

SCIENCE

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FRIDAY, APRIL 19, 1901.

THE MORPHOLOGICAL MUSEUM AS AN EDUCATIONAL FACTOR IN THE UNIVERSITY SYSTEM.*

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THE educational value of the modern morphological museum has of late years received such general recognition that we may well regard its position as established in the university system. Not only do the departments of undergraduate instruction draw more and more extensively upon this portion of the university equipment for the illustration of courses and demonstrations, but the museum itself has assumed its proper relation to independent scientific research and to the investigation of biological problems. It has seemed to me desirable to present to this association—whose members are so largely both teachers of anatomy and investigators of the science—some account of the progress made during the last decade in museum work in the department of vertebrate morphology. More especially does it appear proper at this time to note the present stage of development of the modern anatomical museum, because we have, I think, reached a period at which we can look back over a series of busy years and gauge correctly the value of the results obtained, as well as forecast the probable future development of this work. Ten or fifteen years ago the morphological

* Address of the President before the Association of American Anatomists at the Fourteenth Session, held at Baltimore, Md., Dec. 27–28, 1900.

propriate popularizations. For these this volume has the promise of proving serviceable, and to others and more serious students it may not be without suggestive value. It is fortunate, at all events, that the psychology thus presented draws its inspiration from worthy and scholarly sources, and is presented in a way calculated to make the student think and observe, not merely read and repeat. We may question whether good wine should be so much diluted; but however thin, it retains a flavor which wine of lesser quality never bears.

J. J.

BOOKS RECEIVED.

Report of the Seventieth Meeting of the British Association for the Advancement of Science, held at Bradford, in September, 1900. London, John Murray. 1900. Pp. cxvi + 975 + 111.

Report of the U. S. National Museum. Part II. A Memorial of George Brown Goode together with a selection of his Papers on Museums and on the History of Science in America. Washington, Government Printing Office. 1901. Pp. xii + 515.

The Elementary Principles of Chemistry, accompanied by Suggestions to Teachers. A. W. E. YOUNG. New York, D. Appleton & Company. 1901. Pp. xiv + 106 + 48.

Gano's Natural Philosophy. Translated by E. ATKINSON and revised by A. W. REINOLD. Longmans, Green & Co. 1900. Pp. xii + 752.

Lepeophtheirus and Lernæa. No. VI. of the Liverpool Marine Biological Committee Memoirs. ANDREW SCOTT. London, Williams & Norgate. 1901. Pp. viii + 54 and 5 plates. 2 s.

Second Report of the United States Board on Geographic Names, 1890-1899. Washington, Government Printing Office. 1901. Pp. 150.

SCIENTIFIC JOURNALS AND ARTICLES.

NUMBER LI. of the *Journal of American Folk-lore*, which is late in appearing, and concludes the year 1900, contains as the first article a Hawaiian legend entitled 'Laieikawai,' from the memoranda of Dr. John Rae, by whom the story was taken down and translated, probably about 1860. Of this narrative a variant appears in the book of King Kalakaua, published in 1888. Both versions are abstracts, but the account of Rae, which is only a fragment, is so far as it goes much fuller, and gives a much

better idea of the literary character of Hawaiian myth than any other accessible source of information. The story seems to have been a prose epic narration of great length, ornamented with occasional pieces of verse and provided with a very complicated plot. The state of society, and the conceptions as well as modes of expression, frequently remind the reader of the Homeric poems. The heroine from whom the tale is named was worshipped by certain Hawaiian gentes under the title of the Lady of the Twilight, and the sun-hero became her husband. The story of Rae recites the manner in which the girl, as born before the coming of a brother, is sentenced to be put to death, her concealment by her grandmother, education in a cave below a waterfall, growth to maturity, and great beauty, the fame of which got abroad, and caused a quest after her place of hiding, which was indicated by the presence of a rainbow, attendant on the maiden as of divine race. The narration is full of information concerning Hawaiian cult and superstition, and makes a valuable addition to the existing stock of knowledge. It is to be hoped that the publication may lead to a determined attempt to preserve Hawaiian legendary lore, and to procure full and correct texts in the original language. Miss A. C. Fletcher describes a Pawnee ceremony of thanksgiving, at which she had the good fortune to be present. In this rite a buffalo skull was worshipped as representative of an ancient divine buffalo established by the supreme deity Tirawa as mediator and teacher of men. Dr. A. F. Chamberlain contributes a discussion on 'Algonkian Terms connected with Religion and Mythology.' Among the items of belief may be noted evidence that sacrifices were made to the war-god by the suspension to trees of human victims; one is reminded of the similar Norse offerings to Odin. Rev. W. M. Beauchamp supplies an Onondaga tale of the Pleiades, in which these stars are represented as merry children who have danced themselves into the sky. The excellent record of 'American Folk-Lore' is continued by Dr. A. F. Chamberlain (Clark University, Worcester, Mass.). With the present year Dr. Chamberlain will assume the general management of the journal, Mr. W. W. Newell, who has hitherto

fulfilled that function, remaining as associate editor.

In a reprint of articles on early American ballads, contained in Nos. 47 and 49 of the same *Journal*, Mr. W. W. Newell traces the history of certain ballads produced in Massachusetts. One of these, called 'Isaac Orcutt,' and belonging to the end of the eighteenth century, recited the manner in which that youth met his death from a falling tree; the piece was sung as a dirge at the funeral, being chanted by six young women dressed in white. Similar was the origin of 'Springfield Mountain,' produced in 1761, in memory of the son of a Lieutenant Merrick, of Wilbraham. The ballad attained extraordinary popularity in the United States, being sung with numerous variations; it abdicated its local character, took on a love situation, and survives as a comic song. These examples are the more curious inasmuch as the custom of chanting dirges over the dead seems not to be recorded in English folk-lore.

The Popular Science Monthly for April opens with a sketch of the work of "Malpighi, Swammerdam, and Leeuwenhoek," by William A. Locy. Paul H. Hanus discusses 'Two Contemporary Problems in Education,' What shall we do about the elective system of studies and how shall we bridge the gap between the high school and the lower grade? Incidentally Professor Hanus advocates studying some modern language for two or three years before commencing Latin. Havelock Ellis continues 'A Study of British Genius,' this instalment being devoted to heredity and parentage, and the favorite topic of 'Suicide and the Weather,' is treated in some detail by Edwin G. Dexter. Charles H. Cochrane gives a résumé of 'Recent Progress in Aërial Navigation,' and 'The Foreign Trade of the United States,' is treated at some length by Frederic Emory, who, while noting its recent great increase, calls attention to the fact that in the near future we may be obliged to struggle to retain it. Finally Solon I. Bailey tells of 'The Planet Eros,' which for various reasons, among them its importance for determining the solar parallax, is for the moment of more interest to the astronomical world than the greatest planet. The var-

ious departments contain articles of interest and the number contains the index for Vol. LVIII.

SOCIETIES AND ACADEMIES.

SECTION OF BIOLOGY OF THE NEW YORK ACADEMY OF SCIENCES.

At a regular meeting of the section held on March 11, 1901, the following program was offered:

H. F. Osborn: 'Systematic Revision of the American Eocene Primates and of the Rodent Family *Mixodectidæ*.'

O. P. Hay: 'The Composition of the Shell of Turtilles.'

M. A. Bigelow: 'Some Comparisons of the Germ-Layers in Entomostraca Crustacea.'

Professor Osborn stated that the only fossil primates at present known are those in the Eocene. The supposed Oligocene genera described by Marsh and Cope have proved to belong to the Artiodactyla. Associated throughout with the discovery and literature of the primates is the family *Mixodectidæ*, including *Mixodectes* of the basal Eocene or Torrejon beds; Mathews has suggested that this animal is a rodent. Careful comparison of this type with the supposed primates *Cynodontomys* of the middle Eocene and *Microcyops* of the upper Eocene proves that these animals also belong probably with the rodentia; they represent a primitive stock with strong affinities to the Tillodontia, which are thus brought nearer to the ancestral rodents. This conclusion removes all these animals from the primates where they have hitherto been placed. This leaves three families of monkeys, as follows: *Hypsodontidæ*, including *Hypsodus* and *Sarcolemur*, animals of medium size, retaining the typical series of 44 teeth; a second family, the *Notharctidæ*, including *Pelycodus* and *Notharctus*, animals of larger size, with teeth reduced to 40 by the loss of 4 incisors, and like the foregoing comprising long-jawed types; and a third family, the famous *Anaptomorphidæ* of Cope, short-jawed, very progressive types, with 36 to 32 teeth, the pre-molar series being reduced. The identification of these families with the Eocene *Adapidis* or with *Necrolemur* of Europe is not sustained. The *Hypsodontidæ* and *Notharctidæ* are well