UNIVERSITY AND EDUCATIONAL NOTES

YALE UNIVERSITY will receive $600,000 and the Sheffield Scientific School $300,000 under the will of George St. John Sheffield, of Providence.

A GIFT of $250,000 for the erection of a medical clinic building at the University of Pennsylvania has been made by Martin Maloney, of Philadelphia.

BOWDOIN COLLEGE receives $250,000 by the will of the late Frank A. Munsey, of New York.

CORNELL UNIVERSITY has received a gift of $50,000 from the Robert Boyd Ward Fund, Inc., of New York City. Income from the gift is to be available to the president for meeting emergency needs not provided for in the university's annual budget, such as the purchase of scientific apparatus or supplies, publication of the results of research in the university and lectures in the advancement of science.

THE Massachusetts Institute of Technology will receive $25,000 for "its general uses and purposes" under the will of Kenneth F. Wood.

A NEW course surveying the whole field of science has been organized at the University of New Hampshire by the cooperation of nine departments, representing all the natural sciences and mathematics, and will be offered to freshmen beginning with the winter term. The aims of the course are to give the freshmen a unified view of the whole field of science, showing the interrelations of the several physical sciences, to survey briefly each main division, and to familiarize students with scientific methods.

THE teaching in public health and preventive medicine at Stanford University has been completely reorganized and Professor E. C. Dickson, of the department of medicine, has been placed in charge as acting executive.

FRANCIS L. WHITNEY has been made professor of geology and paleontology at the University of Texas, having been promoted from the rank of associate professor.

DR. WILLIAM E. BROWN has been appointed assistant professor of preventive medicine at the University of Cincinnati College of Medicine.

A. M. ALVARADO, formerly professor of chemistry at the Waukon Junior College, Waukon, Iowa, has been appointed associate professor of chemistry at Loyola University, New Orleans, La.

DR. EDWARD TAYLOR JONES, professor of physics in the University College of North Wales, has been appointed to the chair of natural philosophy at the University of Glasgow, in succession to Professor Andrew Gray.

AT the University of Liverpool, Dr. T. P. Hilditch has been appointed to the Campbell Brown chair of industrial chemistry and Professor S. H. Gager, of the University of Edinburgh, has been appointed to the William Prescott chair of the care of animals with special reference to the causation and prevention of disease.

DISCUSSION AND CORRESPONDENCE

MILLIKAN RAYS AND THE ACCELERATION OF RADIOACTIVE CHANGE

SOME weeks ago (*Nature,* September 12, 1925), A. Gaschler reported that he had succeeded in accelerating the change of uranium to uranium X by submitting uranium oxide to "strong rushes of momentary high-tension currents." One may suppose that, in any group of uranium atoms, the nuclei of a certain number reach a state of unstability in each unit of time, and that these decompose. But, at the same time, other nuclei may closely approach the verge of unstability, and these also may be caused to decompose under the influence of a sufficient disturbing force from outside. For this reason, the idea of artificial transmutation of uranium is usually entertained more favorably than that of the transmutation of mercury to gold; although, it may be added, mercury atoms, while never crossing the verge of unstability of themselves, may, in like manner to uranium atoms, closely approach it. In either case, the force from outside must apparently be greater than such as would operate a hair trigger effect. The trigger has a heavy pull, and the conservative objectors to the reported mercury transmutation have pointed out that the intensity of the energy applied falls far short of that associated with changes in the nucleus.

Such a defect in intensity can not, however, be charged against Millikan rays as described in SCIENCE for November 20. The energy associated, for example, with alpha particles ejected from the nuclei of the radioactive elements may conveniently be stated as lying between four and nine million equivalent volts. This is exceeded many fold by the energy corresponding, on the quantum theory, to radiation of the high frequency of the Millikan rays. One is therefore reminded of the experiments of A. Nodon (*Compt. rend.,* 176, 1705 (1923)) who brought forward evidence of an increase of the activity of radioactive substances when outdoors and enclosed by envelopes of small absorbing power for gamma rays as contrasted to the smaller radioactivity of the same