

the action of the allies. Professor Planck himself was one of the signatories. He is now said to admit that the form in which this letter was written led to regrettable misunderstandings of the real sentiments of the signatories. In his opinion, and it is an opinion shared, he says, by his colleagues Harnack, Nernst, Waldeyer and Wilamowitz-Möllendorff, that letter of appeal was written and signed in the patriotic exuberance of the first weeks of the war. It must not be taken for granted, says Professor Planck, that at the present time anything like a scientific judgment can be formed with regard to the great questions of the historical present. "But what I wish to impress on you," he writes to Dr. Lorentz, "is that notwithstanding the awful events around us, I have come to the firm conviction that there are moral and intellectual regions which lie beyond this war of nations, and that honorable cooperation, the cultivation of international values, and personal respect for the citizens of an enemy state are perfectly compatible with glowing love and intense work for one's own country."

#### UNIVERSITY AND EDUCATIONAL NEWS

By the will of Charles W. Harkness, who died on May 1, Yale University will receive \$500,000. There are also bequests to the Presbyterian Hospital of \$100,000 for endowment purposes, and \$250,000 to be added to the Harkness Fund for scientific and educational work.

A BEQUEST of \$150,000 has been made to the Johns Hopkins University by Miss Jessie Gillender for the purpose of instituting organized research into the problem of epilepsy.

THE Long Island College Hospital, Brooklyn, announces that after January 1, 1918, the completion of two years of study in a college of liberal arts or science will be required for admission to the four-year medical course leading to the degree of M.D. At present the requirement is one year only of college work. Beginning in the fall of 1916 Columbia University, New York, will conduct a pre-medical

college year at the Long Island College Hospital.

MR. ARTHUR DU CROS, M.P. for Hastings, has promised a gift of £7,000 to the extension fund of the London School of Medicine for Women, thus completing the £30,000 for which appeal was made.

CLYDE BROOKS, A.B., Ph.D., M.D., has resigned his post at the University of Pittsburgh Medical School and has accepted the position of professor and head of the department of physiology, pharmacology and physiological chemistry in the school of medicine of the University of Ohio, at Columbus, Ohio. This marks the beginning of a plan to be carried out by the newly elected dean, Dr. E. F. McCampbell, in reorganizing and developing the medical school at Columbus. The plan includes the erection of a new university hospital and a new medical building on the university campus.

AT Harvard University the following appointments to the staff of the medical school have been made: Ernest E. Tyzzer, to the George Fabyan professorship of comparative pathology; Charles J. White, to the Edward Wigglesworth professorship of dermatology, and Arthur D. Hill, to a professorship of law. Percy G. Stiles has been promoted to be assistant professor of physiology, and Dr. James H. Wright, assistant professor of pathology.

AMONG the new appointments at the University of Chicago is that of George Van Biesbroeck, adjunct astronomer of the Royal Observatory of Belgium, as professor of practical astronomy at Yerkes Observatory. Promotions include the following: To a professorship: Henry Gordon Gale, of the department of physics. To associate professorships: Harvey Carr, of the department of psychology, and Preston Kyes, of the department of anatomy. To assistant professorships: Joseph W. Hayes, of the department of psychology, and Wellington D. Jones, of the department of geography.

IN the department of zoology of Columbia University, Dr. William K. Gregory, now associate, has been promoted to be assistant pro-

fessor of vertebrate paleontology. He will retain his position at the American Museum of Natural History.

PROFESSOR ERNST GAUPP, of Königsberg, has accepted a call to the chair of anatomy at Breslau.

## DISCUSSION AND CORRESPONDENCE

### AGE OF THE TUXPAM BEDS

IN SCIENCE of February 10, 1911, the writer gave a preliminary sketch of the Tertiary deposits of northeastern Mexico. In this communication the beds occurring in the vicinity of Tuxpam with their wealth of fossils, which appeared to be largely new or undescribed species, were stated to probably belong to the Miocene, and this reference has been followed in later publications both by himself and by others.

While both gasteropods and bivalves were abundant at this locality, the most characteristic fossils of these beds were the echinoderms, which included great numbers of a very large *Clypeaster*, one or more species of *Schizodus*, *Macropneustes* and *Cidaris*. None of these special forms were reported by other observers from the region to the south of Tecolutla, but the similarity of the deposits of the lower coastal area seemed to indicate their continuity, and since such fossils as had been described from these continuations were considered of Miocene or Pliocene age, it seemed probable that the Tuxpam beds were also of that age.

During the examinations made in the coastal area between Tuxpam and Tampico since this publication, numerous collections of fossils have been made and these are now being examined. We find that the Tuxpam *Clypeaster*, *Cidaris* and *Macropneustes* occur elsewhere in connection with the nummulites, cristillaria and orbitoides of the Oligocene, but where we find this association we do not find the large number of gasteropods and bivalves which are found at Tuxpam, or on the San Fernando. The shells usually accompanying these echinoderms around Tampico are simply a small pecten, a nucula, and one or two small gasteropods. In some localities imprints of

leaves are abundant in the accompanying shales.

Such an association of fossils seems to require the reference of the Tuxpam beds to the Oligocene, and if this be true, it would appear that along the western gulf shore there is no marine Miocene on the surface between Tuxpam and Galveston. E. T. DUMBLE

### NITER SPOTS

TO THE EDITOR OF SCIENCE: In a recent number of SCIENCE<sup>1</sup> is to be found an article by Sackett and Isham relating to the formation of "niter spots" in the arid regions of the western United States. In a more recent number of the same magazine<sup>2</sup> Stewart and Peterson have given a lengthy and interesting discussion of this paper and also a description of these brown spots. These later writers have attributed the origin of these nitrates to the leaching and concentrating action of irrigating water upon the nitrates occurring in the shales and sandstones (or country rock) adjacent to and underneath the affected areas from which the soil has been derived. Their field observations were in Utah, where they describe the appearance of brown "niter spots" in certain irrigated fields.

While making some geological investigations in northwestern Nevada in 1912 it was the present writer's pleasure to make some notes relating to brown "niter spots" occurring on the playas. The observations being in strict conformity with well-known principles of commercial niter formation, the necessity of much speculation before arriving at a conclusion as to their origin was obviated. It is trusted that the few simple facts recorded at that time will serve in giving some added light on the subject in hand.

In traversing the playas brown spots were frequently noted on the surface in connection with alkali salts. When the brown mixtures of earth and salts were tested they invariably showed large amounts of nitrates. In places on the surface where the brown color was not present no nitrates were noted. Pits dug failed to show nitrates at greater depths than

<sup>1</sup> N. S., Vol. XLII., p. 452.

<sup>2</sup> N. S., Vol. XLIII., pp. 20-24.