

Pluerodira. The structure of this animal is especially interesting and surprising, "since we should expect in such an old representative of the Chelonia, a low stage of development, whereas, this type presents directly the opposite. The Pleurodora are generally regarded as the most specialized and highly developed group of Chelonia, yet this form shows all the characteristics of the family in their most complete development. The uncertainty which surrounds the origin and the evolution of the tortoises, is not therefore removed by this discovery, but on the other hand, is increased."

The Newburgh Mastodon.—The mastodon discovered about two months ago at Newburgh, N. Y., has now been more fully uncovered, but thus far proves to be an incomplete skeleton. The parts preserved are the skull, much injured by removal, both upper tusks, the vertebræ beginning at the last cervical and extending to near the tip of the tail, 18 ribs on each side out of 20, a right scapula and a complete pelvis, and portions of the foot bones. No traces of the limbs have been found thus far, although extensive excavations have been made. Fortunately, Mr. Schaefer, the owner, has removed the bones with care, and treated them skillfully. Many very interesting observations could be made by a careful study and exploration of this locality. During a visit by the present writer, the following observations were made, partly with the aid of Mr. Schaefer. The deposition is in three levels, the two upper being separated by a smooth clearly defined surface, and by slight differences in the character of the soil, which is largely dark and thoroughly decomposed vegetable matter, intermingled with few stones and very numerous remains of trees of various sizes. Examination of the latter gives abundance evidence of the existence of beaver in this hollow in the period of the mastodon, and we can easily imagine, that the different soil levels, were due to the building of successive beaver dams. When the dams were first completed the back flow of the water caused temporarily an interruption of the deposition of vegetation and may account for the differences of level above alluded to. The locality has been visited by a large number of people, including several well-known palæontologists.

H. F. O.

SOUTH AMERICAN LANGUAGES.

A DILIGENT and careful collecting of quaint and idiomatic words as found in the vernacular dialects is springing up in many countries of America, and there are already a considerable number of printed records of this character. They are made to include also English, French and Spanish words which are evidently of an origin other than European. In many of them the Indian element is well marked, and even in countries where no longer spoken, words of Indian origin are remarkably frequent. Vocabularies and glossaries of this sort were composed by Pichardo for Cuba, by Membreno for Honduras, and the *Journal of American Folklore* contains many articles contributing knowledge for the same purpose. Recently the linguist Samuel A. Lafone Quevedo, M.A., has published "*Tesoro de Catamarqueñismos; nombres de lugar y esclabones aislados de la lengua Cacana*," Buenos Aires, 1898, octavo, pp. 379, a work which adds considerably to our insight into the ethnography of northwestern Argentina in our century as well as in former periods of history. There may be 3,000 names and vocables of the Catamarca provincial dialects discussed etymologically in Lafone's volume. While some are pure Spanish, others belong to one of the Kechhua dialects, as Amará or Kechhua; others to Guaicurú dialects, whose domain is in and about the Gran Chaco. Others are supposed to belong to Uro, with main seat in the Bolivian plateaux and studied by Dr. Max Uhle; and a number are assigned to Cacán, an extinct language which Lafone has long endeavored to reconstruct. It is, however, uncertain, whether, Lule (with Tonocoté) or Allentiac, or Chilean dialects are represented in the names and vocables of the collection of this industrious investigator. We must confess, moreover, that a North American finds his way only with immense trouble through the maze of Andean languages and dialects of which not one half has as yet been reduced to grammatic rules.

Another linguistic volume issued in the same year is due also to the efforts of Lafone-Quevedo. This is the publication of a manuscript grammar of the *Toba language*, spoken in the Gran Chaco, along the Paraguay River. It was composed

by the Jesuit Father Alonso Barcena about the year 1600, and at present belongs to the library of General B. Mitre. The Toba is a dialect of the Mocobi-Abipon family of languages, the people having received the name Toba from an artificial enlargement of the forehead. On this account they are also called *Caras* and *Frentones*. The grammar of this rather vocalic idiom is followed by Barcena's Spanish-Toba vocabulary, revised in 1888, with the aid of an Indian called Lopez; the words are accented, but the orthography is rather old-fashioned. The same vocabulary is reproduced again with the Toba word first, followed by the Spanish and the English signification. The volume forms part of the 'Linguistic Library of the Museum of La Plata,' which institution is built close to the city of Buenos Aires; the museum has placed Lafone at the head of its archeological and linguistic department.

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SCIENTIFIC NOTES AND NEWS.

THE New York Academy of Sciences opened its sessions on October 2d. The Academy meets in four sections: astronomy and physics, biology, geology and mineralogy, and anthropology and psychology, which meet, respectively, on successive Monday evenings each month until the end of May. In addition to these regular sessions there are five public lectures; a presidential address, this year by Professor Henry F. Osborn, on February 26th; a lecture on psychology on October 30th; one on biology on January 29th; one on geology on March 30th, and one on astronomy and physics on April 30th. Men of science visiting New York are invited to attend the meetings which are held in the rooms of the American Society of Mechanical Engineers, 12 West 31st Street.

THE monument erected in memory of Johannes Müller, was unveiled at Coblenz on October 7th.

ON October 15th a statue of M. F. Tisserand will be unveiled at Nuits-Saint-Georges.

A STATUE of John Ericsson, the engineer, who designed the Monitor, has been unveiled at Gothenburg, Sweden.

SIR JOHN LUBBOCK, Bart, has been appointed

a delegate from the London Chamber of Commerce to the International Commercial Congress now meeting in Philadelphia.

WE have already referred to the decision of the corporation of the City of Glasgow to appoint a bacteriologist in connection with the Health Department of the City, who would work in conjunction with the medical officer of health and the medical officers of the fever hospitals. The *British Medical Journal* states that there has been considerable competition for this post, and the appointment has just been given to Dr. R. M. Buchanan, a graduate of Glasgow University, who was formerly assistant to the professor of pathology in the University, and more recently professor of medical jurisprudence and public health in Anderson's College. Dr. Buchanan will devote his whole time to his new duties, and will have a suitable laboratory at his disposal in the Sanitary Chambers.

DR. ARTHUR WILLEY has been appointed lecturer on biology in Guy's Hospital.

WE learn from the *Educational Times* that Mr. R. P. Paranjpye, the Indian Senior Wrangler, has been awarded a special scholarship of £200 by the Secretary of State, partly as a recognition of his remarkable and distinguished success, and partly to enable him to take the M. A. degree.

It is announced that the date of the opening of the New York Zoological Gardens is fixed for October 25th. At the present time, there have been completed the reptile house, bear dens, flying-cage, prairie dogs' village, aquatic rodents' lake, beaver pool, duck pond, mammal house, burrowing rodents' dens, wolf den, fox den, and buffalo range.

Nature states that the application of the Jenner Institute of Preventive Medicine for permission to alter the memorandum of association so as to enable the Institute to avail itself of Lord Iveagh's gift of 250,000*l.* was granted by Mr. Justice Cozens Hardy on September 13th.

THERE will be a Civil Service examination in the State of New York, for which applications must be filed not later than October 30th, for an examiner in the commission, requiring a knowledge of steam, electrical and mechanical