

six teeth, or one more than it is usually credited with. The specimen in the U. S. National Museum shows also that the first upper premolar is not a two-rooted tooth, but a single-rooted caniniform tooth having a very small accessory cusp on the posterior face. The first lower premolar is a large tooth with two roots. A jaw of *Dorudon* collected by Mr. Charles Schuchert seems to show that the Zeuglodonts were diphyodont, for it contains several teeth much smaller than those found in other specimens and these teeth had apparently not been fully extruded.

#### THE HYOID OF BASILOSaurus.

ACCOMPANYING the skull obtained by Mr. Schuchert is a series of bones considered as constituting the hyoid. The complete hyoid is much like that of a toothed whale but with very much longer arches. The basihyal is flat beneath, slightly hollowed above, the ceratohyals are immensely long, 35 cm., and quite slender; the thyrohyals are stout at the point of articulation with the basihyal, taper slightly and are 25 cm. in length.

#### THE CRANIAL CAVITY OF BASILOSaurus.

A CAST made in the cranial cavity of an imperfect specimen of *Basilosaurus* shows the brain to have been comparatively smooth and of a most extraordinary shape, being very much wider than long, owing to its excessive prolongation in the auditory region. The separation between cerebrum and cerebellum was rather slight, the tentorium being a mere low ridge.

F. A. LUCAS.

#### FORESTRY IN THE PHILIPPINES.

STRANGELY enough, there comes from our far distant possessions in the Pacific Ocean—which we are apt to think backward in all directions of economic development—a call for technically educated assistants in a branch of economics, which in our own country is only just beginning to be appreciated.

The Forestry Bureau at Manila, which is in charge of Capt. Ahern, U. S. A.—a most energetic officer who took great interest in advocating rational forestry methods for our public domain—is an inheritance from the Spanish

government. It was established as long as 35 years ago, and employed 66 foresters, as many rangers and 40 other subordinates supervising the exploitation of the government forest property, which, according to estimate, comprises between 20,000,000 and 40,000,000 acres.

Capt. Ahern writes that he found 'the regulations in force in August, 1898, excellent, practicable and in line with the most advanced forestry legislation of Europe,' so that they could in the main be re-enacted, but, to be sure, the laws and regulations were not fully enforced and scientific forestry not practiced, and "it did not take long to develop the fact that the foresters knew very little of practical forestry, beginning their work after the trees had left the forest, not before, *i. e.*, devoting all their attention to collecting revenues."

At present even a revenue of about \$8,000 per month is derived from licensees, who are mainly engaged in collecting guttapercha, rubber, gum, varnish, dye woods (some 17 kinds) and firewood, besides some of the very valuable hard woods.

Over 400 species of trees are known and a more careful survey will bring the number nearer 500. Of these at least 50 are valuable, the Yang-ylang tree being considered among the most important. This furnishes an oil which forms the base of many renowned perfumes. On the island of Romblon, a mass of cocoa palms, the result of planting under a former governor, covers the slopes from sea to mountain top, furnishing a yearly revenue of from one to two dollars per tree.

There are altogether, according to Blanco's magnificent work on the flora of the Philippines, 28 genera of palms with 87 species, the most important of which is *Coryphæa umbellaria*.

There are 22 species of Cupuliferæ, with two oaks (*Quercus costata* and *conocarpa*), and five genera of conifers with nine species; one only true pine, *Pinus insularis*, occurring in dense forests in the island of Luzon, above 4,000 feet altitude.

The families of Rubiaceæ, Rutaceæ, Ebenaceæ and Leguminosæ furnish quite a large number of arborescent species. Coffee trees grow wild on the slopes, replacing the original growth, when invaded by the wood chopper.

A very large number of the tree species have official value.

Means of communication are hardly yet developed, hence only the outer fringe of the forest has been cut away and lumbering is comparatively expensive, especially as no one gregarious species may be exploited, but, as is usual in tropic forests, a profusion of species occupies the ground; hence systematic exploitation which uses all that is valuable at one and the same time can alone pay for development of means of transportation. Capt. Ahern calls upon the N. Y. S. College of Forestry for six technically educated foresters to assist him in organizing his bureau on better lines than under Spanish rule and also proposes to send some Filipino college graduates to take forestry courses at Cornell.

B. E. F.

*PROFESSOR ROSS AND LELAND STANFORD,  
JR. UNIVERSITY.*

THE enforced resignation of Professor E. A. Ross from the chair of sociology at Leland Stanford, Jr. University is unfortunate, whatever the explanation may be. It is well known that Mrs. Stanford occupies a peculiarly responsible position in her relations to the university. She has, we believe, exercised her authority in the construction of buildings, etc., but never, heretofore, has interfered with the work of the professors. Professor Ross has made public a statement from which we quote the following paragraphs:

"At Stanford University the professors are appointed from year to year, and receive their reappointment early in May. I did not get mine then, but thought nothing of it until, on May 18th, Dr. Jordan told me that, quite unexpectedly to him, Mrs. Stanford had shown herself greatly displeased with me, and had refused to reappoint me. He had heard from her just after my address on coolie immigration. He had no criticism for me, and was profoundly distressed at the idea of dismissing a scientist for utterances within the scientist's own field. He made earnest representations to Mrs. Stanford, and on June 2d I received my belated reappointment for 1900-01. The outlook was such, however, that on June 5th I offered the following resignation:

"Dear Dr. Jordan—I was sorry to learn from you a fortnight ago that Mrs. Stanford does not approve of me as an economist and does not want me to remain here. It was a pleasure, however, to learn at the same time of the unqualified terms in which you had expressed to her your high opinion of my work and your complete confidence in me as a teacher, a scientist and a man.

"While I appreciate the steadfast support you have given me, I am unwilling to become a cause of worry to Mrs. Stanford or of embarrassment to you. I therefore beg leave to offer my resignation as professor of sociology, the same to take effect at the close of the academic year 1900-01."

"When I handed in the above Dr. Jordan read me a letter which he had just received from Mrs. Stanford, and which had, of course, been written without knowledge of my resignation. In this letter she insisted that my connection with the university end, and directed that I be given my time from January 1st to the end of the academic year.

"My resignation was not acted upon at once, and efforts were made by President Jordan and the president of the board of trustees to induce Mrs. Stanford to alter her decision. These proved unavailing and on Monday, November 12th, Dr. Jordan accepted my resignation in the following terms:

"I have waited till now in the hope that circumstances might arise which would lead you to a reconsideration.

"As this has not been the case, I, therefore, with great reluctance, accept your resignation, to take effect at your own convenience.

"In doing so I wish to express once more the high esteem in which your work as a student and a teacher as well as your character as a man, is held by all your colleagues."

President Jordan is reported to have said: "In regard to the resignation of Dr. Ross, it is right that I should make a further statement. There is not the slightest evidence that he is a 'martyr to freedom of speech.' Nor is there any reason to believe that his withdrawal has been due to any pressure of capital or any sinister influence. I know that Mrs. Stanford's decision was reached only after long and earnest consideration, and that its motive was the welfare of the university, and that alone."