

is to be used to maintain the William Andrew Patterson College of the University of Kentucky, the purpose of which shall be to train young men for diplomatic and consular service. President Patterson's library is to be given to the university on condition that it be kept intact and that the books be not allowed to go out of the room in which the library is kept. The will names as literary executors Dr. William B. Smith, of New Orleans, and Miss Mabel Pollitt, who are to examine correspondence and other writings and prepare and publish a biography.

A JOINT meeting of the Eastern and Western Divisions of the American Philosophical Association will be held in New York City on December 27, 28 and 29, at Union Theological Seminary. At this meeting Professor John Dewey will deliver the Paul Carus Lectures on the attempt to apply a theory of experience to certain metaphysical problems. The afternoon sessions will be largely devoted to the lectures by Professor Dewey, and the morning sessions to the reading and discussion of papers offered by members. Abstracts of papers should be in the hands of Professor G. A. Tawney, University of Cincinnati, Ohio, not later than November 10. On Wednesday and Thursday evenings, respectively, the smoker and annual dinner will be held, and at these times also addresses by the presidents will be delivered.

THE writer of "From an Oxford Notebook" in *The Observatory*, who is always very much alive, writes in the last number as follows: "Those interested in handy reference works will be grateful to the compilers of *Who's Who* for producing a supplementary volume *Who was Who*, covering the period 1897-1916. The volume was intended to appear in 1916, but owing to the war its publication was delayed. It has now been produced, and can be put upon the reference-shelves. Since it consists chiefly of extracts from the volumes of the main publication, with dates of death added, its information can generally be trusted; but I notice that it contains a statement of the death in 1909 of Professor Turner, of Oxford. Now I much doubt the accuracy of this information. I have certainly not seen the actual face of the learned gentleman for

many years; but I have heard him lecture, and (unless wireless has entered upon a new phase) I do not think he was very far away. Further investigation is, however, proceeding."

## UNIVERSITY AND EDUCATIONAL NOTES

THE China Medical Board of the Rockefeller Foundation has given \$125,000 each to Southeastern University at Nanking and Nankai College at Tientsin for science buildings and equipment. Southeastern University is a government institution, located at Nanking, the old southern capital of China. Nankai College, in the north, is a private institution receiving provincial aid.

THE *Journal* of the American Medical Association reports that the new Darling Building in the Medical School of Adelaide University, South Australia, was opened recently by Sir George Murray. It is to be devoted to the departments of the fundamental sciences in the faculty of medicine, as there has been inadequate accommodation for the teaching of anatomy, physiology and pathology. The family of the late Mr. John Darling contributed £15,000 towards the erection of the building.

DR. CHARLES RUSS RICHARDS, formerly dean and director of the College of Engineering of the University of Illinois, will be inaugurated as president of Lehigh University on October 14.

DR. HOWARD B. LEWIS, formerly associate professor of physiological chemistry at the University of Illinois, has accepted an appointment as professor and head of the department of physiological chemistry in the Medical School of the University of Michigan.

DR. LEON A. HAUSMAN, of Cornell University, has joined the staff of Rutgers College as instructor in zoology and research zoologist.

JOHN L. BUYS, instructor in entomology at Cornell University, has been appointed assistant professor of entomology at the University of Akron.

DR. A. D. HOWARD, until recently assistant in the Bureau of Fisheries with assignment to certain fresh-water mussel studies at the bio-

logical laboratory at Fairport, Iowa, has resigned to become assistant professor of zoology at the University of Southern California.

PROFESSOR T. J. TALBERT, superintendent of farmer's institutes and extension schools and leader of subject matter specialists, Division of Extension, Kansas State Agricultural College, has been appointed professor of horticulture and chairman of the department of horticulture at the University of Missouri.

## DISCUSSION AND CORRESPONDENCE

### THE PALEOPATHOLOGY OF THE PARASUCHIANS

STUDENTS of vertebrate paleontology have long been aware of the presence of curious knob-like eminences on the snouts of the Triassic crocodile-like, elongate reptiles which Huxley regarded as the Parasuchia, but are now known as the Phytosauria with an organization quite remote from that of the Crocodilia. No adequate explanation of these eminences has ever been given although the writer referred to one of them as a callus following a fracture; an interpretation from which he was dissuaded by Huene. Recently Dr. Case has written me about a very curious example of these eminences and Professor O. Abel of Vienna has discussed<sup>1</sup> in a very interesting manner the nature of all the eminences, regarding them as lesions following injuries received in combat, and as occurring more frequently in the male. The ensuing complexities of a taxonomic nature are startling, and if correct pathological disturbances will reduce a lot of scientific names to the limbo of useless terms.

But I am not at all sure that Abel is correct. His argument is from analogy only. He has given not one positive anatomical or pathological evidence to prove that the eminences are "Bissverletzungen," or lesions of a traumatic nature with often huge necrotic sinuses, if they are at all pathological. The weakness of Abel's argument consists in the fact that

the eminences are always in the median line and are always fairly symmetrical, at least in all the examples known to me. So before Abel's conclusions are accepted and the taxonomy of the Phytosauria revised we must have definite proof that these eminences really are pathological in nature and not something else. They *may* be pathological lesions, but we do *not know* they are, and there are methods of determining this point within reasonable limits of certainty, and that is by a histological comparison of the bone from one of the eminences, with normal bone elsewhere on the snout.

We have sufficient knowledge of the histology of fossil bone through the studies of K  lliker, Seitz and Schaffer, whose work is reviewed in my forthcoming volume on "Paleopathology," and to which I have made a number of additions. From the standpoint of histology the bone tissue of ancient forms, and of modern fishes, consists largely of an osteoid tissue which in normal fossil bone has few, widely-scattered lacun  , scant lamell   and little or no evidences of an Haversian arrangement. In fossil pathologic bone, however, the lacun   become more numerous, the lamell   more prominent, and numerous concentric arrangements, recalling Haversian systems, are apparent. I have found this to be true in callosities of the Permian reptiles, in the Comanchic dinosaurs, in the Pleistocene cats, in pre-Columbian man and in the modern bison, so we may say the phenomena are universal. Foote has recorded a similar fact for the modern bull-frog, in a case of a fracture of the femur.

Until positive evidence of this kind is forthcoming Abel's conclusions must await acceptance. The matter is far too important for hasty judgment. The numerous fossil pathological lesions I have studied are so different from the symmetrical, median eminences seen in the Phytosauria that I hesitate to accept them as callosities. We usually find a lack of symmetry in pathological lesions, especially in those of a traumatic character.

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<sup>1</sup>O. Abel: Die Schnauzenverletzungen der Parasuchier und ihre biologische Bedeutung (mit 10 Textfiguren). *Paleontologische Zeitschrift*, Bd. V, Heft 1, Juni 1922, pp. 26-57.