Arthur E. Kennelly (A'88, M'99, F'13, Life Member)

President 1898–99–1900 Honorary Member 1933 Edison Medalist 1933

MONG the notables in the scientific and scholastic as well as the practical provinces of electrical engineering is Arthur Edwin Kennelly.

Doctor Kennelly was born in 1861 in East India and was naturalized in 1906. He was educated at various private schools, scattered over Europe, including University College in London. He was awarded the honorary degrees of Sc.D., 1895, by the University of Pittsburgh, A.M., 1906, Harvard, and Sc.D., 1922, Toulouse, France.

His engineering career began at the early age of 14 when he acted as assistant secretary of the Society of Telegraph Engineers (now Institution of Electrical Engineers), in London. He had learned 3 signal systems and was employed as an operator by the Eastern Telegraph Company, by the time he was 15. He passed successively through the positions of assistant electrician, chief electrician of a cable repairing steamer and senior ship electrician on submarine cables. The familiarity gained in this submarine work with the theory and practice of transmission of signals over long lines with distributed

capacity, because of the severe demands on his technical knowledge and resourcefulness, undoubtedly formed the basis for his future work in the field of telephony and in the mathematical treatment of the phenomena of transmission lines.

In 1887, when he was 26, he came to America and became the principal assistant to Edison, and later, in addition, was consulting electrician for the Edison General Electric and the General Electric



Companies; also, from 1894 to 1901 he was a member of the consulting firm of Houston and Kennelly. In 1902 he had charge of the laying of the Vera Cruz-Frontera-Compeche cable for the Mexican Government.

That same year Doctor Kennelly was appointed professor of electrical engineering at Harvard University, becoming professor emeritus in 1930 of that institution and of Massachusetts Institute of Technology, which positions he now holds. He was also professor of electrical communication, 1913–24, and chairman of the faculty, 1916–18, of the Massachusetts Institute of Technology. Several other educational distinctions have come to him.

He has been a prolific writer, enriching the literature by the publication of more than 300 papers and books. Perhaps the best known of his contributions to scientific knowledge is his explanation of the mechanism of the transmission of radio waves, published in 1902.

Doctor Kennelly has never swerved from his enthusiastic advocacy of standardization of electrical terms from the time when he became chairman of the committee on units and standards in 1890 to the present as chairman of the committee on electrical definitions of the Institute and as president of the International Electrotechnical Commission. He has served the Institute in many capacities and has been an officer and member of numerous other technical societies in this country and abroad, receiving many honors and awards.