero Club of America, a member of the Board of the National Advisory Association of Aeronautics and of the Board of Governors of the Aerial League of America. In 1908, he founded at Amherst one of the first college aviation clubs, the Amherst Aero Club, the forerunner of the present Amherst College Flying Club.

Dr. Todd married Mabel Loomis, in 1879, who died in 1932. He is survived by his daughter, Mrs. W. V. Bingham.

ROBERT H. BAKER

HARVARD OBSERVATORY

## RECENT DEATHS

DR. CHARLES ADDISON ELLIOTT, professor of medicine at the Medical School of Northwestern University, chief of the medical service of Passavant Hospital, Chicago, died on June 26 at the age of sixty-six years.

DR. HARRY VICTOR ATKINSON, professor of physiology and pharmacology at the School of the Medical Sciences of the University of South Dakota, died suddenly on May 7 at the age of fifty-two years.

GUY PINNER, chief engineer of the American Cyanamid Company, died on June 26 at the age of fifty-one years.

EMMA SAREPTA YULE, pioneer in educational work in Juneau, Alaska, and in the Philippines and for fifteen years editor of the *Philippine Agriculturist*, died in Los Angeles on April 16.

PROFESSOR HARRY HUNTINGTON BARNUM, head of the department of mathematics at Robert College, Istanbul, Turkey, has died at the age of sixty-one years. He had been a member of the college faculty for thirty-nine years.

## SCIENTIFIC EVENTS

### EXCHANGE OF VISITS BETWEEN THE ROYAL SOCIETY AND THE KAISER WILHELM GESELLSCHAFT

IN the autumn of 1938, following a suggestion of the president of the Kaiser Wilhelm Gesellschaft, arrangements were made by the president of the Royal Society of London, Sir William Bragg, and representatives of

the Kaiser Wilhelm Gesellschaft, for an exchange of visits between these two bodies. The Kaiser Wilhelm Gesellschaft, founded in 1911 at the suggestion of the Kaiser Wilhelm II, has at its aim the encouragement of the natural and human sciences, primarily by establishing and maintaining research institutes for natural science in Germany.

This exchange of visits was welcomed by the Royal Society, which, since its foundation in 1662, has always sought to maintain, irrespective of race or politics, the liveliest interest in the work of men of science throughout the world. Consequently, arrangements were made for two fellows of the society, Professor F. G. Donnan, emeritus professor of chemistry in the University of London, and Professor A. J. Clark, professor of materia medica in the University of Edinburgh, to visit Germany in March; at the express wish of the Kaiser Wilhelm Gesellschaft for a lecture on a non-scientific subject, Professor Dover Wilson, the eminent Shakespearean scholar, was invited by the Royal Society to visit Berlin to lecture. The visits, which took place in March and April, were highly successful. The visitors were most hospitably entertained by their German colleagues and were afforded facilities for visiting laboratories and research institutes.

The Royal Society is entertaining during this month four German men of science. They are Freiherr von Verschuer, of the University of Frankfurt-on-Main; Professor R. Kuhn, of the Kaiser Wilhelm Institut für Medizinische Forschung, Heidelberg; Professor F. Wever, of the Kaiser Wilhelm Institut für Eisenforschung Forschung, Düsseldorf, and Professor Otto Hahn, of the Kaiser Wilhelm Institut für Chemie, Berlin-Dahlem. Freiherr von Verschuer and Professor Kuhn delivered lectures before the Royal Society on June 8 and 9, respectively; Professor Wever spoke on June 22 on metallurgical research, and Professor Hahn spoke at the Royal Institution on June 23 on the fission of uranium nuclei by neutrons.—*Nature*.

#### SURVEY OF THE GEOLOGY OF THE CENTRAL ANDES IN PERU

DR. J. V. HARRISON, university demonstrator and lecturer in the department of geology at the University of Oxford, who is leading an expedition to Peru, is reported by a correspondent of the London *Times* to have sailed from Liverpool on June 17, to study and map the geology of a part of the Central Andes of Peru in the region between Canta, Huauca and Huancayo. Dr. Harrison, who was in the same part of Peru in 1925, is accompanied by J. D. Weir, of University College, London, and Saskatoon University, who is a Rhodes scholar and a Burdett-Coutts scholar and who is working in the department of geology; C. H. Kearny, of the Queen's College, who is a Rhodes scholar from Princeton, and M. H. Donald, of Mealsgate, Cumberland, who has previously collected for the British Museum.

The expedition will collect fossils and specimens of rocks from the region for the British Museum (Natural History). Its plans have been approved by the Royal Geographical Society. The area to be mapped is part of an equilateral triangle, the apices of which

are Tarma, Cerro de Pasco and Canta, with the center of the triangle roughly 80 miles northeast of Lima.

How much will be achieved depends entirely upon the weather, which in August and September can not be relied on. The altitudes range from 15,000 feet to 18,000 feet, and the region is subject to violent storms during the break-up of the settled July (winter) weather. Much of the time will be spent under canvas, and the expedition will rely on mule transport, with native muleteers.

Mr. Weir was with survey parties of the Canadian Geological Survey in two successive summers before he went to Oxford, and he has this year been awarded a third part of the Daniel Pidgeon Fund by the Geological Society. The first recipient of this award, in 1908, was the present professor of geology at Oxford, Professor James A. Douglas, who himself did much of his early field work in Peru and is an authority on the geology of that country.

Mr. Kearny, who collected archeological material in northwestern Mexico for a year before going to Oxford, will join the party at Lima. The expedition will return in October.

#### THE MAGELLANIC EXPEDITION OF THE FIELD MUSEUM

THE "Magellanic Expedition" of Field Museum of Natural History, sponsored by Stanley Field, president of the museum, which will largely retrace in the farthest reaches of South America the steps of the early Spanish explorer for which it is named, planned to sail from New York for Lima, Peru, during the first week in July. Those sailing include Karl P. Schmidt, curator of amphibians and reptiles, his son, John Schmidt, field assistant, and Colin C. Sanborn, curator of mammals. They will be joined, probably in September, by Dr. Wilfred H. Osgood, chief of the department of zoology.

The expedition will attempt to complete the fragmentary knowledge of the fauna of the southern half of South America. All classes of animals will be sought—mammals, birds, reptiles, fishes, insects, marine invertebrates, etc. It is planned to explore the shores of the Straits of Magellan and the Island of Tierra del Fuego to the extreme southern tip of the continent.

Upon arrival in Lima, Mr. Schmidt and his companions will cross southern Peru by rail to Arequipa and Lake Titicaca, where collecting will begin. Crossing the lake by steamer, collections will be made in Bolivia. Further penetration into the interior of South America will be made variously by airplane, rail, boat, pack animals and afoot. After the arrival of Dr. Osgood the expedition will proceed through Chile down to the southernmost tip of the continent. It is in the region of the Straits of Magellan and Tierra