

hopes that the discussion of the particular method whereby his object is to be attained will arouse the interest of every educator in America, and will create a determined purpose to accomplish something definite without further delay.—The Boston Transcript.

A NEW MAMMALIAN GENUS.

PROFESSOR E. RAY LANKESTER writes from the Natural History Museum, under the date of June 17, to the London Times, as follows:

I have this afternoon received and unpacked the case shipped at Mombasa on April 19, containing the skin and two skulls of the remarkable new giraffe-like animal obtained from the Semliki forest by Sir Harry Johnston, and sent by him to me for preservation in the Natural History Department of the British Museum. I write without loss of time to say that the specimens have arrived in perfect safety and they fully and completely bear out Sir Harry Johnston's statements and inferences.

The animal is a giraffe-like creature devoid of horns, with relatively short neck and with color stripes on the limbs, but nowhere showing spots or areolæ like those of the giraffe. Sir Harry Johnston was amply justified in assimilating the animal to the extinct *Helladotherium*, but after an examination of the skulls I am of opinion that the 'Okapi' (the native name by which the new animal is known) cannot be referred to the genus of the *Helladotherium*, but must be placed in a new genus.

I must say that, although the horny hoofs are not present, yet the double bony supports of the hoofs are preserved with the skin, and leave no doubt, even without reference to the accompanying skulls, that the animal which bore the skin was not a horse-like creature, but one with cloven hoofs.

P. S.—The 'five-horned giraffe' recently reported as having been discovered by Sir Harry Johnston is (I am told by Dr. Forsyth Major) due to a misunderstanding of a French translation of Sir Harry Johnston's description of the Okapi as 'une girafe sans cornes' (grafe à cinq cornes).

In connection with the above letter, Sir

Harry Johnston has written as follows: Perhaps I may be allowed to correct a slight misapprehension that has arisen owing to a postscript attached to my friend Professor Ray Lankester's letter in *The Times* of June 18. It has been thought by the authorities of the British Museum that the telegram of a press agency from east Africa announcing that my expedition had recently discovered a giraffe with five horns was a misleading variant of the account sent some months ago as to the other discovery made by us in the summer of 1900 of the existence in the forests bordering the Semliki River of a giraffe-like animal, without horns, which has just been named 'Ocapia' by Professor Ray Lankester. Quite independently of this interesting discovery, the credit of which, it must not be forgotten, has to be shared by Mr. Karl Ericsson, of the Congo Free State, who furnished me with a complete specimen, my expedition has been the means of discovering a species or variety of giraffe, which, in the male, possesses five horn cores, instead of the two or three found in other known species of giraffe. Specimens of the five-horned giraffe were shot by Mr. Doggett and myself about five weeks ago in the country lying to the east of Mount Elgon in the northeastern part of the Uganda Protectorate. Of these specimens, two are males and two females. The female has only three horns, while both the male specimens exhibit five horn cores.

In coloration it is my opinion that this species of giraffe differs from those already known. I have in my possession now drawings and photographs confirming these statements, and the four specimens (bones of the head and neck and skins) are on their way to England for presentation to the Natural History Museum.

Until these specimens are in the hands of competent authorities it is rather premature to discuss the worth of the discovery, or the question of its substantiating the existence of a hitherto unknown giraffe.

Perhaps I may be allowed to add that the fact that a month ago my expedition was still travelling through a very wild part of the Uganda Protectorate, and was passing through enormous herds of wild game, recalling the

best days of Gordon Cumming, is indirect evidence of the rapid extension of the Uganda railway and of the remarkable facilities which it affords for travelling in a short space of time to and from London and the heart of Africa.

*THE NEW BUREAU OF FORESTRY.**

ON the first of July the Division of Forestry and three other scientific divisions of the U. S. Department of Agriculture were advanced to bureaus. This was provided for by the last session of Congress, which appropriated for the expenses of the Bureau of Forestry during its first year \$185,440. The appropriation for the Division of Forestry during the year just ended was \$88,520. For the year 1898-99 it was \$28,520.

These figures show how rapidly the forest work of the Government has expanded of late, and also how well it has commended itself to Congress. There was a time when the practical value of the scientific investigations carried on by the Government was not fully understood, and farmers were inclined to think that the money spent on experiment stations and chemical laboratories was of little benefit to them. Now the case is very different. The improvements in agriculture due to the work of the Department have increased the value of the farm products of the country by many millions of dollars annually. As this kind of work has proved its practical utility, Congress has shown itself generous toward it. The readiness with which Congress has increased the appropriations for the Division of Forestry is the best evidence that forestry has proved its importance from a business standpoint.

The change from a division to a bureau, and the larger appropriation, will make possible both an improved office organization and more extended field work. The bureau will be provided with a much larger office force and will be organized in three divisions. But field work, not office work, is what the bureau exists for. This work has been going on during the last year from Maine to California and from Georgia to Washington. It includes the study of forest conditions and forest problems all over the country, the giving of advice to owners of

forest lands, and the supervising of conservative lumbering operations which illustrate forest management on business principles. This work can now be greatly extended. Private owners of some three million acres have applied for this advice, which in every case requires personal examination, and about 177,000 acres have been put under management. This land is in many tracts, large and small, and is owned by individuals, clubs and corporations. Several State governments have also asked the aid of the bureau. But the greatest demand is that of the Department of the Interior of the National Government, which has asked for working plans for all the forest reserves, with the enormous total area of about 47,000,000 acres.

The Bureau of Forestry is made up of the Division of Forest Management, the Division of Forest Investigation, and the Division of Records. Each of these continues, with enlarged facilities, work which was in progress under the old Division of Forestry.

The Division of Forest Management is in charge of Mr. Overton W. Price, the former superintendent of working plans. When the owner (private or public) of woodland wishes to consider the possibilities of his property if handled as a constant source of timber supply, the tract must be examined by an expert to ascertain the condition of the standing timber, the prospects of reproduction, the facilities for marketing, the best method of harvesting the present crop so as to secure the largest present and future yield, and the likelihood of success under management. A preliminary report is then made. If the owner decides on management, a working plan follows. This involves a careful study of the rate of growth of the different kinds of marketable timber, the computation of the proper interval between cuttings and of the amount of timber to be harvested, and, if desired, the recommendation of the necessary regulations to enable the work to go on under contract. All this falls to the Division of Forest Management.

The Division of Forest Investigation, under the charge of Mr. Geo. B. Sudworth, makes studies of trees—of their rates of growth, distribution, reproduction and habits—and investigates all the forest problems connected

* Press bulletin.