

Brown, the Bureau's representative at that port, for appropriate publication. The service is being established near the close of the season, but it is desired to have it in working order, so that it may be efficient on the resumption of more active fishing in the spring, when it is hoped to extend it to the coast of Maine.

#### UNIVERSITY AND EDUCATIONAL NEWS

A GIFT of \$700,000 to the University of Colorado for the construction of a medical school and hospital by the General Education Board of the Rockefeller Foundation is announced.

Two bequests to Yale University are announced, one of \$46,360 from the late Allen P. Lovejoy, of the class of 1904, of Janesville, Wisconsin, for general university purposes, and one of about \$113,000 from the estate of Levi I. Shoemaker, of Wilkes-Barre, Pa.

THE president of Argentina has approved the law ordering the immediate construction of a surgical institute for the chair at Buenos Ayres in charge of Professor José Arce. Four hundred thousand dollars have been provided for this work.

THE following changes have been made in the pathological chemistry staff of the New York Post-Graduate Medical School and Hospital: George Eric Simpson, Ph.D., has resigned as instructor to become assistant professor of biochemistry at McGill University. James J. Short, M.D., has resigned as instructor to complete his internship in the hospital. To fill this latter position, Hilda M. Croll, A.M., formerly associate professor of physiological chemistry at the Woman's Medical College of Pennsylvania, has been made associate. Cameron V. Bailey, M.D., has been appointed assistant professor, to devote his time largely to respiratory and metabolic work.

THE department of physics, West Virginia University, reports the following additions to the staff: Fred A. Molby, Ph.D. (Cornell); formerly of the University of Cincinnati, asso-

ciate professor. E. F. George, Ph.D. (O. S. U.), formerly of the Research Laboratory of B. F. Goodrich Rubber Company, assistant professor. O. R. Ford, B.S. (Salem), instructor.

MISS LOUISE OTIS, a graduate of Northwestern University, formerly chief chemist of The Arco Company, Cleveland, O., and recently chemist with Glenn H. Pickard, of Chicago, has been appointed instructor in food chemistry at Northwestern University.

PROFESSOR H. H. CONWELL, associate professor of mathematics in the University of Idaho, has resigned to accept a similar position in Beloit College.

#### DISCUSSION AND CORRESPONDENCE

##### A POSSIBLE RELATION BETWEEN MECHANICAL, CHEMICAL AND ELECTRICAL QUANTITIES

TO THE EDITOR OF SCIENCE: It is always of interest to find an unexpected numerical relation between different physical constants, and when the only numerical factor turns out to be a multiple of 10, one is led to expect that in the absolute system it is a rational, unity relation, if the units are properly chosen.

At present the numerical connecting link between chemical and electrical quantities is the electrochemical equivalent of silver, an empirically determined constant whose accepted value now is 0.00111800 gram per coulomb. If this value were only about 3/10 of 1 per cent. higher the writer has found the following curious and totally unexpected relation would be true for all the elements:

$$\text{grams} \times g = 10 \times \text{coulombs} \times \text{atomic weight} / g.$$

in which  $g$  is the acceleration of gravity<sup>\*</sup> numerically equal to 980.597; it will be noticed that the only coefficient is 10. The faraday (the number of coulombs per gram ion) then would be equal to  $g^2/10 = 96,157$ , now generally taken as 96,500. The first term (grams  $\times g$ ) represents a force in dynes, if the grams represent a mass. The physical meaning of the right hand term is not clear, but to balance the physical dimensions the factor