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NORTH QUEENSLAND ETHNOGRAPHY. BULLETIN No. 13. FIGHTING WEAPONS.

By WALTER E. ROTH.

NORTH QUEENSLAND ETHNOGRAPHY.

Bulletin No. 13.

FIGHTING WEAPONS.1

By Walter E. Roth, Magistrate of the Pomeroon District, British Guiana; late Chief Protector of Aborigines, Queensland; Corresponding Member of the Anthropological Societies of Berlin and Florence, the Anthropological Institute, London, etc.

(Plates lviii.-lxi.; Fig. 12.)

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¹ Dr. Roth, when transmitting his MS., requested that the details of a few implements in his collection left undescribed, might be added; these are now incorporated and distinguished by being placed within brackets.

—(Ed.)

- 1. Spears:—As to how much labour is entailed in the manufacture of a spear depends largely upon the nature of the timber employed according as to whether this is a bamboo or a thin sapling, or whether the implement is cut out of a tree en bloc, as happens sometimes in the Boulia and Rockhampton Districts, or split out of the solid. The different methods adopted in getting it into shape, e.g., bending, straightening, etc., as well as the tools, etc., required for the purpose, have already been described 2. I propose including certain mention of the spears used in hunting and fishing, which although not fighting weapons, find a more or less natural place here.
- 2. Most of the weapons used in the North-Western Districts have been fully detailed3, and hence require little additional description. Mr. E. Palmer, however, records three additional timbers used for spears in these areas: -Phragmites communis, Trin., stems used for reed-spears on the Mitchell River; Sesbania ægyptiaca, Persoon, stems for the ends of reed-spears at Cloncurry; Thryptomene oligandra, F.v.M., for the points of reed-spears only, on the Mitchell and Gilbert Rivers. Spears that have since been met with are the stone-spears4 of Burketown, Point Parker, and the ranges along the Queensland Northern Territory Border, and the multiple prong fish-spears of the Wellesley The lancet flake of the former is fixed into the split extremity of the shaft after the manner of a wedge⁵, and then bound round with twine, and finally strengthened with cement. The prongs of the fish-spears, spliced and fixed only with twine on to the proximal portion, have their barbs one behind the other, cut out en bloc (Fig. 12).

[The spear selected for description has the shaft scarfed, and is tri-pronged. Both portions of the former consist of sticksaplings fined down. The following are the measurements:-

Length	over all			11	2
,,	of butt			4	0
19	shaft proper			5	2
,,	prongs	• • •	•••	2	0

The butt is cupped for the reception of a wommera peg at the proximal end, and bound with coarse native twine; at the distal end it is scarfed to fit against a corresponding proximal scarf on

² Roth—Bull. 7—Sects. 2, 3, 4.

³ Roth-Ethnol. Studies, etc., 1897-Sects. 246-251. ⁴ Roth—Bull. 7—Plate vi. and Sect. 24.

⁵ Roth-Bull. 7-Sect. 31.

the shaft piece, this union being also bound or lashed with similar twine (Pl. lviii., figs. 1 and 2). The head or distal end of the shaft is grooved on three faces to receive the basal ends of the prongs, the whole union for the length of eight inches being again bound round or whipped with native twine. The inserted portion of each prong is five inches, leaving a barbed length of nineteen inches; the blunt barbs are cut-out of the solid, one behind the other, and all facing inwards, but the distance apart on the same prong is not uniform, varying from one to two inches.]

- 3. On the Pennefather River spears have the generic term of ché-a applied to them, and are formed of a proximal (butt) portion morticed into a distal (shaft tip) one6, the latter being either simple or multiple. The extreme tip is called pe-údana. All these spears are thrown with a spear-thrower or wommera, though they can occasionally be used with the hand alone. The barb, except in the stingaree-tail spears, is of a kangaroo-bone pencil (nowadays oft replaced by thick iron wire) fixed into a longitudinal groove, cut with a tooth-scraper, into the spear tip beyond which it projects; it is bound round and round with twine, the cording finally giving place to a plain looping (Pl. lviii., fig. 3), the whole of which is ultimately covered with The colouring of these spears is fairly cement substance. uniform; starting from the proximal end is a short length of white, a corresponding one of red, and a longer one of black, the latter being "fixed" with a special medium, this latter is either the gum of a Melaleuca, or human blood obtained from The timber employed for the distal portion of all these spears, except (d), is the Acacia rothii, Bail. (NGG. lar.), that for the proximal varying, as will be seen in the following short descriptions of the different varieties :-
- (a) Short light spears, proximal longer (from two-and a-half times down) than the distal position, and no barbs. Used only for playing with, and all known by the general term of pó-ini. Made of Hibiscus brachysiphonius, F.v.M. (NGG. yí-awara), Croton triacros, F.v.M. (NGG. bó-atha), Macaranga tanarius, F.v.M. (NGG. arm-buta), Desmodium umbellatum, DC. (NGG. owono), or Pluchea indica, Less. (NGG. onogona).
- (b) Heavier and longer spears, proximal longer than the distal portion, and armed with stingaree-barb fixed on to the tip-a

⁶ Roth—Bull. 7—Sect. 43, for method of mortising and for treatment of the butt end.

⁷ Roth-Bull. 7-Sect. 30.

few central ones surrounded by others in form of a circlet. These spears, used for fighting, have all the general name of larna-pe (the Nggerikudi term for a stingaree-barb) applied to them. Made of "bamboo" (NGG. ro-amada), or Hibiscus tiliaceus, Linn. (NGG. kórnbrana)⁸.

- (c) Heavier and longer spears, but the proximal portions much shorter (one-fifth or even less) than the distal. Used for hunting kangaroo, fish, etc. Made from timber called ombo. which is bartered from the Embly River, or from *Premna obtusifolia*, R.Br. (NGG. mo-odo), or *Eucalyptus tesselaris*, F.v.M. (NGG. winnichanna). These spears pass by the general name of to-ono.
- (d) Weight and length similar to (c), but the proximal portion much longer (five times) than the distal, which is multiple (three or four pieces) and barbed, and used for hunting kangaroo, fish, etc. They have the generic name of dero. Proximal portions manufactured from Hibiscus tiliaceus, Linn., Thespesia populnea, Corr. (NGG. pe-amanggan), or Tristania suaveolens, Sm. (NGG. ta-andruno), the distal from the Carappa moluccensis, Lam. (NGG. adaimbite).
- 4. The Princess Charlotte Bay, Cape Bedford, Bloomfield and Middle Palmer River spears may be dealt with collectively, with the Cape Bedford ones, about which very reliable information is known, as the type. Local generic names for spears are KRA. KYI. KYE. KMI. kalka⁹, KWA. alkir. All the following Cape Bedford spears are made of a distal (shaft) morticed into proximal (butt) portion, the one extremity of the barb invariably forming the very tip of the completed spear.
- (a) Stingaree-barbed, single (Pl. lviii., fig. 5) or multiple (Pl. lviii., fig. 6) with the barb or barbs pointing forwards, long proximal end of bamboo or reed, and short distal end of Acacia holocarpa, Benth. (KYI. o-yur) or Drymophlæus normanbyi, F.v.M. (KYI. do-war, the local "black palm.") At Cape Bedford such spears are known as mu-lon, a term probably connected with the Butcher's Hill KYE. word mollun, a stingaree. On the Bloomfield the single-barb variety is known as ta-chal, but here the weapon is built of a short Xanthorrhæa butt, and long black-palm (Acacia) or blood-wood shaft. On the Middle Palmer the stingaree barbs are bartered

⁸ Two other timbers sometimes employed for making these heavy spears (b) and (c) are *Wedelia biflora*, DC. (NGG. toudronga-nama) and *Cordia subcordata*, Lam. (NGG. lava).

⁹ Strange to say, kalka is the generic term for a spear amongst the coastal blacks (Gunanni) between the Mitchell and Staaten Rivers.

into the district from the Musgrave River on the east coast, or from down the Mitchell, etc., on the Gulf coast; they are fixed in multiple, and the weapon called a tikara (KMI.). Other local names for the single barb variety are KRA. ri-ang-pal, KWA. ri-angapa; for the multiple-barb, KRA. challawang, KWA. gulaba.

- (b) Stingaree-barbed, multiple, with the barbs placed one behind the other (Pl. lviii., fig. 4), pointing backwards; long proximal end of reed, short distal portion of black-palm or hardwood, and known as dekara. On the Bloomfield River, built of similar proportions and materials as the ta-chal just mentioned, and called dikara. At Princess Charlotte Bay, the local names are KRA. to-wara, KWA. de-kir.
- (c) Quartz-tipped. Pieces of quartz flake (Pl. lviii., fig. 9), often now replaced by glass, fixed with cement on to opposite sides of the spear-tip, long butt and short shaft, known as ku-yan. Same name on the Bloomfield River. The small white quartz flakes are fixed, at their bases, oppositely, like the teeth of a lady's small hair-comb, they are fixed with gum cement, of which a certain length is attached to the spear-head, with a slot run longitudinally up it by means of a thumb nail, and there secured with heat and careful manipulation of the fingers. Their axes are not at right angles with that of the spear, but project forwards. It would seem that the flakes decrease in size proportionately as they reach the spear-tip. The Middle Palmer Blacks call such a weapon tural, and manufacture the proximal portion from Clerodendron inerme (KMI. ochi-illa). At Princess Charlotte Bay the proximal is usually made from Premna dallachyana, Benth., the distal from Erythroplæum laboucherii, F.v.M.; local names, KRA. to-ril, KWA.
- (d) Multiple pronged fish-spears (Pl. lviii., fig. 7). Usually four prongs (distal pieces) morticed into the proximal 10, with a wooden barb on each prong; called yin-ba. On the Bloomfield River these fish-spears, known as yirmba, are made of some light wood, preferably Xanthorrhæa (grass-tree), and are said to have been imported here originally, although they were certainly manufactured in the district for some time previous to 1885^{11} . At Princess Charlotte Bay these weapons are made from grass-tree and black-palm (proximal and distal respectively), the latter material being bartered into these parts from the McIvor River; the barbs are

¹⁰ Roth-Bull. 7-Sect. 43.

¹¹ On the authority of Mr. R. Hislop.

either of hardwood or bone; the blacks throw these spears either at fish in situ, or else, as I have often watched them do in a muddy water-hole, aim here and there in the water on the chance of hitting one; local names are KWA. lu-yu, gurrpan, KRA. larwa, karanja, KLA. pur-ta. The Middle Palmer River Natives make the proximal portion of bamboo, which is bartered from the Princess Charlotte Bay Blacks, and use bone-barbs; they call this spear urr-ché-ra.

- (e) Long grass-tree proximal, and short Acacia holocarpa, Benth., distal portion with wooden barb; known as wur-poi. Similar name on the Bloomfield River.
- (f) Similar to preceding, but the grass-tree is replaced by reed; called nambar.
- (g) Long proximal portion made of reed, the timber used being immaterial, and a short black-palm distal end, the latter giving the particular name to the spear, do-war. Same name and weapon on the Bloomfield River.
- (h) Short grass-tree proximal portion, long Acacia or Erythrophlaum distal end; wooden barb; called mu-rongal.

The Princess Charlotte Bay Natives have a special spear made with a proximal bamboo portion, and a distal Acacia one; local names, KRA. andarma, KWA. bar-nga; the bamboo is obtained from the Hann and Kennedy Rivers, and forms a staple barter, e.g., to the Koko-minni of the Middle Palmer River, etc. Here and there an odd spear or two are met with, not necessarily introduced from anywhere else, which appears to have a local name, yet without sufficient history to allow of its being considered a typically local weapon. Such for instance, is the mongil mon-gil of Cape Bedford, a long reed proximal, and a short hardwood distal, the latter armed with wooden barbs placed in pairs alternately on opposite sides. Other examples are the burongámo and o-wórn of the Middle Palmer and Bloomfield Rivers respectively, and from their very nature require no detailed description.

A timber, which so far, I have not had cause to mention, used for making spears on the Middle Palmer River, is the Acacia lysiphlæa, F. v. M. (KMI. urr-te). Another is Corypha australis, R. Br. (Cabbage-tree Palm), the wood of which is split and made into spear-heads on the Endeavour and Normanby Rivers.

5. On the Lower Tully River are to be met the four following varieties of spear, the three and four-pronged fish-spear being an introduction of but comparatively recent years:—

¹² On the authority of Mr. E. Palmer.

- (a) The wommera spear is built of two pieces, the proximal longer than the distal; the former is made of grass-tree (MAL. pi-ran) or Eupomatia laurina, R.Br. (MAL. mu-jir), the latter from a split Archontophænix alexandræ, Wendl. (MAL. kopangara), Ptychosperma elegans, Blume. (MAL. warkai), or from a sapling of Myrtus exaltata, Bail. (MAL. yambi). Stingaree-barbs may beattached or not; if present, the spear is called a warrakatcha, and its distal extremity covered with red and white rings, but if not present, this extremity is smeared with a uniform red. It is used for fighting purposes, and for spearing wallabies.
- (b) The chukaji is a hand spear, formed of a single piece of local "hard-wood" (MAL pindanyo), obtained only from Mount Mackay, either cut out from, or a sapling itself of, the tree. Its proximal end is pointed, but of course not so sharp as the distal. From about five to eight to nine feet in length. It is this spear which is used by the four gins at the Prun ground¹³, and also employed by men for fighting.
- (c) The warkai, also thrown without a wommera, is so named from the black-palm (*Ptychosperma elegans*, Blume.), out of which it is split, and is mostly used for spearing eels and other fish.
- (d) The wi-valli is another hand-spear also cut out of one piece, seven to eight feet long, heavy, clumsily made, and the only spear having a spatulate tip, the latter being covered with ngobi¹⁴ gum; the butt-end tapers somewhat. Made of local "hard-wood" (*Myrtus exaltata*, Bail.), or another timber known as yalma.
- 6. In the Rockhampton District, where I made my enquiries in 1897, the spears met with were of the simple (single-piece) acicular type, about seven to eight and a-half feet long, with the butt ending in a sharp abrupt point; any marked shortening than this was due in all probability to the weapon having been broken, and subsequently sharpened up again. The weapon was always thrown with the hand, no spear-throwers being known here, as well as all up the coast-line certainly as far north as Townsville. Its manufacture consists in cutting it out in its entirety from a "wattle"-core, or from an outer strip of "brigalow" or "rose-wood." Sometimes, just previous to a fight, a barb or two, placed oppositely, might be fixed on with twine and cement-substance at some considerable distance from the tip (Pl.lviii., fig. 8). At Glenroy, on the Upper Fitzroy River, I saw a

¹³Roth-Bull. 4-Sec. 15.

Melicope australasica, F.v.M. See Bull. 7-Sect. 13.

couple of spears manufactured within the previous two years by local blacks (presumably Karun-burra) similar to the preceding, with a thickish girdle taking the position of the barb (Pl. lviii., fig. 10); but the Rockhampton (Tarumbul) Natives knew nothing of this substitution. Three spears in the possession of Mr. A. Cowie, of Rockhampton, were of interest, not only in that he himself had obtained them from the blacks in the district under consideration some eighteen or twenty years previously, but that the barbs were cut out of the wood en bloc. I made careful enquiry from the older natives concerning any information about these weapons, which were all about eight feet six inches long, and learnt that they passed under the name of mi-lo, the term for a barb, peg, etc., but that they had not been made for many-along day, the necessary timber, owing to the white settlers, being then obtainable at no less a distance than nine or ten miles from the township. The first is a "rosewood" one obtained in Rockhampton from Westwood aborigines. It has a flattened expanded head twenty inches long and three inches wide, sloping in a graceful curve to a slender point, each side being carved into four barbs (Pl. lviii., fig. 11); from this enlargement, which has been raddled, the diameter of the shaft progressively diminishes to the butt where it abruptly tapers off. The second, from the same locality, with tip similarly flattened, has five barbs, but only on the one edge (Pl. lviii., fig. 12): the shaft is peculiar in that it progressively increases down to the butt. The third example, believed to have come originally from the Marlborough District is of the common acicular type, but bears a barb cut out of the wood itself, the tip of the weapon not being flattened (Pl. lviii., fig. 13).

- 7. The Brisbane Blacks¹⁵ had three kinds of spears, all of them simple, *i.e.*, of one single piece, and thrown by hand only.
- (a) The pi-lar was made from Eucalyptus crebra, F.v.M. (local "iron-bark," the tandur of the local natives). They would pick out a young straight-grained tree, one that would split well, climb up to ten or eleven feet, cut a transverse notch above deep in, then two vertical ones reaching down from it, a transverse one below according to the length they wanted, and split it off. Then gradually trimmed it down to the size required. They then spoke-shaved it with a Mytilus (mainlanders) or Donax valve 16 (coastal ones), smoothed it down with a piece of broken shell, which was subsequently replaced by glass, straightening and

¹⁵Notes from Mr. T. Petrie.

¹⁶Roth—Bull. 7—Sect. 28.

bending, etc, as required, blacked it all over in the fire and finally hardened the point by the same means. This pi-lar was made from nine to ten feet long, and used for fighting at close quarters. Sometimes old ones were nicked very nearly through, about two inches from the tip, for some fellow they had a special "down" on, so that when stuck in, it would break off and remain behind. At other occasions one or two stingaree barbs might be stuck on with beeswax and twine for a similar purpose.

- (b) The kannai was made from a young sapling of a certain scrub-wood, chosen to about the size required, the bark must be scraped off, and then pointed. Used for fighting and hunting; and just before a fight bundles of these would be collected from the scrubs. It was blacked all over in the fire, as in the case of the pi-lar, and hardened at the point, the last twelve inches or so of which was finally scraped quite white; this was done to enable one to see it coming when thrown. Sometimes the tip might be left blunted, when three or four prongs, each from six to seven inches long, would be attached to it, the weapon being then used for purposes of fishing.
- (c) The rose-wood timber spears, not manufactured here, but bartered from the Ipswich Blacks, were also called pi-lar, and used similarly for fighting at close quarters.
- 8. Spear throwers (wommeras) were absent in the eastern coastal districts, extending from Townsville to Rockhampton, and were unknown in Brisbane (*T. Petrie*), but they were present in the area around what is now Charters Towers. In their most primitive form of a hooked stick (Pl. lviii., fig. 14) they are met with in the Wellesley Islands and neighbouring mainland.
- 9. Wommeras on the Pennefather River are known by the general name of arái-i¹⁷. Used both as a spear-guard and as a spear-thrower. The blade (Pl.lviii., fig. 15) varies greatly in width, but with greater width there has, of course, to be a correspondingly larger peg; greater width, however, is not considered an advantage. It is manufactured from five different timbers:—Erythrophlæum laboucherii, F.v.M. (NGG. nau-muta, "iron-wood"), Acacia rothii, Bail. (NGG. lar), Mimusops parvifolia, Linn. (NGG. ngó-ru), Eucalyptus terminalis, Sieb. (NGG. rar-ru), and Aglaia elæagnoidea, Benth. (NGG. andró-e). To prevent the timber from splitting after being cut from the tree it may be buried in the ground for two or three months before anything further is done

¹⁷ Further down the Gulf coast-line between the Mitchell and Staaten Rivers the Gunanni call them yur-nganya.

to it18. The different parts of such a weapon are spoken of as follows: -- the proximal (handle) portion to-o, the distal kwanna, the blade a-rár, the peg kó-kan, edge of the blade bú-ni, the shellhaft pé-ra (after the name of the shell), and the extreme proximal end of the blade beyond the haft teriwan (= tail). For decorative purposes the blade may be covered with a mixture of resin and fat, producing a polished or varnished appearance 19. peg is a circular pencil of iron-wood, not flattened at all, projecting somewhat below the lower edge of the blade. It is fixed into the vertical edge of the blade-head, which is split for the purpose (Pl. lviii., fig. 16), by means of a shell, or with the teeth; two holes are then drilled, through which twine, etc., is passed to tie the peg in position, slipping being prevented by means of a thick covering of Canarium australicum, F.v.M., cement²⁰. The handle is covered with a similar cement, so as to prevent it from The cement at one or both slipping through the hand. extremities of the blade may be occasionally decorated with the dried (yellow) strips from the outer covering of the "Rock Lily" (Dendrobium bigibbum, Lindl.) orchid. The shell-haft is formed of two oval-cut pieces of pera shell (Melo diadema, Lamk.)21 attached with beeswax, while a few Abrus precatorius beans may help to ornament the edges in-between; the angle at which the shell-haft is affixed varies a good deal, and appears to depend on individual caprice.

10. The Koko-minni Blacks of the Middle Palmer River, Laura River, Maytown, have "iron-wood" (Erythrophlæum laboucherii. F.v.M.) spear-throwers. The blade is long, comparatively narrow (though wider at the centre), with gradually sloping proximal (handle) extremity 22. The long peg, which has a deep transverse nick in it to catch into the extremity of the spear-butt, is formed from an Acacia and fixed on to the blade by tendon passing through two holes in it, this portion of the peg being accordingly flattened from side to side, into two holes correspondingly drilled into the blade (Pl. lviii., fig. 17); the ligature is covered with Grevillea cement, the back of the peg remaining free of it (Pl. lviii., fig. 18). The haft, fixed at from anything of an acute to an obtuse angle, is either of Melo

¹⁸ Roth-Bull. 7-Sect. 2.

¹⁹ Roth—Bull. 7 - Sect. 19. This blade may be sometimes stained.

²⁰ Roth—Bull. 7--Sect. 13.

vi., 1891, p.699; Luschan—in Bastian-Festschrift, 1896, pl.x., fig.5.—(Ed.)

²² Both here and at Cooktown, and the Bloomfield River, Ficus leaves are employed for smoothing down the blades. Roth-Bull. 7—Sect. 3.

shell (KMI. torng, or ye-cha) bartered from the Musgrave River, etc., or else of a lath of wood doubled upon itself. The spearthrower is known here as borna.

11. At Cape Bedford, on the Endeavour and Bloomfield Rivers, and at Butcher's Hill, the iron-wood spear-thrower has a comparatively long blade, even width throughout, and a short peg with a slight nick. The peg, which is cut from Petalostigma quadriloculare, F.v.M. (KYI. ckn. dun jo), is neither flattened nor drilled, but tied with tendon, etc., on to two holes drilled into the blade (Pl. lviii., fig. 19), the cement covering the back of the peg (Pl. lviii., fig. 20); a similar arrangement to what is met with on the Pennefather. The cement used is usually that of the iron-wood, but the Grevillea²³ is preferable when obtainable, as it lasts better. The handle is either haftless (Pl. lviii., fig. 21) or else hafted with two pieces of Melo shell fixed on with beeswax (Pl. lviii. fig. 22), or else with a thin lath bent on itself (Pl. lviii., fig. 23). The Cape Bedford name of the implement is milbir.

At Butcher's Hill I have seen wommeras made out of a yellow-coloured timber (KYE. nga-til), which I have not yet succeeded in getting identified.

On the Bloomfield River, and along the small stretch of coastline between it and Cape Grafton, is to be seen the bent or moonshaped variety of spear-thrower (KYE. ballur), in addition to the straight kind. The ballur²⁴ (Pl. lviii., fig. 24) is employed for spearing fish or birds with, especially anything at very close quarters. It is comparatively short, made of a light timber, is haftless, and generally decorated with red and white pigment at its distal extremity. It is thrown in a manner different from all other wommeras, in that the blade rests in the fork between the first finger and the thumb, instead of, as in the ordinary style, between the first and second fingers²⁵. As an example of how two tribes, although almost contiguous, may be ignorant of each other's ways and customs, it is interesting to note that sometime during 1897 one of these moon-shaped spear-throwers was thrown up on the beach at Cape Bedford 26, and brought to the Rev. Schwarz, who, never having seen one before and being anxious to

²⁸ Roth-Bull. 7—Sect. 13.

²⁴ Illustrations of modifications of this wommera will be found in Etheridge—Proc. Linn. Soc. N. S. Wales, (2), viii., 1894, pl. xiv., fig. 2; in Luschan—Bastian-Festschrift, 1896, pl. x., fig. 2—(Ed.)

²⁵ Roth—Ethnol. Studies, etc., 1897—Sect. 253.

²⁶ Cape Bedford is only about thirty miles as the crow flies from the Bloomfield River, where the moon-shaped spear-throwers are manufactured.

know something about it, asked the local blacks what it was; they could not give it a name, but they told him that the person who made it must have been mad!

- 12. At Princess Charlotte Bay the wommera is made of ironwood. The blade is longer than at Cape Bedford, etc., wide at the centre, narrower at the handle, with the shell-haft fixed at any angle, obtuse or acute. The long peg is flattened at its attachment; if drilled it is only partly covered with cement, if tied on it is wholly covered. Local names:—KRA. bo-un, KWA. alvau-ul. North-west of Princess Charlotte Bay, the koko-olkulo type of spear-thrower is comparatively short and wide, almost leaf-bladed with a long peg, this peg is made of "beef-wood," and tied on, not drilled, its back being covered with beef-wood (Grevillea) cement. With this kind of wommera a very short spear, about six feet long, is employed.
- 13. On the Lower Tully River the spear-thrower, used with the bangkai spear, is called charin (= nasal septum) from its flatness. It is a long thin lath with two holes drilled at its extremity, and the peg (MAL kom) tied on with small strips of "lawyer-cane" (Calamus, sp.).
- 14. In the North-Western Districts I have nothing to add to the descriptions of spear-throwers already given²⁷, but must draw attention to a very primitive form of implement met with in the Wellesley Islands, and on the adjoining mainland in the neighbourhood of Burketown²⁸ (Pl. lviii., fig. 14).

[It is a straight stick in one piece, two feet five inches long, obtusely pointed at the proximal end, and round throughout the entire length until within about the last six inches, when the sides are flattened more and more, resulting in an "eel-tailed" distal end. The latter is higher than the shaft, the fore upper angle forming the "peg"; it is a very light implement.]

Two other types, it is true, are occasionally to be found in the area around Burketown, but they are certainly not of local manufacture, being brought in from the eastward²⁹.

[The first of these is, again, a plain stick 30, gradually tapering a little from proximal to distal, two feet long and raddled.

²⁷ Roth-Ethnol. Studies, etc., 1897—Sect. 253. Note the small projection on the edge of the blade at the distal extremity illustrated in fig. 369 of the same work.

 $^{^{28}}$ Type in general figured by Luschan—Bastian-Festschrift, 1896, pl. ix., fig. 9—(Ed.).

²⁹ Westward and southward—(Ed.).

³⁰ See Spencer and Gillen—Northern Tribes of C. Austr., 1904, p. 669, fig. 224.

At the proximal end is placed a tassel of human hair "ringlets," each ringlet a two-ply twist (Pl. lxi., fig. 1); it is prevented from slipping off by a washer of gum-cement around the stick (Pl. lxi., fig. 2), but hidden by the tassel. The distal peg is of wood, held in position by string lashing, gum-cement covered.

The second implement³¹ is narrow, rigid, and lath-like, about three quarters of an inch in thickness, plano-convex or slightly bi-convex, and two feet ten inches in length by one and three-quarters wide. The proximal end is cut out for the reception of the hand of the spearsman, but affording a very small grasp (Pl. lxi., fig. 3). The wooden peg at the distal end is large and obtuse (Pl. lxi., fig. 4), and held in position by a gum-cement coating, and doubtless lashed on beneath. The whole of both surfaces is highly raddled and decorated with broad pipeclay transverse bands at both ends, the whole intermediate surface being pipeclay cross-hatched.]

- 15. Boomerangs are either manufactured from the flange of a tree (a natural form) or else cut en bloc. North of the Palmer River, they may be said to be absent in the Peninsula. Employed for both fighting and hunting purposes.
- 16. The generic name for a boomerang on the Lower Tully River is wa-ngal. This can be either a charal-jego (charal = to bounce on the ground), a fighting one, i.e., one which, on striking the ground, flies low; or a nyaral (= to buzz, hum), a toy one, i.e., one that flies high. The quality of either cannot be gauged except by experience³². Fortunately or unfortunately, the natives have learnt that if, during a fight, a good fighting-one gets broken, they can utilize a toy one by throwing it wrong endon on to the ground, when it will rise but little. With either kind, a left-handed one (i.e., one which, when thrown, will swerve to the left) is spoken of as chaku-i, and a right-handed one as yural-bara, similar terms as the particular attributes in a man.

The boomerang is manufactured from the following timbers, only one of which have so far been identified:—the yarran (Rhodomyrtus macrocarpa, Benth.), yandan, bokobai, charkala, puchera, yalma. In all cases, as well as around Cardwell, it is made from the flange on the butt of the tree, and hence is an example of a natural form. Furthermore, it is always got-out

^{31&}quot; Biletta"—See Etheridge—Proc. Linn. Soc. N. S. Wales, (2), vii., 1893, pl. xi.; Luschan—Bastian-Festschrift, 1896, pl. x., fig. 6; Spencer and Gillen, loc. cit, p. 669, figs. 222-3—(Ed.).

⁸² Roth-Bull. 4-Sect. 22.

in the same manner, represented in Pl. lix., fig. 1, with a cut above and below, and one behind. This last cut is made about three inches from the free edge, the split travelling simultaneously up and down, and used to be done with a stone tomahawk; even without this split a smart blow will remove the piece required. The timber so removed is then cut into shape by splitting, then chipped, then scraped with flint, then with shell, and finally rubbed over with the pumice stone which is obtained both in the Tully River and at its mouth. The fighting boomerang is clumsier made and heavier than the toy one, and is always used for offensive purposes by making it strike the ground first. Originally it used to be ornamented with a uniform coating of red pigment. Its parts are only named as the mollo or handle, and its opposite extremity as the chinna or foot.

17. Around Mackay, the natives will describe the local boomerang as having two knees, *i.e.*, a more or less defined double bend, which results in giving the weapon a very typical appearance (Pl. lix., fig. 2).

18. In the Rockhampton and surrounding coast-district, except its southern portions, e.g., Gladstone and Miriam Vale, the boomerang (Pl. lix., fig. 3) has a very marked bend or knee close to its proximal (handle) extremity, the upper convex surface showing a fine stone-chisel fluting; its extremities are tapering, while the width of the shaft gradually increases from the handle onwards, until it reaches its maximum of about two and half inches at a spot situated at about three-quarters of its length. Lumholtz figures 33 one similar to this from Coomooboolaroo, Central Queensland. A straight line joining its two extremities measures about twenty-six and a half inches, this increasing slightly as one travels northwards from Rockhampton. It is made of brigalow, rosewood or wattle. At Marlborough (1897) a local aboriginal told me that in the olden times boomerangs used to be ornamented on their convex surface with large diamonds (? graved) placed end on end, each diamond being subdivided by parallel lines into four smaller ones. On the Keppel Islands I could learn nothing about boomerangs, whereas at Miriam Vale the only two specimens obtainable were bi-laterally symmetrical, i.e., with the knee at the middle, its widest portion, and were said to be return or toy boomerangs.

³³ Lumholtz - Among Cannibals, 1890, p. 334, 2 figs. I do not think that Lumholtz's figure represents the same weapon as above, described by Dr. Roth.—(Ed.).

- 19. At Brisbane³⁴ the boomerang, or braggan, was made from the spur of a tree as on the Tully River, cut above and below, and split off. Both the toy and fighting variety were thrown either on to the ground, or direct into the air. As compared with the toy, the fighting one had less of a bend, was heavier, more rounded on both sides, and thrown lower. It would, when thrown on the ground, proceed at first in a straight course and then gradually taper to the right or to the left, the thrower learning by previous experience when it would turn off, on which side, and where it would hit. When thrown on to the ground direct it would turn off at the spot struck. The natives would often practice on the trees with these weapons, each owner thus getting to know just exactly what his particular weapon could do.
- 20. The boomerang of the North-West Districts has already been described by me³⁵. Around Normanton and the Gulf Coast, just to the North of it³⁶, the weapon becomes heavier and clumsier, the more or less acute angle at the wider knee (Pl. lix., fig. 4) gradually giving place to an only slightly perceptible curve (Pl. lix., fig. 5). Thus, on the coast-line between the Mitchell and Staaten Rivers the Gunanni call both varieties by the same name of we-angala, but use the angular one for fighting at close quarters by throwing it on the ground, the curved one for knocking over wallaby, native companion, and bandicoot.
- 21. Throughout the Peninsula no indigenous shield is to be met, the place of the weapon being taken by the broad-bladed spear-thrower, which, in the hands of a skilful fighter, can brush to the right or the left, as the case may be, any spear that may be thrown at him. On the Gulf Coast-line, the northernmost limit of the shield would appear to be the Mitchell River, where the weapon is more or less identical with the Normanton and North-West District pattern, in that it is made from a split timber and subsequently trimmed down into shape. The North-West types I have already described ³⁷. The Normanton District shields are usually decorated with red and white bands.

[A typical example (Pl. lx., figs. 17, 18) measures three feet three and a half inches in length by one foot in width. It is a large and proportionately very elongate oval shield, not unlike a drawn out "Goolmarry," and concave-convex, convex externally, slightly concave on the inner surface, becoming flatter towards

³⁴ Notes from Mr. T. Petrie.

⁸⁵ Roth-Ethnol. Studies, etc., 1897-Sects. 239 to 244.

³⁶ In areas where it is made from the flange of a tree.

³⁷ Roth-Ethnol. Studies, etc., 1897-Sect. 254.

the apices, which are obtusely rounded; the lateral margins are parallel in the central region, and slightly converging at the ends. Both surfaces are raddled, the outer decorated with three pipeclay and four dark-red narrow transverse bands at the centre, with a pipeclay panel occupying the whole of each apex. The handle or holdfast, on the inside, is of the ordinary pattern, but rather larger than usual.]

22. On the Lower Tully River the shield or pi-kan is made from Ficus chretioides, F.v.M. (MAL. magura) and from another timber, not identified, but known to the local Mallanpara Blacks as keba. It is cut from the tree on similar lines as the boomerang. A curved incision is made in the flange both above and below, chipped about half-way through the spur next on either side along the lines required (Pl. lix., fig. 6), and the piece then hammered or pushed out. Such shields are therefore not exactly oval, their shape on one edge depending upon the greater or less concavity of the flange. After this piece has been removed it is chipped away on both surfaces, except at the centres, which remain; in section, this stage of its manufacture would be represented in Pl. lix., fig. 7. To the central boss on the front of the shield nothing more is done for the present, though it may subsequently be shaved down a little; into the projection at its future back, however, two longitudinal holes are chipped, these being united below by hot cinders, together constitute a handle at the end of the process. The weapon is then lightened by means already detailed 38, then rubbed down with pumice stone, etc., and finally painted. In the designs of the patterns so depicted (Pl. lix., figs. 8-10) there is no meaning or interpretation, and on this subject very careful enquiries have been made, both by myself and on my behalf throughout the district; there may be some three or four typical styles, but, as a rule, one man copies another's, the copy being either a travesty or an improvement, according to the light in which it is regarded. The front of the shield is called kananja, a word signifying "the inside" in reference to its outside (outer bark) having been removed in course of manufacture. The central projection is the namma, the back of the shield the chu-cha (=person's back, dorsum), while dumbul (a term signifying the female genitalia) is applied to the handle portion³⁹. This manufacture of a shield from the

ss Roth-Bull. 7-Sect. 2.

³⁹ There is a very fine series of these shields in the Australian Museum. See Etheridge—Journ. Anthrop. Inst., xxvi., 1896, p. 157, pl. vii.— (Ed.).

flange of a tree extends southwards to below Cardwell, and northwards to the Bloomfield River, and is met with along the mountain ranges of the hinterland, e.g., Atherton.

- 23. The Bloomfield weapon was somewhat more oblong and rectangular as compared with that of the Tully, and usually larger, such dimensions as three and a half by one and a half feet being not uncommon; it is, however, fast falling into disuse, and even so late as 1898 was only being occasionally manufactured by some of the very old men. The Bloomfield Natives called it kúnjuri, and used to paint it with varying designs. Although no shields are found on the Endeavour River and at Cape Bedford at the present day, the local Koko-yimidir Blacks speak of them as gorndor-e. Indeed, so far as the eastern coast-line is concerned, the Endeavour River must be regarded as the northerly limit of the weapon.
- 24. In the Rockhampton District shields are all made from the local "cork-wood," the rumul of the Tarumbal Blacks, and present a more or less similar shape (Pl. lx., figs. 1 and 2)—an elongate oval, with flat (Pl. lx., figs. 3 and 4), in some cases approaching a markedly convex (Pl. lx., fig. 5), posterior surface, and incised handle. Each main encampment used separate characteristic gravings on the anterior surface:—
- (a) Rockhampton and Gladstone. Two transverse incisions, comparatively deep on occasion, divide it into a large central and two terminal compartments (Pl. lx., fig. 6), the former is blackened with charcoal grease, the latter whitened. Two specimens measured from twenty-one to twenty-one and a half inches long, eight and a half to nine inches wide, and two and a half to three and a half inches thick; in the smaller the handle-groove extended close to the sides of the weapon (Pl. lx., fig. 7), a somewhat unusual feature in this locality.
- (b) Yeppoon. Three transverse, and one longitudinal band, raised slightly above the general surface; these are blackened, the intermediate spaces being whitened (Pl. lx., fig. 8). Sometimes patterns of red and black may be observed in addition, either in alternate row or in their entirety, independenty of the graving, but this colouring would appear to be empirical. The number of transverse raised bands—up to four, even five—usually varies with the size of the weapon. From twenty to twenty-one and a half inches long, nine to ten inches wide, and two to three and a half inches thick.

^{40 &}quot;Goolmarry" type—See Etheridge—Proc. Linn. Soc. N. S. Wales, (2), ix., 1874, p. 514, pls. xxxiii. and xxxiv.; Id.—Journ. Anthrop. Inst., xxvi., 1896, p. 157, pl. vi., figs. 7 and 8.—(Ed.)

- (c) Marlborough. There are two transverse incisions with a contained raised pattern in the form of a cross (Pl. lx., fig. 9); the posterior surface also has a raised surface of a crossed type (Pl. lx., fig. 10). These shields are sometimes to be seen painted, but the colours vary. A specimen, with slightly convex back, measured twenty by nine by two and a half inches.
- (d) Tilpal, Torilla. Anterior surface similar to the Yeppoon pattern, and the posterior (Pl. lx., fig. 11) somewhat a development of the Marlborough type. A specimen with distinctly convex back measured twenty-seven and a half by three inches.
- (e) Miriam Vale. Smaller, more truly oval and much more flattened than any of the preceding (Pl. lx., figs. 13 and 14); anterior surface blackened. Used for protection in the case of weapons thrown from a distance. The measurements of one example were twenty by ten and three-quarters by one and a half inches. Another type here is heavier (Pl. lx., figs. 14 and 15) comparatively, and differing from all the others in having almost equally convex anterior and posterior surfaces; it is employed at close quarters for fighting with the heavier varieties of nulla. The measurements of an example were twenty-two by nine by three and a half inches.

Nothing definite was known concerning shields on the Keppel Islands.

25. At Brisbane⁴¹ the shield or kuntan⁴² was made from "cork-wood" (Erythrine, sp.) by splitting, each split half being trimmed into the ultimate shape required 43. It was then put aside for two weeks, until quite dry, because while damp the wood could not be charred. The handle was next made as follows: -the two holes were outlined in charcoal, the lines then cut in with a flint or celt, the intervening parts picked and dug out with a hardened-pointed stick, then hot cinders put on and blown on, more picking, and finally joining the two holes beneath. The whole surface was next covered with warm beeswax, producing a dark brown colour. There were two kinds of shields, but both called by the same name—a thin broader one for warding off spears in the big fights, and a thick narrower one for receiving blows from waddies in single-hand combat. The former, after the beeswax had dried, was painted with pipe-clay according to pattern (Pl. lx., fig. 16) on the upper surface and uniformly covered with it on the under; the thick narrower shield had nothing on them beyond the beeswax.

⁴¹ Notes from Mr. T. Petrie.

⁴² Also the name of the timber from which it was made.

⁴³ As in the case of the Northern Koolamons. Roth -Bull. 7-Sect. 62.

26. The nulla-nulla is not so much a hand implement as a throwing implement, i.e., it is used more for throwing at short distances than for hitting at close quarters, and is very often employed in hunting wallaby, kangaroo, etc. Its manufacture is gradually dying out in the Boulia District, where it is not employed for purposes of barter, though it was (1897) pretty common along and to the north of the Leichhardt-Selwyn Ranges. It is made from the "gidyea" (Acacia homalophylla, F.v M), coloured black with charcoal grease, and measures up to about two feet in length. The distal extremity is enlarged and tapers to a point. A good one is usually incised with some circular bands at the proximal end, and with a longitudinal fluting which reaches either to the tip or ceases abruptly about an inch from it. The Pitta-Pitta Blacks speak of it as mor-ro; the Maitakudi call This type of weapon (Pl. lxi., fig. 6) is common throughout the whole of North Queensland 44, as well as the Central Districts, and was to be met among the old Brisbane Blacks. In shape it is comparable with the wooden mallet of the Wellesley Islands 45.

27. On the Tully River there are, in addition to the common type just mentioned, a two-pronged variety known as wirka, as well as a globular and a decorative (pine-apple) pattern, all more or less identical with those to be observed in the Rockhampton District (Pl. lxi., figs. 7, 9, 10). The pine-apple type has on occasion been seen in the Peninsula and Eastern Coast-line; Lumholtz figures 4 it from Herbert Vale, and Petrie from Brisbane. Considering its limitation to the extreme north and to the coast-line, and its resemblance to the pine-apple stone club of New Guinea, I am inclined to regard it in the light of a Papuan introduction.

28. In the Rockhampton District nullas were usually made from "brigalow" or wattle, timbers known to the local Tarumbal (Rockhampton Tribe) as ku-nun and pakkar respectively; rosewood was occasionally employed, and on the Keppel Islands mangrove. Six or seven varieties are known, the first three of which are manufactured in large (heavy) and small (light) size. The heavy ones never left the hand, being used for the offensive and defensive at close quarters. The light ones were thrown from a distance, but were often used for knocking over native-bears, kangaroo and other game, i.e., employed as hunting weapons.

⁴⁴ At Princess Charlotte Bay it has the following names: -KRA. kunbai-il, KWA. pa-ul.

⁴⁵ Roth - Bull. 7-Sect. 38.

⁴⁶ Lumholtz-Among Cannibals 1890, p. 73, fig. b-(Ed.)

Good nullas should show the fine fluting caused by the stone chisel, and all possess handle-marks to prevent the implement slipping. Of late years, some of these weapons have been (?) improved by the addition of horse-shoe nails stuck into the distal extremity. In the neighbourhood of Rockhampton itself the Tarumbul had a word—barkel (=any stick or handle)—to express all these varieties of nulla collectively. To the following short description of each the Tarumbal name is attached:—

- (a) The distal or free extremity progressively enlarges, to end finally in a gradually tapering point (Pl. lxi., fig. 6), and is the commonest of the series. The smaller kinds are called barkal, the larger tindil.
- (b) The weapon gradually enlarges from the handle-end to the globular extremity, this knob being either distinct from or merged into the shaft (Pl. lxi., figs. 7, 8). Known as tanda.
- (c) The head of the implement is girdled, the girdle being subsequently cut into from two to five rows of squares, by means of transverse and longitudinal incisions (Pl. lxi., fig. 9); it is called a níl-li. For decorative purposes, I have here and there seen one of these weapons with two opposite sides of the girdle shaved down to the general surface level and then coloured red and white respectively.
- (d) Cut cut on the same general lines as the common barkal, but having the distal end fissured into two, three (Pl. lxi., fig. 10) or four prongs. It varies from twenty-eight and a half to thirty-one inches in length. Called tambara or yambara.
- (e) The distal extremity is in the shape of a more or less beak-like projection (Pl. lxi., fig. 11); sometimes there may be two of these "beaks" (Pl. lxi., fig. 12) opposite to one another, while occasionally there may be found an intermediate third or fourth. When decorated, the implement often has the beaks coloured white, and the intervening bases raddled. Called yu-lun.
- (f) A form only made apparently by the Karun burra Blacks of the Upper Fitzroy River, etc., but not within recent years. As compared with the commonest type, the "head" is defined from the shaft by a distinct ledge, and its tip tapers far more abruptly (Pl. lxi., fig. 13). A specimen which I obtained in 1897⁴⁷ was twenty-six and a half inches long.
- (g) The distal extremity is in the form of a curve flattened from side to side. It is said to have been cut from the flange of

⁴⁷ Now in the Queensland Museum, Brisbane.

a tree, and was called bi-teran 48 (Pl. lxi., fig. 14). At Glenroy, a selection on the Upper Fitzroy River, in Karun-burra country, I obtained a variety of this weapon having the curve sharply bent, and a couple of deep nicks cut into its extreme convex edge 49 (Pl. lxi., fig. 15); the handle marks were of a regular diamond pattern.

In regard to the above varieties of nulla, all save (f) were met with, or records concerning them obtained, throughout the Rockhampton District, except at Keppel Island, at Gladstone, and at Miriam Vale; at the last-mentioned localities (d), (e) and (f) were not recognised, while on the Keppels only (a) proved to be familiar.

- 29. At Brisbane⁵⁰ the nullas were made out of iron-bark and saplings; they were all painted black, similar to the Rockhampton types; the tabri (a) for fighting and hunting, the mur (f) for fighting, a weapon similar to (c) for fighting at close quarters, and the bakkan (g) for killing by a blow on the back of the head.
- 30. On the Middle Palmer River the men's fighting pole (KMI. eln-bá-la) is made of "box-wood" (Eucalyptus resinifera, Smith), on the same pattern and used after the same methods as that of the North-Western Districts⁵¹. At Princess Charlotte Bay the implement (KRA. albé-ila, KWA. alkau-úra) is somewhat shorter. In the Rockhampton area the women's fighting pole (TAR. rang-kwan) is about six feet long, and used in the same three positions of defence as has already been recorded; the weapon, which is made of "brigalow" becomes progressively thicker from the proximal to the distal extremity, both being sharply pointed.
- 31. In the Rockhampton District, at the North-Rockhampton Yaamba Road Camp, I obtained in 1898 a two-handed sword that had recently been made by an old relative of a Karun-burra friend of mine. The old man told me that in the days before the advent of the whites it used to be employed in the area extending from Yaamba towards Broadsound, and made to strike either with its convex or concave edge. He called it a bi-teran, a term identical with that applied to the similar but much smaller pattern of Rockhampton nulla-nulla (Pl. lxi, fig. 14). The

⁴⁸ This is the "Bendi" type—See Lumholtz—Among Cannibals, 1890, p. 334, 2 figs; Etheridge—Internat. Archiv. Ethnographie, x., 1897, pl. iii., fig 22—(Ed.)

⁴⁹ The "Langeel" type—see Etheridge, loc. cit., pl. iii., fig. 6—(Ed.) 50Note from Mr. T. Petrie.

⁵¹ Roth—Ethnol. Studies, etc., 1897—Sect. 255.

straight line joining the two extremities of this particular specimen ⁵² measured forty-six inches, while the greatest width of the blade, with equally convex sides, was three and a half inches; it was made of brigalow. Lumholtz figures ⁵³ one of these, and says it is usually covered with cross-bars of chalk. The two-handed swords of the North-West Districts have already been described ⁵⁴.

- 32. Single-handed swords are met with in the Cardwell and Bloomfield Districts. On the Lower Tully River this weapon, the barkur (Pl. lxi., fig. 16), is made from Myrtus exaltata, Bail. (MAL. vambi), and from another tree which I have not been able to identify. Such a tree of about six inches in diameter is cut off at the butt and felled, the length required removed, and then split down the centre (Pl. lxi., fig. 17). A slab can then be taken from either half (Pl. lxi., fig. 18), and chipped to shape. The shape of weapon thus follows the shape of the tree, straight or bent; the straighter it is the more preferable it would appear to be. To make the handle a cut is made into either side of the slab, which is then split; fibre twine is finally wound round the handle and covered with beeswax. One edge is as a rule sharper than the other, but both edges can be used for cutting; if the weapon has a distinct bend or curve, it is the convex edge which is apparently only used, but if straight, both are used, and the whole may be uniformly raddled. The proximal or handle-end amongst these Mallanpara Blacks is known as mura, and the distal extremity ngorn, a term signifying the forehead. It is from four and a half to five feet in length, and always used with the one hand stretched over the shoulder, the weapon hanging behind the back, and brought forward from above down with a more or less sudden jerk; well directed, a blow from it can split a man's skull. This weapon used to be manufactured on the Bloomfield River, but now (1898) only occasionally by the old The Koko-yellanji Natives here call it worran.
- 33. Very little reliable information is to hand as to the methods and procedure adopted in cases of one tribe fighting with another collectively; indeed, the progress of settlement and opening up of the country has rendered warfare such a comparatively rare institution nowadays, as to limit it to districts, e.g., portions of the Gulf Coast-line not ordinarily accessible to European observers. What was observed in the Boulia District

⁵² Since presented to the Queensland Museum, Brisbane.

⁵⁸ Lumholtz—Among Cannibals, 1890, pp. 332, 334, fig. on l.h.—(Ed.)

⁵⁴ Roth-Ethnol. Studies, etc., 18-Sect. 245.

has already been recorded 5. On the Bloomfield River (R. Hislop) there was one individual, not necessarily the oldest, who took the lead and planned out the whole mode of attack; this leader wore the cockatoo top-not feather-tuft head ornament, which rendered him sufficiently conspicuous. At the field of battle the older women would either try to prevent blood-shed or else with dancing egg the combatants on to greater fury, their conduct depending upon local circumstances, cause of quarrel, etc. Prisoners were not taken, but the final victors would seize the opportunity of capturing any women of whom they might be in want.

34. With regard to individual fighting, the following notices may not be out of place:—

At Miriam Vale (C. E. Roe, in 1892) the men would often, when at close quarters during the wrestle, try to seize each other by the testicle, the successful one increasing the pull by pressing his free hand on his adversary's shoulder; outsiders would then interfere. They used to fight very hard in the old days, but one would never take advantage of another—at least, not in the case of a weapon being accidentally broken. They were very stubborn, and would continue the strife on the following morning if one had been rendered unconscious or perhaps received a sufficiently severe wound to incapacitate him for the rest of the day. The women in fighting would throw hot cinders at one another.

At Boyne Island, Gladstone District (C. Hedley, 1887) the natives, when fighting, would try and rupture each other.

On the Bloomfield River (R. Hislop), fighting between two people alone was not common. The one about to be attacked might be ignorant of the attacker's intentions, and yet would stand up to a blow or cut without so much as flinching; were he to turn tail and run, he would be considered a coward and probably speared. On the other hand, the two might thrown down their weapons, rush at each other and wrestle, during which process one would try and throw the other—unlike the wrestling contests at the initiation ceremony. At last they will fall, the one on top trying to throttle the one below; the former, however, will then often get the worst of it by the by-standers and mutual friends striking him with wommeras, etc., on the back and head, while the latter will be saved. Friends and relatives will always try and prevent fatal consequences.

⁵⁵ Roth-Ethnol. Studies, etc., 1897-Sect. 238, last par.

EXPLANATION OF PLATE LVIII.

Fish spear, the distal end, or head, exhibiting grooves to receive the basal ends of two of the three prongs—Wellesley Islands. Fig. 1. Portion of the shaft of the same spear (fig. 1) showing the method

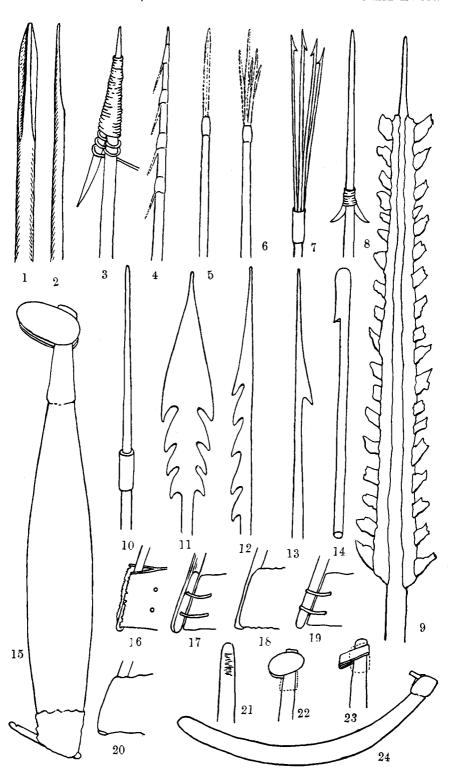
of scarfing the two portions of the shaft.

Method of binding-on the barb with twine, ending in a plain looping below.—Pennefather River. 3. Multiple sting-ray-barbed spear, the barbs placed one behind the 4.

,,

- other. Bloomfield River. Single sting-ray-pointed spear.—Cape Bedford, Princess Charlotte 5. Bay, Bloomfield and Middle Palmer Rivers.
- Multiple sting-ray-pointed spear.—Same localities as fig. 5.
 Multiple pronged fish spear, four prongs, each with a single barb.—Same localities as figs. 5 and 6. 7. Single acicular spear, with two barbs added at some distance from 8. the tip. -- Rockhampton District.
- Distal end of spear mounted with quartz flakes on both sides .-9. Same localities as figs. 5-7. Acicular spear with the barbs (fig. 8) replaced by a "girdle."— ,, 10.
- Glenroy, Upper Fitzroy River.

 Spear, with flattened and expanded head, bearing four barbs on each side below.—Westwood. ,, 11.
- A rather similar spear to Fig. 11, with five barbs on one side .-,, 12. Westwood. ., 13. Acicular spear with non-flattened head, and one cut-out barb. — Marlborough District. Primitive wommera, in the form of a hooked stick.-Wellesley ,, 14.
- Islands, etc. Wommera, with haft formed of two oval pieces of Melo or pera shell.—Pennefather River. ,, 15.
- Distal end of pera wommera, with the blade head split for the reception of the peg. ,, 16.
- ,, 17. Distal end of iron-wood wommera, with a long peg fixed on by tendon passing through two holes in the latter, and two others
- correspondingly drilled through the blade. Middle Palmer and Laura Rivers. Distal extremity showing the back of the long peg in fig. 17 exposed free of the cement covering. ,, 18. Distal end of iron-wood wommera, showing the peg tied on with ,, 19.
 - tendon through two holes drilled in the blade only. Cape Bedford, Bloomfield River, and Butcher's Hill. A more complete example of fig. 19, exhibiting the final cement ,, 20. covering of the back of the peg.
 - ,, 21. Haftless handle of the same wommera (figs. 19, 20). Handles or proximal end of the same wommera (figs. 19-21), ,, 22. hafted with two oval pieces of Melo shell fixed on with beeswax.
 - A further modification (figs. 19-22), with a thin lath bent on itself ,, 23. at the proximal end.
 - Moon-shaped haftless wommera. Bloomfield River.

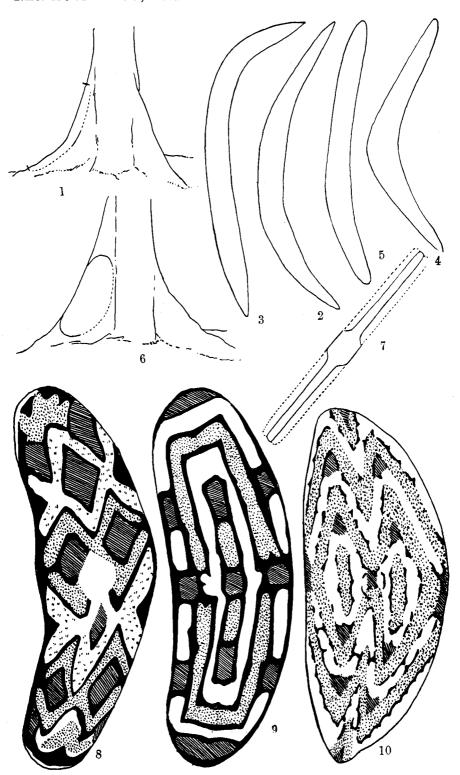


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EXPLANATION OF PLATE LIX.

- Fig. 1. Method of cutting a boomerang from a flange on the butt of a tree. - Cardwell, etc.
 - Boomerang, with double bend, or "two knees."-Mackay District.
- 3. Boomerang with bend, or "knee," close to the proximal extremity. ,,
- -- Rockhampton District (except in its southern portion).

 Boomerang, with a more or less acute angle at the knee.— Normanton and Gulf Coast.
- 5.
- Boomerang, with only a slightly perceptible curve. Method of cutting out the pi-kan shield from the buttress of a 6. tree.-Lower Tully River.
- Section of the pi-kan shield after removal from the tree buttress, 7. with the surface chopped away, except at the centres of the two faces.
- ,, 8-10. Decorative motive on the fronts, or kananja of pi-kan shields (cross-hatching, left to right, red; close-dotting, yellow; double-dashes, red dots or splashes).



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EXPLANATION OF PLATE LX.

- Fig. 1. Elongately-oval cork-wood shield, inner face showing hand-grip. -Rockhampton District.
 - Outer convex face of fig. 1.

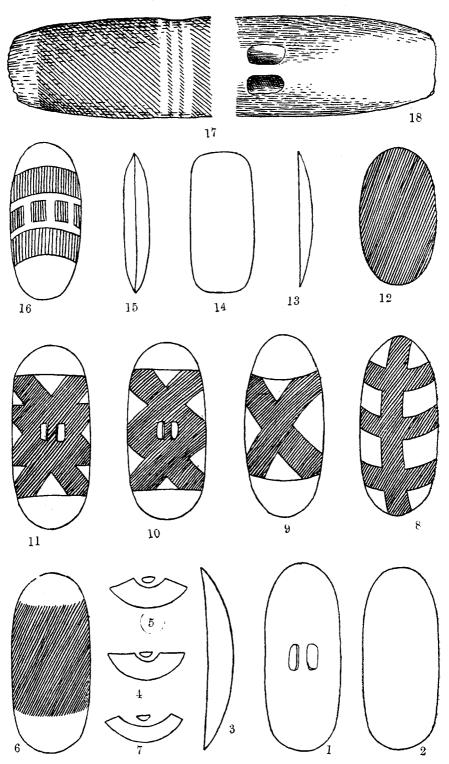
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16.

- Longitudinal section of figs. 1 and 2. 3.
- 4. Transverse section of figs. 1-3.
 - Transverse section of variety of figs. 1.4. 5. Outer convex face of cork-wood shield, with the surface divided
- into a central blackened panel and apical spaces whitened.— Rockhampton and Geraldton. Transverse section of fig. 6, showing the handle-groove extending 7. close to the lateral margins of the shield.

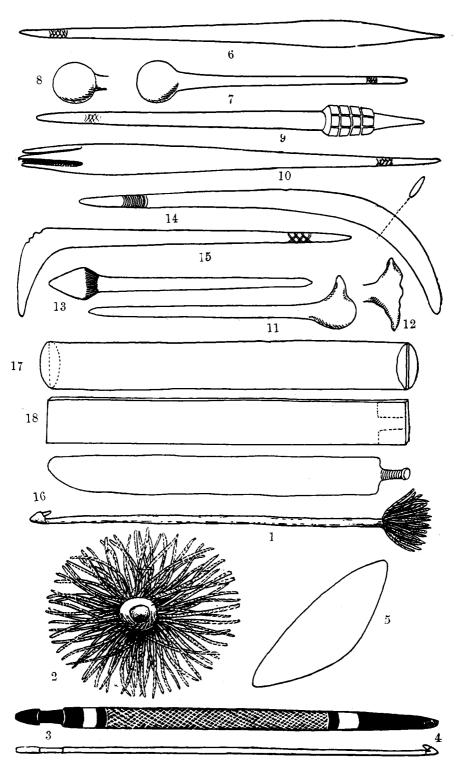
 Outer convex face of shield, with three transverse and one longi-
- 8. tudinal band, slightly raised and blackened, with the intermediate spaces white.—Yeppoon.
- Outer convex face of shield, with raised motive in the form of a 9. St. Andrew's cross, Marlborough.
- Inner face of fig. 9, with bi-geniculate motive, or double St. 10. Andrew's cross
- ,, 11. Inner face of shield, the motive a modification of that of fig. 10. -Tilpal, Torilla.
- ,, 12. Outer face of shield, more truly oval, smaller and flatter than the shields represented in figs. 1-11. - Tilpal, Torilla.
- Longitudinal section of fig. 12. 13.
- 14. Heavy bi-convex shield used for close-quarter fighting.—Miriam
- Vale. ,, 15. Longitudinal section of fig. 14.
 Outer face of cork-wood shield.—Brisbane.
- Convex outer half face of large elongately-oval shield, with white and red transverse bands.—Normanton District. 17.
- Inner half-face of fig. 17, slightly concave. 18.



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EXPLANATION OF PLATE LXI.

- Wommera. A plain stick with tassel of human hair ringlets at Fig. 1. the proximal end.—Burketown.
 - The tassel and terminal "washer" of fig. 1. 3.
 - Lath-shaped wommera, with the proximal end cut out to form a hold-fast; high decorated.—Burketown.
 Side view of fig. 3.
 Section of fig. 3.
- 5. ,,
- 6. Single-pointed nulla-nulla. -North Queensland.
- Knob-headed nulla-nulla, the head merged with the shaft .-7. Rockhampton District.
 - 8. Knob of another example of fig. 7, with the head distinct from the shaft. 9. Pineapple-headed nulla-nulla. - Rockhampton District.
- Three-pronged nulla-nulla.—Rockhampton District. Beak-headed nulla-nulla.—Rockhampton District. 10. ,,
- 11. ,,
- ,, 12. Double beak-headed nulla-nulla. - Rockhampton District.
- ,, 13. Bi-conate-headed nulla-nulla.—Upper Fitzroy River. ,, 14. Nulla-nulla, at the distal end flattened from side to side.-Upper
- Fitzroy River. Variety of fig. 14, with nicks cut on its distal convex edge .-,, 15.
 - Upper Fitzroy River. Single-handed sword. -Lower Tully River. 16.
- ,, 17. Sapling to be split along centre for preparation of the singlehanded sword.
- Slabs to be "got out" from the halves of sapling (fig. 17). 18.



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