

of Leidy, while I was at Yale in 1892, I felt that this statement was indeed "subject to verification," as its author later remarks.

That Leidy and Marsh were good friends is apparent, first of all, from the letters written by Leidy to Marsh during the years 1867 to 1890, and now in our museum archives, and equally so from the praise of Leidy that Marsh is known to have spoken at New Haven and elsewhere. Moreover, anyone who will take the time to go through Marsh's many publications will find many references to Leidy and his species, ranging all the way from 1868 to 1893. In none of these cases does he differ much with Leidy, and in one instance, at least, he speaks gratefully of bird material loaned him from the Philadelphia collections. In 1893 he named a new Miocene mammal *Ammodon leidyianum*.

Turning now to more direct references, in his well known vice-presidential address before the American Association for the Advancement of Science at its Nashville meeting in 1877 on the "Introduction and Succession of Vertebrate Life in America," Marsh says: "For our present knowledge of the extinct mammals, birds and reptiles of North America, science is especially indebted to Leidy, whose careful, conscientious work has laid a secure foundation for our vertebrate paleontology." Again, in the presidential address before the same association two years later at the Saratoga meeting ("History and Methods of Paleontological Discovery") we read: "The foundation of our vertebrate paleontology was laid by Leidy, whose contributions have enriched nearly every department of the subject."

Yale's admiration and gratitude for the learning of Philadelphia goes back to the beginning of the last century, when Benjamin Silliman went to that university to get his training in natural history from Professor Adam Seybert. This feeling Marsh inherited, and for the scientific men of the Academy of Natural Science he had only praise, save for the "militant paleontologist" of whom Osborn also speaks.

CHARLES SCHUCHERT

YALE UNIVERSITY

I am very glad indeed that Professor Schuchert is calling attention to the two paragraphs in Professor Marsh's writings in which he paid tributes to Joseph Leidy. My address was delivered under very great pressure, from hurried notes and absolutely extemporaneously. The statement I made was to the best of my memory and belief, but I am glad to qualify it now in the manner indicated by Professor Schuchert. It remains true, however, that the remarkable discoveries by Leidy in the genealogy of the horses, of the camels, of the rhinoceroses, of many other vertebrate

groups, received scant or no recognition from either Marsh or Cope.

I am obliged to differ also from Professor Schuchert in the matter of prior descriptions. It is literally true, as I stated in my address, that the prior descriptions of species, and in many cases of genera, by Leidy were passed over in silence by both of his great successors. I hope at some future time to pay a very full tribute to the work of Marsh, as I have previously done to the work of Leidy and Cope. On this occasion I shall try to summarize Marsh's achievements, which were certainly monumental and deserving of highest recognition.

HENRY FAIRFIELD OSBORN

AMERICAN MUSEUM
OF NATURAL HISTORY

THE AUDIBILITY OF SOUNDS

THE note on "The audibility of consonants" in SCIENCE, February 22, 1924, p. xiv, calls to mind some analogous experiments made by the writer in 1905-6, part of a doctor's dissertation. The nonsense vocables used consisted of three syllables, each syllable a consonant followed by a vowel. There were six subjects, the material affording in all 1,296 interpretations of each consonant and 4,104 of each vowel utilized. The misperceptions of the consonants worked with ranged from 34 per cent. to 3 per cent., the order from most to fewest mistakes being *w, v, h, m, th* as in *the*, *l, g, p, b, d, n, r, k, t, f, th* as in *thought*. In respect to the character of the sounds wrongly heard, the tendency was to change the place of articulation rather than the method, thus *p* would be heard as *k* rather than as *f*. There was also some tendency for a person who heard a sound well when it was spoken to hear it erroneously instead of some other sound, and there were individual differences in the sounds so affected.

The vowels experimented with were *a, e, i, o, u*, in their "continental" values. The misperceptions ranged from 15 per cent. in the case of *e* to 3 per cent. in the case of *a*, the order being *e, i, u, o, a*.

F. L. WELLS

IN SOUTH CAROLINA

CHICORA COLLEGE FOR WOMEN is situated at Columbia, the capital city of South Carolina. It is owned by eight Presbyteries of the Synod of South Carolina, "in connection with the Presbyterian Church in the United States," and is managed by a Board of Trustees representing these various Presbyteries. Its president is Rev. S. C. Byrd, M.A., D.D., who is also professor of Bible and philosophy.

Under date of March 14, 1924, President Byrd sent the following letter to the members of the faculty of the college:

Dear Sir:

It has been rumored for a year or more now that there are members of our faculty who hold views which are not in harmony with the fundamental doctrines of historic evangelical Christianity—such as the inspiration, infallibility and authority of the Bible as the Word of God, the direct creation of man, the deity, virgin birth, vicarious death and bodily resurrection of Christ. I have been incredulous of these reports and was disposed to deny them. Recently, however, I have been inclined to fear that there is some foundation for them, and hence this letter.

As you know, the college is owned and controlled by the Southern Presbyterian Church, and is conducted for the purpose of promoting the education and training of our students in the essential principles of Christian doctrine and life as held by the Southern Presbyterian Church and a liberal education in accord with these principles.

It is confidently expected, therefore, that no officer or teacher in the college will hold views, religious or otherwise, which are contrary to or inconsistent with any of the fundamental doctrines of the church. Should such views be held by you, this letter is a request that I as the president of the college be informed of the fact. Should I not hear from you immediately in answer to this letter, I will understand that you hold no such views, and that these reports are without foundation so far as you are concerned.

Yours very cordially,
S. C. BYRD, President

Two professors in the college, Professor Guy A. Lackey, head of the department of education, and professor of education and philosophy, and Professor James M. Reinhardt, of the department of history and sociology, returned answers to the letter of a character presumably unsatisfactory to the president. Their resignations have been asked for, received and accepted.

These men were not questioned as to their creeds before they were employed. Professor Lackey—naïve soul—"took it for granted that all psychologists believe in evolution," and apparently, also, that presidents of all colleges, including denominational ones, realized this common failing of all psychologists.

VERNON KELLOGG

WASHINGTON, D. C.

QUOTATIONS

PROFESSOR WHITEHEAD

PROFESSOR A. N. WHITEHEAD, whose appointment for a period of five years to a chair of philosophy at Harvard was recently announced, is fortunate in securing at the age of sixty-three the opportunity it presents of writing up the philosophy that has gradually been developing and maturing in his mind. Free from much of the routine administration and

committee work of a busy university life, with which he is so fully identified, he will be able, save for a few lectures or "chats" per week on his own researches with his students, to devote his whole time to the expansion and publication of his work in certain realms of thought which he had made peculiarly his own—the philosophy of science, mathematical logic and generally the philosophical questions arising from it. On the philosophical side, he proposes to extend and systematize his recent work as embodied in his "Principles of Natural Knowledge," his "Concept of Nature," and "Principles of Relativity," and to consider the metaphysical questions suggested. On the logical side, he intends finishing the fourth volume of "Principia Mathematica," dealing with geometry and more generally with many termed relations. On account of his versatility and his manifold activities, Professor Whitehead's departure from Great Britain will be felt as a great loss to many sections of the educational world, administrative and pedagogic. To the mathematical layman, he is perhaps best known for his "Introduction to Mathematics," probably his one successful book financially, and his collection of addresses, "The Organization of Thought." Since his early days, Professor Whitehead has been identified with a distinctively progressive attitude both with regard to the general philosophic basis of education and to the special technical facilities that demand development. On this account his loss to the Imperial College of Science and Technology, South Kensington, where he succeeded Professor A. R. Forsyth as chief professor of mathematics and mechanics, and to the University of London, where he is chairman of the academic council, can not be estimated. It is a severe commentary on the inelasticity of the British university educational system that it should be necessary for one of such eminence, charm of manner, and inspiring intercourse, to seek a period of five years in an educational establishment of another country in order at the close of an active career to find the opportunity of completing his research. Scientific thought undoubtedly stands to gain by this latest form of American enterprise.—*Nature*.

SCIENTIFIC BOOKS

Manual of the Vertebrates of the United States. By H. S. PRATT. P. Blakiston's Son and Company, Philadelphia.

NATURALISTS all over the country will have cause to rejoice at the convenient "Manual of the Vertebrates of the United States" recently brought out by Blakiston. It is written by Dr. H. S. Pratt, of Haverford College, and will serve an equally important function