

the pathological changes in the tissues of the same, can be of great value to the physician, much more has yet to be done. The serious investigator is more impressed with what has yet to be done, than elated with what has already been accomplished. It is with great pleasure that I read in the columns of NATURE of the continued advances of those well fitted to engage in the study of the properties of Röntgen rays in the physical laboratory; and while we have reason to be pleased that the rays have been clearly proved to be of great value in the diagnosis of certain affections, every part of the apparatus must be investigated and improved upon before we obtain thoroughly satisfactory results.

JOHN MACINTYRE.

SCIENCE IN THE MAGAZINES.

PROF. H. F. OSBORN, curator of vertebrate palæontology in the American University of Natural History, New York, contributes to the *Century Magazine* a popular account of prehistoric quadrupeds found in the Rockies during the past few years, and to be exhibited to the public at that museum in October. Interest in his description is greatly increased by nine remarkably fine illustrations (reproduced from water-colour drawings by Mr. Charles Knight), designed to give an idea of the animals as they probably appeared in life in their natural surroundings. Another interesting article in the *Century* is made up of extracts from the journals of the late Mr. E. J. Glave, whose journey to the Livingstone Tree had such a melancholy termination. On July 8, 1894, Mr. Glave reached the tree beneath which Dr. Livingstone's heart is buried. Jacob Wainwright, the Nassick boy who read the burial service, cut on the tree the words: "Dr. Livingstone, May 4, 1873. Yazuzu, Mniasere, Vchopere." The body was roughly embalmed and carried to Bagamoyo, on the coast opposite Zanzibar, afterwards to be taken to England and buried in Westminster Abbey. As to the tree, Mr. Glave wrote in his journal: "Although done twenty years ago, the inscription is in a splendid state of preservation. The tree shows no disfigurement, and, moreover, the carving is not on the bark but on the grain of the tree itself. It is a hardwood tree, three feet in diameter at the base; at thirty feet it throws out large branches; its top is a thick mass of foliage. When Livingstone died the heart and other viscera were buried beneath this tree, and the bark was cleared off for a space of two and a half feet square; in this space Jacob Wainwright (whose account my discovery verifies to the letter) carved the inscription with no dunce's hand, the letters being well-shaped and bold. The tree is situated at the edge of the grass plain, and is very conspicuous, being the largest tree in the neighbourhood. It is about five miles south-west from the present site of the village of Karonga Nzofu, an important Bisa chief, whose father was a friend of Livingstone. Chitambo's is now ten miles away. It was originally near the tree; in fact, Livingstone died a few minutes' walk from the old village of Chitambo." The tablet which Mrs. Bruce—the daughter of Livingstone—sent out by Captain Bia and Lieut. Franqui to commemorate the explorer's death, was put up by them eight miles from the spot where he died, and was afterwards carried off by the chief of a slave caravan.

"There is scarcely a modern skull preserved in our great anatomical museum beside those of abnormal malefactors. There is no fairly representative collection of the variations of our race; and there is no means of learning the characteristics of it in contrast to those of other races. This is far more the case in other directions; any solid comparative study of man's framework is as yet utterly impossible. Of many races not a single skeleton is preserved; and those of which we know a little are only shown by a few scanty specimens, of which the history and details are scarcely ever recorded. Of both past and present races a collection of at least a few dozen specimens of each race, precisely dated and localised, are the smallest amount of material which would enable us to begin a scientific treatment of the varieties of man." So writes Prof. Flinders Petrie in the *National Review*; and he suggests that, to systematise the study of man, a large museum should be established where examples of every object of human workmanship can be preserved. He is sanguine enough to think that this great repository of the works of man will be realised in the course of a few years. Such an institution would undoubtedly be of service to science. From this proposal of Prof. Petrie's, ethnologists may profitably turn their attention to a paper on

"African Folk-Lore," contributed by A. Werner to the *Contemporary*. While staying for some months in East Central Africa, the authoress collected a number of traditional tales of the Mangánja, and she now relates them. Many of these stories deal exclusively with animals; and all of them proceed on the assumption that animals, human beings, and inanimate objects feel and act in much the same manner. There is a striking similarity between these myth-stories and the stories of "Uncle Remus"—a fact which goes to confirm the opinion that the latter originated with the African.

Prof. Ray Lankester reviews Mr. Archdall Reid's speculations on "The Present Evolution of Man" in the *Fortnightly*. "Mr. Reid," he says, "seems to be under the impression that the lines, or rather two of the lines of the present evolution of man have been definitely and satisfactorily indicated by his speculations. I am far from admitting that he has done more than demonstrate and draw attention to some tendencies of that evolution. . . . I am by no means convinced that the present and future evolution of man is being determined exclusively or even mainly in the simple way and by the obvious factors which he has placed before us."

Two editorial notes in *Scribner* deserve mention. In one a plea is made for the adoption of the metric system throughout the United States. The Bill introduced last session, and which will again be brought before Congress in the coming session, provides for the substitution of the metric system immediately in practically all the departments of the Government of the United States, and the adoption of the metric system of weights and measures as the only legal system to be recognised after the first day of January, 1901. The second note referred to is on Summer Schools, or vacation courses. It appears from a report of the U.S. Bureau of Education, that more than three hundred vacation courses, dealing with all branches of knowledge, are now held at various educational centres throughout the world.

In the *Strand Magazine*, Sir Robert Ball, continuing his series of astronomical articles, describes the discovery of Neptune, his treatment of that well-worn subject being illustrated with several interesting pictures. A number of reproductions from curious photo-micrographs form the chief feature of Mr. W. G. FitzGerald's article on "Some Wonders of the Microscope" in the same magazine. There is also a story dignified as an "Adventure of a Man of Science," which has for its scientific foundation the cure of madness by mysterious capsules. Even this flimsy basis is better than the description, in last month's *Strand*, of the use of a camera to obtain a photograph, by means of Röntgen rays, of a stolen diamond inside the thief's body. We should have thought it was known by this time that cameras are not used in Röntgen photography. Sir C. H. T. Crosswaite shows a little better acquaintance with the subject in a story entitled "Röntgen's Curse," contributed by him to *Longman's*. The central figure of the story concocted a liquid which, when painted on the insides of his eyelids, made him as perspicacious as a platino-cyanide screen excited by Röntgen rays. The capacity thus gained proved anything but a source of enjoyment to the experimenter. The idea may be good enough for a story, but a cautious man of science would have tried his wonderful liquid on one eye, and not on both.

In the *Sunday Magazine* there are two popular articles of interest to naturalists: one describes and illustrates sculptures of animals adorning a number of ecclesiastical buildings; and in the other Mr. C. J. Cornish writes on nightingales' nests, his account being illustrated by photographs from life.

Chambers's Journal has, as usual, several popular articles on science.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

MR. H. R. NORRIS, Mathematical and Science Master of Ipswich Grammar School, has been appointed Head-master of Barry Intermediate and Technical School, Glamorganshire.

THE Finance Sub-Committee of the Bradford Corporation recently held a special meeting and decided to allocate the following grants under the Technical Instruction Act:—Bradford Technical College, £2875; Free Library, £300; Boys' Grammar School, £500; Girls' Grammar School, £100; Mechanics' Institute, £300; School Board, £1000; Church Institute, £100; Blind Institute, £50.