

five planets Mercury, Venus, Mars, Jupiter and Saturn, distinguished the signs of the zodiac and made long lists of the fixed stars. The chief duty of the astronomer was to observe the moon for the purpose of keeping the calendar.⁷⁸ Their predictions of eclipses were made by a rule based upon the empirical discovery that there was a period of a little over eighteen years within which eclipses repeat themselves.⁷⁹

That Greek astronomy was based on the astronomy of the Babylonians is well known. We have noted that certain mathematical results regarded as original with the Greeks must, from now on, be attributed to the Babylonians and to the Egyptians. But whatever new facts are found concerning mathematics before the Greeks, the glory of their achievements in creating a vast body of deductive geometrical reasoning is not likely ever to be dimmed.

OBITUARY

EDWARD DRAKE ROE, JR.

DR. EDWARD DRAKE ROE, JR., for twenty-nine years professor of mathematics at Syracuse University, died suddenly at his home in Syracuse on Wednesday, December 11.

Dr. Roe had a long and distinguished career as student, educator, mathematician and astronomer. He received his bachelor's degree from Syracuse University in 1880. He then went to Harvard University where he first studied medicine and then returned to his studies in mathematics. He received a bachelor's degree from Harvard in 1885 and a master's degree in 1886. After teaching a few years, he went to the University of Erlangen, Bavaria, where he won his doctorate in 1898. He returned to America and was made associate professor of mathematics at Syracuse University.

In 1901 he was awarded the John Raymond French chair of mathematics and some years later was appointed director of the Holden Observatory of Syracuse University.

Dr. Roe built his own private observatory in connection with his own house. It was equipped with an Alvan Clark equatorial telescope and is considered one of the best-equipped private observatories in the country.

He was the author of nearly seventy scientific articles on mathematics, astronomy and philosophy. He was the author of a text-book in trigonometry and one in algebra.

He was the founder and director general of the honorary mathematical fraternity, Pi Mu Epsilon, and was a member of the Phi Beta Kappa, Sigma Xi, Pi Kappa Phi and Delta Kappa Epsilon. He was a fellow of the American Association for the Advancement of Science, a member of the American Mathematical Society, the founder and president of the Syracuse Astronomical Society, a member of the

Deutsche Mathematiker Vereinigung, Circolo Matematico di Palermo and Société Astronomique de France.

Dr. Roe stood for high scholarship, thorough scientific study and research. He impressed all who knew him as a scholar with a deep thirst for knowledge. He worked with untiring patience in mathematics and its allied science astronomy in the university and in the community.

Throughout his years of service as a teacher Dr. Roe always stood for the highest ideals of intellectual honesty and scientific achievement. He was a devoted teacher, a deep thinker, a philosopher and an earnest Christian. In his death Syracuse University has suffered a distinct loss.

ALAN D. CAMPBELL

MEMORIALS

THE American Electrochemical Society has announced its intention of establishing the Joseph W. Richards Memorial Fund, the interest of which is to be used as an honorarium to foreign electro- and physical chemists who are to be invited by the society from time to time. The guests will present lectures at annual spring conventions of the American Electrochemical Society, and possibly at universities and other institutes of learning. Professor Richards was secretary of the American Electrochemical Society for almost twenty years and was very largely responsible for the founding of the society. He was ever a very strong advocate in fostering better relations between our own scientists and scientists abroad, inviting and entertaining many notables at his own expense. The many friends of Professor Richards, therefore, feel that this memorial to him is a most fitting one. All those interested are invited to send their contributions to the secretary of the American Electrochemical Society, Columbia University, New York City, making all checks payable to the Joseph W. Richards Memorial Fund. It is the desire of the Board of Directors of the society that the list of contributors include as many as possible of Professor Richards'

⁷⁸ British Museum, "Guide to the Babylonian and Assyrian Antiquities," London, 1922, p. 25.

⁷⁹ For a summary of Egyptian astronomy see T. E. Peet, "The Sciences" in "The Cambridge Ancient History," Cambridge, vol. 2, 1924, pp. 218, 656.