itors attended a ceremony held to mark the occasion in the academy building in the public garden facing which stands a statue of Count Széchenyi, among them being the regent, Admiral Horthy, and scientific men from many nations. The president of the academy delivered a speech in which he reviewed the literary achievements of the past century.

A NEW society for physical anthropology has been founded in Germany under the chairmanship of Professor Aichel-Kiel. According to *Eugenical News*, on motion of Professor Aichel, Professor E. Fischer, of Freiburg, was elected president, and Dr. W. Gieseler, secretary. The new society will work in harmonious relations with the old "Gesellschaft für Anthropologie, Ethnologie und Urgeschichte" but will support more especially physical-anthropological investigations in Germany. The first meeting of the new society will take place at Easter time, 1926, simultaneously with the anatomical meeting in Freiburg.

ACCORDING to the *Electrical World* a series of meetings was held in Cleveland by a number of the committees of the American Society for Testing Materials on October 27, 28 and 29. The committee on electrical insulating materials, of which F. M. Farmer, chief engineer of the Electrical Testing Laboratories, New York, is chairman, received reports from subcommittees on insulating varnishes, molded insulating materials, porcelain, sheet insulation, liquid insulation, cable splicing and pothead compounds, and radio frequency tests. All these committees reported experimental progress. A new committee on metallic materials for electric heating was appointed, with Dean Harvey, of the Westinghouse Company, as chairman, and five subcommittees will deal, respectively, with life tests, physical and electrical tests, chemical analysis, standard sizes and packages, and application of data. It will be the first time that a fundamental study of this field has been made by producers and consumers of such material working together. Other committees which met were those on coal and coke, corrosion of iron and steel, rubber products, and the effect of temperature on the properties of the metals.

THE sum of 50,000 liras has been presented to the medical faculty at Florence by physicians in Argentina to found the Guido Banti prize. The income from the endowment is to be awarded for the best original Italian work on pathologic anatomy.

THE Yale Corporation has forwarded to the University of the Witwatersrand, South Africa, resolutions thanking the officers and board of trustees of that university for their cooperation in the erection of the new Yale Astronomical Observatory in South Africa.

UNIVERSITY AND EDUCATIONAL NOTES

CORNELL UNIVERSITY has received an anonymous gift of $250,000, the income of which is to be used for the "benefit and advancement of teaching and research in chemistry." A second gift of $500,000 has been made by an anonymous donor, subject to a life interest. The income of the fund is to be at the unrestricted disposal of the trustees, the donor expressing a wish that it be used for the benefit of the college of engineering.

AS a contribution from Rush Medical College Alumni to the development fund of the University of Chicago, a committee of physicians throughout the country has been organized, under the leadership of Dr. Ralph W. Webster, Chicago, to raise $250,000.

AT Purdue University Dr. A. R. Middleton has been appointed acting director of the department of chemistry following the resignation of Dr. E. G. Mahin. Dr. M. G. Mellon has succeeded Dr. Mahin as professor of analytical chemistry.

DR. G. N. QUAM, formerly professor of chemistry in Midland College at Fremont, Nebr., has accepted a position as head of the department of chemistry at Coe College, Iowa.

ELMER O. KRAEMER, National Research Fellow in colloid chemistry, has been appointed assistant professor at the University of Wisconsin.

HENRY SCHMITZ, of the University of Idaho, has been appointed head of the forestry department at the University of Minnesota.

PROFESSOR J. A. S. WATSON, professor of agriculture and rural economy at the University of Edinburgh, has been appointed to the Sibthorpian chair of rural economy in the University of Oxford.

A CHAIR of oto-rhino-laryngology has been founded at the Toulouse Faculty of Medicine, with Dr. Escat as its first occupant.

DR. WALTHER BORSCHE, head of the department of chemistry at the University of Göttingen, has been appointed to a similar position at the University of Frankfurt.

DISCUSSION AND CORRESPONDENCE

WAS THERE A PACIFIC CONTINENT?

DR. ALFRED O. WOODFORD has recently demonstrated[1] that a large volume of sediments in Southern California, the San Onofre Breccia, is composed exclusively of rocks and minerals which must have come from the west. The minerals are such as are not

[1] University of California Publications, Bull. Dept. Geol. Sci. Vol. 15, No. 7, pp. 159–280, 1925.

found to the eastward any place, from which they could have been transported to their present position. The age of this breccia was determined to be Miocene and probably the equivalent of a portion of the "Monterey."

The size of this westward land mass, now submerged, except for portions of the "Channel Islands," must have been considerable, although the exact boundaries may never be known. Many of the fragments of which the breccia is composed are large and angular, but the indications are that there were streams flowing eastward.

This work, supported by exact petrographic studies, adds still another link to the chain of evidence which has been accumulating and which demonstrates almost beyond contention the existence to the westward of North America of a land mass of probably continental size. The eastern boundary of this land probably disappeared or at least was greatly lowered in elevation at the close of the Miocene epoch. During that long period of geologic time there accumulated in what is now California enormous thicknesses of sediments composed very largely of the skeletons of microscopical organisms. Some measured sections of this deposit are over 8,000 feet thick. The preponderance of these organisms over clays, sands or other materials derived from erosion of land areas demonstrates that the climate of the region throughout the period of deposition was one of great aridity. A logical explanation for this aridity exists in the supposition of a mountain range to the westward of the present shore line which cut off the moisture, just as to-day the coast ranges cause desert conditions to appear in the interior valleys of California.

The close of the Miocene was marked by an abrupt change in the features of sedimentation: micro-organisms became relatively scarce and clastic materials derived from land masses made up the greater part of the deposits. It would therefore seem that the cause of the great aridity during the Miocene was suddenly removed and a period of much precipitation followed. A lowering of this offshore Pacific mountain barrier would probably produce just such a result.

Of course great aridity at a given place is not necessarily dependent upon an outlying offshore barrier, as the climate of the coastal region of Chile and Peru abundantly proves, but in the California region that appears to be the most reasonable explanation.

Other evidence pointing toward the existence of a land area to the westward of the present shore line is found in the existence here and there of isolated "islands" composed of granite rocks. The Farallon Islands, the tip of Point Reyes Peninsula and Point Pinos near Monterey are some of these areas, far removed from any similar rocks. Granite is generally considered to belong exclusively to the continental land masses. Farther to the south, off the west coast of Mexico, there is a larger mass of the same rock, forming the Cape Region of Lower California. Also one of the discoveries made by the California Academy of Sciences Expedition in 1925 was a granitic core in Maria Madre Island. Likewise, sixty miles west of Socorro Island, one of the Revillagigedo group, there is an isolated menace to navigation, called Roca Partida. The walls of this are perpendicular and landing was impossible, but from a row boat the rock had every appearance of being composed of granite.

Can all these points be the last remnants of a continent which existed when much of Central America and California were submerged? It certainly looks as if this question might be answered in the affirmative with very little qualification.

G. DALLAS HANNA
CALIFORNIA ACADEMY OF SCIENCES

ULTRA-VIOLET LIGHT AND ANTI-RACHITIC VITAMIN IN THE HENS' EGGS

IN concluding their article on "The influence of ultra-violet light on leg weakness in growing chicks and on egg production,"[1] Hughes, Payne and Latshaw state: "The variation in the hatchability of the eggs produced by hens receiving varying amounts of ultra-violet light is perhaps due to a variation in the anti-rachitic vitamin content of the egg. This is merely an assumption but points the way to some very interesting research work." This year experiments have been completed in which the relative anti-rachitic vitamin content of eggs from hens receiving different amounts of ultra-violet light has been determined and, as predicted last year, the hens which receive an abundance of ultra-violet light are able to put an abundance of the anti-rachitic vitamin in their eggs, while the hens which receive a very limited amount of ultra-violet light are able to put only a small amount of the anti-rachitic vitamin in their eggs.

In this experiment eggs from four pens of hens receiving varying amounts of ultra-violet light were tested by feeding the eggs to growing chicks. These four pens of hens were housed in a shed-roof type house with a south exposure. Each pen was eight feet by ten feet and had a glass window in the south side three feet by eight feet. Pens 1 and 3 were allowed a run to the south of the house, where they had access to direct sunlight. The windows in Pens 2 and 4 were kept closed at all times, so all the sun-

[1] *Poultry Science*, Vol. IV, No. 4, April-May, 1925.