

and in all other facilities for mountaineering away from crowds of tourists. "In fine," concludes Sir Martin Conway, "no part of the Alps now forms a better training-ground for the youthful would-be mountaineer, none a less vulgarised holiday resort for the man of moderate physical capabilities, simple tastes, or restricted means, than the region comprised in the Austrian and Bavarian Tyrol."

In *Scribner* there is also an article on scientific taxidermy, under the title "A Lost Art," by Mr. J. Carter Beard. The reform in taxidermic methods is said to have begun fifteen years ago. As instances of successful work are cited Mr. W. T. Hornaday's "Fight in the Tree-Tops," illustrating a characteristic episode in the lives of orang-utans, whose habits he had studied in their native forests, and whose skins and skeletons he had himself collected; Mr. Hornaday's group of flamingoes, and groups of bison, in the U.S. National Museum, and New York Museum of Natural History; a group of Rocky Mountain goats, by Prof. L. L. Dyche; a young camel, by Mr. Rowley, in the latter Museum, and the rehabilitation of "Chico," a large ape, done for the same museum by the same taxidermist. Nothing is said of any of the specimens in our own Natural History Museum.

The *Geographical Journal* contains the address delivered by Sir Clements Markham at the recent anniversary meeting of the Royal Geographical Society. There are also contributions on "The Pamirs and the Source of the Oxus," by the Right Hon. George N. Curzon; "Admiralty Surveys during the Year 1895"; "The Indian Surveys 1894-95," by Mr. C. E. D. Black; and "Geography at the Universities." In the *Contemporary*, Mr. A. E. Pease has a short article on the political geography of "Africa North of the Equator." The *Century* contains "Glimpses of Venezuela and Guiana," by Mr. W. N. King; a short paper on Eskimo life, entitled "An Arctic Studio (77° 44' N. lat.)," by F. W. Stokes; and "Impressions of South Africa," by Mr. James Bryce.

A passing mention must suffice for the remaining articles of scientific interest in the magazines and reviews received. Under the title "Stray Thoughts on South Africa," Olive Schreiner contributes to the *Fortnightly* some facts as to the crossing of races in South Africa and the results of the mixture of blood; Prof. Max Müller's paper on "Coincidences," read before the Royal Society of Literature in May last, appears in the same review. Dr. Louis Robinson discusses, in the *National*, some aspects of "The Science of Change of Air," and offers a few sensible and seasonable suggestions on the subject. Mr. F. E. Hewitt has in the *Westminster Review* a historical study entitled "How the First Priests, the long-haired Shamans, and their successors, the Tonsured Barber-Surgeons, measured Time." To *Longman's Magazine* Mr. Grant Allen contributes a popular paper on "Lobsters at Home." Mr. James Buckland describes in the *English Illustrated Magazine* the remarkable mode of nidification of the hornbills, and makes a conjecture why the male bird plasters up the nest and keeps the female a prisoner until the eggs are hatched. Finally, *Chambers's Journal* contains its usual complement of instructive articles, among the subjects being Mr. Carey Lea's work on modifications of silver, and artificial perfumes of flowers.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

CAMBRIDGE.—An examination in natural science (chemistry and physics) will be held on Wednesday, October 7, for the purpose of filling up a Bristol scholarship (open *pro hac vice*) of the annual value of £100 and tenable (under the usual conditions) for five years; the successful candidate to commence residence immediately upon election.

DR. T. M. LEGG has been appointed Professor of Hygiene in Bedford College, London.

THE widow of the late Dr. Arthur Jackson, of Sheffield, has presented £5000 to the Sheffield School of Medicine to endow a chair of Anatomy, to be named after her late husband.

THE Council of University College, London, have instituted a new Professorship of Pathological Chemistry, and have appointed Dr. Vaughan Harley to the professorship.

THE Cornell University has issued, in the form of a slender brochure, its programme of courses of instruction in physics for

the session 1896-97. The Department of Physics occupies a large building known as Franklin Hall, and the equipment is valued at 50,000 dols. Prof. E. L. Nichols has the services of an efficient staff, consisting of three assistant professors and seven instructors. The curriculum includes elementary courses for senior and junior students, advanced work both for undergraduates and graduates, and courses given in the summer school from July 6 to August 16. Among other encouragements for research, one university fellowship and one graduate scholarship in physics are awarded each year. With a view to affording still further stimulus for research, the University, three years ago, founded the *Physical Review*, which is the only journal in America devoted exclusively to physics. Such enterprise furnishes an example which our older English universities would do well to emulate.

THE Duke of Bedford has placed at the disposal of the Technical Instruction Committee of the Bedfordshire County Council a farm of 275 acres, 149 of which are arable land and the rest grass. In addition to this his Grace has erected the necessary lecture-rooms, dormitories, and other buildings for the accommodation of twenty students. Twenty boys are granted free scholarships by the County Council, entitling them to two years' board, residence, and instruction in the science and practice of farming. On Tuesday, June 30, the members of the Bedfordshire County Council were able, at the invitation of the Duke, to pay a visit of inspection to the farm, and are able to report that every branch of farm and garden practice is efficiently taught by means of models and specimens in school and of actual work on the farm, in the dairy, poultry-yard, and garden. The institution is modelled on the lines of similar school farms on the continent, which were inspected and reported upon by the Organising Secretary of Technical Instruction some time ago.

SOCIETIES AND ACADEMIES.

LONDON.

Royal Society, June 4.—"On the unknown Lines observed in the Spectra of certain Minerals." By J. Norman Lockyer, C.B., F.R.S.

In the first note of the series "On the New Gases obtained from Uraninite," by the distillation method, the author remarked¹ "I have already obtained evidence that the method I have indicated may ultimately provide us with other new gases, the lines of which are also associated with those of the chromosphere."

In a subsequent paper "On the Gases obtained from the Mineral Eliasite," he gave a list of several unknown lines, and suggested that they might indicate the existence of a new gas or gases in that mineral, and added² "Although the evidence in favour of a new gas is already very strong, no final verdict can be given until the spectra of all the known gases, including argon, have been photographed at atmospheric pressure, and the lines tabulated. This part of the inquiry is well in hand."

The inquiry above referred to has now been completed and in the following manner:—

Photographs were taken of the spectra at atmospheric pressure of nitrogen, oxygen chlorine, carbonic anhydride, coal gas, sulphuric anhydride, phosphoretted hydrogen, and argon, these being the gases which, from the experience thus far acquired are likely to be associated with those given off by minerals. In addition to these the lines of mercury, potassium, and platinum, were also photographed. The lines of platinum are always present in the spectra for the reason that the spark is passed between platinum poles, while the lines of mercury or potassium frequently appear according as the gases are collected over mercury or potash.

For the wave-lengths thus obtained no greater accuracy than one indicated by four figures is claimed. It was the author's intention, in the first instance, to give five figures from the more elaborate tables of some of the elements given by other observers, but this had to be abandoned in consequence of the considerable variations found in the tables between the results as given by different observers.

A list is given of sixty lines which have been observed and photographed in the spectrum of the gases from eliasite which do not appear in the spectra of the old gases.

¹ *Roy. Soc. Proc.*, vol. lviii. p. 70.

² *Ibid.*, vol. lix. p. 3.