

the cranium. Following this is a diagram showing *Zeuglodon* at the bottom and *Ziphius* as the most highly modified genus at the top, other genera, recent and fossil, being indicated in their proper positions at either side. This portion of the work is replete with information and abounds in references to other papers. There are, however, two points to which it may be well to call attention: The first of these is the assumption that *Zeuglodon* is the ancestor of the toothed whales, the other is the assumption that *Zeuglodon* had a highly developed dermal armor, amounting in fact to a carapace. Both of these conclusions should for the present be held in abeyance, as neither is as yet proven. This may perhaps be modified somewhat by saying that under the term *Zeuglodon* are included two perfectly distinct genera, *Basilosaurus* and *Dorudon*, and that while it seems very improbable that the former left any descendants, the structure of the latter is much nearer that of modern whales and these may be descended from that genus. There is, however, a large undescribed cetacean, indicated by vertebræ in the U. S. National Museum, found in the Eocene of Alabama and a knowledge of this form may throw some light on the problem of the origin of modern toothed whales. As to the defensive armor of *Zeuglodon* it may be well to discuss this at length later; for the present it may be said that the fine material collected by Mr. Schuchert for the U. S. National Museum shows nothing more than a few dermal ossicles, about the size of one's fist, of a rounded shape and slightly keeled on one edge. Had there been any extensive dermal armor it seems likely that it would have been collected, or at least seen, by Mr. Schuchert.

F. A. L.

ANTHROPOLOGY AT THE UNIVERSITY OF CALIFORNIA.

A DEPARTMENT of anthropology has, as we have already noted, been established by the regents of the University of California. The work of this department, for the present, will be anthropological research and the formation of a museum. Mrs. Phoebe A. Hearst has for several years been collecting a large amount of valuable material from the several expeditions

she has established, particularly in Egypt, in Peru and in California. These collections she gives to the University at Berkeley. The University has also a large collection from Alaska, presented by the Alaskan Commercial Company; and it is known that other collections are to become the property of the University when the museum is established. There are also now in the University many archeological specimens and human crania obtained from various parts of the state. For the storage and preservation of all this valuable material a temporary fire-proof building of brick and iron is to be erected at once. It is believed that this action will also be an incentive to the friends of the University to provide the funds for a museum building adequate for the proper exhibition of the collections in all departments.

As an encouragement to others and as an expression of her great interest in the new department, Mrs. Hearst, who is one of the regents and a most generous patron of the University, makes a gift of \$50,000 a year for five years for anthropological research. This amount will be devoted to continuation of the work in Egypt and in South America and to securing Greek and Roman antiquities; also to a thorough research of the archeology and ethnology of California, with particular reference to investigations of the deposits from the supposed Pliocene gravels to recent times, with the object of discovering when man first appeared on the Pacific Coast; also to a study of the many Indian tribes of California, their languages, myths and customs. For this work several parties are already in the field.

At present there will be no regular courses in the department, but university lectures on special topics in anthropology will be given from time to time. The first of these lectures was delivered on September 20 by Professor F. W. Putnam, who was invited to outline the purpose and scope of the new department and the methods of anthropological research. This was followed by a lecture on the study of the Indians by Miss Alice C. Fletcher; and the third lecture is to be by Mrs. Zelia Nuttall on the picture-writing of the ancient Mexicans.

Dr. A. L. Kroeber and Mr. P. E. Goddard have been appointed respectively instructor

and assistant in anthropology with assignment for field work among the Indians of California. Professor J. C. Merriam of the paleontological department has been given immediate charge of the research. Dr. P. M. Jones is engaged in archeological work with special reference to Santa Rosa Island. An honorary advisory committee has been appointed by the regents, as follows :

Dr. Benjamin I. Wheeler, President of the University.

Professor F. W. Putnam, Chairman of the Committee.

Mrs. Phoebe Hearst.

Miss Alice C. Fletcher.

Mrs. Zelia Nuttall.

Dr. Franz Boas.

Professor John C. Merriam.

Mr. J. G. M. E. d'Aquin has been appointed assistant secretary and executive officer of the department.

SCIENTIFIC NOTES AND NEWS.

THE eightieth birthday of Professor Rudolf Virchow has been celebrated in Berlin with elaborate ceremonies. The birthday actually occurred on Sunday, October 13, but the public exercises were on the previous day. There was a reception in the Pathological Institute in the afternoon and a banquet in the dining hall of the Prussian Diet in the evening, followed by an official reception in the parliament hall. Professor Waldeyer, secretary of the Berlin Academy of Sciences, presented 50,000 Marks, subscribed by medical men in Germany toward increasing the Virchow research fund. The Emperor has conferred an order and a medal, which have presumably been so long withheld owing to Professor Virchow's active participation on behalf of liberal institutions. The municipality of Berlin has resolved to call its new hospital, containing beds for 1,700 patients, the Virchowkrankenhaus. In New York City there was a banquet in honor of Virchow on October 12, when addresses were made by Drs. William Osler, W. H. Welch, A. Jacobi and A. H. Smith. Two days previously the *Gesellschaft der Wissenschaften* also celebrated the

event, on which occasion addresses were made by Drs. A. Jacobi, Franz Boas and J. N. Senner.

A STATUE of Pasteur was unveiled on September 9, at Arbois, where he spent his childhood and his holidays in later life. The monument, erected at a cost of over \$10,000, was designed by M. Daillon and represents Pasteur seated. On the pedestal are two bas-reliefs, one representing inoculation against rabies and the other agriculture profiting from Pasteur's discoveries. On the occasion of the unveiling addresses were made by M. Decrais, French minister of the colonies, and M. Liard, representing the Department of Public Instruction.

AMONG the scientific men who will be present as delegates at the bicentennial celebration of Yale University are : President H. S. Pritchett and Professors Wm. T. Sedgwick and George F. Swain from the Massachusetts Institute of Technology ; President Schurman from Cornell University ; Professors J. M. Van Vleck, W. N. Rice and W. O. Atwater from Wesleyan University, and Dr. H. C. Bumpus from the American Museum of Natural History.

DR. RUDOLF VON LEUTHOLD, has been appointed Staff-Surgeon-General of the German Army, in succession to the late Dr. von Coler.

SURGEON GENERAL GEORGE M. STERNBERG has returned to Washington after a tour of inspection in the Philippines.

PROFESSOR BASHFORD DEAN has returned to Columbia, after spending his sabbatical year in the east. He has brought back an almost complete series of developmental stages of the Port Jackson Shark, *Heterodontus japonicus*, a number of stages in the development of *Chlamydoselachus*, two new *Myxinoids*, a new *Chimæra*, together with a general zoological collection. During a visit to the Hokkaido (Yezo), he brought together several hundred specimens of Aino antiquities, which are now deposited in the American Museum of Natural History in New York. He also secured a collection of interesting glass sponges from the region of Misaki, which are also destined for the American Museum. Among other specimens are included a