UNIVERSITY AND EDUCATIONAL NOTES

DR. GEORGE ALFRED LAWRENCE, the neurologist, of New York City, who died on December 28, made bequests of $1,000,000 to Stanford University, his alma mater, and to the All University Club, of which he was an organizer. In addition Dr. Lawrence willed equal shares in his residuary estate to Stanford University and the All University Club.

AN anonymous donor has contributed $50,000 to establish a chair of preventive medicine in Queens University, Kingston, in honor of Dr. Arthur Elliott, an alumnus.

THE Kansas State Agricultural College has been placed upon the list of institutions of higher education approved by the Association of American Universities.

AT the University of Virginia, Robert E. Lutz has been appointed associate professor of organic chemistry, Lauren B. Hitchcock associate professor of chemical engineering, and Lyndon F. Small research associate in organic chemistry.

DR. ALVAH R. MCLAUGHLIN has severed his relations with the department of physiology and pharmacology of Michigan State College in order to accept the position of physiologist and pharmacologist at the experiment station of the University of Wyoming. He will assist in the investigations of plants poisonous to livestock.

DR. THOMAS P. HASLAM has been appointed associate professor of pathology at Baylor University College of Medicine, Dallas, and medical director of the Baylor Hospital.

CHARLES E. BRAUN has resigned from the research staff of the Barrett Company to become assistant professor of organic chemistry at the University of Vermont.

DR. JAMES HENRY DIBBLE, professor of pathology and bacteriology in the Welsh National School of Medicine, Cardiff, has been appointed to the George Holt chair of pathology in the University of Liverpool. Professor Warrington York has been transferred to the Alfred Jones chair of tropical medicine.

DISCUSSION AND CORRESPONDENCE

IS THIS SCIENCE OR METAPHYSICS?

THE Silliman lectures at Yale University have been the avenue through which some of the masterpieces of modern science have been published. Among these lectures are the "Integrative Action of the Nervous System" by Sherrington and "Respiration" by Haldane. Among the other lecturers on this foundation appear the names of Krogh, Morgan, Thompson, Nernst, Rutherford, Arrhenius and Bateson. In such company the highest standard of true science should be expected. This expectation is further justified by the fact that the Silliman Foundation expressly provides "that lectures on dogmatic or polemical theology should be excluded." It is, therefore, to be noted with regret that the lectures in this series recently delivered by Professor Lawrence J. Henderson are seriously infected with that most insidious disease of scientific thought, metaphysics.

The subject of the lectures now published,[1] according to the opening paragraph, is "the red blood of vertebrates," to be studied "both as a physico-chemical system and as a tissue," considered both in the "interrelation of its physiological functions" with other parts of the body and as "an illustration of organic integration and adaptation."

A general conception of protoplasm from the standpoint of a physicochemical system is then presented, and this is followed in the second chapter by a statement of the components and functions of the blood as a type of protoplasm or of the nearest approach to protoplasm that has yet been analyzed with any degree of thoroughness. The discussion then turns to a presentation of the acid-base equilibrium of blood as depending upon the balance between sodium bicarbonate and carbon dioxide in simple solution. The influences exerted by the cells of the blood and by the proteins and other buffers of the plasma are brought out. Up to this point dissociation curves of the usual form are chiefly used in the graphical presentation of the facts. The number of factors involved in the physicochemical equilibrium in so complex a system as blood is found, however, to exceed the limits of ordinary graphic representation; and on this account the author has recourse to the use of nomograms as devised by d'Ocagne, in which it is possible to represent the interrelations of a larger number of factors. The shift of the equilibrium within the blood during the normal respiratory cycle is shown in a series of 100 successive diagrams, and this is followed by two other series of diagrams, one of five and the other of twenty-one separate figures. In fact the total number of figures in this book, exclusive of the appendix, is 225, and the tables are eighty-six in number. The presentation of the material is thus extremely full. Following the chapters dealing with the influence of respiration and with the blood in circulation are chapters presenting evidence regarding readjustments in the blood during

[1] "Blood, a Study in General Physiology." By Lawrence J. Henderson, Yale University Press, 1928. Pages 397, price $5.00.