THE NATIVES OF SARAWAK AND BRITISH NORTH BORNEO.¹ A NTHROPOLOGISTS are again indebted to Mr. Ling Both for presenting to them, in a convenient

A NTHROPOLOGISTS are again indebted to Mr. Ling Roth for presenting to them, in a convenient form, the results of wide reading and diligent compilation. It is by such well-directed enthusiasm that the labours of the student are materially lightened; for not only has the author, in this instance, marshalled a portentous array of accurately acknowledged quotations, but he has sedulously collected illustrations of objects preserved in numerous museums and private collections, in order to fully illustrate the descriptions that he quotes. It is perfectly evident that this has necessitated an immense amount of painstaking labour, which of itself is sufficient to raise the book from the rank of a mere compilation to



FIG. 1.—Sea-Dyak Women (Sakarang Tribe). The corsets are composed of cane hoops covered with innumerable diminutive brass links.

that of a work containing original research. It is true that Mr. Ling Roth has borrowed illustrations from other authors; but he has supplied a large number of wellchosen figures, most of which are clever pen-and-ink sketches by Mr. C. Prætorius.

Owing to Mr. Ling Roth's conscientious method of giving verbatim quotations from numerous authors, the book has rather a patchwork appearance which is slightly distracting, and may even be somewhat repellent to certain readers; but this plan is to the advantage of the student, who can thus read the original traveller's observations in his own words. The accounts are at times at variance;

¹ "The Natives of Sarawak and British North Borneo." By H. Ling Roth; with a preface by Andrew Lang. ² vols. 8vo, with over 550 illustrations. Pp. xxxii + 464; ccxl + 302. (London: Truslove and Hanson, 1896.)

NO. 1415, VOL. 55

but this may be due to the tribes not being always clearly discriminated, and it is well known that local differences are of common occurrence, and there is always the idiosyncrasy of the recorder to be taken into account: when there are many observers, there are likely to be some discrepancies.

Some of the most satisfactory portions of the book are the various essays or detailed descriptions which have in some instances been published before, such, for example, as Archdeacon Perham's memoir on the "Sea Dyak Gods," and the papers by S. B. J. Skertchly, "On Firemaking in North Borneo" and "On some Borneo Traps," or the translation of Dr. Schwaner's ethnographical notes. The author has also contributed others, uppone which may be mentioned "Alloced Native

among which may be mentioned "Alleged Native Writing in Borneo" and "Negritoes in Borneo." The first "Appendix" consists of 160 pages of vocabularies, but, considering the amount of space devoted to lists of words, the chapter dealing with language is meagre ; the construction of a language is of more importance than the actual words employed, interesting and suggestive as these often are.

The Land Dyaks, who occupy the south-west corner of the Raj of Sarawak, are a small, slightly built, untattooed people, with skin and hair similar to that of the Malays; some tribes burn their dead. Their language is quite distinct from that of other groups, and they substitute the letter r for l. The Sea Dyaks live further to the east; they are more stoutly built, well-proportioned, and tattoo slightly on the arms. They live in long houses along the river-banks, and bury their dead. Both peoples consult birds as omens. The term "Dyak" should be restricted to these two peoples ; even now there is some obscurity as to its exact significance. It is probably derived from dayah, the generic name for "man"; the Malays, and later the Europeans, learned to call certain peoples Dyaks on account of their general term for men, but the latter never used it as a collective name for themselves. Rajah Sir James Brooke was the first to divide the Dyaks into Land and Sea Dyaks. Some have suggested that the term is derived from a word meaning "inland," that is, the people of the interior.

The Milanaus are a very fair, quiet, sago-cultivating people who inhabit the greater part of the coast of Sarawak east of the land of the Sea Dyaks. Interior to these

is the large territory of the allied Kayans. The Kayans are very hospitable, and, like the Hill Dyaks, of the most scrupulous integrity; but the Dyaks are braver, more truthful, less treacherous, and a finer-looking and superior people. Also quite different from, and bigger than the Dyaks, are the Muruts, an inland tribe of very low social scale. The Ukits pass a wandering life among the hills, and do not build houses; they live by hunting, and use the *sumptian* or blow-pipe. The Muruts extend into the west of British North Borneo; in the centre are the Dusuns, an ill-favoured folk who, according to some travellers, have probably resulted from an infusion of Chinese blood with the aboriginal race of North Borneo. The eastern part of the territory is inhabited by Sulus. The northern coast contains mongrel populations, the most interesting of whom are the Bajaus, or Sea Gypsies, a curious, wandering, irresponsible sort of race of low culture, who dwell almost entirely in boats. They are supposed to have come from the Straits of Malacca, and they profess Islamism.

The Sea Dyak girls receive their male visitors at night, as privacy in the day is out of the question. About nine or ten at night, the lover quietly opens the door and

goes to the mosquito curtains of his beloved, gently awakens her, and they sit conversing together. Of course, if this nocturnal visit is frequently repeated, the parents do not fail to discover it, although it is a point of honour to take no notice of him; if they approve, matters take their course, but if not, they use their influence with their daughter to say to him, "Be good enough to blow up the fire," the usual form of dismissal. These nocturnal visits but seldom result in immorality. The natives of Borneo appear to be a very moral people, on the whole, both before and after marriage. A good deal of freedom is permitted among some tribes to the lover, as a precaution against a sterile marriage, but marriage almost invariably follows pregnancy. Often a girl will commit suicide rather than face the disgrace of an unacknowledged child. Usually the bridegroom lives with or near his father-inlaw (whom he often treats with more respect than his own father), and works for his benefit. Polygamy is rare. Divorce is very frequent, and may be obtained for a large number of causes or pretexts -bad temper, gossiping, laziness, unfaithfulness, any of which are deemed sufficient reasons for divorce without incurring a fine, as are also troublesome dreams and various omens; but, on the whole, the marital relations are satisfactory. The couvade is in force among both the Land and Sea Dyaks. At a birth the husband is confined to his house for eight days, and may eat only rice and salt, and for one month he ought not to go out at night.

The Kanowits follow the

Milanau custom of sending much of a dead man's property adrift in a frail canoe on the river; they talk of all his property, but this is exaggeration. Mr. St. John, after describing the display of a dead chief's worldly possessions, goes on to say: "As I expected these valuables were not sent adrift, but merely a few old things, that even sacrilegious strangers would scarcely think worth plundering." Burning of the dead is confined to the Lavd Dyaks; the Sea Dyaks either bury theirs, or place the coffin in a miniature house

NO. 1415, VOL. 55

built on piles eight or ten feet high; the latter is also a Kayan custom. A very wide-spread custom of the natives of Borneo is that of depositing the relics of their dead in a jar. In many places slaves or others are sacrificed at the funeral of an important man, in order to attend him in the future life. Some tribes have the cheerful practice of dancing round a tied-up slave, and as each man slightly wounds him they send n essages to their deceased relatives, but the wounds are sufficiently numerous to cause his death. One tribe now substitutes a pig for a man.

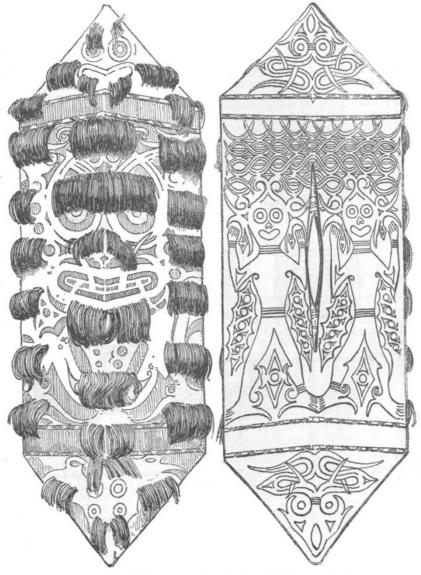


FIG. 2.-Kenniah Shield from Sarawak (length 481 inches), Edinburgh Museum.

There are two explanations of the notorious custom of head-hunting, which is by no means confined to the Dyaks. There can be little doubt that one of the chief incentives to getting heads is the desire to please the women. Among some tribes it is said to be indispensably necessary a young man should procure a skull before he gets married, and the possession of a head decapitated by himself seems a pretty general method of a young man ingratiating himself with the maiden of his choice. Some tribes believe that the persons whose heads they take will become their slaves in the next world; and Sir Hugh Low states that among the Kayans, before a person can be buried, a head must be obtained. Several travellers are of opinion that the passion for head-hunting, which now characterises these people, was not formerly so deeply rooted in their characters as it is at present, although to a limited extent it is probably an ancient custom. The second reason is a fairly satisfactory explanation of the origin of the custom, and the first for its extension, as the fact of a young man being sufficiently brave and energetic to go head-hunting would promise well for his ability to keep a wife.

The religious observances of the Land Dyaks consist of setting aside of a portion of fowl and pig-meat for the deity; the propitiation by small offerings of rice, &c., of *Antus*, or spirits (of these there are two kinds, demons and ghosts of departed men); the *pamali*, or taboo; obedience to the medicine women, and belief in their pretensions; dancing; the use of omens from the notes of various birds.

On reading this book, one is constantly reminded how much more information must be collected before a complete record of the people can be gained; as Mr. Lang a student at home finds in endeavouring to interpret the significance of a native pattern, we have only to look at the design to the left in the illustration on p. 38 of Mr. Ling Roth's book, which, without a clue, could never have been imagined to indicate a cloudy sunset.

Sufficient has been said to show that this book is a valuable storehouse of information, and it also reflects great credit on the publishers for the artistic manner in which it has been produced. An idea of the character of the illustrations may be gained from the three which accompany this notice. ALFRED C. HADDON.

THE ALLOYS OF COPPER AND ZINC.

O^N account of their great industrial importance, the alloys of copper and zinc have at various times been studied by many observers. Mallet, Matthiessen, Riche, Thurston, and a host of others have made contributions of varying importance to the literature of the subject; but so difficult is it to eliminate the accidental differences in the physical conditions that Prof. Thurston announced, as late as the year 1893, that the curves representing the variations in the properties of brasses

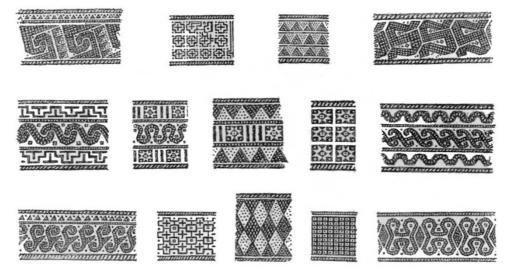


FIG. 3.-Patterns on Kanowit Baskets in the Brooke-Low Collection.

points out in his preface, "the writers quoted by Mr. Ling Roth were not, or not usually, anthropologists who knew what to look for"; on the other hand, as Mr. Lang says, "inquirers who know what to look for, are only too likely to find it, whether it is there or not. This is the dilemma of anthropological evidence." It is to be hoped that the publication of this work will result in renewed and definitely directed observations on the spot.

One important line of inquiry, the significance of the decorative art, is totally unrepresented in the materials at Mr. Ling Roth's disposal. That this is a promising field for research is evidenced by a recent paper by Dr. W. Hein, "Zur Entwicklungsgeschichte des Ornaments bei den Dajaks" (*Ann. k. k. Naturhist. Hofmuseums*, Wien, Band x. Heft 2). This study deals only with anthropomorphic designs, but it is probable that the motives are much more varied. The characteristic and very effective designs on Bornean shields are also mostly derived from the human form.

To those who are conversant with the evolution of savage decorative art, it is evident that such patterns as those on Kanowit baskets have a significance which is at present unsuspected. As an example of the difficulty

NO. 1415, VOL. 55

were so irregular that the effects of composition only (irrespective of other conditions) must remain unknown until further researches should be made. To the task thus indicated M. G. Charpy has addressed himself, and has succeeded in notably advancing the knowledge on the subject.¹ He did not confine himself to the mechanical properties, but has also made a careful investigation of the micrographic properties of a number of alloys, a branch of the subject which had already been attacked by Guillemin and by Behrens in 1894.

Among the results of the mechanical tests, none are more interesting than the determination of the effects of variation of the temperature used in annealing pieces of brass which had previously been hardened by repeated rolling. M. Charpy finds that, if the maximum temperature of annealing is maintained for some time, the mechanical and micrographical properties of test pieces of similar composition depend only on that temperature. The tensile strength of metallic copper, in kilogrammes per square millimetre, when annealed at different temperatures, is shown in Fig I, the shape of the curve

1 "Recherches sur les Alliages de Cuivre et de Zinc," by M. G. Charpy (Bull. de Soc. d'Encouragement, 5th series, vol. i. p. 180, February 1806).