

UNIVERSITY AND EDUCATIONAL NOTES

THE total of funds to the credit of the \$17,500,000 development program of the University of Chicago, according to an announcement by Robert P. Lamont, chairman of the committee on development, is \$6,508,752. In addition, \$2,134,763 has been given to the university during the campaign for other than campaign purposes, so that the total of subscriptions made to the university during the period of the campaign is \$8,643,515.

WITH the gift of \$1,000,000 to Washington University by Mr. Charles Rebstock, of St. Louis, will be erected a building for biology, costing \$300,000; the remainder of the gift will be used for general endowment. This is one of the largest gifts the university has ever received from an individual and differs from the usual donation in that no stipulations are attached.

THE trustees of Gettysburg College have appropriated \$100,000 for the construction of a new chemical laboratory.

DR. W. L. HOWARD, of the University of California, has been appointed director of the branch of the College of Agriculture at Davis in addition to his previous duties as head of the division of pomology in the university.

DR. CHARLES H. KEENE, director of health education in the department of public instruction at Harrisburg, Pa., has been appointed professor of hygiene and director of physical education at the University of Buffalo.

DR. A. K. ALDINGER, for twenty years supervisor of physical education in the schools of New York, has been appointed professor of physical education at the University of Vermont.

DR. VASIL OBRESHKOV, associate professor of zoology at Syracuse University, has been made head of the biology department at St. Stephen's College, Annandale-on-the-Hudson.

DR. A. B. DAWSON has recently resigned his position with Loyola University School of Medicine, Chicago, to accept an appointment as associate professor of biology at New York University.

C. I. REED (Ph.D., '25, Chicago), formerly associate professor of physiology in the University of Kansas and for the past year fellow in medicine of the National Research Council, has accepted the position of associate professor of physiology in Baylor University Medical School, Dallas, Texas.

New appointments at the Carnegie Institute of Technology include the following: Arthur C. Jewett, formerly head of the department of mechanical engineering at the University of Maine and more recently with the Winchester Repeating Arms Co., to be director of the college of industries; William T. Crandell, of Kansas, assistant professor of commercial engineering, and Dr. Borden P. Hoover, formerly of the University of Illinois, assistant professor of mathematics.

DR. W. H. MAXWELL TELLING, who has occupied the chair of therapeutics in the University of Leeds for the past two years, has been elected professor of medicine and head of the department of medicine on the retirement from that office of Dr. T. Wardrop Griffith. Dr. R. A. Veale has been elected to the chair of therapeutics in place of Professor Telling and Dr. G. W. Watson has been elected to the chair of clinical medicine, which has been vacant since the retirement of Dr. A. G. Barrs.

DISCUSSION AND CORRESPONDENCE BERNOULLI'S PRINCIPLE AS CONSERVATION OF ENERGY

WHILE clearing up a doubt in the mind of a bright undergraduate the writer learned to his surprise that the old notion of "pressure energy" had reappeared in a recent edition of a popular college text on physics, with the usual application to Bernoulli's Principle. Now it is absurdly easy to show that such energy does not exist; for instance, if the pressure on a cubic centimeter of water is raised from zero to one atmosphere or 1.031×10^6 dynes per cm^2 , the water is compressed by 0.000045 cc and the work done is only 46 ergs: how then can the water have acquired energy numerically equal to the pressure or equal to $1'031'000$ ergs? But when a persistent error admits of such easy refutation, it usually contains a grain of truth. The only way to destroy the pressure-energy complex for good and all is probably to direct greater attention to the *correct* interpretation of Bernoulli's Equation as an energy equation and to urge the general adoption of this interpretation in elementary texts on physics.

According to Bernoulli's Equation

$$E = 1/2 \rho v^2 + \rho gh + p = \text{constant}$$

along a tube of steady flow in a frictionless liquid, where ρ = density, v = speed, h = height, p = pressure. To deduce this equation from the law of the conservation of energy, consider a section of a tube of flow with ends at A and B, respectively. For every cubic centimeter of the liquid that enters