that social progress is best brought about by a paternalistic régime of some kind, by throwing upon a few elected or hereditary officials the whole responsibility for social initiative of all sorts, then you will say, "Let the government do it all; let it establish state universities and state research laboratories and state experimental projects of all kinds as it has done in most European countries and let the whole responsibility for our scientific progress lie in these institutions." But if you believe with the early makers of our nation in the widest possible distribution of social responsibility, in the wide-spread stimulation of constructive effort, in the nearest possible approach to equality of opportunity, not only for rising to wealth and position, but for sharing in community service, if you believe with the President-elect that government should only step in where private enterprise fails, that it should act only as a stimulant to private initiative and a check to private greed, then your industries in the New York Chamber of Commerce, your industries which are themselves the offspring of pure science, will join in the great nationwide movement to keep alive the spirit of science all over this land of ours through keeping pure science going strong in the universities its logical home, and applied science going strong in the private industrial laboratories where it thrives best. No country ever had such an opportunity as ours, no country ever had such a widespread stimulation of individual initiative, such a large number of citizens who had learned to treat financial power as a public trust, such resources to command, such results to anticipate. With our American ideals American industry can not fail, I think, to realize this opportunity, and to support and keep in the finest possible condition, "the hen that lays her golden egg." That is my conception of the relation of science to industry in the United States. ROBERT A. MILLIKAN

CALIFORNIA INSTITUTE OF TECHNOLOGY

WILLIAM NORTH RICE 1845–1928

WILLIAM NORTH RICE died November 13 at the home of his son, Professor Edward L. Rice, in Delaware, Ohio, 8 days before his 83d birthday. Two days before, on Sunday, he had attended church service, taken his usual walk, and was in excellent spirits.

Professor Rice, a thoroughly trained classical scholar, was the youngest member and valedictorian of the class of 1865 at Wesleyan University. In 1867 he received his doctor of philosophy degree from Sheffield Scientific School (Yale). He was immediately

ately appointed professor of geology and natural history in Wesleyan and after a year of study in Germany commenced what proved to be a lifetime of service at his *alma mater*. In 1884 the work which he had been carrying was divided and he continued as professor of geology until 1918, when he retired as professor of geology, emeritus.

Professor Rice was first and always a teacher, and his chief monument will always be the affectionate memory of the students who for fifty years sat under his clear, accurate and inspiring instruction. Nor was his influence in educational matters confined to the classroom. At Wesleyan, perhaps more than in most colleges, the faculty determines the college policies. Between 1870 and 1920 the three outstanding faculty names at Wesleyan were VanVleck, Winchester and Rice: each was a great teacher and each exerted a large influence on the development of the college. No one of the three was more responsible for the educational evolution of Wesleyan than Professor Rice, though he himself would doubtless make an exception of VanVleck. For ten years he was secretary of the faculty and three times served as acting president.

Professor Rice was an ordained minister of the Methodist Church and while he never held a regular pastoral charge was an occasional and effective preacher through life. This double interest in religion and in teaching led him naturally into what is perhaps the most outstanding activity of his life, his study of and writings on the relations of science and religion. In the early seventies he had accepted the evolution theory—the Origin of Species was a new book in 1865-and during the following years at Weslevan both in his college classes and in his Sunday afternoon Bible class he was ever intent on helping the student to meet and accept the new scientific knowledge without loss of religious faith. Wesleyan students in those days who came under his influence were not troubled by evolution or Old Testament criticism. Out of this work came his best known and most important book, Christian Faith in an Age of Science. There were fundamentalists even in those days and when it was necessary to meet them outside college walls Professor Rice, who was a brilliant debater, never came off second best. A recent clash with John Roach Straton gave him especial joy, and when Straton began to quote Price's The New Geology his comment was, "Now hath the Lord delivered him into my hands." He used to say of himself-"I must be orthodox for have I not for years been Chairman of the Committee of the N. Y. East Conference of the Methodist Church which has to pass on the orthodoxy of candidates for the Methodist ministry!"

Professor Rice's geological field work, though it includes a report of the Geology of Bermuda, was mostly done on the geology of Connecticut. He was asked to revise Dana's Text-book of Geology for the fifth edition. From 1903-16 he was Superintendent of the Connecticut State Geological and Natural History Survey and in addition to seeing the various bulletins through the press wrote (with H. E. Gregory) a Manual of the Geology of Connecticut. It was for the same Survey that last year he wrote. with W. G. Foye, a Guide to the Geology of Middletown. Professor Rice's knowledge of botany, zoology, and geology was wide and accurate. If his original production in geology is less than that of many of his geological contemporaries it should be remembered that for the first sixteen years of his teaching he taught botany and zoology as well as geology, and that more and more in later years his interest was growing in the relations of science and religion. He himself considered that it was in this field that he had done his best and most useful work. He often said that he "would have done more if he hadn't tried to do so much"—and another might add, "and to do it so well."

No account of Professor Rice can be at all satisfactory that does not put first the man, his mental and spiritual traits, rather than the work done; and vet how hard it is to do this adequately! He was small of stature and slight of build; and while not at home in rough outdoor exercise could outwalk most of his students. Perhaps one's first impression of him might be one of seriousness and logical perfection of mental processes. He spoke when he had something to say and while he enjoyed a joke as well as any did not easily make small talk. He had the patience and conscience to make sure of his facts; few caught him napping here. And he had a mind fundamentally orderly and logical. Home training, education and inclination made him a wide and thorough reader, especially in history and the best English prose and poetry, though he was not interested in technical philosophy. His favorite poets were Tennyson and Whittier and one of his published essays was on Tennyson, the Poet of Science. Perhaps it was his classical training that gave him his mastery of the niceties of the English language. He read his New Testament in the original Greek throughout life.

Keenness of intellect in Professor Rice was balanced by the depth and intensity of his ethical and religious life. He was a fair man, carrying over into every field of his thought the scientific attitude of mind. Everything was seen against a background of moral and religious values and took meaning from that background. His love of beauty in nature was

profound—whether on walking tours in the Alps, or along the shores and in the woods and fields of New England. This last fall in central Ohio he was out almost every afternoon and his joy in the colors of autumn foliage and sunset sky was intense. And to him it was always God's world.

His interest in community educational and religious matters was constant. For some time he was president of the Middletown school board. In recent years he has been a member of the Council of the Connecticut Federation of Churches, twice its president and for a long time its secretary. He has always been interested in temperance and on that ground, among others, was an ardent Hoover man during this last election. When he finally decided not to attempt to go back to Middletown to vote, he made partial amends by sending liberal contributions to the Connecticut State and local Republican Committees and to the Anti-Saloon League.

Professor Rice was a member of the American Society of Naturalists (president in 1891), of the Geological Society of America (vice-president, 1911), and of the American Association for the Advancement of Science (vice-president and chairman of Section E, 1905-6). It was a source of regret to him that in the multiplication of organizations in recent decades and the separation of their meetings in time and place from those of the parent society, the American Association, with its emphasis on the common work of science as a whole, should suffer.

L. G. WESTGATE

SCIENTIFIC EVENTS

PALEOLITHIC DISCOVERIES IN NORTHERN IRAQ

The British-American Archeological Expedition in northern Iraq, which is the joint undertaking of the Percy Sladen Fund (British) and the American School of Prehistoric Research, has just closed a most successful season. Miss Dorothy A. E. Garrod, leader of the expedition, has reported to Dr. George Grant MacCurdy, director of the American School of Prehistoric Research, the finding of numerous caves northeast of Bagdad in the region of Sulaimani.

The complete excavation of one cave at Larzi has yielded important results proving that the prehistoric race which lived on the eastern tributaries of the Tigris River during the latter part of the Old Stone Age had a culture practically identical with that of the race living at the same time in central and western Europe—a culture known as Aurignacian, left by the race of Cro-Magnon.

The industrial remains at Larzi are not only typically Aurignacian but also very numerous. The flint