

head and narrower in the region of the jaws; the chiefs generally belong to the latter type. It appears to be impossible to discover any reason for this variation." Periodically numbers of the younger people are seized by a peculiar form of hysteria (resembling the so-called arctic hysteria), and the sight of a hat or cap, or sometimes of a dog, causes the patient to fall into convulsions, until the obnoxious object is removed from sight. The numerical proportion of the sexes is equal, and polygyny is fast

of a very secret character in the woods; in the darkness of the night a weird booming roar is heard, and the youths sit and shudder with fright. This is said to be caused by a fearsome beast, which on the third day is supposed to be killed and its flesh eaten by the novitiates. Very little is known about this ceremony, which is evidently one of great antiquity and interest.

The second part of the book contains some valuable notes upon a few other tribes; of especial im-



FIG. 1.—Pictographs cut on a stick representing a star; moon; arrow; b'ack, red-legged millipede; python, the dots represent the spots on the reptile's skin; spider; tortoise; lizard; wooden jar for carrying honey. From "Ethnology of A-Kamba and other East African Tribes."

dying out. The A-Kamba are the only people in East Africa who chip the upper incisor teeth to a point; filing or chipping the teeth is generally supposed to be associated with cannibalism, but so far as can be ascertained no such custom exists or has existed among the A-Kamba. The ornaments, clothing, implements, arts and crafts of the people are succinctly described, but the most valuable portion of the book is that dealing with the social and religious aspects of native life. The birth, marriage, and death customs are recorded, but those connected with puberty are of greater interest. Circumcision is performed when the child is about four or five years

portance are the notes on the social organisation of the Masai, among whom a geographical grouping is replacing the older clan grouping; the marks branded on the cattle correspond to the latter, while the designs on the shields have a territorial significance. Mr. Hobley directs attention to the promising field for research, not only in the ethnology but in the archaeology of British East Africa. His little book, which is extremely well illustrated, serves to emphasise how much more there is to be done; for example, he has discovered a new small pastoral tribe, the Mogogodo, on the foothills on the north side of Kenia, who possess a remarkable language, and features that remind one of certain ancient Egyptians. In a prefatory note, Prof. Ridgeway strongly endorses the remarks of Mr. Hobley on the importance of Government officials having a preliminary training in anthropology.

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FIG. 2.—Matungi, chief of the Mogogodo tribe. From "Ethnology of A-Kamba and other East African Tribes."

old; this is only a small affair, but more important is an initiation ceremony, which lasts for several days, at which several hundred young people are often present; the boys and girls are divided into batches of ten or fifteen, with a fully initiated youth or girl in charge of each batch. It is the duty of these tutors to teach their pupils their duties in life; they also cut pictographs on sticks, the meaning of which the neophytes have to discover. Some two months later the youths only undergo a ceremony

THE TOKYO IMPERIAL UNIVERSITY.

THE peoples of the West for a long time had the impression that while the Japanese had great artistic ability and could imitate the productions of other countries, they had little or no originality. Notwithstanding all that they have accomplished during the past forty years or so, both in the arts of peace and war, that impression still prevails to a considerable extent, and we frequently hear opinions which do not do justice to their general ability, their trustworthiness, or their originality. It would take us too far afield if we attempted to disprove those opinions from what the Japanese have accomplished, but a perusal of the reports of the Minister of State for Education and of the calendar of Tokyo Imperial University shows that the developments which have taken place in Japan in recent times are not the superficial veneers which some people would have us believe they are, but, on the contrary, that they have been made on a solid foundation of education.

The annual report of the Minister of State for Education is a most interesting document, and shows that during the time which we have mentioned every department of education which is necessary to train men and women for all the duties of a modern State has been very fully developed. Elementary schools are to be found in every part of the country, and secondary schools have been established in the more important centres of population, while a great variety of special and technical schools, fit for all the functions required under the new conditions, which are the result of the adoption of Western science and habits of life.

At the head of all these educational institutions stand the Universities of Tokyo and Kyoto, the calendar of the former of which has just come to hand, and a perusal of it will be useful to all who are interested in education in this country, as in some respects it shows a width of view and a completeness of arrangement which are not always observable in universities in this country. The University of Tokyo began in a very small way, and its development is sketched in the interesting historical summary which serves as an introduction to the calendar. At a comparatively early stage it had four departments of study, namely, those of law, science, literature, and medicine, and in 1886 the Kobu-Daigakko or Imperial College of Engineering, became a college in the university. Readers of NATURE of between thirty and forty years ago will remember this as the college associated with the names of Dr. Henry Dyer and Dr. Edward Divers, its first and second principals, and of Profs. Ayrtton, Perry, Milne, and other graduates of British universities.

The university now consists of six colleges and one university hall. The colleges are those of law, medicine, engineering, literature, science, and agriculture. The College of Law includes the two courses of law and politics, with thirty-four professorial chairs. The College of Medicine includes the two courses of medicine and pharmacy, with thirty-one professorial chairs. In connection with this college there is a course of State medicine. The College of Engineering includes the nine courses of civil engineering, mechanical engineering, naval architecture, technology of arms, electrical engineering, architecture, applied chemistry, technology of explosives, and mining and metallurgy, with thirty-two professorial chairs. The College of Literature includes the three courses of philosophy, history, and literature, with twenty-four professorial chairs. The College of Science includes the nine courses of mathematics, astronomy, theoretical physics, practical physics, chemistry, zoology, botany, geology, and mineralogy, with twenty-five professorial chairs. The College of Agriculture includes the four courses of agriculture, agricultural chemistry, forestry, and veterinary medicine, with thirty professorial chairs. For the training of practical farmers, subsidiary courses of agriculture, forestry, and veterinary medicine are provided in connection with the College of Agriculture.

The university is well equipped with all the appliances required for the practical teaching of the various subjects. It has a very good library, containing a large number of all the more modern books required in university study. Hospitals are connected with the College of Medicine. An Institute of Historical Compilation is a part of the College of Literature connected with the College of Science are the Tokyo Astronomical Observatory, the Botanical Garden, the Seismological Observatory, and the Marine Laboratory. Forests, experimental farms, veterinary hospitals, and the Institute for the Training of Agricultural School Teachers are connected with the College of Agriculture. There are many laboratories and museums in connection with the Colleges of Medicine, Engineering, Science, and Agriculture.

The total number of students is between five and six thousand, and of graduates in one year nearly nine hundred. The record of the occupations of the graduates after they have left the university shows that they have taken up practical work connected with the special department which they had selected as students. A large proportion become Government officials, lawyers, engineers, medical practitioners, and teachers. There are two private institutions in Tokyo of university rank, the Keio Gijiku and the Waseda Universities, each of which has a large

number of students, the majority of whom enter private services, as distinguished from the students of the Imperial University, a large proportion of whom become Government officials.

That the students of the university do not simply absorb Western learning and apply it to practical purposes is shown by the long list of papers which is printed at the end of the calendar, giving the contents of the *Journals* of the Medical, Engineering, Science, and Agricultural Colleges, and the bulletins of the Engineering and Agricultural Colleges. Those who have had the opportunity of perusing these publications will admit that they will bear very favourable comparison with those of similar publications in any other country, and those who have the pleasure of knowing the professors personally will admit that they are men of ability, learning, and character, of whom any learned institution in the world would have no reason to be ashamed.

A survey of the results of education on the affairs of the nation shows convincingly and conclusively the intimate relation that exists between the provision made by a nation for the higher education of its people and the position taken by that nation in the ceaseless competition between the great countries of the world. After a searching comparison between the facilities for university education in this country, on one hand, and in the United States and Germany on the other, Sir Norman Lockyer was justified in saying in his presidential address at the British Association meeting at Southport:—

“But even more wonderful than these examples is the ‘intellectual effort’ made by Japan, not after a war, but to prepare for one. The question is, Shall we wait for a disaster and then imitate Prussia and France, or shall we follow Japan and thoroughly prepare by ‘intellectual effort’ for the industrial struggle which lies before us?”

H. D.

FIFTH MIGRATION REPORT OF THE BRITISH ORNITHOLOGISTS CLUB.¹

WE have before us the fifth annual report of the migration committee of the British Ornithologists Club, containing the data with regard to the arrival and dispersal within England and Wales of our common migratory birds during the autumn of 1908 and the spring and early summer of 1909, scheduled and tabulated as in former years. The report, which is longer than any of its predecessors, summarises a vast number of observations sent in by numerous voluntary observers, and by the keepers of the coastwise lighthouses and lightships. These data, compiled with an infinitude of labour and care, will always retain their value as a contribution to our knowledge of the movements of the species dealt with within the narrow limits of the area of reference. Even such apparently dry details—composed solely of names and figures—present (among those, for instance, sent in from the lonely sea-girt stations dotting our shores from The Hanois to St. Abbs Head) an interesting and fascinating picture of that wild, inexplicable rush of our feathered friends in a commingled horde fleeing as from judgment to come, which every autumn blindly compels to the southward, but to what latitudes we know not yet for certain.

The dates of the movements of the scheduled birds tabulated on the maps afford us again the satisfaction of following the sure and happy return of our

¹ Bulletin of the British Ornithologists Club. Edited by W. R. Ogilvie-Grant. Vol. xxvi., Report on the Immigrations of Summer Residents in the Spring of 1909; also Notes on the Migratory Movements and Records received from Lighthouses and Light-vessels during the Autumn of 1908. By the Committee appointed by the British Ornithologists Club. (London: Witherby and Co., 1910.)