UNIVERSITY AND EDUCATIONAL NEWS

The General Education Board and the Carnegie Corporation have jointly promised $100,000 to the Medical College of the University of Georgia, to be paid at the rate of $20,000 a year for the next five years on condition that a like amount each year is raised from other sources.

Professor C. J. Tilden, who has been director of the highway and highway transport education committee, in Washington, D. C., since December, 1920, has returned to Yale University to resume his work as professor of engineering mechanics.

Dr. Frederick H. Falls, of Chicago, has been appointed head of the department of gynecology and obstetrics of the State University of the Iowa College of Medicine.

Dr. T. L. Patterson, formerly of the physiologic department of the State University of Iowa, has been appointed professor and director of the department of physiology at the Detroit College of Medicine and Surgery.

D. Walter Munn has resigned his position of professor of engineering and head of the engineering department at the Royal Military College to become professor of mechanical engineering at the Nova Scotia Technical College, Halifax, N. S.

DISCUSSION AND CORRESPONDENCE

POSITIVE RAY ANALYSIS OF ZINC

With the apparatus previously used in the analysis of lithium and magnesium,[1] which will be described fully in the *Physical Review* for December, I find that the element zinc is a mixture of four isotopes, separated by two units in atomic weight. Although slight variations were observed in the relative intensities of the components, they are approximately given by the ratios 6 : 7 : 10 : 1, the heaviest being much weaker than the three lightest. The measurements in themselves do not give the values of the atomic weights with an accuracy of one unit, but since the separation in each case is exactly two units, and all other elements hitherto analyzed have integral atomic weights, with oxygen = 16 as a basis; we may assume that the zinc components are also integral. In this case the only values possible are the atomic weights 63, 65, 67, and 69, since these values with the above intensity ratios give a mean atomic weight of 65.5 and a displacement of the group one unit either way would make the mean differ by a whole integer from the accurately determined chemical atomic weight 65.4.

A. J. Dempster
Ryerson Physical Laboratory,
University of Chicago

THE REDISCOVERY AND VALIDITY OF ARCA LITHODOMUS SOWERBY

Nearly a century ago, in 1827–1830, Mr. H. Cuming made an extensive voyage along the western coast of South America collecting natural history specimens. The shells obtained by Cuming were described by Broderip and Sowerby. Among the Noah's Ark shells was a most curious species, named by Sowerby *Byssoarca lithodomus*[1] and figured by Reeve.[2] The shell was cuneiform, very finely ribbed, and covered with beautifully imbricated scales. It measured 3.5 inches in length and 1 in height. It was found by Cuming at Monte Cristi, Ecuador, about Lat. 1° South.

In 1840, Gray established for this singular *Arca* the section *Litharca,* which, in 1887, Fisher recognized as a section of the subgenus *Barbatia.* Dr. Dall, in 1898[3] thought the species invalid, and that the type was probably a shell of *Arca candida* that had grown in a *Lithodomus* burrow. But in his Peruvian catalogue, 1910, he listed the species, referring it back to Cuming's shell and placing it in the subgenus *Barbatia.*

Mr. Axel Olsson, while at Bucaru, Los Santos Province, on the western boundary of Panama Bay, in 1921, was so fortunate as to find a single valve which is the sole ex-

[1] Science, December 10, 1920; April 15, 1921.

[1] *Proc. Zool. Soc. London,* p. 16, 1833.
[2] Conch. Icon., *Area,* pl. 12, f. 76, 1844.
[3] *Trans. Wagner Inst. Sci.,* 3, pt. 4, p. 615.