

on the shore of Lake Union at the foot of the campus, where ready access to the sea is obtained through the Lake Washington Ship Canal. The building is admirably equipped for research in oceanography, based on the fundamental sciences of physics, chemistry, botany and zoology. The Oceanographic Laboratories, besides the main laboratories to be dedicated in June, are composed of a research boat *Catalyst*, which is seventy-five feet long, Diesel driven, with a cruising radius of 2,000 miles, and the field laboratories at Friday Harbor in the San Juan Islands, comprising eight buildings of hollow tile construction, on 484 acres of land, with about two miles of shore line.

ACCORDING to the *Journal* of the American Medical Association ground was recently broken for the erection of a research laboratory at the plant of Merck and Company, Inc., Rahway. A south wing will be devoted to carrying on pure or fundamental research, for which three laboratories will be provided. Another laboratory will be fitted for biochemical research with an adjoining incubator room containing a sterilizer, incubator and other necessary equipment. In a pharmacologic laboratory the physiologic action of various chemicals will be investigated. There will also be a laboratory for micro-analysis, a microbalance room, an ordinary balance room and an ice room. The north wing will contain a large chemical laboratory suitable for twelve chemists carrying on applied research and development work. The central section will contain, among other things, a library.

ACCORDING to *The British Medical Journal*, an Alfred Fripp Memorial Fellowship, endowed with the sum of £7,000, has been established at Guy's Hospital for promoting the advancement of knowledge and research in psychology through the study of children in health and disease. The fellowship will be awarded by a board of electors consisting of the physician for diseases of children, the superintendent and the dean of the medical school as *ex-officio* members, and five others coopted by the *ex-officio* members. It will be open to either sex, but candidates must be unmarried, not more than 30 years of age, and be qualified to practice medicine or surgery; they will be expected to submit with their application a scheme of advanced study or research work. The appointment will be whole-time—it may be held concurrently with a demonstratorship—for a period of two years, which may be extended for a further period not exceeding three years at the discretion of the board of electors. The Fripp Fellow will be allowed opportunities for study in the children's department of the hospital, and the salary will be £300 per annum.

Nature reports that the amalgamation of the Optical Society and the Physical Society of London has been under consideration for some time. It has now been decided to proceed with the amalgamation. Certain alterations are to be made in the articles of association of the Physical Society, and, in due course, a general meeting of the Optical Society will be held to wind up the society.

DISCUSSION

LEIDY'S CRETACEOUS REPTILES OF THE UNITED STATES

IN Professor Henry Fairfield Osborn's interesting biography of Edward Drinker Cope, paleontologist, there appears on page 169 a severe criticism of Joseph Leidy's "Cretaceous Reptile Fossils of the United States, published under the auspices of the Smithsonian Institution," which Cope erroneously attributes to Professor Huxley, taken from the *Geological Magazine of London*, 1868.

The appended correspondence from the letter files of the Smithsonian Institution, contributed through George P. Merrill, geologist in charge, and the letter files of Professor Leidy's personal correspondence, should be preserved in the interest of the history of American science of that period and as a prelude to the *Elasmosaurus platyrus* episode, which is further elaborated on pp. 403-409 of the same biography. It is curious that Cope should have drifted into this error, as the work in question "was referred

in 1865 by Secretary Baird of the Smithsonian Institution to Louis Agassiz and Edward D. Cope for review as to publication, both men naturally approved it" (see page 159), and, as Professor Osborn states, this memoir entitled "Cretaceous Reptiles of the United States" collected all the previous knowledge of American explorers, and put into the hands of Marsh and Cope all the knowledge of cretaceous reptiles up to that year, just as Leidy in his subsequent contributions of 1869 reviewed the entire western fossil mammalian life.

JOSEPH LEIDY, II

PHILADELPHIA

1302 Filbert Street,
Philadelphia, Pa.,
February 4, 1869.

COPY

P. S.

Dear Professor Henry:—

A very unfavorable criticism recently appeared in the *London Geological Magazine* on my last work on the

"Cretaceous Reptiles," published by the Smithsonian Institution. The review was signed by "H," which led others and myself, to suppose [that it] proceeded from Huxley, and I assure you I felt much annoyed about it, though I took no printed notice of it. I have just been informed by Professor Newberry of New York, that he was authorized to say that Professor Huxley not only did not write it but knew nothing of it until it was printed and that he does not sympathize with, but utterly condemns it. I give this information to you for I should not like my credit disputed.

Yours truly,
JOSEPH LEIDY.

School of Mines, Columbia College,
Corner 49th Street & 4th Ave.,
New York, Jan. 29th, 1869.

Professor Joseph Leidy

My dear Sir:—

I suppose you have noticed the very harsh and unjust review of your "Cretaceous Reptiles" in the October Number of Geological Magazine. I need not assure you that all who know you and the high character of all the scientific work you have done feel that American science which has no more creditable representative than yourself has been grossly insulted in the article referred to and that on this side of the Atlantic at least this review will do you more harm than good.

My object, however, in writing you now is not to tell you this, for you must know that such would be the feeling of your scientific friends, but to say to you that if you have been led to suppose from the fact that this review was signed "H" that it was written by Prof. Huxley, as was the impression producing great surprise and regret among us here when it was published, I can have the pleasure of assuring you that Professor Huxley did not write the article and knew nothing of it until it appeared and farther that he has no sympathy with the views or spirit of the article and condemns it as earnestly as we do. I have his authority for saying this much to you.

I suspect the avenues and the facts or assertions of the obnoxious article emanated from a source much nearer home.

We all deeply deplore Cassin's early death. At the last meeting of the Lyceum, resolutions of regret and sympathy were passed which will be communicated to his family.

I hope to be in Philadelphia in a few days and to see you. I have some things to say to you that I can't well put on paper.

Yours very cordially,
J. S. NEWBERRY.

SIGNIFICANCE OF BAER'S LAW

IN discussing my paper published in the issue of SCIENCE for November 13, 1931, Kirk Bryan and

Shirley L. Mason¹ state that I "neglected to mention the factor of stream deflection due to the earth's rotation," in my explanation of contrasts, "in the rate at which denudation takes place on the banks of any rills or streams flowing in directions approaching east or west" in southern Ohio and in New Jersey. The impression which I get out of the discussion is that the authors consider that the neglect of this consideration may well invalidate all my observations.

The criticism of Bryan and Mason refutes itself: I called attention to the steepness of northward slopes in valleys having streams flowing east and in valleys having streams flowing west, mentioning both directions specifically. How then would right-hand deflection result in steepening of northward slopes? Their entire criticism breaks down before this one simple fact. It hardly seemed necessary to state that field observations yielded no hint of the influence of rotation on topography, nor to discuss that factor in a brief note on slope asymmetry. However, the point is discussed, and negatively dismissed, in one of the references I cited. F. Bascom² explains the steeper northward slopes, characteristic of the Coastal Plain in New Jersey, on the basis of differential exposure which causes contrasts in the active processes of weathering and transportation.

Bryan and Mason cite the classic example of steep banks on the western sides of Long Island streams as evidence of the potency of rotation in producing asymmetric valley cross-sections. As Fuller³ limits this characteristic to the portions of these valleys in outwash plains and definitely states that their cutting began in Wisconsin time it seems strange that Bryan and Mason shy away from the study of asymmetry in the glaciated portions of North America on the basis that many of the streams are "too youthful." Their statement that "Obviously the nearly unglaciated northern portion of Asia is the region for testing" the question of valley asymmetry appears inconsistent with their faith in the examples cited from Long Island.

The principle that rivers in the northern hemisphere tend to cut their right banks more vigorously than their left was apparently first advanced by Babinet,⁴ though it is customarily called Baer's Law because of its formulation by Karl von Baer⁵ in 1866. Dunker, Klockmann, Nansen, A. E. Nordenskiöld and others have discussed it at various times since. American geologists usually refer to the classic papers by Gil-

¹ "Asymmetric Valleys and Climatic Boundaries," SCIENCE, 75: 215, 1932.

² U. S. Geol. Surv., Folio 167: 2, 1909.

³ M. L. Fuller, "Geology of Long Island," Prof. Paper 82: 51, 1914.

⁴ Comptes Rendus Acad. Sci., x1: 638, 1849.

⁵ Bul. Acad. Sci. Petersbourg, 2: 1, 218, 353, 1866.