

for food. When another tribe visited them, before they allowed them to drink water they had a severe fight with them, in which several were wounded severely. Then came a grand corroboree, and next day they were permitted to drink some water. They wove "dilly bags" and mats from the bark of fig trees. The stone heads of their spears come off in the wound. They make armlets and necklaces of polished grass. They make signal fires on the tops of hills, and they make and use canoes.

We have to acknowledge with thanks and pleasure the receipt from Mexico by last mail of *Memorias y Revista de la Sociedad Científica*. The first article is upon *coreskiastic* methods of detecting optical imperfections as astigmatism, etc. The next article is upon political economy in relation to credit banking. Also an article deals with the properties of protoplasm. Then, after articles upon variations of plants, butterflies, and earthquakes, follows an article upon spontaneous consolidation of fractures of bones; also upon the physiological actions of an extract of *amanita muscaria*; also a *resumé* of the meeting and transactions of the International Congress upon Geology; and after others comes an article upon archæology and Maya studies, with a view to the interpretation of their hieroglyphic and their chronology, and the symbols upon the idols. Several valuable suggestions are given, and the recent discoveries are noticed, and the things found in the tombs. There are other articles which show that this periodical covers a wide field of research, and brings before those who read Spanish a large number of subjects engaging the attention of the experts who are students of nature.

In Mr. Lionel Decle's book, "Three Years in Savage Africa," is noticed a scientific curiosity near Mochudi, viz., an immense stone covered with the fossilised impressions of human feet, and of the feet of animals differing from those of recent times. This is another instance of human footmarks in early times. Will any one of our readers send us any particulars of any ancient human footmarks they may have heard or know of in any part of Australia, or of any stone axes or other works of men of remote times which may have been discovered in any Australian deep mining operations?

NOTES ON THE CUSTOMS AND DIALECT OF THE WONNAH-RUAH TRIBE.

By J. W. FAWCETT, ESQ., OF QUEENSLAND.

THE Wonnah-ruah tribe of aborigines inhabited the Hunter River district in New South Wales. Their tribal district had an area of upwards of 2000 square miles, and included all the country drained by the Hunter River and its tributaries. Fifty years ago they mustered a large population, totalling between five and six hundred individuals. Half a century of British debauchery, diseases, and vice, and their accompaniments, have almost wiped them out altogether. A few more years and their land will know them no more. To preserve some account of their customs and daily life, as they were before the intrusion of the white man, has caused me to compile these notes, and for much of the information contained herein I am greatly indebted to correspondents and friends.

The members of the Wonnah-ruah tribe were both well-built and well-formed. The average height of the men was about 5ft. 6in., and of the women a little over five feet. Some of the men were nearly six feet, a few over it, in height. They had long lank hair, but occasionally one was found with curly and even with woolly hair.

Their tribal boundaries were both well defined and clearly understood both by themselves and the members of their neighbouring tribes. So strictly were all rights and privileges understood, that for one tribe to enter into the

district of another in pursuit of game was considered an offence of great magnitude and a good ground for a hostile meeting. They had no permanent settlements, but roamed about from place to place within their tribal district, in pursuit of game and fish, which was their chief sustenance, making use periodically of the same camping grounds, generation after generation, unless some special cause operated to induce them to abandon them. In choosing the site, proximity to fresh water was one essential, some food supply a second, whilst a vantage ground in case of attack from an enemy was a third important item.

Their huts were exceedingly primitive ones of crude architecture and few materials. A couple, or three, forked sticks, a few straight ones, and some sheets of bark, stripped from trees growing near by, supplied the requisites for the construction of their home. The forked sticks were thrust into the ground, and the straight ones placed horizontally in the forks. The sheets of bark were then set up against the horizontal poles in a slanting position, the bark of the structure being towards the windy point of the compass. The sides were frequently enclosed for further shelter, but the front was generally open. Before each one was a small fire, which was seldom allowed to go out, and which was used for warmth, or to cook by.

The daily work of the men consisted in hunting kangaroos, wallabies, and other animals, and the manufacture of weapons. The daily life of the women consisted in fishing for mullet and whiting, in gathering oysters and other shell fish, in digging for roots, in carrying wood and water, and in keeping the fires alight and cooking.

For food they ate kangaroos, wallabies, bandicoots, kangaroo rats, opossums, rats, emus, snakes, lizards, fish, caterpillars, grubs, lava of wasps and other insects, etc., and other animals, birds, reptiles, etc., found in their district. They used also a variety of bush fruits and roots, one of the latter being that of the water lily.

Their mode of cooking was very simple. The animals or birds were roasted on the embers until the hair or feathers were charred off, when they were covered over with ashes and embers, and some fresh sticks piled over and around it. After being about half cooked the animal or bird was taken out, and an opening made in the body. This was stuffed with clean grass, and the whole was returned to its place in the ashes for a little while longer. It was then taken out, and the flesh was consumed all hot and juicy. A shell, or the sharp splinter of a stone, served as a knife. When the animals were skinned for the sake of their fur they were generally wrapped up in leaves before being placed in the ashes. The roots were either roasted or baked into a kind of bread.

The gastronomic propensities of many of the aborigines was remarkable, some of them being able to put the whole of a large kangaroo—skin, body, and entrails—out of sight. They had laws regarding the use of food which were very imperative. The young of both sexes were prohibited from eating certain sorts of flesh, and many animals and birds were tabooed to both youths and females at different periods of life. Previous to the passing of the ceremonies of the bora by which the boys were initiated into manhood, their food was like that of the women, confined to female animals, and those only of special kinds. Flying foxes were esteemed great delicacies, and the dingo was reserved for the use of the older men only. Emus and black snakes were also reserved for special individuals and seasons.

The weapons and implements used by the Wonnahrahs consisted of the ordinary spear (durrane), wommera or throwing stick (werrewy), shield (kooreil or murrybye), boomerang (the war boomerang—tootoo-kerá—which does not return, and was used in fights), and the boomerang which returns when thrown (burragan), and which was used for throwing into flights of ducks and other birds, with good results, and partly used as a toy or article of amusement, tomahawks or hatchets (mogo), made of a rudely sharpened stone of a hard dark colour, which was first chipped out and then ground to an edge, and fitted to a handle, (the iron hatchet was called mundabong), knives made of flint, used for cutting up meat, chips of flint or shells were used in skinning animals, clubs, yamsticks, bags (buakul), made of platted swamp grass, and wooden bowls (koola-man or koka) from two to three feet long, for holding water in the camp. They also made nets (turrila) for catching fish. Their canoes (buba) were simply sheets of bark cut from suitable trees in such a manner as to give a little elevation to the sides and ends.

Their mode of obtaining food varied according to the animals hunted. Kangaroos and wallabies were hunted by battues. The grass in certain districts was first burnt off, and about a month afterwards, when the young grass had sprung again, these animals all congregated there to eat the sweet young pasturage. A day for a grand hunt was then fixed and at early dawn of the day in question the men and boys took their boomerangs (burragan), clubs, and spears (durrane), and set out for this spot. There they formed a circle around the unconscious game, cautiously, silently, and slowly gradually closing in upon them, until the ring became so contracted that the animals became alarmed. In trying to break through they were met by the hunters, who by their loud cries so confused and bewildered the animals that they became an easy prey to the aborigines. The wallabies (the smaller and more active creatures of the two), were either clubbed or speared as they tried to dart through the lines of the hunters, whilst the kangaroos driven to within a narrow circle, were easily killed by the boomerang or spear. The dead and wounded animals were next collected together, as were also all their weapons. A large fire was next made on the "field of battle," in which as much game as could be eaten on the spot was cooked. When the meal was finished the hunters returned to their camp, more or less laden with the slaughtered game. Sometimes kangaroos and wallabies were captured by means of nets. The emu (murrin) was also caught by means of a net. Fish (makroo) of various kinds, including eels (kannung), were caught with nets (turrila) and three pronged spears (muttock).

The children when born were, like other aboriginal babies, of a yellowish brown colour, becoming darker as they grew older, until when about ten days or a fortnight old, they were of the same colour as their parents. Infanticide was practised in the tribe, and there were recognised baby-killers amongst the old women. On these occasions, as soon as the child was born, it was placed in the hands of one of these old women who took it away and suffocated it, generally by cramming its mouth full of mud. The reason which they ascribed to the practice of infanticide was that food was scarce and an additional mouth meant a less supply to the others, or that they had long journeys to make, and it was impossible for a woman to carry more than one young child in her wanderings. Female infants were oftener destroyed than male ones.

The aborigines were a very affectionate and emotional people and they showed great attachment to their children. Their offspring, especially when little, were always well cared for and caressed and fondled, and made great pets of by both the father and mother. They were carefully wrapped—when babies—either in the fold of the mother's rug, or in a few roughly cured skins. Often times when asleep they were placed in a large netted bag and hung up in the hut. When carried about they were generally slung upon the mother's back or shoulder, or supported on her hip. They were nursed until they were two years old, although one often saw a child of much older years receiving nourishment from the mother's breast. These latter instances were doubtless matters of necessity, as the aborigines had no means of preparing anything approaching the assimilated foods which European babies are supplied with. The little creatures, however, soon learnt to clutch at whatever they saw their parents enjoying, and generally came in for a plentiful supply of tit-bits which were reserved for them.

The children used to scamper about in fine and warm weather as naked as the day they were born, and play at various games or dance mimic corroborees, but in cold or wet weather they looked pitiable little objects as they crouched around the fires or huddled together in the huts. For a covering at night, especially in cold weather, they either used the roughly cured skins of wild animals or the soft bark of the paper-barked tree (*Melaleuca Cuscadendron*), or even burrowed into heaps of dried grass. Both girls and boys used to troop about together in care of the women until they were twelve or thirteen years of age. They soon learned to catch fish, to cut out the grubs from decayed trees, to dig for yams, or to hunt for bandicoots, rats, and other small animals. The boys soon used to imitate their elder male friends and relatives by making toy boomerangs or clubs, or spears, and by constant practice soon became very skilful in throwing at targets or knocking down birds. They used to be greatly praised for their cleverness, and rewarded by well fashioned weapons made by the older men. The girls often adorned themselves with flowers, bone or reed ornaments, and shell necklaces. Under the instruction of the older women they learnt how to fish, or to search for fruits or roots, to sew skins together for rugs, using a bone needle and kangaroo sinews for thread, and to plait bags and small nets.

When the boys reached the age of puberty (about sixteen years of age) they were initiated into the privileges of manhood by strange mysterious secret rites and ceremonies. This ceremony was known as the boorool, and the initiates became boombits. For some days previous to the date of the ceremony, members (both men and boys) of other tribes in the neighbourhood used to assemble in the district and receive a hearty welcome. The coming event was one of great importance, in fact, it was the most important incident in the life of each male aboriginal. Great preparations were made and every day the welcome extended to visiting tribes became more demonstrative. Boomerangs and spears were made with special impulse, and the men anointed themselves with fat until their skins glistened again, and ornamented their bodies with markings of red ochre and white pipeclay. Great hunts were arranged, in which large quantities of game were killed; the women spent much time in fishing and yam digging, and some of the men and boys went bee-nesting, and returned with large quantities of honey and honeycomb.

Feasting and mirth and pleasure was then the order of the day for some time.

When this was ended all the men and elder boys went off to some retired part of the bush, leaving the whole of the women with the girls and younger boys at their camping place, with strict orders not to leave it. Guided by the old men, or by the karadjis or kradjys (native doctors), some of the men followed to an isolated and unfrequented position, generally the top of a well wooded hill, the remainder of the men and boys being left in a camp. Here a couple of circular clearings were made, the branches and brushwood being used in making a fence or hedge around them; a narrow path, also fenced in with bushes, connected them. Some of the trees in the neighbourhood were marked with rudely drawn and cut animals, the totems or badges of the tribe, and designs, the meanings of which they would never disclose. Preliminaries being ready, the novitiates, who had been kept at a distance, were then brought into one of the cleared spaces. Here they had to give proof of their skill with the weapons of warfare and chase, their supposed enemies and victims being targets of various kinds. In some of their duels their antagonists were the elder men. When this was finished they were given over into the care of special guardians and teachers, who took them into the second circle, where they were made to lie down flat on the ground for a long period of time, and the slightest alteration of position was punished by a no gentle tap from a club. Then for a certain period they had to sit on their haunches with their heads bent down between their legs.

Part of the time was taken up in receiving instruction from the elders in the tribal laws, and in learning such things as were considered necessary to fit them for the duties of manhood. A stoical indifference to hunger and pain were practically enforced, and the boys were kept without food and in uncomfortable positions for long periods. When food was supplied to them it was generally of the most nauseating character. If any of the boys showed any undue impatience, or failed at any point of importance, they were sent back to associate with the women and young children, and had to wait until the next boorool, or bora ceremony, to be made men. Often times these delinquents were subjected to severe taunts from their more fortunate companions. Towards the end of the ceremony they were harangued by the oldest man, or by one or more of the koradjys, who afterwards presented each of them with a piece of clear rock crystal, which was supposed to have a very mystical importance, and which on no occasion, or under no consideration, was to be shown to women or to uninitiated persons. A breach of this law rendered by the man who showed it, and the woman or uninitiated person who saw it, either liable to death or to lose the protection of the good spirit and fall under the influence of demons and sorcerers. A great part of the boorool, or bora ceremony, consisted of emblematical dances, and many new dances and songs were often introduced at the great festival, if such it may be called.

Towards the end of the ceremony the women were brought to see their children, apparently to have a formal leave taking between the mother and son. On this occasion the women fondly embraced and cried over their boys. After awhile the women were then made to lie down within the circle and were entirely covered over with bark or rugs, while a special corroboree was danced. At its conclusion they were sent back to their own camp.

A large fire was then built up of light blazing materials, round which the men and the boombits joined hands and danced to and fro. In this dance the parties were arranged so that a man and a boy stood alternatively in each line, a man always being at the end of each line. They danced slowly at first, but gradually increased in excitement as they chanted some wild song, until finally they dashed through the flames from side to side, lifting the boys from their feet. They continued the corroboree until the fire went out, and they themselves were well nigh exhausted. Strange to say they seldom got burnt, their movements being so rapid that the fire took but little effect on their naked and well oiled bodies, whilst the skin of their feet was so indurated and thick that the hot embers caused them but slight inconvenience.

(To be continued in our next.)

RECENT DISCOVERIES, AND ANTHROPOLOGICAL NEWS.

M. J. DE MORGAN has been making discoveries of the remains of the very old people, who long since occupied the Nile Valley, from Cairo in the north, to the Wady Halfa in the south, and who, he maintains, produced the pre-historic civilisation of Egypt. They represent the people who occupied Egypt before the Egyptians of the historic, or regular dynastic times. They were the oldest race in Egypt, and this explorer considers they were the indigenes of that region, and contrary to what has been thought, they are now proved to have had long, smooth, fair hair, dolichocephalic skulls and white skins. In the earliest of their tombs there were no bronze or iron implements. M. Amélineau, has also been excavating and collecting the remains of this pre-historic people at Amrah, Ballas, and Nakada. Prof. Petrie has been examining these remains and comparing them with his former discoveries. At Nagada, they have found a tomb which appears to be that of King Menes. M. Amélineau has discovered the tombs of very early kings at Abydos, there were archaic hieroglyphics, also utensils of copper such as pots, hatchets, needles, chisels, and gold beads. The earliest specimen of mixed tin and copper yet found, is of about 3400 B.C. in Egypt. The Chaldeans of Babylonia made use of iron, sooner than did the Egyptians. The Egyptians used copper as their first metal, and afterwards bronze, a mixture of tin and copper.

M. Dieulafoy maintains that there was in very early times in Babylonia a dark people, the Khuis, or Khuzi, of the Arab geographers, whose country they term Khuzistan, which was originally from the Persian Gulf to the Tigris. They were the Kush or Kissians of other writers, and they were related to the Dravidian peoples. They were also related to the Brahmi people at the mouths of the Indus. They were, as Rawlinson has shown, the Kush, or Kusan. They were also related to the Elamites, and to the dark Susian arches. Herodotus says these eastern Ethiopians had straight hair. Kusan was the old name of Beluchstan, and Kissia was Susiana. The Himyarites of S. Arabia were originally of these dark people, and were afterwards invaded by the Shemites. The Gallas and Somalis were also Kushites, as were the Bioharas, Hadendowas, by the Red Sea. The Abyssinians were mixed Kush and Shemites. The Cushites were all along the shores of the Indian Ocean. The beginning of Babylonian history are the appropriations of Cushite culture by lighter coloured peoples. Their cul-