

Pulbertese Rice or Grass skirt

Usual Always made from coconut palm leaves, never pandanus.
Cut about $\frac{3}{4}$ of a frond from a tall coconut palm. Then take out
the mid-rib (te noko) of each "leaf", ^{tear off leaves} knot in bundles of about
15 as they are made ready. The strips are known as "Te bani." The next step
is splitting the leaves. A sharp cut is made ^{with a piece of shell,} on the dull side of
the leaf, about $\frac{2}{3}$ of the thickness, then the leaf is bent over at the
incision - with the thumb the dull side is pulled apart from
the glossy side. It is then put in the mouth & held between the teeth,
with the "te noko" is made 1. The Brooms with which the houses are swept out ^{Te Kaa-m-aki} ~~the~~

2. The needles are made with which the thatch "Te Rao" is threaded together.

The right thumb & index hold the leaf firmly about 3 ins. from the
mouth & the left thumb & index pull the glossy half upward &
outwards, it is then stepped down its whole length.

Te Kookoo = The rejected skin.

To make the Rain Hat a Bala Leaf is

Te Bani = The strips.

preferred.

To make good white grass the unopened leaf is
used & when split immersed in boiling water &
taken straight out into cold water it is then hung
up inside to dry.

The noko from these leaves are used for brooms.

To make red.

Take a branch of the ~~E~~ Bero tree. (Uan te Bero) rub it on a leaf of the same tree. Then take a Te waka ni Kaina leaf and ~~take~~ then rub on the leaf where the juice is & it will become red.

To make black

Collect the leaves, taking the middle only of each shoot, of Te Mao.

Next prepare an oven by making a round hole in the ground, then fill with coconut husks, all turned down. One coconut husk is lighted & put face up in the center. Te Ingi is also put in.

(Coconut husk = Te Nana.)
" fiber = Te Ingi)

The whole thing is covered with stones & left for about 1 hr. when it will be red hot & no flame. Then the Mao leaves are thrown in, a little ^{cold} water ^{is} poured round so that there shall be plenty of smoke, & this covered with a mat & then sand & left for 1 hour.

Collect some good pandanus roots (te waka ni kaina) skin it & then pound it with a large stone. When soft wring out, letting the juice run into a basin.

Take the Mao leaves out of the oven, allow to cool slightly & then squeeze into drain with other juice. Put the dye over a fire until it boils, now it is ready for use.

an ace.

a. Fish Hook for the Laga Fish (Wood)

New Words

Noko = The midrib of the smaller divisions of a coconut frond.

Kuanun = a Basket made of coconut leaves for which the midribs are rejected.

Kuokoo = To engage in peeling a skinning.

Koo = a coconut-shell cup for receiving boiled coconut oil before putting it into a bottle.

Bee = the bee tree, for which red dye is made.

Waka = a Root. waka-ri-kana = a Pandanus root.

ky = The fibrous, porous envelope at the base of the coconut leaf or frond that helps to bind it to the tree.

① Binoka

About two inches at a time.

Te kano maing — left twisting — used on Tea an. The string for fishing.

Te bibiri. (three ply stems).

the ordinary plaiting or beading.

Te dodo. (four ply)

plaited

~~Te kano~~ Te kanotin. stems with an
extra binoka rolled in. ~~also left-handed~~

Te buaburu. skin & coarse fibre which are
not used.

Qualities of Knots and Bindings

1 (a) Skillfulness in Knots.

(b) List of Knots Known

2 (a) Skillfulness in Bindings

(b) Names of Bindings and their Uses.

3 Manufacture of String

into a coil. Starting at the thin end

Baini katungiting.

Made with half pinnule, rolled up from thin end
but rather flatter & bigger 4 to 10 lengths.

Te kikanmang. = windmill

Te ati n Tabuasaan

General use

Te bara te tanni

Two varieties. one made from 2 strips of coconut leaf
& the other with one Both worn by men & women
when working in the sun.

Te tara - thin edge of pinnules

Te tūbūbūbaeaba.

Working the same as te tuki baene, leaves are
cut & put in sun all day, & baskets are about 3
ft across by 2 ft high.

Te baene ni kaion - large baene ni tun for labor

Te kete - ~~between baene ni tun & baene ni kaion~~

for fishing gear. same as te abaene but no lid

Bara ni te Babai

Te moko - made from half a pinnule. (like a pipe)

Starting with the thick end.

46 of Te ni karangani or Babai

52 - 1 in

1 - $\frac{1}{32} \times 46$

253

46

$\frac{11}{16} \times 46$

Baka Tarawa

Leaves dried for a very short time.

Only made thick.

Te atō-coconut thatch. (Same as thatch)

Te itēan inai used for fishing. Put round a prepared heap of stones, stones removed, fish caught. Patterned on both inai & te itēan inai.

Te kaboni-Makin. Old type used for screens. Same as te inai but closely woven. One leaf in length.

Used for carrying boxes.

Te eeri long te inai used in manaba.

Baka Tarawa used for carrying te wero.

Te kabure ni baone. I weave 6 lines then single.
Te kabureake.
Te kabure ni baaitōa.

Te ketekete, very small oblong used for children's food.

Autēbatubatu.

abramat-pont 31

When you have finished grating the babai and squeezed it with your hands put it in a basin. Put some moantari on the stove to boil, ^{but first} squeeze into it the juice of the stem of the kiau, about $1\frac{1}{2}$ ft, boil until good.

Grate some coconut & put in the sun to dry, then pound it until liquid. Mix the coconut with thick kamamai & add to the babai & then add the moantari.

Tekamanainai

Grate the babai & squeeze with the hands for some time. Grate some coconut & dry in the sun & pound it. Mix the coconut with kamamai & add to the babai. Then mix with kamamai & water.

Remove the skin from the babai.

Remove the ~~skin~~ Tengkamasto. babai.

The skin is removed from the babai while it is fresh and afterwards it is grated on the grater, as much as you want because perhaps one or two or three ~~portions~~ ^{portions} also as much as you can eat, & when you have finished grating it, and you put it in the sun on a mat to dry, & when it is dry you take it against powder in the shell until it is good.

You have previously grated some coconuts & prepared them ^{by squeezing them}. This is ^{is how to} this method of ^{measuring} ~~measuring~~ ^{one} when one portion of babai has been grated, then ~~the~~ ^{the} nuts ~~also~~, the coconuts should be grated and dried in the sun & when sufficiently dried pound in the shell until it is good & ~~this part~~ ^{has become} liquid & when the coconut is ready, put it in a basin or a bowl & leave it ~~while you~~ ^{to make} the treat so previously squeezed.

~~Mix it for it is about to boil which is so to speak of the page, the body of the yeast which today, which you abate which is about to~~

Mix ~~the~~ ^{the} babai together with ~~and~~ with fresh toddy (moantari) until soft.

Boil the moantari & mix ^{it} with the squeezed babai until it is ~~in a basin~~ very thick.

Mix the coconut in the basin with some kamaimai, as much as you want, then mix it with the babai & some ~~tan~~.

Boil the moantari & mix it with the babai.

Teonouna

Method

The babai should be minced while it is raw, then squeeze it with the hands in a basin.

Mix a little toddy, te kamaimai & some water together & add to the minced babai. When it is soft add some more kamaimai. Grate 3 or 4 coconuts (te ben) & squeeze put ~~in~~ ^{te ran ni ben} the ~~basin~~ ^{te ran ni ben} into a basin, then take te kiaou, about 2 feet, take off the leaves & pound the stem, then wring it & add the juice to te ran ni ben & strain. Mix with some kamaimai & boil until it smells good, stir all the time. When ready remove from the fire & mix with the babai. Make into a shape & bake in the oven.

2 1/2 lbs grated babai

1 teacup kamaimai
mollasses

1 breakfast cup kamaimai

1 breakfast cup of te ran ni ben

1 ft. te kiaou

} to be boiled together

Add 1 teacup of kamaimai to the babai & squeeze with the hands until well mixed. Now add a teacup molasses & repeat.

Pound the stem of the kiaou & squeeze into the ran ni ben holding the stem well in the ran ni ben. Strain into a saucepan - add the kamaimai.

Red Dye

The method of dyeing red with the Non root is said to have been introduced from the Ellice Islands about 1885 by Toromon, the second Samoan Missionary to reach Beru.

Collect first a bundle of Non roots, the root buried under the ground only being used (waka-n non). This root will be found to have a dark outer bark (or skin), a soft ~~yellow~~ inner skin and a hard core of wood. Only the soft inner skin is used for making dye.

Scrape off the dark outer bark with a koikoi, nikatona or ntarawa shell which has been made sharp by pressing its cutting edge against a hard surface so that the brittle portions of the edge break off, leaving a sharp cutting edge. Throw away this outer bark.

Now scrape off all the yellow skin until the hard wood is reached, letting it fall on to a mat. Now mix the gratings with powdered lime, 5 parts of non scrapings to one part of lime; squeeze together with the hands for some time. Put the mixture into a piece of te ing, roll it up and then squeeze the juice into a tin, on to the prepared te ira. The dye must cover te ira when boiling. Bring to the boil and boil for about 5 minutes. Then let it stand until te ira are cool enough to handle when they should be hung up to dry.

The dye may be used several times until it is all used up. If only a little lime is used the dye will be bright red - if a lot of lime is used it will be dark red.

Yellow Dye

If no lime at all is used the dye will be yellow.

Red Dye:

The method of dyeing red with the kon root is said to have been introduced from the Ellice Islands about (1885) 45 years ago by Taramen, the second Samoan missionary to reach Bevu.

First collect a bundle of kon roots, the root buried under the ground only being used (Waka-a-kon). This root will be found to have a dark outer bark, a soft yellow inner bark and a hard inner core of wood. The soft inner bark is alone used for making the dye.

Scrape off the dark outer bark with a Koeko, Mikatonu or Narawa shell which has been made sharp by pressing its' cutting edge against a hard surface so that the brittle portions of the edge flake off leaving a sharp cutting edge. This outer bark is thrown away.

Now scrape the root until the hard inner core is reached, allowing the scrapings to fall on to a mat. The scrapings are now thoroughly mixed with powdered lime and the mixture is squeezed together for some time with the hands. The mixture is about 1 part of lime to 5 of kon root. Place the mixture in an envelope of Te hū, roll up the hū tightly and squeeze the mixture into a tin or other receptacle in which the rolled and prepared leaves for dyeing have been already placed. Enough dye is put in to cover the leaves

¹Te Kon = *Munda citrifolia* (Malay custard apple)

when boiling. Bring the dye to the boil and boil for about 5 minutes. Then let it stand until the leaves are cool enough to handle when they should be hung up to dry.

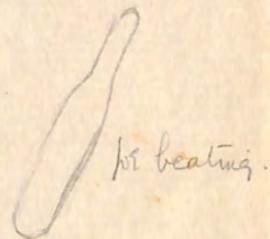
The dye may be used several times until it is all used up. If only a little lime is mixed with the non root the dye will be bright red - if a lot of lime is used it will be dark red.

Yellow Dye.

To make yellow dye the process is exactly the same as when making Red dye except that the non root is not mixed with lime.

Making the Kamamai.

The fire is lighted with "tē roro" & after a few minutes, when the oven has heated up, the bowl of karewe is put in position. The bowl should not be more than half full. It should boil after about 5 minutes if the oven is an old one, if new it will take about 10 minutes. When the karewe is boiling hard it should be skimmed. This should be boiled hard for about 1 hr. Then tested to see if it is nearly cooked. When becoming syrupy, nearly cooked, the fire should be made smaller, dip the spoon in the kamamai, then scoop up & pour out some of the syrup, when it is so syrupy that a thin thread hangs from the spoon it is cooked. Remove from the fire, pour into another bowl & beat well until it becomes thick & white, about 15 mins.



for beating.

Making Te Ruabua or Te Kamanainai

Te Kamanainai

A mixture of ordinary molasses and grated coconut. (Makin)

Te Ruabua

A mixture of white molasses and grated coconut. (Beu) or Rabubu

Half fill the bowl with fresh toddy & boil hard until it becomes syrupy, about $\frac{1}{2}$ hour. Then add enough finely ^(Bukimairi) grated coconut to make it like porridge. Boil hard for a few minutes. (Sometimes the coconut is not added until the syrup is really thick) Then stir the mixture continuously & lessen the heat. Cook for about 50 mins. the heat at the last being very low. It is cooked when threads appear when the mixture is divided with a spoon. Turn into a wet bowl & beat for 10 mins, until the mixture is cool. Form into a ball.

Sugal

Strip the leaves & skin from about 3 ft of Te Kiau for one shell of toddy. Chop it up and wrap it in a piece of "te ing" & tie it up.  Beat it gently with a piece of wood, then enclose in another piece of "ing".

Pour the toddy into the bowl, soak the chopped kiau in it & squeeze it well with the fingers to expel the juice. Put the bowl on the oven & light the fire. After the toddy has boiled allow the scum to settle & the surface of the toddy to appear before removing the scum. Boil hard until thick — when a hair hangs from the spoon.

* Toddy should be fresh, from 6 a.m. to 9 a.m. is best.

add this to
the kiau
stage?

Te Bekei

2 $\frac{3}{4}$ lbs grated raw Babai
Kamamui
Te Ben grated

Put the Babai in a basin & cream by squeezing with ~~flour~~
hands, add enough Kamamui ^{about 1 cupful} to make a nice paste which
when cut with the hand does not close up. Put in two cases made
of Babai leaves & put into boiling water. Boil for 15 hours
Grate 3 coconuts & make Te can ni ben, it should make nearly one pint
Pour into a large bowl, add the cooked Babai & mix well. It is now
ready but will not keep unless heated for about $\frac{3}{4}$ hr.

Making Black from
Te Tabaa'n Tōu

Collect about 4 young pandanus fruits, about 3 or 4 inches long. They are good as long as the leaves close to them are fresh. Now pound them in an auhuqa with a stone pounder. Put about 4 pints of sea water in a tin. Grate one good sized 'ben', or wring it, allowing the "saw ni ben" to fall into the sea water. Next drop in the pounded "Tabaa" + the sea to be dyed. Boil for

Red leaves, Black dye for

Tin half filled with sea water

Water brought to the boil.

Collect the bundles of red leaves as before

Put them in tin so that there are just enough for the water to cover.

Boil well, but do not stir, for about one hour, when the stems of the red leaves should be soft

Remove the leaves from the water and allow them to cool slightly then wring them allowing the expelled water to fall into the water in the tin.

Then add fresh red leaves as a lining all round the tin and place the tin in the middle of the tin with one leaf and place the tin on the fire again.

Collect some 6 ^{thick,} juicy aerial roots of the Pandanus tree.

- Te hae - Floor into screens.
- Bakatawae - ^{weaved} Horse screens.
- Te hula - Fans for fire, the bakatawae ones are used to heat.
- { Te Buke baene - Fan shell fish a small fishes etc collecting them. it is 3 ft by 2 ft
 { Te Kuru baene
 net used for hook light fishing. very large.
- Te hon-ni-bei - ("Palato" for "Pook") Fan food & the cut ends of Pookanus used for
 netting kibaba. very large up to 3 ft by 2.
- Te Bara ni Kone - Used for getting flowers for nests or for placing round the balai.
- Te tiki (one was) - { Receptacles for food.
 Te tiki all tiki - as has tiki - lent at Fanny's house.
- Te Bala (as long as i. tabua) - for getting the old Pookanus leaves for rat netting, etc.
 a netting basket.
- Te Bala - for carrying food.
- Te Rumar - a plate for food etc.
- Te Bala - 2 Tanoa - for holding food.
- Te Baene ~~Ma~~ ni lon - used ^{solely} for getting sail for the balai pits (kone bar).
- Te Kete - basket for holding fish used in fishing for canoe.
- Te Nohmahua - for holding fish caught in hook fishing. large than the balai baene.

Account leaves

1 Te Rim - a dead leaf lying on the ground, for fishing trenches & for the lining round balai plants
2 Te Am - a feeding leaf. the color will fade, but it had to be a nice thing

3 Te Ba-ni - The ordinary leaf.

4 Te Kaka-kaka - The small, undeveloped leaf at the top for fine fan work etc.

~~The Ba-ni is~~ they are then classified according to the shade of the leaf.

- 1. Te Ni-roa - Dark colored leaf.
- 2. Te Ni-ba-ni-balai - dark green like a balai leaf.
- 3. Te Ni-bama - most has yellow streaks, light green & color.
- 4. Te Ni-paka - yellowish red.
- 5. Te Ni-keang - light bluish.
- 6. Te Ni-tantana - half way in color between the Ni-bama & the Ni-roa.

The color of the leaf is found by finding specimens to see what color it will result.

sarangaana ### Te mae + sleeping mat.
 Kaeberena pattern on Te baka Tarawa Te itersan Te mae.
 bibeakina plaiting

Te tiki ae wae
 Te baka + Tarawa brought by
 the early Savan Missionaries.

Te tiki ae tohiki, learnt from Manihiki people on Fanning Island

String.

1. The ordinary string is two-fly, ~~the~~ being easy to make.
2. For birds, work on canoe and for kumaka - where exceptionally strong string is required 3-fly string is made.
4. For the thicker & stiffer string required for deep sea fishing 4-fly string is sometimes made. The thine for the gulleys and also for canoe & the handles of nets.
5. String more than 4-fly is never used.

Rua - ni - lenu

Te Bana - a coconut hook.

Te Baka - The strands of coconut fibre for making twine.

Te Bini - 3-stranded string.

te bini te rana teni a teni ari

Te Ototo - 4-stranded string.

Te Ro - a gulle, rope.

String is classified according to thickness.

1. rana - te rana (subsea & wall string)
2. Bana - te rana (scoop-net string)
3. Te Kaba (only used in bulky cases) Kaba n. can & dit bulky.
4. Te Au (fish line string)
- 5.6. Te Kaka (string for tying in thicket). Kaka n. te te a thicket.
7. Te Kaka ro (the same string used in rope making).
8. Te Ro (a ^{rope} gulle) used for fishing.
5. Te Rana (double tying string - in twine).

Te Tia Au Te Tia Kaka etc

Te Taka - the string made by the ordinary method nalo.

Te Kaka naly - the method of flax string of the left handed method

Te Kaka ten - ac string of ac bushes unwashed

Te Kaka - two strings together

when ^{the required} string is ^{more or less} required one it is described as being the size of Te Kaka ^{three or half etc}.

Te Bana naly - the skin & thick parts of the bark discarded for string making purposes.

This process is said to have been invented by the middle aged man who showed it to me - Tem Baro of Amman. In the first place a bundle of the leaves of the Ren tree are obtained.² The bottom of a keosere tin or other receptacle is packed tight with these leaves and the sides of the tin also lined with them. In the empty space in the centre is placed the iri to be dyed and several layers of ren leaves are laid over the top so that the iri is now completely surrounded with them.

a fire is now made in a hole in the ground in the usual Gallicese manner and the tin is filled with sea water until the water comes above the level of the top layer of leaves. Two coconuts are husked, cracked and grated and the gratings placed in an envelope of Te Iny and squeezed into the tin so that the coconut cream (ran ni hen) mixes with the sea water.

The tin is placed on the fire and the sea water in it kept on the boil for some 10-12 hours, fresh sea water being poured in as required to keep the level of the water above the ren leaves.

after 10-12 hours of boiling the iri should be jet

¹ Te Ren = *Tournefortia argentea*.

² The young branches of the tree are nipped off some 6 inches from the top and the whole cluster of some 10 or 20 leaves are used in the packing as a unit.

black and beautifully soft and glistening. It is then ready to be worn, te ram ni ben being, however, usually rubbed on it before use.

To speed up the process of dyeing, some pieces of rusty tin are usually placed in the bottom of the boiler underneath the layer of Ren leaves. Two to three hours of boiling then suffices to dye the article black.

a rin made of Mi-kika leaves was stained a dark reddish brown with son root mixed with lime. It was then laid on a mat and, holding it by the gudge, a woman stroked the leaves down from the gudge to the fringe, frequently smearing her fingers with some toddy contained in a clam shell by her side. The toddy was cut early one morning and was some enough for use by the morning of the following day.

The application of the dark, treachy some toddy to the rin makes it beautifully black, smooth and glistening and acts in addition as a fixing agent to the dye, which is otherwise liable to be run in the rain.

Scenting Rice.

a rice fixed with some toddy or ran ni ben is beautiful to look at but is apt to be smelly unless scented before use.

The following are used for scenting rice:-

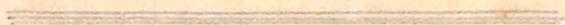
- (a) The bark or dry branches of the mao tree (*Scaevola Koenigi*).
- (b) The bark of the Hai tree (*Callophyllum hollyllum*).
- (c) The red bark or the old and decaying aerial roots of the hardanus tree.
- (d) The roots of the coconut tree.

In every case the process is similar. a round oven is dug in the ground and lined with coconut husks and ty. It is then lit and the dried scenting bark or root is placed on top of the oven in the centre. a conical pile of small sea pebbles is then heaped on top of the oven thus:-



The rice to be scented is then laid on the conical pile of stones and the whole covered over with ty or some other substance which will keep in the scented smoke.

at intervals the rice is turned and when thoroughly dry and smoked it will be found to have a pleasant though smoky scent.



Beru and
Orotoa Islands.

Red dye from the Beru tree.

There are two methods of making red dye from the Beru tree:-

1. Learnt on Beru. The roots of the Beru tree are obtained when they will be found to be similar to non roots but whitish in colour. The roots are scraped and the scrapings mixed with lime etc., the entire method being exactly the same as in the case of te non roots. Yellow, however, cannot be obtained from the roots of the beru tree. It is said that a clearer and brighter red is obtained from the beru tree than from the non.

2. Learnt on Orotoa. Take the berries of the beru tree (Ma-n te beru) and rub them on leaves of the same tree squeezing the juice out of the beru berries at the same time. Then take one of the aerial roots of the pandanus tree (waka-n te kaira) and tense out an end. This end is rubbed up and down on the beru leave until the juice of the berry is thoroughly rubbed into it when it will turn red. This method does not appear to be used in practice as it would be difficult to transfer the colour from the pandanus root to the object to be dyed.

Yellow Dye from Lime and sea water.

a clam shell was filled with sea water and plenty of coral lime mixed with it, the water turning milky white. The Pandanus leaves, having been split, were folded into rolls with the inner shiny side of the leaf on the outside of the rolls. These rolls were then plunged into the mixture and kept there for a minute or two, being moved about all the time with the fingers in order to allow the mixture to act on all portions of the leaf. When the leaf turned a shiny yellow colour it was removed from the mixture, washed in fresh water and hung up to dry.

The best leaf for dyeing by this process is "Te ha - a Ang", a light coloured leaf. The lime used should be dry and powdery for the best results. Articles dyed by this process may be washed without the dye coming out.

It is said to be a new process, having been learnt by the woman who taught us, Tei Terawete, from an Ellise woman she had befriended on Baraba. It is a secret in her family.

Berm Island.

Red dye from Te Kon roots. Second Process.

This process of dyeing articles red was learnt from Kai Terawete of Antukia on Berm. It is said to give a better colour and is much cleaner in use as it will not readily come off.

The scraped kon root is mixed with coral lime as usual. The leaf (ira) to be dyed is placed in a tin of boiling salt water and the mixed kon and lime added and well mixed in.

✓ The mixture is then kept boiling for a few minutes, when the leaves may be taken out, washed in fresh water and hung out to dry.

If the leaves are boiled in the mixture for some time a purple colour - te uraro - is obtained.

To make a black siri.

Any coconut leaf which is easily torn apart may be used, & a leaf near the centre of the tree is cut.

After splitting the leaves the fine side is rolled up & pounded with a stone, ~~as hard~~ the leaf being held on a stone or a piece of hard wood. When all are beaten & soft they are spread out in the shade for about 24 hours. The leaves are then knotted on to the string & is ready for dyeing.

Collect the leaves of "tē ruku", sufficient to make a fist full when squeezed lightly in the hand. Fill a 6lb. Bully Beef tin with sea water & ~~hold~~ ^{squeeze} the leaves in it until the water is expelling the sticky juice from them. Strain the mixture into a large tin & add 1 6lb. tin of fresh toddy* & leave ~~from 1 to 3~~ days. * Grate one "ben", wrap in ing, dip in the mixture & wring out.

Roll up the siri & put one end into the mixture, squeeze well, to let the dye get in; then put in the other end & also squeeze well. Wring out. Prepare a small ^{"tē kabweari"} ~~"umum"~~ & cover with stones & on the stones small leaves (tē toara) lay the siri on this & cover with a mat. Look at it after about ^{every} 5 minutes & put on more stones & leaves as it must not be too hot. When the fire dies (after about 3 times) remove. The siri & wrap in a mat. Two or three hours later the "kabweari" is lighted again & the same process repeated. The following morning it is smoked again & is then ready. Spread the siri out & leave for 24 hours, then grate 5 ben & make "tē ran ni ben", add to it 2 bottles of kamaimai & boil slightly. (makaakoa e ta tūtana)

When cold pour a little into the hands + rub
on to the hair. Then smoke once or twice more.

This hair can be sealed & smoked as the
colour or shininess fades.

Te Raurau - A Platter.

A midrib strip carrying anything from 15 to 25 leaflets, the exact number depending on the size of plate desired, is torn from the main coconut leaf by gripping a leaflet in the hand and tearing it off with a downward movement towards the butt end of the leaf. In this way only the skin of the midrib is torn off, forming a commencing edge, strong but not needlessly thick. The midrib strip is held on the worker's lap, the leaflets pointing away from her, and the working proceeds from left to right as follows:

1 and 2 remain dextrals. 3, the first sinistral, passes over 2 and under 1. 4 remains dextral and 5 passes over 4, under

Fig. 1. The commencement of a raurau.

2 and over 1, and so on until the first and final elements interlace: it will be noted that the third and all succeeding odd elements become sinistral. Having reached this stage the sides are formed, beginning at the lower right hand corner by turning in each element with a half turn and continuing the check stroke with it. By this method a rectangular platter

Fig. 2. The left hand side of this figure shows the

stage when the first and final elements have become interlaced. On the right hand side the working has been continued up to the point where the braiding would be commenced.

is achieved which is finished by braiding the ends into a three-ply braid and finally knotting the end of the braid itself and tucking it in.

Fig. 3. The completed raurau.

Te Koro

The bark is obtained from manuka any tree.

as soon as it is cut off it is taken into a sea with a weight as a top of a woven mat.

Little put in the legs as in a tee.
after is quaked in the sea 2-3 months.

In a tee about 4-5 months. it would be O.K. after 2 but better after 4.

It is taken out of the feet, beaten and dried under the sun - about a day but not dry a less.

In the sea like dry and broken down in water not flocced out and covered with stones and sand.

Te Manuka is the bark of manuka

Koro is the general name of the manuka and the manuka.

The dried Manuka is then stored ready for use.

Manuka for use

Remove outer skin (to skin).

Remove also about half pieces of bark (to bark) & also the large very coarse pieces (to bark).

Two types of bark used

Two methods of drying

1 By hand.

Turning and half to least thickness one side.

2 in the breeze for the best fruit.

This gives you a Manuka.

Te Koro

Te Koro is - 2 methods.

Te Koro not a rope as rope starts with 3 strands.

The thinnest string is called Te Raita. much to 1 old name.

Te Raita name

Manuka te Manuka

Te Tua Kala

Te Manuka

Te Kabae

Te Kakuni

Te Ar

Te Ro

Introduction

Materials used

- a. Coconut
- b. Hibiscus
- c. Human Hair
- d. Coconut Shell

1. Fresh beer and allow water to run into a tin.
2. Get the beer.
3. Fresh water, either Karan or man, is poured in, in the proportion of about 2 of water to 1 of beer.
4. The galled nut is washed in by, dipped in the mixture and the, wrong, the resulting "naime beer" being wrong out into the mixture.
5. an ibo of fresh toddy is poured into the mixture.

Coconut Fibre

Preparing the Fibre. All the string required in the Gilberts for ordinary household purposes is made from benu, the husk surrounding the coconut proper. Vast quantities of two-ply coconut string are made on every island, principally for use in house building and repairing, the surplus being readily marketable to the government and traders at the standard rate of 6d a pound. Only three varieties of coconut tree are recognised by the Gilbertese and no particular variety is regarded as bearing coconuts especially suitable for string making. Moimoto, or green coconuts in the fifth stage, are invariably used, no string being made from mature nuts; and for preference large nuts only are chosen.

The husk is removed in four or five longitudinal slices on a koro (husking stick), and when a sufficient quantity of nin-ni-moimoto, as the unprepared benu of a moimoto is termed, has been obtained, it is placed either in a ruani benu, or shallow pond specially made for the purpose of steeping husks, of which every woman possesses from five to ten, or else in the open lagoon. Should it be placed in a ruani benu it is merely covered with an inai, or coconut leaf mat, with a stone on top; but in the lagoon it is necessary to dig a hole and cover the husk and inai mat with sand and stones. Action is quicker in the salt water lagoon and the husk may be taken out after 2 or 3 months soaking as compared with some 4 to 5 months in a ruani benu, but ponds are preferred as the resulting fibre will be stronger. The longer the benu is soaked the stronger will be the fibre.

On removing the husk from the pond or lagoon it is well beaten on a pandanus post while still wet with a kain tiri-benua (a mallet made from the hardwood ngea tree) until the butaeni wanin, or red inter-fibrous material, is shaken out. The benu is then dried in the sun for a few hours and stored in a basket ready for use.

When it is desired to make string a section of benu is taken and the hard pieces of outer skin, called kun, are discarded, together with the short, fluffy pieces, called buruburu, from the inner side, and any large and coarse fibre, or koran. The discarded material is not used for any purpose owing to its unpleasant odour. The remaining benu is separated into two groups, the thicker fibre being used for ordinary string while the softer fibre near the skin is retained for making the finer varieties required in the construction of scoop nets, kites, etc., and in canoe building.

Making the 'binoka', or strands. To make the strands which form the basis of the plies used in all string making a few fibres of benu are smoothed out and held in the right hand, the exact number depending on the thickness of the cord desired. This bunch of fibre is divided into two equal sections, one being held in each hand between the thumb and index. The bunch in the left hand is now inverted and laid against that in the right hand so that about a third of its length projects above the right-hand bunch, the inversion resulting in an even strand, since the portion of each fibre formerly situated in the end of the nut attached to the tree will be thicker than the part nearest the free end. There are two methods of rolling the binoka strands together. In the more usual method the joined bunches are held in the middle between the left thumb and index, with the middle finger inserted between the two bunches to separate the lower ends. The bunches are now grasped between the right thumb and index, above the point at which they are being held in the left hand, and rolled together in a clockwise direction by drawing the right index across the ball of the right thumb. The twisted binoka ascends, the movement being repeated until the left hand is free of the strands. The binoka is now inverted and the whole process repeated with the remaining and untwisted half, resulting in a completed strand. The second method commences in exactly the same manner as the first, i.e. by twisting between the right thumb and index, but on the strands being inverted they are rolled along the right thigh towards the knee with the palm of the right hand.

The completed binoka strands are laid together in a pile until sufficient have been prepared to commence the twisting or braiding of the string.

Coconut Fibre

Preparing the Fibre. All the string required for ordinary household purposes in the Gilbert Islands is made from lenu, the husk surrounding the coconut fiber. Most quantities of two-ply coconut string are made on every island, principally for use in house building and repairing, the surplus being readily marketable to the government and traders at the standard rate of 6d a pound. Only three varieties of the coconut tree are recognized by the Gilbertese and no particular variety is regarded as bearing coconuts especially suitable for string making. Nurivito, or green coconuts in the fifth stage, are invariably used, no string being made from native fruit, and for preference - large nuts only are chosen.

The husk is removed in four or five longitudinal slices on a keru or hooking stick and, when a sufficient quantity ^{of the husk of a coconut is sliced} nuvito has been obtained, it is placed either in a ruani bena or shallow pond specially made for the purpose of steeping husks, of which every woman possesses some five to ten, or else in the open lagoon. Should it be placed in a ruani bena it is neatly covered with an urai or coconut leaf-mat with a stone or two but in the lagoon it is necessary to dig a hole and cover the husk and urai mat with sand and stones. Action is quicker ^{in the salt} lagoon and the husk may be taken out after 2 or 3 months soaking as compared with ^{some} 4 to 5 months in a ruani bena, but ponds are preferred as the resulting fibre will be stronger. The longer the lenu is soaked the stronger will be the fibre. On removing the husk from the pond or lagoon it is well beaten ^{with a wooden pest} while still wet with a ^{small} mallet of hardwood, te ngea, until the butene wama, or red inter-fibrous material between the outer skin and the fibre, is shaken out. The lenu is then dried in the sun for a few hours and stored in a basket ready for use.

When it is desired to make rope string a section of lenu is taken and the hard pieces of outer skin, lenu, are discarded, together with the short, flabby pieces, lunubun and any large and coarse fibres, koran. The remaining lenu is separated into two groups, the thicker fibre being used for ordinary string while the softer fibre near the skin is retained for making the finer varieties required in the construction of reef nets, hites, etc., and in canoe building.

Making the budo, or strands. To make the strands which form the basis of the fibres used in all string making, a few fibres of lenu are ^{smaller cut and held} for the right hand, the exact number depending on the thickness of the chord desired. This bunch of fibre is divided into two equal sections, one being held in each hand between the thumb and index. The bunch in the left hand is now inverted and laid against that in the right so that about a third of its length projects above the right hand bunch, the inversion affording ^{the} an even strand, since the ^{of} section of end fibre ^{is} projected ^{of} the nut attached to the tree will be thicker than

the part nearest the free end. There are two methods of rolling the binoka strands together. In the more usual method the joined bunches are held ^{in the middle} between the left thumb and index, with the middle finger inserted between the two bunches to separate the lower ends. The bunches are now gripped between the right thumb and index, above the point at which they are being held in the left hand, and rolled together in a clockwise direction by drawing the right index across the ball of the right thumb. The twisted binoka ascends, the svenet being repeated until the left hand is free of the strands. The binoka is now inverted and the whole process repeated with the remaining and untwisted half, resulting in a completed strand.

The second method commences in exactly the same manner as the first, i.e. by twisting between the right thumb and index, but, on the strands being inverted, they are rolled along the right thigh towards the knee, with the palm of the right hand.

The completed binoka strands are laid together in a pile until sufficient number have been prepared to commence the twisting or braiding of the actual string desired.

Braiding with kanatu a human hair.

(a) Three-fly braid ^{flat} - Te Bibine. Taking a hank of hair in her left hand, the operator divided it up into numerous bundles, which were laid beside her, the quantity of hair in each bundle depending on the thickness, atua, of the braid to be made. She took three of these bundles in her left hand and, after smoothing out the hair in each, she crossed them as shown in Fig. 1 a, 3 crossings over 1 and 2 over both 1 and 3. She then braided by crossing the outside bundles over the centre bundle into the centre position first on one side and then on the other. When about half an inch had been braided she tied the braid at the top, the end being doubled back to prevent slipping. A loop was formed with the binding string, this being looped over the operator's big toe. Braiding was now continued towards the operator.

Fig. 1 - Three-fly flat braid. a. ^{consect} b. ^{after 2 meets} c. ^{a length + string.}

(b) Four-fly braid ^{flat} - Te Bibine. Four bundles of hair were taken and tied together at the top before commencing braiding. A loop being formed in the binding string and placed over her big toe, she commenced braiding as shown in Fig. 2 a, 1 being crossed over 2 and 3, and 4 over 1. The braiding was continued in the usual manner from alternate sides, the outside bundle on the left crossing over two bundles and that on the right over one.

Fig. 2 - Four-fly flat braid. a. ^{consect} b. ^{after 2 meets} c. ^{a length.}

(c) Four-fly round braid - Te Ototo. The tying and looping was similar to the four-fly flat braid. She commenced by crossing 2 over 3 and continued by passing 1 under 3 and 2 and then around and over 2 into position between 3 and 2. 4 was then passed under 2 and 1, around and over 1 into position between 1 and 3. The braiding was continued in the same manner from alternate sides, the outside bundle on each side passing under two bundles, around and over the second, and into position.

Fig. 3 - Four-fly round braid. a. ^{consect to left side} b. ^{continue to right side} c. ^{a length.}

(d) Five-fly flat braid - Te Bibine. Tying and looping was similar to the four-fly flat braids. The braiding was similar to the three-fly flat braid the outside bundles being crossed over two bundles into the centre position from alternate sides.

Fig. 4 - Five-fly flat braid. a. ^{consect} b. ^{after 2 meets} c. ^{a length.}

(e) Eight-fly square braid - Te Toatooa. The tying and looping was similar to the four-fly flat braid. (a) The operator commenced by crossing 1, 2 and 3 over 4, 5 and 6. (b) 7 and 8 were then crossed over 1, 2 and 3 into position between 1 and 6. (c) 4 was passed towards the right over all intervening bundles up to, and including, 1; then around and under 1 and under 8 and placed in position between 8 and 7. (d) 3 was passed towards the left over all intervening bundles up to, and including, 7; then around and under 7 and under 4 and placed in position between 4 and 8. (e) 5 was passed towards the right over all intervening strings up to, and including, 8; then around and under 8 and under 3 and placed in position between 3 and 4. (f) 2 was passed over all intervening strings up to, and including, 4; then around and under 4 and under 5 and placed in position between 5 and 3. (g) This braiding is continued as above from alternate sides, the outside bundle on each side being passed in turn over five bundles, around and under the fifth, under the fourth, and into position.

Fig. 5. - Eight-fly square braid.

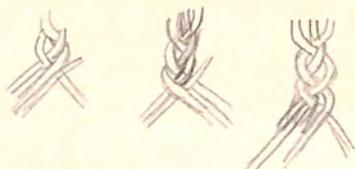
• • • •
 after round (c) after round (f) a length.
 a. b. c.



Braided Hair

3 ply

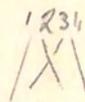
Taking a hank of hair in her left hand she divided it up into thinner strands, the thickness depends on the "tua" which is to be made. She proceeded then to take three of these strands in the left hand  then braided it beginning with the left hand & transferring bulk from one hand to the other, when about 1/2 inch is done it is tied at the top, the ends being doubled back first to prevent it slipping, a loop is formed with the binding string which is then slipped over the big toe.



4 ply round



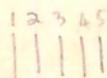
Tie it.



2 over 3.

1 under 3 under 2 over 2

1 under 2 under 1 over 1



4 ply flat



4 over 2+3

1 over 4

2 over 3+1

4 over 2.

Not of the same kind

2nd & 3rd (handmade)
1st & 4th (machine)

Eight of these kind a sort of hair of a few families.

The join. - The one as with a "binder"

What makes differentiate the three "lines"?

Clothing

The "Riri" a Grass Skirt.

There was nothing except the Dancing - the they were "Te Be" a plant that made of Pandanus.

The Women wear two kinds of Riri.

1. "The Riri Uona" a short skirt of 1/2 foot and behind, worn by Girls before Menstruation.
2. "Te Riri Talamini" - The whole Riri - a short grass skirt extending all around the waist, worn by women after they'd menstruated.

There were two methods of Dyeing Riri:-

"Te Talamini" is the name of the Grass skirt once it has been dyed Black by the "Te Rao" process.

"Te Ngulira" is the Riri dyed Brown by being rubbed with Coconut Milk & Kamani and then smoked.

The method of dyeing Red with "Te Rau" root came from the Ellice Islands, about 45 years ago with Taramon, the second missionary to reach Bora.

Dark Riri were always dyed but making Riri were usually not.

The "Riri" have different names according to the color of the leaves from which they are made.

"Te Ubanibabai" - referring to the colour of the Babai leaves as it was made of very green leaves.

"Te Ukika" = The Octopus. Made from reddish leaves. The Octopus when cooked is a reddish colour.

"Te Ukeang" = a Sea-weed. a dark blue coloured leaf Riri.

"Te Ukawa" = Light blue coloured, like a Pandanus leaf.

"Te Uuro" = a black coloured Riri.

"U" = Kind or type.

To make a "Riri" take out the "Noko" a mid-stem of the coconut leaf & pound the two resultant strips between stones and then chew them - then string them onto coconut string. The Riri before use is oiled with "Te Rau Ben".

a man would never wear a Pini. If he did he would be mocked.

a few women wear "Te Raburaba" when on a special occasion.

Two kinds of "Te Kouti" were worn by women when walking abroad.

1. "Te Bakaraburaba" worn by women before they had their first child.
2. "Te Aoranga"^{x2} worn by women after they'd had their first child and until it walked.

The first was a large mat worn on the head & reaching to the knees, the second was worn around the neck.

The first was decorated with "Te Etete" - stones made for bleached Porcupine. The latter had bone stones.

WEAPONS ^{no woman} ^{stone} was allowed abroad without her husband or guardian. The guardian walked in front with one or more of ^{the} ~~these~~ weapons.

1. "Te Betia" - a long wooden sword studded with shark's teeth.

2. "Te Tamangaria" - a Purged sword studded with shark's teeth.

3. "Te Ie"^{x1} - similar to 1 but with 3 prongs across the stick.

^{wa}



3b. "Te Kamawa" - similar to 3 but with no shark teeth. The shark fin was ranned at a right angle & the side prongs were used in defence.

4. "Te Maram" - just a long pointed oiled piece of wood.

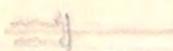
all made for Coconut wood.

5. "Te Butu" - a short shark tooth sword used especially by women - about a foot long.

Three kinds of "Te Ie"

x1 "Te Ie tenia" with 3 prongs 

"Te Ie wawa" with 2 prongs 

"Te wala ni re" with 1 prong 

x2 Aoranga = The upper part of the shoulder.

Weapons

Fa Hitting? just "Te ^{mare} ~~mare~~" or "Te nbo" were used.

These are clubs made of coconut wood.

Length 4 fingers longer than the wielder.

Thickness depends on the wielder but about = to an arm.

"Te nbo" is a smaller edition of "Te mare".

"Te mare" or "Teavalubieti".

"Te nbo" or "Te lym ni ba".

(observed in Taumoa)

In the North Gilberts a Lasso about five fathoms in length was used in warfare.

~~In the South the clubs were made of rope attached to the middle to get the back after being at an opponent.~~

"Te Ra ni Kiri" was also used in the South - a dot pointed stick with about 4 yards of Rope attached to it. The stick was hided at the opponent and retrieved with ~~the~~ the end of the rope.

To make "kakoko".

To ensure a good leaf being cut the man goes up a tree which the woman has previously chosen as having good long leaves & preferably a long unopened spike like leaf. (This unopened leaf makes the whitest ira but the just opening leaf is quite good & is also called "kakoko", the opened leaf is also used but is inclined to be green & is called "te sauce".) The man pulls off one pinnule & throws it down to the woman who splits it (te kuokuo) to see if the thin skin comes away cleanly, if it does not they seek another tree, if it does it is cut. Next some rain water is boiled over an open fire. The "noko" is stripped from each pinnule & the leaf pulled off the mid-rib but the "noko" left adhering to it. The pinnule now consists of two strips joined at one end, these are opened, one at a time, and the first skin cut through with a shark's tooth or a piece of sharp shell, about 1 inch from the join. The leaf is now held between the thumb & index finger of the left hand, the long end hanging over the backs of the fingers. With the right thumb & index the two skins are pulled apart to a depth of one inch from the cut. Then the short piece, that which has been cut, is held between the teeth, the leaf is held, close to the mouth, between the left thumb & index finger, the right thumb & index hold the other side of the leaf & pull it apart while, at the same time, the left hand slides down the leaf. (Te kuokuo) The skin held in the right hand is immediately dropped into cold water, to keep it a good colour, this makes "te kakoko" & is called "te noko", the other skin is called "te noko" is used for making a bathing rice or else thrown away. When the hot water is boiling hard the leaves are taken out of the cold water & plunged into the boiling water, they are stirred round for about 2 minutes & then taken out & dropped into clean cold water. It is then split on a "sweeci", one leaf at a time being taken out of the water, it is hung

up to day inside a house

The Oven (Te ai ni kamainama)

An oven hole is dug about $6\frac{1}{2}$ " deep with two outlets to it, the larger for insertion of the smoking fuel + the smaller as an exit for smoke. About six double handfuls of coral lime are then taken



and mixed with a slightly larger quantity of sand, salt water is added + the whole well mixed until the mixture is of the consistency of soft putty. With this mixture the oven, together with the feeder + the outlet, is lined. This oven is distinct from the "ai ni karawe" which is made anyhow. Lime is the best medium but ashes may be used if it is unprocureable, or ashes and "riburibu".

A row of flat stones is then laid round the central depression + on top of them further rows of stones each row projecting over the row beneath + the whole cemented together with more of the lime + sand mixture. This process continues until a small dome is formed having an opening at the top in diameter sufficient to fit the base of the cooking pot. The dome is actually horsehoe in shape as the stones do not quite meet over the feeder aperture but only over the outlet.

on ^{larger} depth, cooking pot to bottom of oven should be a "rakana" (span) + the length of the top or two

top index finger joints.

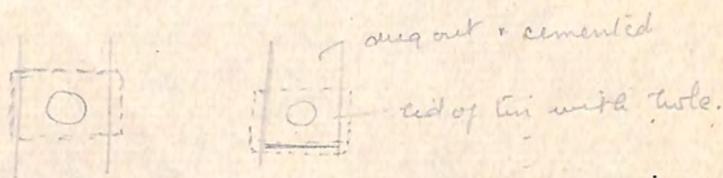
The basic principles of the idea were learnt by our informant from Abaia but riburibu + ashes with no stones.



?
What is rakana?

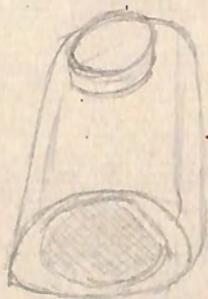
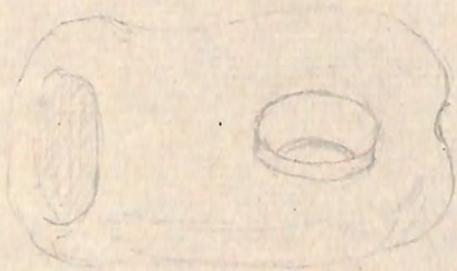
*

the finer points we evolved by him on Bees.



"ai ni karewe" (Ahaing)

Now the sides of the feeder are also built up with stones & lime in the same manner as before but projecting rather less. Next, a the top of a keystone tin is slightly bent & inserted into the feeder to form a roof & another piece of tin, with a hole cut in it to fit the basin, is placed on top of the oven, the whole expanse of tin is covered with a layer of lime fitting up round the basin to the height of 1 inch.



Mrs Terrell,

I should be most grateful if you would take charge of this copying order from Dr Koch of the Museum für Völkerkunde in Berlin; using Bozana wherever possible.

Dr Koch wants one copy of each item. Some will clearly have to be photo-copied, e.g. the kite patterns, while some will probably have to be typed, e.g. where the pencil is too faint. I should prefer photo-copying wherever feasible, as it obviates transcription errors and reproduces the drawings accurately.

This may be an opportunity to teach Bozana how to operate the 3M machine?

slm

15.12.64.

TABUNEA.

✓ There are two reasons for the constant tabueas associated with the building of a manacaba:-

1. To prevent harm a Kararuaia to the builder & his family.
2. To prevent harm & promote the well being of those who were to inhabit the manacaba when it was built.

A.

✓ The first thing to be done in building a manacaba is to cut the Tatanga for the E. side - then the site is measured out and the bouna got.)

✓ The Pandanus trees selected must fall N. S. or E. If they fall W. they would not be used as they are falling in Baker's side. also if they did not fall properly, catching in one tree, they would not be used as, Tabakea is holding them.

✓ Eithe Podanus (suitable for small manacabas) or coconut will do for the tatanga.

✓ The tatanga must be cut with a shell edge & as the blows fall there is a tabuea said by the builder (who is the fella).

T 1. " ai ba-n anga tika aiti korea bouna-n manacaba-ia

Taburumai, na Amuaria, nei Tenwai, Riki na nei

Tatuaalme ai e - - -

E toki tera? E toki te mate

E toki tera? E toki te bakarere.

E toki tera? E toki te kai-n anti

E toki, e toki

E toki, e toki

E toki, e toki. "

when anything is cut for the nancala (by foot, by wire etc.)
the magic T.I. must be said when cutting it.

only on 3 occasions is the taluwa different:-

- when laying the ridge capping.
- when burning all the rubbish which has collected inside a nancala after the completion of the work.
- when placing the arunge in the centre of the nancala.

Placing the arunge in the centre of the nancala.

The builder gets the arunge for the reef and lays it ~~at~~ in the middle of the nancala a table to the E. of the exact centre.

3 boys are chosen (the eldest children of the builder and his relatives).

These boys go with 3 baskets with the builder to tanake - the builder obtains 3 nani-natanu and puts one in each basket.

They then come to the first cape at tanake and place one feather a piece of drift wood on the ground at the point. They do the same at 2 other capes (tobaki).

3 girls similarly chosen obtain flowers & ba-ni, grass etc. from the land of the builder and place it round the nancala outside the lona.

The builder gets the fuge nulu of the builder's family, cuttings from their hair or a bit off their sleeping mats if they are too small to have hair.

The builder also gets small bits of coconut leaf, todano leaf, flowers and grasses from his land and mixes it with the rest in the arunge. The arunge is then buried upside down with the mixture underneath only 3 ribs of the shell being allowed to show above the ground.

When the builder is placing the nani-natanu fish in the boys baskets he says the following taluwa.

In the morning at about 9.
at low tide.

natanu
a shellfish, Tanka
xtanuu Grel. - white
4, 23.

Karua - 2 te Aubuge.

T2 "Teirake, teirake rykami akame nani-natanu, ba kam
na aki tiri nwi-u, ba kam na aki tiri moa-u,
nakea a roko-2 naseaba-u aia, ba kam na aki
ketia ao katana ao katebwea."

Immediately the tombuki has been laid (ridge capping put on) the aubuge
is buried. The rubbish is then burnt.

While the aubuge is being buried this is chanted by the builder:-

T3. "ai ba-2 rogi tiba aiti kulakia aubuga-2 naseaba-ia
Talumai etc. as in T.1.

Rabura te naseaba.

The builder climbs up the middle of the east side before the
ridge capping has been put on. He carries a piece of ngai
and places it over the tombuki, then places his right arm over
the tombuki ^{and} on the ngai, and with his head down so that he
cannot be seen from the W, ^{he has mouth and} ~~Face~~ S, he chants thus:-

T4. "I rabura, ai rabura,
I karaba, ai karaba,
anti ni lo, anti ni lo,
bona-e, bona-o,
ko a roko aubo,
ko aki kakawana naseaba-u aia,
be tei ona,
te itua ni buni, tanebetia,
ko na buti neia ma ko na buti neia,
ko na roko neia ma ko na roko neia,
ko na ti tei i mainiku-2 naseaba-u ikai,
ko na ti tei i beangi-2 naseaba-u ikai,
ko na ti tei i nalo-2 naseaba-u ikai,
ko na ti tei i naraki-2 naseaba-u ikai,

1 kani kīno, 1 kani kīno,
 1 kani lāti, 1 kani lāti,
 1 kani Nauna,
 1 kan rō."

He then descends and the tambuki is put on by the htn of the
 builder from Nukuruaia. At the N.E. corner.
 starts the cutting from N to S and then down the S.W. corner.

- ✓ The people of Beia and Tekai have nothing to do with the
- ✓ building. Nauna are the builders and his related clan of
- ✓ Nukuruaia are the ridge cutters.
- ✓ Nauna, Nukuruaia, Beia na Tekai and Beia te Rung are
- ✓ all related lāti.

Kabuoka - ni Burae - ra.

all the range is collected ^{into lats} by the people on ^{east of} the four sides of the
 maeala, ^{at a sufficient distance to prevent sparks reaching the building} a good way off but opposite the middle lona in
 each case. The builder lights the fires, in Nungotaku anti clockwise
 odo, and taken to Biki clockwise, the tubuca being said three
 times over each fire as follows.

T 5

" a teke, a teke, a teketeke mata-ia,
 anti ni mainike - n maeala - u ikai,
 ba a na kowara maeala - u,
 aki meni ko na be tee ona,
 a teke, a teke, a teketeke mata-ia."

Te Kai - n Taibao.

If any old man of Beia na Tekai enters the maeala during construction
 (i.e. The htn of the maeala) The beating of the binding lona on the
 east side must be done by the builder himself who must
 at the same time chant as follows :-

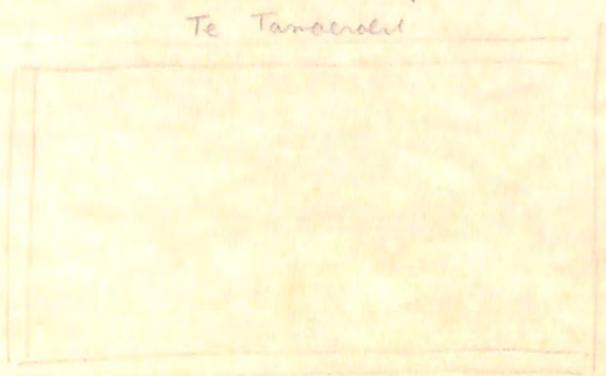
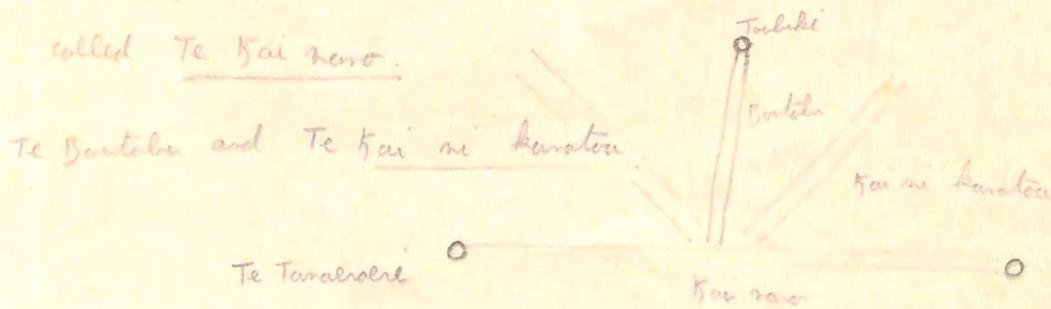
" ai ba - n aji tika

Te Kai-ni Taebu.

T.6. "ai la-n angī tība aiti karebuea,
 kai-n mānala-ia Talumai na Amāria, Hei Fēwēsi,
 Rūki na Hei Tituaabine,
 ai-e-i. E toki tēra? E toki te arōki,
 E toki tēra? E toki te bakare,
 E toki tēra? E toki te mate,
 E toki ia? E toki ikai,
 E toki ia? E toki ikou,
 E toki ia? E toki i a-n marua,
 unā tababa, kōra tababa,
 lāba ao bāba,
 bāba ao bāba,
 lāba ao bāba."

✓ when the stone Hei Tituaabine is placed in position a coconut is planted beside it as its' food. when the maala is finished this is uprooted.

✓ The continuation of Te Kai ni Bala across the middle of the maala as called Te Kai nara.



Taburea when cutting the first hole for the roof-plate
(tētanga) on the eastern side of the hānau at
Ōmāke on Tarawa.

The cutter sang it as the blows of the shell axe
descended:-

" ai ha-n angī tika aiti kōea hōa-n
hānau-a Taburea, na Amāria, Ōi Tewenei,
Riiki na Ōi Tituobine. ai e — e toki tēra?
E toki te mate. E toki tēra? E toki
te hōkore. E toki tēra? E toki te
kōi aiti. E toki, e toki.
E toki, e toki.
E toki, e toki."

Kabuokan Baraena

ateki-e, ateke, ateketeki mataia, anti
ni mainukun manebau ikai,
ba ana kawara manebau, aki
meni ko ra be tei ona, ateke
ateke ateketeki mataia

Te Kain-taibas

Ai ban angiti tibi aiti karehwea,
kain manebauia Laburimai ma
auriaria nei Leweni Riki ma
nei Lituabine, ai-ei e toki tera?
e toki te aoraki, e toki te ra e toki
te bakarere, e toki tera e toki te mate
e toki ia e toki ikai, e toki a? e toki
i koa, e toki e toki i aon marira
wina tababu kaina tababu,
bābu ao bābu, bābu ao bābu
bābu ao bābu,

at the top left

Te Teke Kaiti

kai butiki, ma nartari, ma nāi
anna ōa, e bui e rara, e nawa
ae e nawa antin te manebau anei
main ao, ma antina n titiri, ma
antina ni kakān, ma antina n
oro, abiri nako, a nerenako, a to nako,
akina wa taraiāu, be a nako nako
ana kai, māna uaba, ma nānāba
ma antin te manebau ane i main
ao, ma an tina n titiri, ma anti
na ni kakān, ma antina n oro,
iai tia, i me mwa, i onia, i
ka munitaia, a ka nawa 3 to

Kandan Te Aubunga

Sei nake te nake ngkani a kanne
kani-matanin ba kam naki tiri mwin
ba kam naki tiri moau nakea nakan
manabau ais. ba kam na aki kaetia
ao ka taua ao. ka tebea.

Rabunan Le Manaba

Ira bunna, ai Rabunna, ai karaba
ai karaba, anti ni-bo, anti ni-bo,
boira e, boira o, ko a nako sibos, ko aki
kakawaria manabau ais, be tei ona,
teitua ni Buni, taureketia, ko na buti
neia ma kona buti neia | ko na roko
neia ma ko na roko neia, ko natitei
i Mainukun manabau i kai | ko na
ti tei i Meangi manabau ikai | ko na
ti tei Maeson manabau ikai | ko na
ti tei Masakin manabau ikai | Ikani
kino, ikani kino, i kani bati, i kani
bati, i kan mauna, i kan ro.

Sizes of Raecala & kawa

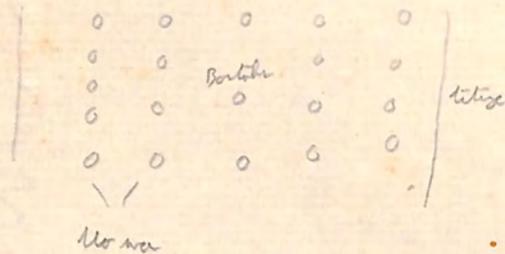
Te Bote 5 oka No exterior in raecala
 Te wa-tara 5 oka Exterior

Te Manacaba 7 u na oka

{ Te wa a large raecala with one side line of web supports
 E wa te raecala

{ Mo wa The largest type of raecala by 2 side lines
 E wa te raecala

20 little u na the
 largest raecala built by the Maori
 at Botolph Claydon.



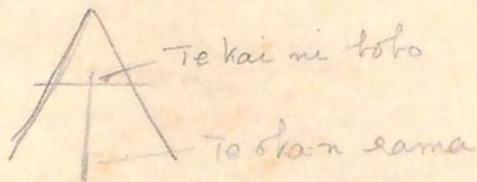
The oka - same method as for finding te tanga proportions.

✓ Even numbers in oka are forbidden, only even numbers used.
 No oka beyond the first & second staves.

To find the length of the tauhuki = from 1st to 2nd staff
 plus one span on either side.

The extra span is for "te mauri".

✓ The "bona" will not be directly beneath an oka, it is
 always placed a little dot one side. If on the oka it
 will "teke naka" & there will be no "mauri".



✓ The oka-n sama goes from the mid of the tanga n sama up to
 the middle of the kai-ni tobo

✓ The kauri kanene

✓ The eastern te tanga is slightly longer than the western.
 anything from a span to 1/2 fathom.

✓ If the eastern tanga is not longer. Rakon can do as he please, if
 it is longer he is a feard.



Tabernacle

Wagon

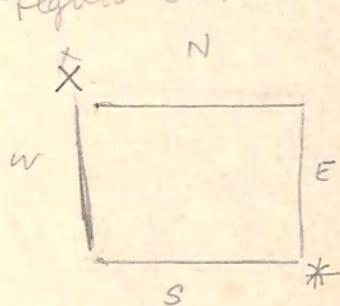
Wagon

Toby	Wagon	L. 15	W. 10 1/2
Dargotchi		L. 18	W. 15
Tabernacle	to Bible	L. 21	W. 16 1/2

L 126	W	105 -	6
L 126	W	99	7

✓ The two raras should be the same length.

✓ Should one end be longer than the other the people from that end of the island will always win everything in games, fights etc.



open at * the north is weak

" " * the south is "

✓ When built in the south the holes for the "bua" are dug to the north of the marking stick & vice versa.

✓ The raras will be parallel but the "tanga," either E or W will be out of line.

✓ When the tanga are marked for the oka, the oka are not placed exactly on the marks, but in the case of the southern manaboa they are placed to the north & vice versa.

✓ On N manaboa the first post will be the N.E. the bua sunk from N to S. The S.E. bua being slanted so as to open the S.E. corner, but if it is ~~no~~ warfare is in question the S.E. bua, the Tutuabua will invariably be sunk first, then N.E. then centre.

✓ Te Tama - ~~the~~ tri = the flat he.

✓ Te Kai - Ta = the bua correctly the oka parallel with the E & W. Totaga. where the line runs a E side & below on W. made to tatoua Bakoa

✓ The tambiki will be lying a little bit towards the W. side for the one reason the posts are solid it lies slanting towards the W. Bakoa is a bed of shell in the rocker.

✓ The no. of thatch rods on the W. side is always 1 less.

The *Waka* *Fucula* & *talle Nagotab*.

✓ The *Kai ni Kakari* = the thin slots in which the blades ~~are~~
are tied. There must be three between
each oka see 2 or 4.

==== *oka*

==== *Kai ni Kakari*

==== *oka*

✓ The middle between the *oka* is termed the rua ni rote (the groove) &
unless a *kai ni kakari* is put over it the groove will not be
shut, to the detriment of all.

✓ The *Bontoku* are the centre line of posts.

✓ The *Bonriki* are the line on either side supporting the *tamerasu*.

Buidly Rakoa

✓ when cutting any part end etc. Aloft in the mameala it must not be allowed to fall but must be lowered gently to the floor on the end of a rope. If anything falls a tubua must be done as it is the builder of the mameala.

That tubua is called Burglea.

✓ 2 The builder of the mameala can never cut anything under the roof of the mameala until the caes have been cut. When the builder's work is finished he goes away and does a tubua called Te Tebo mata.

The bees him is called hi to cut side the rock.

✓ Te Boroboro These are the ^{having stones} small white pebbles laid ^{and the} on the floor of the mameala after construction has finished. They are laid on the Titouche anti-clockwise to Manakaria. Then chalked to those places. This is to heat ^{notion} hahetel of the builder who would otherwise go near to return.

✓ Te Atomo These are the small white pebbles which form the floor of the mameala.

✓ Te haai The floor mats are then laid. This has a special ceremony. ✓ The caes are ~~to~~ cut at the same time. The ceremony and feast is called "Taunani Te haai".

✓ The food is eaten at the haai as this huge luck. It is of a small feast.

✓ about 3 or 4 weeks afterwards a large feast takes place at which all the island comes - repeated for this are made after the small feast. It is called Te Koro Mameala. The day of the week.

✓ Note The haai is laid from S to N starting on the east side of the bantaba.

✓ The edges of the E. haai not only be over this to the E.

✓ The Builder has a little of the range on the E side of the mameala when the caes are cut. The rest is then away.

✓ When the maneaba has been pegged out, the hole has been dug for the Tituaahine pillar, the people are called & a feast is held. The day after the full moon this is done, the food being collected in the morning. The pillar is placed in the hole, some time during the day, three old coconuts & an old airi are thrown into the hole & buried with the post. The hole is dug on the side of the stake nearest the centre of the maneaba. ^{& dug towards the centre.} The second stone to be placed in position is Tabakea. There is no feasting beside this stone but the hole is also dug towards the centre of the maneaba. After Tabakea the centre pillar of the Eastern side is put in, then in order, the N.W., S.W., & central west pillars. The eastern Tatanga is then placed in position, the base of the tree used resting on Nei Tituaahine. Then the western Tatanga the base being on the N.W. pillar. The eastern Tatanga being, of course, longer than the western Tatanga.

✓ The height of the pillar should be ⁽¹⁾ from the ground to just below the hip-bone (Tea Toua), (2) to just under the arm pit (Te anu hui) or (3) to the shoulder. (Te aon onanga).

1. For Tabiang maneaba.
2. " Mauniga Tabu.
3. " Tabon Te Bika.

According to the 3 types of each class of maneaba the height should vary, up to the waist for Tabiang, Mauniga Tabu from the waist to the arm pit & Tabon Te Bika from the arm pit to the base of the neck. The next thing to put up is the "wa-n anti",

✓ These are pandanus trees cut down + their branches left on them. They serve as scaffolding for the construction work. The first is placed between the Tituaabine. The first "bou tabu" about 6 ins. short of a $\frac{1}{2}$ fathom east of the bou tabu. (One would be "kamamate" if one didn't cut a little off the fathom when measuring). The remainder are placed parallel with the bou tabu at a distance of about a fathom from one another. A corresponding line of wa-n anti are placed on the west side of the bou tabu starting from the north. Scaffolding poles parallel to the ground are tied roughly to these wa-n anti for the workmen to stand on.

colored to design

✓ First you measure the height of the toubiki above the ground in the manner already described. Then you arrange the height of your scaffolding platforms so that the toubiki when raised will only reach the shoulder of a man working on the platform. ~~Then the boutabu are sunk and cut so that they are level with the shoulder of a man working on the platform.~~ Two padang poles are the sunk, one on the north and one on the south side of the manala in the central line*. These posts are cut so that their tops are level with the shoulder of a man working on the scaffolding poles. The toubiki is now raised onto these two poles. The boutabu are then sunk, cut and placed under the toubiki which rests on them.

* These are the N and S boutabu.

rest of

✓ The toubiki must be raised from the east side of the manala on the eastern tetoga and tied to the wa-n anti. It is then raised to shoulder height and placed on the 2 boutabu.

when the toubuki is raised you tie the towa-zie to the centre and let the flunk line fall. This will enable you to make sure that the centre of the toubuki is over the centre of the manaba - It should fall exactly over the stone marking the centre.

You then tie a line to each end of the toubuki and make sure that it is the same distance from the bona on the east and west sides of the manaba.

Finally you ~~then~~ hook the toubuki about a heda breadth out of the centre towards the west so that it will over-hang Bokoa (For nomi). Then you sink the rest of the bantaba, cut them and make fast the toubuki to them by locking.

The oka are then locked into position. ae rei Tutuohie first are Tubokea second then the central 3rd the third rest. The same the other side - west, in the same order as the bona. All the oka from the east side must meet the oka from the w. side north. They cross north of them and are locked that way. This method of crossing is called Te Anga tai. The Anga ^{man} ~~man~~ method west hony Nob E cannot be used except when a house is being built for a woman. It would therefore never be used for a manaba.

The locking of the oka is done in the same order as the hedy up. The oka being locked to the tatanga before being locked to the toubuki.

The architect of the manaba himself will bind the locking of the oka ae rei Tutuohie to the tatanga but before cutting off the unused strands of the rope used he will tie three knots in it and then cut. (This is for the architect's name) The rest of the oka are locked aka okaba.

✓ all oka are cut off at te kai ni bobo. The ones on either side of the
 outer oka meet the kai ni bobo where they meet it. The middle
oka will always be lashed to the kai ni bobo a bit to the
 east of its true center & east of the tanbiki.

The east the kai ni ta which will meet those for the length of the
meaba at each case & be lashed with the length ones.

✓ The s. side is done as in the case of the N.

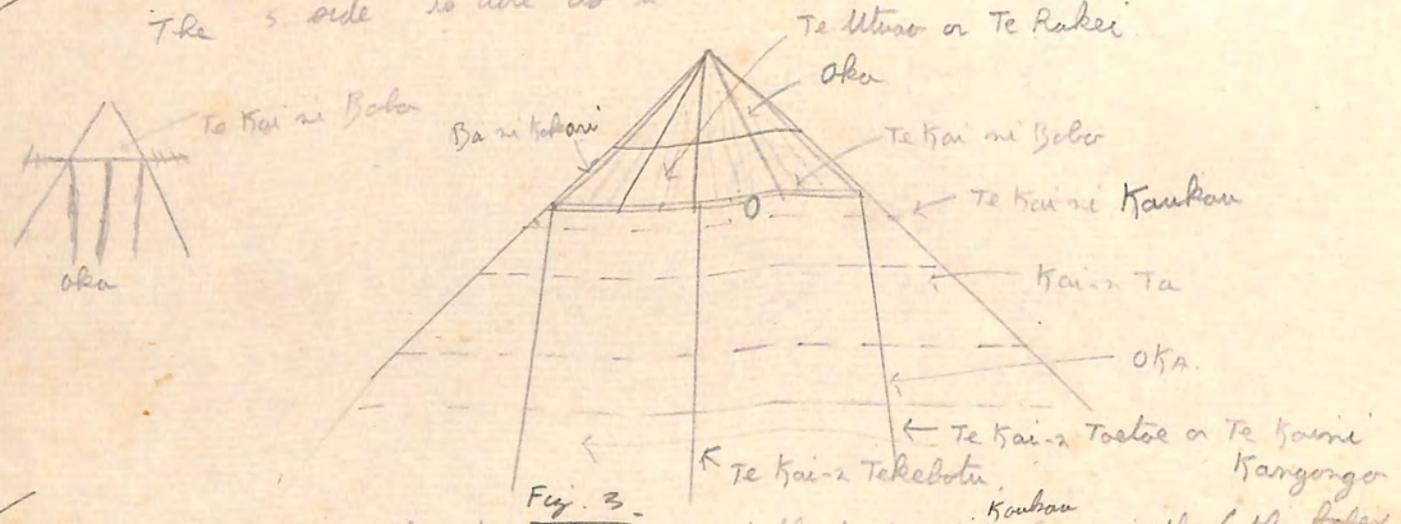


Fig. 3.

✓ The distance between the kai ni Bobo and the kai ni Kōkōni (the highest
 nearest kai ni Ta) should be the length of mea head for each to foot.
 If the kai ni Ta for the E or W side should not then meet the kai ni Kōkōni
 a short kai ni Ta is made and lashed to the kai ni Kōkōni and runs a short
 distance te (about 2 kai ni Kōkōni) down the E or W side parallel with the
kai ni Ta. This small kai ni Ta is called Kara ni te Kai ni Kōkōni.

✓ The triangle above the kai ni Bobo is called Te Uturo (the kite) it has
 three oka, 3 kai ni kōkōni a 2 between each oka & one almost touching
 the two outer oka of the Δ .

✓ Note Te Bouriki the line a double line of posts supporting the
Te Tamapere cross beams on either side of the hōtōkōni are put up ^{at the same time} as the mea
mea is put up and lashed when the tatanga is put up. on these
houmiki the Taralere, 4 poles parallel to the gōnd and under
 to the tatanga, are placed.
 The houmiki are midway between the hōtōkōni & the tatanga.

✓ The better maceba is of entirely recent date. Formerly no-one was skilful in the construction of macebas on Tarawa except the people of Duanke.

✓ The people of Maewa are the builders of the maceba.

- | | | | |
|----------|---------------|--------------------------|----------------------------------|
| Shortest | 1. Tokaloua | sketch in light & widest | 1. Tabung-in Tabung |
| | 2. Tokamamao | | 2. Mawngatabu-in Tabung |
| | 3. Numakabu | | 3. Tolo-in te bike-in Tabung |
| | 4. Numawete | | 4. Tabung-in ni Mawngatabu |
| | 5. Teieta | | 5. Mawngatabu-in Mawngatabu |
| | 6. Ngonio | | 6. Tolo-in te bike-in Mawngatabu |
| | 7. Kariaba | | 7. Tolo-in te bike-in Tabung |
| | 8. Karamatang | | 8. Tolo-in te bike-in Mawngatabu |
| | Longest | | 9. Tebera-in te Kai |

Longest & sketch in middle
 1-3 = Tabung
 4-6 = Mawngatabu
 7-9 = Tolo-in te bike

✓ The middle posts supporting the ridge-pole = Te Boutabu.

Ridge-pole = Te Tumbuki

Roof plate = Te Totanga

✓ 1 Te Totanga-in Ni Ni Ni

✓ 2 " " " " " "

✓ 3 4 2 Totanga-in Ni Ni

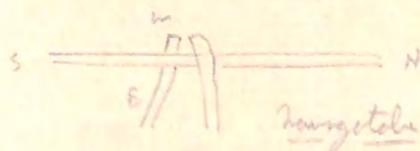
✓ The construction the N. 1 is termed Rouaba and 2 Bakoa.

✓ 3 & 4 are no special technical constructive names.

The members are made first of all for the ridge in Ni Ni Ni

Notes on the Hauwaka

The crossing of the aka at the hauwaka is different be
Nauwatahau and Tolon te Buke. If the E aka cross N
of the W it is Nauwatahau - if the W. cross N of the
E it is Tolon te Buke.



✓ 2. If a Hauwaka is built in the time of Rururua it must
be of the style Nauwatahau.

If in Nei anti it should be Tolon te Buke.

✓ 3. The whole edifice is called the Tabakea of Nauwatahau or the
Kauti-ni-riri of Tolon te Buke.

✓ 4. In Tolon te Buke the first bora on the N. ~~side~~ side of the E
side is called TABAKEA.

In Nauwatahau the first bora on the S. of the E side is
called NEI TITUAABINE.

✓ 5. The 2 G Hauwaka is a Nauwatahau type.

Nauwatahau is the peoples Hauwaka but Tolon te Buke is the chiefs.

Te Tangarua, Tamaon and Manuete built the first Hauwaka of
Kauti sob Buakei in Tolon te Buke style.

✓ 6. He has no knowledge of new styles of Hauwaka such as Tolrang
and Tolorakei. The old styles are only 2 - Tolakea and Kauti-ni-
riri.

✓ 7. Tia-ni-Huawaka is the name of the measuring string when
building the Nauwatahau and Te Wao the connecting string for
Tolon te Buke.

8. ✓ The middle stone of the E side is called TABUARIKI in both languages.

✓ 9 The Totara of the E. side is called Rotaloa a name usually Talakea, that on the W. is called Bakoa

10. The W side is the side of Bakoa & the people from the sea, the east the side of Talakea & the people from i eta (the land). In the old language of "anti ma aonata" they used to dance the moia together side by side. ^{They danced the same moia.} The old name of anti ma aonata was first on Tawawa, then went to Bora & from there it went to Samoa. Talakea and Bakoa had an argument over the dance. Talakea and his people were wearing pretty flowers (koma etc) from the land and Bakoa's people the things of the sea. After the dance Talakea collected all his ornaments and gave them to Bakoa & Bakoa reciprocated. Then Bakoa left for the sea & when he ~~was~~ went into the sea all his flowers etc went back whereas Talakea's ~~gifts~~ (human teeth, whale's teeth, porpoise teeth etc) kept for a long time. From that time Bakoa was un and that is why if a big shark sees a man in the sea he will eat him. That is why Bakoa's side of the moia has to be kept down. Bakoa & his people have never returned to the moia since that time. Bakoa the son of Talakea went to sea & saw Bakoa and tried to kill him with clam shells & ~~the~~ Te Rota-a-Tari. But he took with him one chicken and one ~~chicken~~ Te Kekenu (like a dog but not seen these days).

Bakoa's gifts to

When Bakoa saw Te Rota his chicken was released & took it to pieces. So Bakoa gave him his food & said that if he & his people didn't finish it they were to be killed. Te Kekenu however dug a big pit in the sand and buried the food in it.

Then all had a dance & Te Kekenu was dancing the first dance. He cut all Bakoa's people to pieces with his teeth and

a few, including Bokoa, who sought Bokoa's protection.

The dove was in the sea but a returning Bokoa left the chicken on the end of the reef because they feared her as she was in a bad temper he used to kill people.

The chicken was taken on shore. Bokoa was seen again.

There were chicks before Eropoa trees - flat at ^{NAO MOA} nao nao at Buariki. They had tails (feathers sticking out at the back nearly reaching the ground).

FEASTS.

✓ There are five feasts during the building of a naeola.

1. when the dimensions of the naeola have been measured out in string they have a feast inside the string (the builder's).
2. when the scaffolding poles (Teta n anti) have been put up.
3. when the ridge capping has been laid.
4. when the floor mats (trani) have been placed.
5. when the eaves have been cut.

The clay shell is made in the middle for the name of the naeola. There is no feast but some magic. It is for the good health of the family of the builder. Leaves of trees, flowers, nail ~~staples~~ ^{parings} for the nails of scales of the builder's family cuttings of hair for their hair etc. are all buried under the awning in the centre of the naeola when the tauuku has been placed in position.

✓ The builder always had his food, smoke etc. outside the naeola.

Mancabas, Construction of

Formerly the only people skilful in the construction of Mancabas on Tarawa were the people of Buariki. The Betw Mancaba is of comparatively recent date and is modelled on the Buariki one.

The people of the clan Maema are the traditional builders of the Mancaba. My informant was Mautake who is, so far as can be ascertained, the only man alive today (except his father) who is in possession of the complete lore of Mancaba construction.

Mancabas are of 3 main types:-

1. Tabiang
2. Naungatabu
3. Tobo-2 te Buke

When a new Mancaba is to be built the people will be asked by the clan Maema to name the length desired. The length they name (5, 10 or 20 fathoms for example) will not constitute the total length of the Mancaba when finished but is only that of the construction line which is plotted on the ground in order that the correct traditional proportions (as to height, length and width) of the type of Mancaba to be built may be accurately determined.

The type of maseaba to be built (whether Tabiang, Nungatabu or Tabo-n te Biki) is fixed by the type which previously existed there, if any, by the names of the clans who are to be given lots within it and by the clan of the builder (? is maseaba builder of all 3 types).

On the afternoon of the day on which the ground plan and proportions of the new maseaba are to be plotted out the master builder proceeds to the bush (as the sun is descending, at about 3 1/2 p.m.). Here he cuts some 20 or 30 ba-n te inoi (fronds of the coconut tree whose pinnules are to be used for braiding te inoi mats) about a foot long and sharpens their ends to a point.

Soon after dark (i.e. at about 7 1/2 p.m.) on the same day the people gather about the site of the new maseaba and clear the marae (ground space on which it will stand) of all grass and weeds and level it.

One of the ba-n te inoi stakes is driven into the ground in the south eastern portion of the marae and a second in the north eastern portion of the marae so that the distance between the two stakes is the length already named by the people (say 12 fathoms). See Fig. 1.

A cord made of coconut fibre (Kera) is stretched between the two stakes and a third stake driven in half way between them. The web-plate

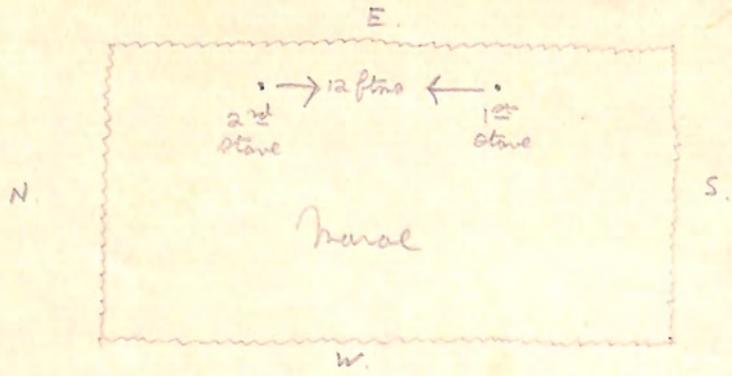


Fig. 1.

(totānga)

of the eastern side of the naua will be laid, when the naua is being built, so that it lies along the line between the stores, the third store being on the spot exactly in the middle of the eastern roof-plate of the future naua.

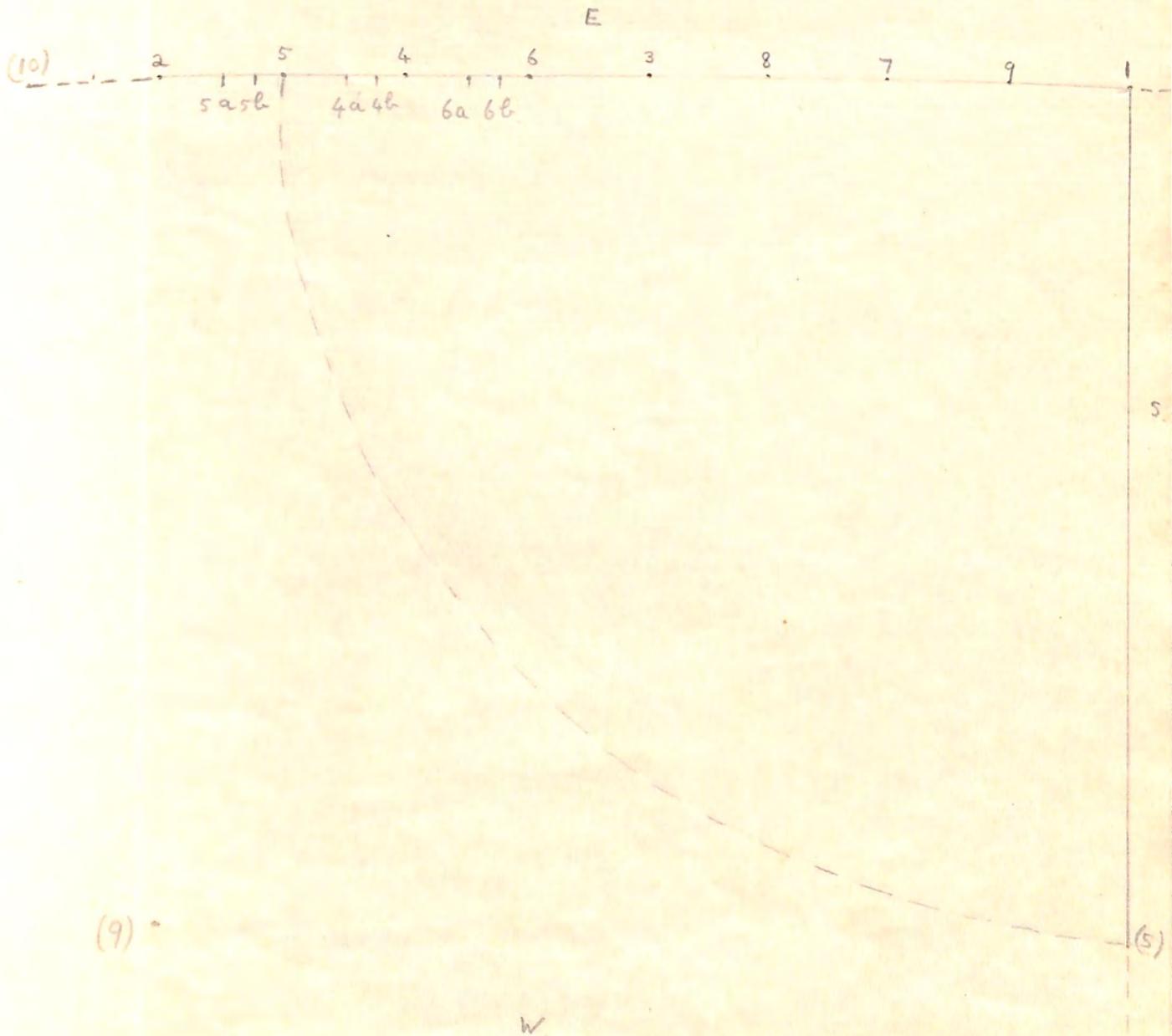


Fig. 2

Midway between staves 2 and 3 will be placed staff 4, midway between staves 2 and 4 will be driven staff 5 and midway between staves 3 and 4 will be placed staff 6. The same process is gone through between staves 1 and 3, staves 7, 8 and 9 being driven in in a similar manner. (see Fig. 2).

The points 5, 4 and 6 enable us to obtain the breadth of the three main classes of *manaba*, *Tabrang*, *Maungatabu* or *Taloban* to *Bike* but these main classes are finally subdivided into nine types. In order to build the exact type of *manaba* required one must again subdivide the spaces between the staves 2, 5, 4 and 6.

For example to obtain the measurements for the three main types of the *Tabrang* class of *manaba* mark the spot midway between staves 2 and 5 - called 5a on Fig. 2. Then again mark the spot half way between 5a and 5 - 5b on Fig. 2.

In the case of a *Maungatabu* *manaba* mark similar positions between 4 and 5 - 4a and 4b on Fig. 2, and for a *Taloban* to *Bike* *manaba* mark the same positions between 4 and 6 - 6a and 6b on Fig. 2.

To obtain the breadth of the *manaba* required a rope is tied to the staff 1 and -

- (a) In the case of a *Tabrang* *manaba* the other end is carried along to either 5, 5a or 5b. The builder marks this point on the rope, which is the required breadth, and walks S.W. until the rope is at right angles to the original line from 1 to 2. A stone is driven into the ground at the marked point on the rope - (5) on Fig. 2. Having found the point (5) it is, of course, easy to find the point (9), since the line (5)-(9) must be

parallel to 1-2 and the lines 2-(9) and 1-(5) must be of equal length.

(c) In the case of a Naungatabu or a Tabo-n te Bike maneaba the procedure is slightly different since the rope from 1 must be taken round 2 and then back again to 4a, 4b or 4 in the former case and 6a, 6b or 6 in the latter. The broadest type of Tabo-n te Bike maneaba will thus be 1-2 + 2-6 in breadth. In Fig. 2 is shown - at (4) - the breadth of the broadest type of Naungatabu maneaba.

The names of the nine types of maneaba are as follows, starting with the narrowest and ending with the broadest:-

- Tabiang Class {
 - 1. Tabiang - Tabiang (Tabiang-in Tabiang) = 1-5.
 - 2. Tabiang - Naungatabu (Naungatabu-n Tabiang) = 1-5b.
 - 3. Tabiang - Tabo-n te Bike (Tabo-n te Bike-n Tabiang) = 1-5a.
- Naungatabu Class {
 - 4. Naungatabu - Tabiang (Tabiang-in Naungatabu) = (1-2) + (2-4a).
 - 5. Naungatabu - Naungatabu (Naungatabu-ni Naungatabu) = (1-2) + (2-4b).
 - 6. Naungatabu - Tabo-n te Bike (Tabo-n te Bike ni Naungatabu) = (1+2) + (2+4).
- Tabo-n te Bike Class {
 - 7. Tabo-n te Bike - Tabiang (Tabo-n te Bike-n Tabiang) = (1-2) + (2-6a).
 - 8. Tabo-n te Bike - Naungatabu (Tabo-n te Bike ni Naungatabu) = (1-2) + (2-6b).
 - 9. Tabo-n te Bike - Tabo-n te Bike (Tabo-n te Bike-n Tabo-n te Bike) = (1-2) + (2-6).

[length?]

The next thing done is to obtain the width of the maneaba. This is obtained by tying one end of a rope to the stone 2 and measuring off the necessary length along the line 1-2.

- In the case of a type 1 maneaba the length required is 2-5a.
- " " " " " 5 " " " " " 2-4b.
- " " " " " 9 " " " " " 2-6

and so forth, this length being measured out on the ground as an extension of the line 1-2. - Fig. 2 shows the length of a type 3 maneaba - an equivalent length is measured out on the other side of 1.

The total lengths of the eastern and western tatanga of a naneaba will therefore be:-

$$\begin{aligned} \text{Type 1} &= (1-2) + (2-5a) & 6 &= (1-2) + (2-4) \\ \text{Type 2} &= (1-2) + (2-5b) & 7 &= (1-2) + (2-6a) \\ \text{Type 3} &= (1-2) + (2-5) & 8 &= (1-2) + (2-6b) \\ 4 &= (1-2) + (2-4a) & 9 &= (1-2) + (2-6) \\ 5 &= (1-2) + (2-4b) \end{aligned}$$

we have now to find the height, above the tatanga, of the posts supporting the ridge-hole & known as Boutabu.

There are nine different lengths of the Boutabu and therefore nine different heights of the naneaba to correspond with the nine lengths and breadths. These heights are obtained by sub-dividing the now known length of the tatanga as in Fig. 3.

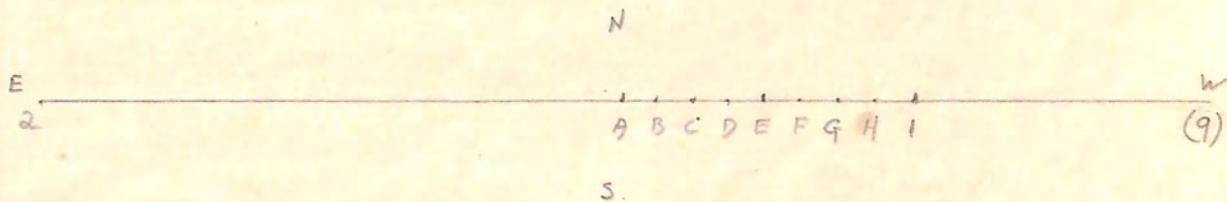


Fig. 3.

A is the mid point of 2-(9) and consequently the point where the Boutabu will be sunk to support the toubuki a ridge-hole. E is the mid point of A-(9), C of AE, G of EI and B, D, F and H of AC, CE, EG and GI respectively.

Now the height of the Boutabu, above the tatanga, in a type 1 naneaba will be the length from 2-A of a type 2 naneaba for 2-B of a type 5 naneaba for 2-E and so forth, the broader the naneaba the higher the Boutabu.

There is a name for each type of naneaba according to its height but the complete list given below is, so far as I can ascertain, known to only two men now living.

[1a E?]

should the height of the boutabu above the tutereys be as for 2-A the name is termed a Tokabona name, should it be for 2-B it is termed Tokamamao and so forth, the complete list of names, progressing from the shortest to the longest, being as follows:-

- | | |
|--------------|--------------------|
| 1. Tokabona | 6. Ngono |
| 2. Tokamamao | 7. Kariaba |
| 3. Mumakabu | 8. Karamatang |
| 4. Mumamete | 9. Tabera-n te Kai |
| 5. Teieta | |

Strictly speaking a Type 1 name should also be a Tokabona one, a type 6 name an Ngono one etc. but these niches are not always observed. However the builder stated that this always should be so.

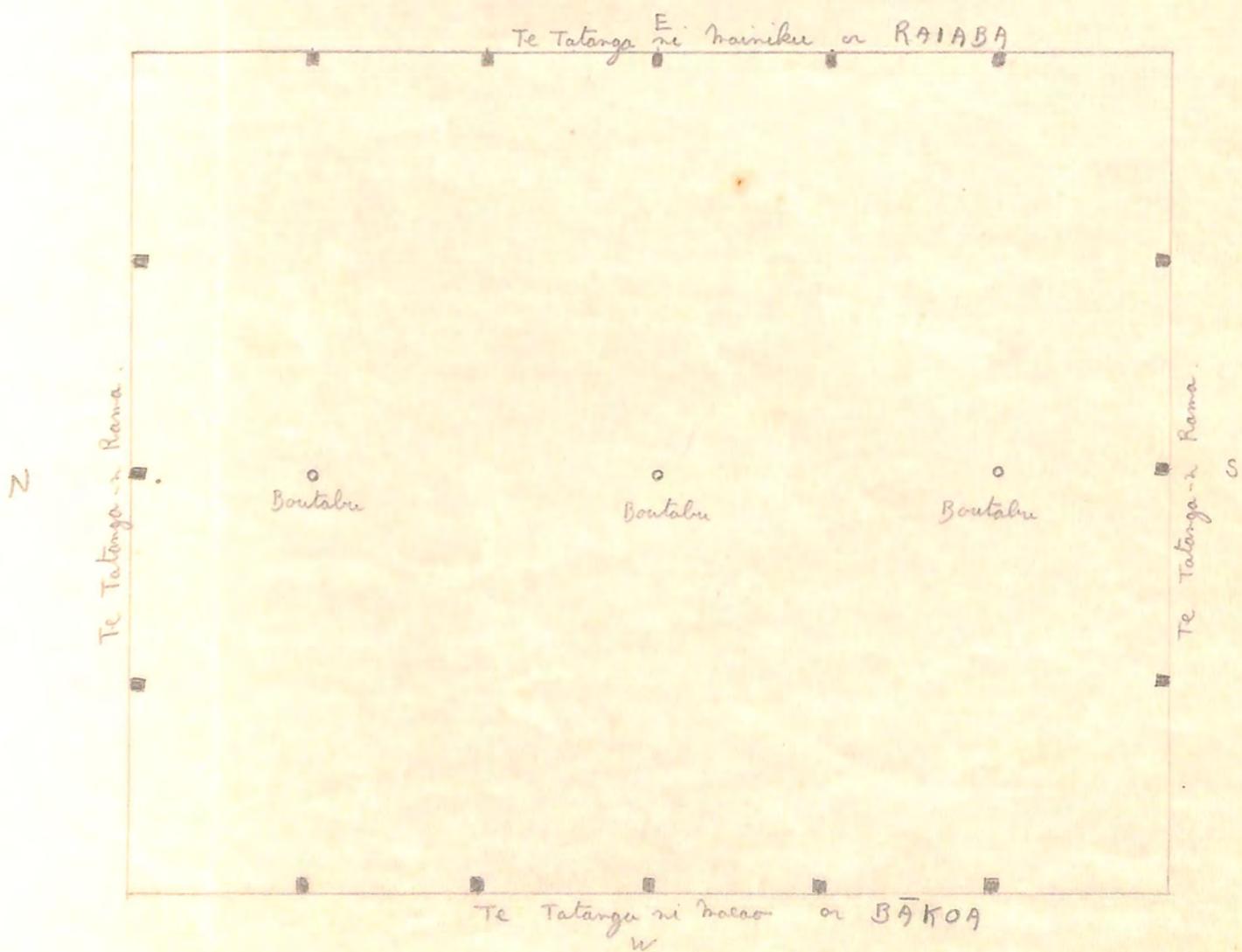


Fig. 4.

Nomenclature:-

The Roof-plate = Tatanga.

The Ridge pole = Te Taubuki

Posts supporting the Ridge Pole = Boutabu.

Aron - Teakawa.

Sebanga n aine. Ekona n karekekehi Teiha ae Tetakabe, ao Tebubu, ao Tebokaboka, n te Akawa aei. Ngkana ko kamarakea Sebangan-aine n Teiriko nikai ni Latinea i nanona, ao ko n maia i marawa.

Te taou. Ngkana ko kamarakea Teu, n te kika, ke Teiriko nikai. Ekona n reke Teرابono. Ngkana ko nako ni katikua i rarikin Teرابا.

Sebanga. Ekona n reke Teiha ae Teouru, ao Teriba, ke Teihanibung. Ngkana ko nako ni kaaki am Banga i rarikin Teرابا i nanon te Nama n aki karekeke Teamarake i nanona

Te kabae Para. (Te kabara) Ngkana ko hani karekeke Tebara. Ko nako moa n ai Onauti, ngkana e reke temana Te Onauti, ao ko kabaea i tabou Te kai. Ao ngkana Ekaoti Te Para ao ko anaia n kabutia ni kairia nako nanon Teban, are e mena ironu raom ae Tekauoman.

Te kabakoa. Ngkana ko hani karekeke Tebakoa. Ko karekeke moa am kakekekeke, Teatibu, ae ko kabaea mukana n Tero. Ao ko a maia nako marawa Songo, Tebakoa, E oreia ko ngkoe, ko a katika am bai ni kaira Teiha mai i nano nako Eta & tia ao ko ana am tau ni kabaea.

Te ai-Onauti. Ekona n reke Te-Onauti Ngkana ko Karaoa am Pinobino n ai Onauti, ko kabaea muwin am ao i matan Te Pinobino ao ko kamarakea n Tekauhi, ke Teiriko nikai, Ao ko kabetia nako am Pinobino i Marawa.

Lekibe.

Ekona n reke Seika ae Lemake, ke Lekoinawa,
ao Leku, ao Ika ni bane aika Warereke, ngkana
ko nako Nikiibe ma am Paene i Borovam, ao
am Riema i Bain. ao ko kaira am Bin n
te Bong.

Lekari. (ke Seibeibe)

Ekona n reke Lekari, ao Lekobe, ngkana ko
nako n Akawa n Se wa. I nanou Lemana, ao
am av. Sekora. ao matauna Sekabas, ao Kana
Seibo, ke Seimatang.

Lekaraun.

Ekona n reke Ika ni bane n Lekaraun n
Sebong, ke n Sengaina, ngkana ko kani Karaoa
am Karaun ko karekea am Benu ni Kamara
i Sari, Etia e Pinokahi mani Karaoaki iai
am Karaun.

Lekabara.

Ngkana ko nako ni Kabara, karekea moa
Abeam Se Onauti n Sataeia n te Bong. E reke
abeam, ao ^{ko a} tiba Akawa ni karekea Seingo, ao
Setauri, ao Seika ni bong, ao Sebaru, ao Sebatua.

Lekibakiba.

Ngkana ko kani karekea Seika ae Lekuau, ao
ao Sebaue; ko ana am kai Nikibakiba ao
ko nako ni kaea abeam Lemakauo, ke
Seirikonika to ko nako n tei i rarikin
Sena, i Sari.

Lekika

Ngkana ko kani karekea Lekika. ko nako
ni karekea am kai ae Paoua ae Lemanga
ni ma. ke Seuri, to ko nako n nakonako
i aon Lemaran, to ngkana ko nora bangana
ao ko Karina am kai ni karekea iai.

Sekae i Sari Ngkana ko nako Mikae i Sari Akea am bai n
Akawa i baim, ma bon ti Rabatam n nakonako
i Sari, Ao ngkana ko mora Seika i matam, ao
Kobiri ni kaea ni kabanga i an Seatibu. Ebon
bati Seika ae reke iai, Seibaba, Sekoinawa, Searinai,
ao Senevekabane. ao Ika aika kona n reke.

Sekatiki Ngkana ko nako ni Katiki i Marawa. Ko Kabaka
am bai 7e wa, Ao akea abeam ma bon ti Se-
buraeniman are ko Katikia i tabon am ao,
Ekona n reke iai: Seraku, Sebara, Seingimea,

Sron Se Ruoi Ngkana ko Katea Paim teaina
ni karieta; E a ranaki ba Setambuki.

Ao ngkana ko katea baim teaina ni Kabaua mai
eta; E a ranaki ba Seien Pakoa.

Ngkana ko Kaborava baim ni Katea n aki
karinea te aina; E a ranaki Seborauca, Ke
(Sebainiman.) Ke Sebaitannari.

Ngkana E tei Ieta Paim teaina ao ~~Tararakie~~
ao are inano e baraki. E a ranaki Serabu-tei

Suan Seruoi. Ngkana ko boa anibaim, ko na boia
ngkana e roko Semaneve are boaki iai. Ao tara
Taboni-baim n aki Karuberubca matam, ao
atuna Seteteve. Kaoka Atum nakon tenuka
ao manga Ruoi n ai aroica aomata. Ao ngkana
iai Se maneve are boaki Se-rae iai. Kaeta
raei Baim are ko na boa waem iai ba e
aonga n Samaroa tarana n Seno.

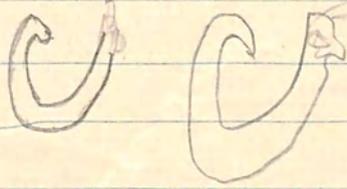
Searo Sevana Ngkana ko Ruvia, tai Karuberubea matam
ma boni Karekea taran are ko taraia ba
ko kona ni katekeaki man Seno, ba angkoa
ko mata ~~rekeia~~ rere ia.

Kaetan aron Atum. E na mena Atum n te tabo are taraia
matam, ba ko aonga ni mata temu! Ao e
ria ba ko na ana Sekuna i win ba
e aonga ni Karavira aron ngkana Korucia
ma ni Kasta rasi ba ko aki Kamwerengau.

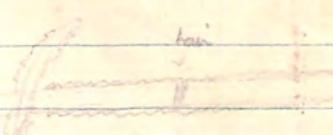
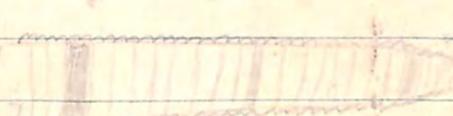
Aron reken Se Sari, n Wei Kiman.

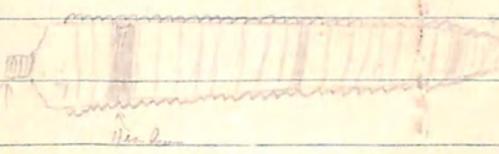
Ebon riki Se Sari i nanona, ngkana
e aki bali Se-ran, man e Ewa Seriringa.
ao e riki Se Sari i nanona ni bali; Ebon
anaia te somata n aki akaka, n ai
aron are Etangira, ao aka Sekainga
baina, ko tauta tevana, te Utu tevana.

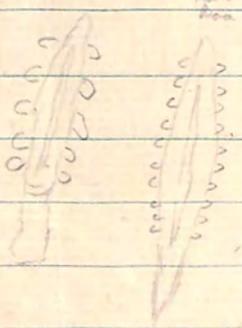
Fish Hooks.

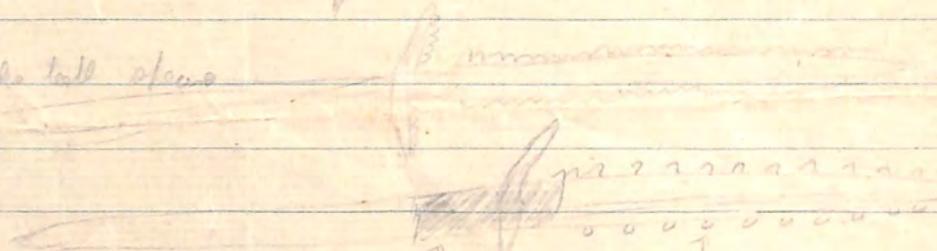
- 11660 1 1 Palm for Greenwich in Caribbees (small lot scales)
- 15845 2 1 " for Uru (large scales) EP
- 11658-g 3 2 " for Dutch (small scales)
- 15860, 15887 4 2 various Bantia? Kelly hooks for Tulehu. Bone barb European leadings
 hibiscus bead? Small attached to round holes also? EP
- 11661 5 1 Kelly hook for Greenwich. Ellis round attached.
 Small barb of head-shell 
- 15852 6 4 Pearl shell fish hooks for Tulehu  EP
- 11668-g 7 2 small 4
- 15850 8 1 coconut shell hook Tulehu EP 
- 15851 9 1 Bone ditto
- 12729 Vio 1 stalgate fish-hook (Bantia) for Ocean Bone barb
 Hibiscus bead & leadings? Ellis
- 15853 ✓ 11 EP roll of well-made hava fishing line with ^{small} bent-nail hook attached. Giddah

Stems etc

- 14184 1 Shank with sword with narrow, open-like blade - G 
- 15862 1 ✓ 2 Horns with slab-tooth print (EP) G (2) 
- 15862 2 ... 
- 14182 3 Horns and with edges & last good toothed
 bond with horn & horn
 3 tooth lines 

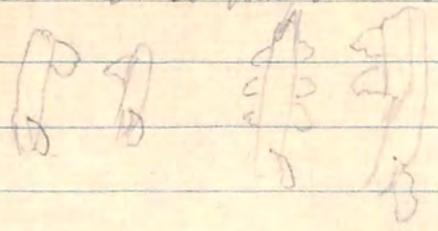
- 14038 4 Broad sword edged with small slabs tooth 

- 8564 ✓ 5 2 light horns (Ecluse) as E.P. 
- 15862 2

- ✓ 6 3 fine long wide tall stems
 edged mid-rib
 separate beds 

very ridged each tooth reflects band
 bond will do find the cross large tooth
 in the the reflect

The one in the corner case is similar to the base of the tree.

- 7 4 various light horns Bata  all E.P.

Mataurua te Pihle.

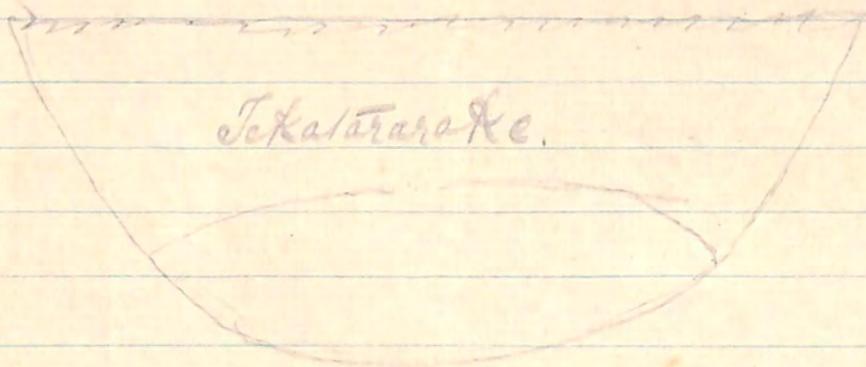
TE KATANGAINGA.

Mataurua te Pihle

TE-RUATIU.

28th Nov 1941
M. K. K. K.

Tekatarara Ke.



To smoke the Toddy Shell.

Make a hole in the ground, about 6 ins across & 9 inches deep. Put in some small pieces of rotten pandanus wood, then "te ing", already lighted, when the flame is strong push in enough "titi" to almost fill the hole. Allow this to burn for about 10 mins. Then put on top of it some dead "Tessitani" & several handfuls of small white stones. On these place half a coconut shell inverted, with the hole uppermost so that the smoke comes through it.  Now place the Toddy shell upside down on the inverted half shell so that the two holes are together, thus letting the smoke go through the half shell into the Toddy shell. Prop in position & leave for 10 mins or $\frac{1}{4}$ of an hour.

Why is it necessary to smoke?

Shells

Scientific Names
SCIENTIFIC

Tumara = Bubble shell - Bulla

Bwere = Violet Snail

Bwere-rena

Bwere-tika

Buroa

} Different kinds of Cowry
including the spotted Tiger Cowry

Wiaau

{ Club shell
Wentle Trup
Mitre
Shindle shell

Bu

Tau

{ Triton
Helmet shell
Spider shell
Harp shell

Tau'alone

Painted Lady (to sell for a Bu)

Kabinea

Anger shell

Ki-kakar

Anger shell

Tunet shell

Lei Robu	Doris
Ubara-n-Ha	Limpit.
Hunataamin	Wanener
Kabunereel } Bure }	{ Sea Snail - Natica Crow - Natica
Baraitoa	Top shell - Trochus.
Kaluku wa (The Top).	Cone.
Koikoi-n-Tarawa	Scallop.
	Naoko's ark shell.
Nakoarikiriki	Cobble.
Koikoi	Trigonia.
Barao	Oyster
Ambunga } Nestora } Batua }	Clam - Tridacna. (different sizes)
Kiika	Actopus
Rero	Squid

Tua Paper Nautules.

Boatimō - Sea Urchin.

Koatunāia Hart Urchin.

Kiika-n-ang Star fish (including Brittle star).

Skills, use of

- 1. Te Koukuntari
 - a. Used as a scoop for scooping out coconut meat from the shell.
 - b. Used on a Kautusi (coconut grater) as the grating blade.
 - c. Used as a scraper for scraping lobai.
- 2. Te Koukoi - a Anti
 - a. Cut and used as a pendant.
- 3. Te Kitarawa
 - a. As a Pandanus and coconut scraper.
 - b. To scrape ron root used in dyes.
- 4. Te nikatona a Te hikabebe
 - ~~a. as a Pandanus scraper. No use.~~
- 5. Te Kabun
 - a. No use.
- 6. Te Kourama
 - a. ~~To use~~ for cutting leaves before dividing for size, in abundance or wi ni takoa.
- 7. Te hikarikiriki
 - a. ~~To use~~ see 6.
8. Te hikarewewa?
9. Te hikarababa?
 - a. Scrapers.
10. Te Bueei?
 - a. For splitting Pandanus leaves into widths, in making mats.
- 11. Te Bure
 - a. as a decoration on canoes and in dancing.

12. Te Tumara?

a. as a tama-a niri in the roua.

✓ 13. Te Burewa = Cowrie shell Burewa?

a. as a tama-a niri in the roua.

Te Hana is the generic name for all bi-valvular shells.

✓ 14. Te Mese

a. as a coral decoration.

b. For smoothing the stringing on a coral.

✓ 15. Te Tau (79)

a. as an oil fower.

16. Te Buretika or Te hematenin?

a. used in the game Te Boran, sb. also in Kabui-a
Tanakai.

✓ 17. Te Buretin

a. for necklaces & kalāu.

18. Te Houo

19. Te Kabinea

20. Te Buki kakaang.

21. Te Kabau

22. Te Heang

23. Te Rotu.

24. Te Aubunga

25. Te ŋibanikekoa

26. Te ŋimaka

27. Te Kamangin.

✓ 28. Te Kabau.

a. Tauatava lures.

b. Adye.

Te Kawaruuwaru when
c. 3 string together & shapen under the water
to attract sharks.

29. Te Raiiau

30. Te ŋekarimeci

— About Travelling —

I

Get ready to day to travel, through moonlight.
The wind which blows my canoe ^{pail} is fair. It was
sent from far lands by the sky. I cannot be
lost, or dead, but I can't hold the end of
Beteriki, the yellow place Katatake with
the wind from Marao. I shall untie the floor
of my outrigger for racing. It sounds.

A bird fell on my mat. I will deride another
sky bird. It flew to the north sky, now. I
must wake up my foe is coming. Somebody
hits Tabiteneva. The fish that lives among
the sea-grass. Carry it on we will find
another fish that can fight it, and beat it
from the very depth of the deep sea. The
passage is lightning. Something will be
happened. I wish I'll be succeed ^{to reach} the end of the
sky bird's wings. My luck for fighting
when everybody gathered together. The
People run away when I spear them. I
got the man that leads the journey. I
speared him on his home. He will hear
the sound of the thing I am going to
spear him with. My luck will be
on me my god remember me the sun
and the moon. Put a bird on a memory
stone

My songs movements are very good they go
well nobody can tell. You picked this day
for ~~the~~ journey to go and out the side of
Heaven ^{us} European lands and Samoa. Come
together those who wish to join the journey
to South. This will be my memory name
to heaven's. Gost the sun and the moon.
Paddle my canoe its broken by Tahitua
a man who leads the journey departed from
his home the sea black bird said: Put
it down don't take a journey when its is
stormy. Those who are ~~small~~ travelling
can travel anytime, because they know more
than anybody else about travelling. They
also know the foaming of waves in the sea.
He went on my canoe the magic canoe
my second is the unknown canoe. My
canoes were gone with a man. I was
lost between Kuria & the land. I wish
my outrigger floats on the sea fern from
Makin the leaves of my Land. Buta get
some more from Rikta with my place
the heaven lightning. You know the time
which called "te adial, te manua" in daybreak
the place of my mast is losing when I
let my sail ropes go. The canoe is near
to ~~the~~ ashore. Pull down the sail

The travelling said. ~~Let~~ Do! Look it
around we will have a meeting to sound
the bird "to take". We arrived.

Te Kai-ni-gaki

Strip the "moko" from a coconut leaf. Take a number, about 20, & bind the tips with kora, then take a few more & bind round again & so on until the bush is the size needed.

COUNTING, WEIGHTS,

MEASUREMENTS AND

COLOURS.

(7) Counting by tens. Anything when in a hurry who they are flat to be counted.
 Tera=2 Ma=4 Ten=5 Ranga=8 Rima=10 (one or the other out and the counting)
 stitocyan " " " " Rina (with the out at so full)

They do not go beyond Rima beyond that was desired for Fava or Hama's business.

(8) Counting numbers, Hama being, animals, Bonito lines, Birds, insects.

Tera... tergan

(9) Fish smaller than the number in bar

Tera... teraki

(10) Count in Te Bueca, length of hot rods for cones or of Ra for kites

Tera... tergan

(Part of short for Terakana).

(11) Cones, ships, kites, bicycles. (anything that moves) Taka. Teams in ^{at} games. (Kara, Kabesoko, Gudo)

Tera... tergan

(12) Teams in arena, kara, arena (all goes not into 11). Roma. Gudo.

Tekanama... tergan

(13) Anything that is ^{like} cut into slices for the kumato, pelano poles.
~~cut~~ (Kai, Hapto) etc.

Tera bona boten boang (no further)

one stick 2 half sticks 3 3/4 sticks 4 1/2 sticks.

anything divided into slices small fishes or quites.

Bua Bwana Luente Luening.

anything cut into slices cross. Toloco, big fish.

Karua huter krong

Counting.

(1) Counting Beans or any account packed a unhusked.

Tearana, nawa, tenawa telwira, walwi, teilwi tengaur, urgaur

(Note - Tengaur = 100 and rot 10, which is telwira.)

tengana, nanga. tealu.

	Counting atibu (in 5 pieces of land)	all round blingo	Houses, case sheds	Rino, Kue	Bruto	
(2)	Tearana	telwira	tebulua	tengana	tealuu	tekuni
	1	10	100	1,000	10,000	100,000

teca in N Tetaro in South.

1,000,000 (There is no Motor etc. It stops at tetaro.)

The old men can suggest ^{practical} use for the higher counting.

Tetaro is the Sad i.e. the sand of the world which cannot be counted.

big the tomadunai

(3) Counting Sticks, all large Ewok (Kua, Bakoa, Tot Hwai). Fishy torches also weighted.

Tearana tengaur tebulua like (2).

(4) Counting Trees when living

Tekeana tengaur

(5) Counting Fishing Torches, ^{unlighted} young ^{Pandanus} trees before bearing, ^{small} creeping plants.

Tearana tengaur

(6) Baskets and basketfuls

Tekeana tengaur

(14) Sketch of Balai

Tesoro teluma

Fishing in the Lagoon

Individual fishing was allowed. But communal net fishing was only allowed in the clan fishing ground of the fishes.

If a clan objected to fishing for his clan grounds, he could put up ^{his} Kamirovira, a coconut leaf on a pole - then no one could fish there.

Clan grounds

1. Te Baboa (any part of the lagoon that the others didn't have)
2. Antemi (Te Tanageri ni ala)
3. Te Tikini vae
4. Te Ang & Anti (half way up the reef)
5. Riko tengetenge

Maraka = Te Maraka ni lai

tanaka = 2

ao raka = 3

rua raka = 4

ao raka = 5

na raka = 6

Tengara a Toga

tanga

Tanga

aanga

ruanga

oanga

itanga

ruanga

ruanga

tengara tanga

Measurements of size.

Tua = size.

1. ^{Tua} Tuvua Tua → te kiikui = ~~a large grain of sand~~ a small pebble about the size of a little finger nail
2. ^{Tua} Te, ki noimoi = The small immature nut.
3. ^{Tua} Te, Beti = one chewed podanus section - the best part only
4. Te To ni Bai = one fist
5. Te Karua → ni Ben = one husked coconut. ^{one best as the first.} ~~was one fist or a little~~
6. Te Tua Ben = one unhusked coconut.
7. Te Karibu → ni Tou = a small podanus (~~section of date~~) chufe
8. Te Tou = a Podanus chufe.
9. Tua → te baene → ni bon = one arm curved round (an armful).
(Sail Basket)
10. Te baene → ran = 2 arms curved round & the fingers tucked (2 armful)
11. Te baene → ni karua a = 2 arms outstretched with the fingers curved round.
Te baene → ni au

Measurements entered

Te Aue ni Bai or Te Uke ni Bai - a finger nail
 Te Manu - 2 tabimbar - for tip of finger to first joint
 Manu - 2 tabimbar - " " " to second joint
~~Manu~~ Tenanu - 2 tabimbar - " " " to third joint
 (relationship to whom etc not done)

a day's journey of land for navigators.

Measurements of Time

Te tōi ni ngani - very slow time. "
 Kaungara ni - not before 5. When the cockles close
 Te Uau, mainika - when the sky begins to get red. (First blood of dawn)
 Te no-rata - when they can recognise each other's objects
 Te oti-ni tai - Sun up.
 Baka uke-ni tai - when the sun is well up.
 Tawau - midday.
 Tani maeso-ni tai - afternoon.
 Te Tai ni Koro Koro - Truly cutting time. 4-5.30 p.m.
 Bungi-ni tai - Sunset.
 Te ai luhutea - Twilight.
 Te ai no - Darkness. 7 p.m.
 Te hukani lung - Midnight.
 Te aiahi = one lunar month.
 Te Ao = 6 months.

No measurement of Value except Land.

Measurements

Te Rakara - from tip of thumb to tip of middle finger

Te Arua ni bai a finger's breadth

Hasi ni bai

Tenai ni bai

aa ni bai

huai ni bai

10 Te Arua ni bai = Te Rakara
(Togamu ni bai)

Te Rakara

ua raka

ten raka

ā raka

rua raka

oro raka

iti raka

wan raka

ma raka

teraka

terogamu = teroga. (not on Ellice 9.)

Teroga = a bathon = from tip of middle finger of right hand to tip of middle finger of left hand when hands are outstretched at level of shoulder.

7 1/2"

1. Te naroku ni bai = from tip of middle finger to elbow.

2. Te namata ni bai = " " " " " to half way between elbow & shoulder (underneath shoulder muscles) used & necessary below.

3. Te arua ni bai = " " " " " to shoulder.

4. Te Bwenasua te aorata " " " " " to middle of the chest.

5. Te arua arua nowa = " " " " " to the opposite shoulder.

6. Te Buki ni bai " " " " " to the opposite elbow when the opposite arm is bent so that the hand is on the chest.

Te Nga

Bindings

1. Te Boutim. For tying the roof plates on to the rafters
and as a decorative binding for the ends of the rafter poles
2. Te Kabaca-n Tanai. For bird's shell adze to the bolt and for joints
3. Te Taera-n Roata. For tying teringa (the wood fish hooks) on to the line
4. Te Hoi. For the roof of a house. Occasionally a canoe
5. Te Hoi bangabanga. For the beams of a house
6. Te Buki-n hoi. For house beams, canoe.
7. Te Taera-n Roata ae roloa. Same as 3.
- 8.
9. Te Hoi and Te Buki-n hoi Maui. Same as 4.
10. Te Buki-n hoi. Same as 6.
11. Te Timou. Tying the cross rafters into the pitched rafters.

Trunculas

Colours

Reed = Whama

Manama = White

Poro = Black

Te Kano ni heary = Color of the Lagoon

Mawawa = Green

Babolo = Yellow

The rest use all Riri colour (See Riri)

And in Benito Hoko (See Benito Hoko)
But these are like the one in mistico.

Wa H-lects

Bara-n Tauti

note from skin of Te Tauti

Fish skinned. skin filled with sand and hung up to dry for a few days
when dry fitted on head goes down at back to shoulders or if small
either cut over backed to allow eyes nose & mouth to show. Tied at
each end by jaws and ends of string held in mouth.

Reef Rights

Benu Island.

1. Te Toki ni Wae (nei aitia. Te ~~ma~~ Ororo. Te areu. Rawa-n An. Te Aoo.)

Le Bain Aoraki

Bain Sewaimata, Serana Sekuabe ko ana Kanwana, ao Kotāwāia i an Seriringa ao Katikua i nanon Seram ni Kaburia ma ngāia, Etia ao Katena matan tē waimata iai

Bain Semka ni wi Serana nan Senon ae Sewaa, ao Tenua boton Sewao. Ko botia ma ngāia ao ko Ikuā, ao ko ongira ranna ao ko a ana Sentana Terani-bue ao Kaitiaka moa am Aoraki iai, Etia ao Kareā nanoni wina iai

Bain Se Sona Ko Kāra wakan Senon, ao ko ana kimana Taberana, ao ko Ikuā ao Katikua i aon Se Sona. ao are wakana Katikua naba i aon Se Sona, ao Kaki bana i aona, ao Kabutia ni Kabutika Se Ahitu ao Katikua i aon Se Sona.

Bain Se Kinaka Ko Kaara wakan Senon ao ongira ao Renganna ma Terani-ben ae aki aokaki Etia Kabira Kinakan am Aoraki iai,

Aron Se aine, ae nangi bung.

Ngkana Emoani Pikoutou E weteaki tē tū Riring ba e na Kamarana Pirotona n tūnga Imwin ane ngkana e a maraki, ao e a manga weteaki tē tū Kaiia ni ki teaki tē tābo are na bung-i-iai. Ao ngkana E e roko natina ao e Kaitiakaki Se Sei i Sari, ao e Kamoaki n nan Senoimoto, ni Kaitiakaki wina, Ao ngkana e Kamoaki n Sari. E a onga ni bana-raoi n anene, Etia, Aokabaeaki Piroton tē n Ote Iria ba e Kawa ni Kaubiroto, Ao tekatēka n aki natonak.

Tentias

Sebailaerere

Beru

Baita

Tebuororo

"

"

Hamakaina

"

"

Te bai n Aoraki.

Aran te Aoraki

Aran Baina ae Karaoaki iai.

1 Te Kimiman

Wakan Senon, Ao Semannang. ae Korenganna
mangaia, ao Te bā, ao ran Sewani ae Ko Ikua ni
Kamaraua, Ongiria nakon Senana Ao Ka-
-burua n te ai. Ao a toia n am Patoro, ao
Katūtūa am Aoraki iai:

Katēnana

Ngkana E aki mao, Pān Sento ae maii
ao ae Uraura. Ko Kara Kuna, ao ongiria
nako nanon Senana, Ao Katoroa n Te-ai. E tia
Ao Katēna manukan am Aoraki iai.

2 Te Kabuebue.

Wakan Sekaina ae a tiba bakati mai Joma
anauna Semanuku-ni-bai, Ko kona naba
ni Kanarerekea nakon anne: Ko Ikua
n ongiria ao Kamoa am Aoraki iai. Ao
ngkana E a tia ni moi iai ao Kabiria
Ana Mangoban Te-ni ao raenaia ni Kokoa
nanona, ao botia i nanon Seing, E tia ae ongiria
i avon Rabatan am Aoraki, E tia ae Kawā-
-etata n niria i nanon Se-kie ni Karokoa e
tinako maonona, Ao Kabuta Rabatana
n te bai anne ni Kabiria iai:

3 Te Kaniwi

Ko ana Taberan Senkin 3 Ao Ko Ikua i nanon
Senana. Ao Kaki i nanon Seing. E tia
ao ongiria ao kanoa am Mangho, ao ana
tētāna Sari ni botia ma ngāia, ao Katoroa
n Te-ai. Ngkana Ko nang Karava am Aoraki
Anganna Sari tētāna ba e na karakoraia
E tia Ao anganna are Ko Karavia ba e na
Karakaraia n ai avon anne.

Aran te Aoraki

Aran baina ae Kororaki iai

4 Sekaboa

Wakan Sewao ko anaia n Seingabong, ko ana
are tara Sai, Ao ngkana ko anaia i muwin
Lawanou ko ana ae Sario, Etia ao
a naia ni Ihua i nanon Senana, ao
Ongiria i aon Sekaboa.

5 Serangirang

Ko ana Setabakea ae memena i taberan
Sema. ao Roatan Senon. Setabakea n nei
ao Roatan Sekaiao.
(Kaitarana i Sari) ko ana Sekikannang
Setakataka ao Sentabaniban, ao win
Sekorikori-ni-Koinava, Etia ao ko
ana tentana ranin, Seben ao tentana Sari
ao ko Kaburoa n Se ai, Ao rimwi ko a nai
baikerei ni kaki i nanon Seing. ao ko Kaburoa
i nanon Seran are ko katoroa n Se ai, ao
rimwi ko anai tenua ataman te mate
ni Karca nanon am Patoro. ni botia
ma Seba Ao ngkana e roko sorakin te
Rangirang Ao ko Kabiria iai.

6 Niman Sekongenge.

Ko kaika Semaniba n ana moantarina, ao
ko Kansa nanon am mangko, Etia ao ko ana
50 ban Sebers, ko Ihua ao ko Kaburoa i
nanon Seran are ko Kaburoa n te ai, Etia
atua n am Patoro ao angan am Aoraki
ba e na nima n tabentaia

Sevokan te Aoraki

Ngkana e teai ni maiu am Aoraki, Ao ko
ana tentana Seran, ao 50 ban Seruku ao
50 ban Sekiaou, Etia botia Ihua, Ao Kaburia i
nanon am Patoro.

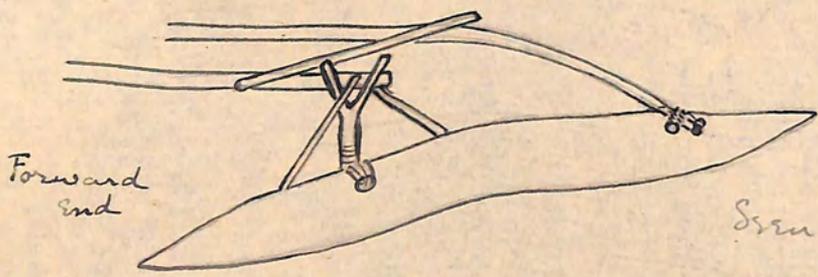
Aran te Aoraki	Aran i vaima ae Karavuki iai.
7 Bain te Maraki n atū	Ko ana moa Seran, ni kahi i nanon am mangko. Ao rimwi ana Serangoba Raenuaia ni Kahi kumna, ao so Taberan Seuri, ao Tennai wakan Se-Aongo ao s uana ko botia ni Ihua ongiria i nanon am Ran ao atoa n te Paboro. ao katutua Atun te aoraki n te bai anue.
Katokam te Aoraki	Ngkana tao e aki toki Aorakina iai, ao ana tentana Tari ao tentana Sebā ao s taberan Sema. aika uarereke ao tentana him-ronan- Senana ae mena i Tari. Ongiria nako nanon Sekoikoi ao kangibuea i am te ai. E tia ao katima i nanoni Pairim te Aoraki anue.
8 Maraki ni mata	Ko Karekea Tentana Sekareve ae aki renganaki Katima i matam.
9 Sebo maiaona	Ko Sebokia n Tari ao ko botia ma Seran ao Renganana Taberan Seuri maitina ko ao ko a tebokia iai am Aoraki Etia anue Ao ko ana Himana wakan Sebongo. ao ko Kkota kumna ao ko Ihua Kahi n Seing. Ao Suruturunga i nanon Sekareve. ao Kamoa am Aoraki iai.

Aran to ArokaAran to Ham.

1	Senteute mane	Se-Boata
2	" aine	Se Likaobian (Eraka)
3	Sentanini	Sekarinaba
4	Sewao.	Senareau
5	Seboi	Semaniberu
6	Sentca	Seberu
7	Setarai	Setikunei
8	Sehiaou.	Sekinwongo
9	Sekaiao.	Sennonnon
10	Seruku	Sebabatia
12	Semaunei	Seuango.
13	Seuri.	Semaninnara
14	Semao.	Semoku
15	Seren	Seio
16	Seukin.	Seitei
17	Sebero.	Sehitiba
18	Seitai	Sehun
19	Sengea	Sekeve
20	Searoua	Sekiriri
21	Seango.	Sematawanaba
22	Setongo.	Semankiri
23	Senon.	Sehiahia
24	Sebukare.	Se Sirivenei
25	Seinoto.	Sehibui
26	Señi	Se rabaraba
27	Sehaina.	Sekimoa
		Sekabane
		Setake
		Seña
		Setinibu

Canoes; outriggers attachments; Bauabau

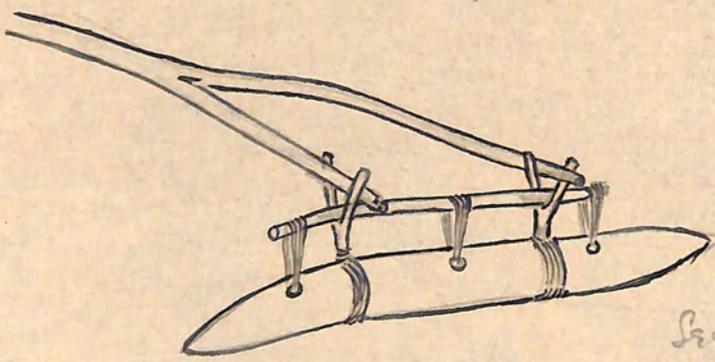
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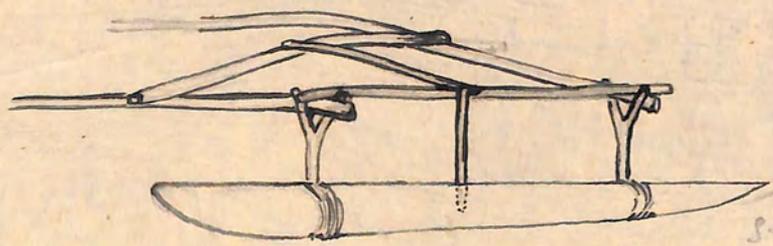
Forward end

After end.

Seen at Tabiang, Bauaba
19. 2. 22.

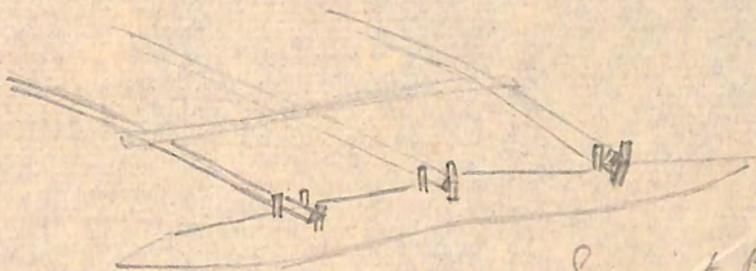


Seen at Tabiang,
Bauaba, 19. 2. 22.



Seen at Tabiang
19. 2. 22

Canoes Outrigger attachments. Ellice.



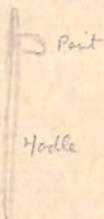
Seen at Bauata
17. 2. 22

Surgical Instruments.

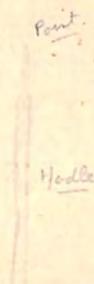
Banaba.

Te Moa-moa or Lancet is made in two types - both being made of Sharks teeth.

1. Te Bai n Oro.



2. Te Bai n Ewa.



1. was hit down with a stick while 2. was jabbed in.

Both were used to cause bleeding.

Bon le'wi ni Bakoa



manim le'mae le'parana



manim le'mae le'parana



manim le'mae le'parana



Bon le'ba ni kalamaroa



manim le'mae le'parana



June 30th 1933

Dear Tukarawa

Taiaska, ba o ak

tu. reor an Tamae

are ko tauria ba

akea aenna tarua

reor, poua

Yours Affectionately

Kona kabai!

Jasena ha

pen wri rek:

leikarawa

Dogouti

leitoa.

Beru

Banaban Material Culture -

Miscellaneous Notes.

1. ~~2~~ 2. ~~2~~ 2. ~~2~~
Tangi ni wane

Entered on 185 so that it is a saddle

2 (10) 2 (10)

1 2+5 (5+2) 7 2 CE

Tangi ni wane

Te wane

Te wane ni wane ni wane

Te wane ni wane

Te wane ni wane ni wane

1. What kind of canoe and paddle was used before
Tangi ni wane

What was they made of

How are they made

Who remembers these things

Who are they last made and used

4. How many kind of canoes are now used in Basoko?

How is the outrigger attached to the canoe
according to the Basoko custom?

5. Can any one go in from the lake and make
other figures.

6. Tangi ni wane.

Te wane

Tangi ni wane

1. Te Baeba fu Fishing:

Hibiscus wood a tot

Te ~~ka~~ n. o. h. a. i. n. u. d. e. n. t. e. o. b. a.



Te Ma 5 ciao flake.

Te Koroa the tree

Te Moeai who dead.

2 utuiggas Kai ni Moeai.
or Te Moeai.

2 bottles a less in length. 12 ft.
about 3 ft in width.

Aran bain te Waa

Te Buto (te Kabi n nuka

" Kabi-ni-kateke

" Kabi-ni-mango

" Rai The Hull

" Aiai The uls

" Kiara-motu

" Kiara

" Naniman

" Toto

" Rama

" Takā

" Kainao

" Kain-aomota

" Bai

" Tabo

" Bukin-taba

" Botaka

" Tunga

" Anima Baile

" Au

" Amaki

" Anrama

Te Kabā The ladsys.

Podilles made of the Te Tame
all else Te Hā except the rāra

The outrigger was attached by a log

used for Banter fishing and for visiting ships
& bottom log

Aran kunin te Kaneati

Te Kunimam ^{5.30 at} ^{7 at} ^{pure white} (E bainaki n teiangabong)

Te Kuni maerere ^{new} (Eurauro ke mainaina ^{striped})

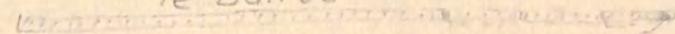
Te Kuni makoko ^{mixed coloring}

Te Kuni atimata

Te Kuni bo ^{pieces with a little yellow in it - 3/23. as}

Te Kunimatoa ^{se} (E bainaki n te tawanou. ^(reddish))

Te Bairoa



Kaneati

Te Abo-Teninga

Abokin Te Bairoa, man (te ¹teninga) uanga nakon te bukini bai,
uanga nakon te ²bwenoua, uanga nakon te ³manokunibai.

Te Bairoa (Te maeai)

Te Abo. (Kunin Te maeai) arana Te marai

Win te Kaneati (te Ri, naomata.

Buruburun te Kaneati (Te marai.

Taetae ni Banaba

Nakomai maro

Maro

Kamaneaki ngkomi

Ani kauriri

Tiang-waki

Kama bareki, ngkami n ota

Mai Tabweoa

Mai Uma

I kākāi

Kabiri mā-ka-ko

Auā

Aua, tia buanna iroumi

Kabuti waemi 'O'

Tia riroum mai koo

Tia bo n ota riki

Tia bo n tai rikiriki

Ea korā 'O'

Te waa ni Matang

Ea mama tabon kaneati

Ea tabān

Te Kānoa

Te Tānā

Te Kiuroura

Kāu

A bwe Kirā

Taetoe ni Kiribati

Nakomai rin,

Karābai ngkami riki,

Rimoara.

Tinang nako.

Kama nako-mai ni ngabong.

Mai Meang.

Moi. Maiaki.

Kawaetoka.

Akea, ngaira

Akea ngaira iroumi

Koraki (ke kōnenei

Tia nako ao tiaoki

Tia kaitibo ngkana e tawanou

Tia kaitibo nakon te tai riki.

Terō

Te Kaibuke

Ea roko i rarikin te oba.

Taekan te Kaibuke ngkanaebitok

Te Boti

Iowawa (ke Te,un)

Te kai-tatan

Tia-nako

Akea korara te iko (akea te ika

Flying Fish

The flying fishing will no more Te Karo
" " will a more Te Tei, because they stand of
a fatter touch used in Te Karo
about an anno' chaete in Te Tei.

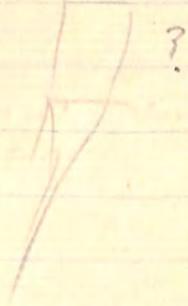
The whole village may go out, the first to launch then
come being the leader 2 to 3 to look canoe
2 foddlers or 1 foddler and are steady with a teal in the
left hand & a net in the right. in Te Tei.

In Te Karo are stads in the middle & the row are sets with the net at
3 — if only 2 are stads & are sets & no are foddles.

Neto Te Baki tenaa



Te Baki nona



Te Roa

Te Tei. are the 2 kinds fishy eggs a Baraba.

The difficulty about Te Roa is the way, its duck & drake is the right
name. If it does not travel right in the water the fish
will not stick in the Kaneehi.

sactes tenaa baka-ra. sactes 2 a 4.

& the staly, in the chest or hand & it will knock as on.

Te Kati in akoi is the topula now goes to this fish Te Ahi,
only to the way are pressed in against one's chest.

In the old days once a fish was on the beach & it got away the
canoe was upset as a punishment. Now as is not allowed
to fly fish for 3 days. The fish when it gets into the
water again scares all the other way - like sheep.

Te Tu is had in a net & if the
net shakes the flying fish get frightened. on moonlight
nights the fish will fly high so the net must be held low.

about 5:30 p.m. at night - in the town the Te
Kababa - the flying fish all had together. at night they
only keep 10 or so in groups.

In the dark nights there are plenty of Te after the
flying fish - falling the - but there is no way of
getting them.

Taberna had the right of deciding what birds were to take
place & he "spoke" to the "roa - or la akai".

Te itua nra te ruberube n ra e itua; n nana e iti n ra
nana n ai a nikiari toani waeu e e ruberube n ra
ni Kauatato mea bon nikiari bebeni bairu^{oo} n nana
abo ma kain roa, mea tai kakawa kanoani nana naba
are nke boni nana; ma tina katokitoki nana roa ke tina
Karei banibanra n tenana te ati bura, te kura te ati mai
e mate mai aon anau (e nene baina) be inao mea barite
n nara bebeni kono te ati, bai roatini buakon te ni
Kananau Kauatato n rasiroina be nirikana orana te ati
ba are bitoa ibebena mai nana be mate be un ra
beia be kuaakia, kam ai karei taboni baia be tirini
atuna te inan atu e matu moni nana e moimoti abona
te abo ni maiaki tenita ni kono atimivan e be berabe
ian namakaina nke bon e kono au kaneati te koro
nake te acae ni man e i katikia i manenan ban taeta
noho natim ao; ai toki baina ma bukiana ni katanina
be kebo unana n te eba n tabonibai e taritaba kuni
au kaneati te ian te na te ritaba n atiburu maran e kaboa
be wa man e kiki abona kaneatina oron bai tabekia e
mate mgi aon anau e buriburi n nara bebeni
i rou be kibanako bernao kasa

Kalea nra kaina ma roa Be tirini abona
abo tikui mgi ananau ke te abo tikui man
amomoro bne bo bne bo te ati buru ba
rae taboni baina Be bakara marawa n

Ke kua... Imanu...

a tainua kana na ma kava reo ana
Ternane mas ma karaba ba I karava mas ba
Iaki kactia ba I purukakina mata Ternane ba
bukan te bain roa e mata be litura e mata
wa te ati o Ilika kama ma roa Be sinca
kanang te kinibo te kono van tona te kumtara
neu te van te mamam te kinu ma pa ao ma
nim aon ha taboni buka ba ma ka karava
ake e namoa kachurea ba I kamikamai moan
ba ikata aon e te bokia e bukoa te reo ni buka
Bo no man e a beti gu kama e roan Tebaniburea
e e banno mai ba e na yta maenun an te
buka e utai ba maenun bukan aon tengri te
a kakaru manina e roan kana natim biba
narena be nanaren taka buke buka holo e bua
kon te tauman e kua mas marawa ba manin
aon ho e roa e kaitinako e roa e aon ataka te
rouli taboni kama e kabuina be buka bakari
te karau ayakimake e aon wai e roa ma kono
e buka boloran reana ba maroni bonatara
e nanon te manaba e taboni buka bei e aki abau
e ruru e tebuloki ni wae e na kaitis e na tabe
ke roa kama e na buka amoa kama te nimimo ni
bukan e roa be nananau reka ma e nararua e
na tabe ke mas kama e na karua kama te manina ni

hukuna kahuna e te e hurehure n. rora ha ha
maon te ika e tereina e ani maluluna te an
e. hakiwai atna ma Parana be tiri ati wau e
tahi ati i maon te nna karaya te ati Tai kakaba
kahaka maia ahea e lura e kahaka tenaei o nna
roam saba are ika te nane kotahi ati kana
kaiko aku taua e mala ma tahi ka kahaka te
nai hano te nai ni kalaki ke tua e on te ni me
a ka hua te hai ma koakai kahaka te ati
te nane