ORIGINAL ARTICLES.

Solomon Islands. With Plate L. Rivers: Quiggin.

The Solomon Island Basket. *By W. H. R. Rivers, M.D., F.R.S., and Mrs. Hingston Quiggin, M.A.* 93

The Solomon Island basket, with its peculiar patchlike base, shown in Plate L, Figs. 4 and 6, has been somewhat of a mystery to anthropologists. It has even been supposed that the basket is first made and then for some unknown reason patched.

The materials for the following account were obtained in the island variously called Eddystone, Simbo, or Narovo in the western part of the Solomon Islands. Here, and probably throughout the group, the manufacture is carried out exclusively by women.

The baskets are made from leaves of the coco-nut palm called *ngandi*, which are about 120 to 130 cm. in length, and about 6 cm. in width at their broadest part. Only new leaves from near the top of the tree are used. The leaves are stripped off with a piece of bark attached ; the leaves and attached part together are called *talonjo*, and the piece of bark *simalona*. These are dried over a special kind of fire, called *vinato*, made by heaping a square mass of stones, spreading firewood over them, and stones again over all. When the fire has been lighted and the stones are well heated, the *talonjo* are held over the stones at such a distance as to give a very decided heat to the hand. The leaves sweat when thus held over the fire, and are kept there till they are quite dry, probably for about ten minutes as a rule, and the long leaf is then readily split down the middle and the midrib (*pipiruku*) taken out. The halves of the leaves are then split into narrow strips ; those near the edge of the leaf called the *talinga* (ears) are of no use, so they are torn off and thrown into the sea. The tips of the half leaves are then snipped off with the nail and the leaves split, also with the nail, into narrow strips called *njira*. In the case of every alternate *njira* the splitting is carried right up to the *simalona*, but the intervening strips are only split up to about 16–18 cm. from the top ; the broader strips at the top being called *ruanjira*, *i.e.*, two *njira*. Each *ruanjira* is thus about 3 mm. in width, divided about 16–18 cm. from its attachment into two strips, each about 1·5 mm. above, gradually tapering off to a breadth of about a millimetre. The strips next to the midrib, called *epata*, are coarser than the rest, and are separated to be used for the manufacture of the ruder kinds of basket. The finer split strips are separated from the *simalona* ready for use and are then called *kotungandi*. The basket is called *mani*, and the process of its manufacture or plaiting is called *viri*.

For the purpose of description it will be convenient to divide the process of manufacture into three stages :—(1) Making the upper rim ; (2) Making the body of the basket, including the lower rim ; (3) Filling in the base.

(1) The first step is to prepare a piece of leaf called *pinggu vaperangai*, which is used as a framework on which to start the upper rim of the basket. This does not enter into the completed structure, but is removed when the rim is joined into a circle. The *pinggu* should be properly prepared ; but, as it does not actually form part of the basket, the Eddystone women are now content to use it green, though it was said that in Ruviana it is still properly dried. The process of beginning a new basket is called *pinggupinggu mani*.

In the specimen figured (Fig. 1), the *pinggu* (A) consists of a double strip of leaf, split about 15–16 cm. from its base into six strips which form the wefts.* At the point where the splitting begins the *pinggu* is folded obliquely, and the wefts are interlaced as shown in the illustration. Then other wefts (*kotungandi*) are introduced and interwoven with the *pinggu* to form the upper rim of the basket.

* The term weft is applied to each weaving element, whether consisting of one or more strips of leaf.

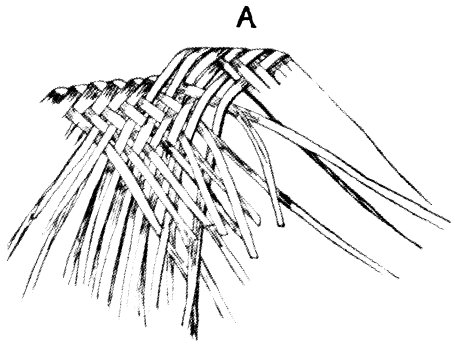

FIG. 1.

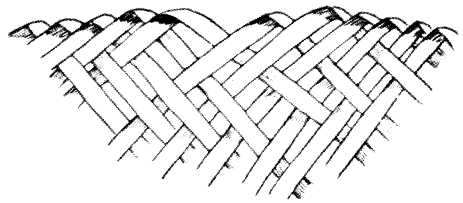

FIG. 2.

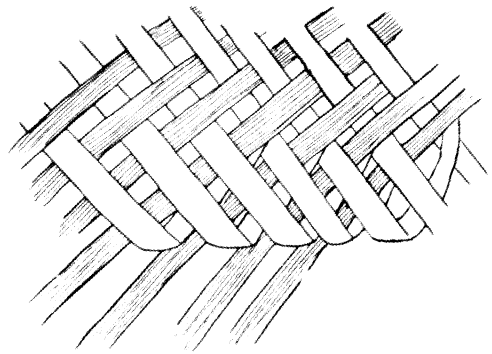

FIG. 3.

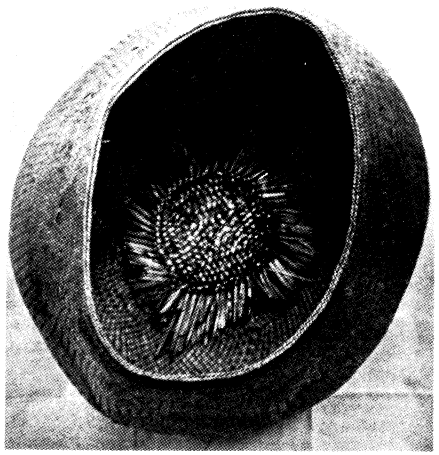

FIG. 4.

FIG. 5.

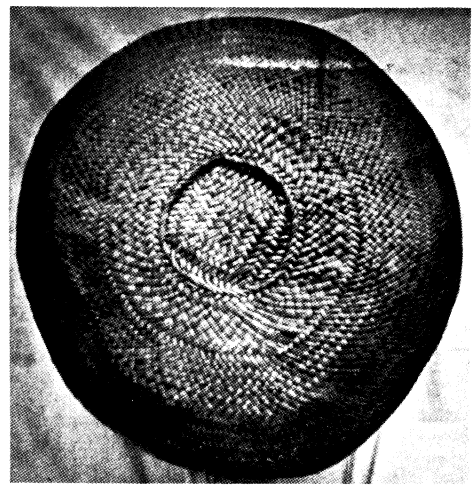

FIG. 6.

THE SOLOMON ISLAND BASKET.

These *kotungandi* are all in pairs. Two long *kotungandi* are taken, and their ends laid one above the other, overlapping for a space of about 17–18 cm., with the shiny surfaces outside. They thus form one long strip, single at the ends with a double piece in the centre. It is this double piece which is plaited in with the *pinggu* (*see* Fig. 1). The upper rim, therefore, is woven with double wefts, while only single wefts are left to form the body of the basket, the ends of both series forming a fringe on the inside of the completed structure.

At the stage shown in Fig. 1, when six or seven *kotungandi* have been plaited in with the *pinggu*, the latter could be removed without disturbing the plaited rim, but, as a matter of fact, it is not removed till the plait has been continued as far as is necessary and the maker is ready to join the ends to make the circle complete. Taking out the *pinggu* is called *unisi pania*, and joining the top of the basket is *varikarovona*. Fig. 2 shows the completed rim pulled apart at the place of junction to illustrate the method of joining, the short ends being on the inside.

(2) The plaiting is then continued all down the body of the basket in various simple patterns until it becomes necessary to begin the contraction for the curved base. At this point two or three *kotungandi* are taken together to form each weft and the plaiting continued until the base is sufficiently narrowed.

So far there is nothing peculiar about the construction, but at this stage a characteristic feature is introduced which has led observers to assume that the work is here finished off and a patch added to form the bottom. The process is somewhat intricate, but may be elucidated by reference to the illustrations.

First, all the *kotungandi* are doubled obliquely back towards the inside of the basket, and all the sinistral wefts* caught down under the next sinistral weft but two, working from left to right (*see* diagram, Fig. 3).†

Next, the basket is turned inside out by being put on to the head and drawn down over it. The work is then continued and the basket completed inside out.

The wefts which had been caught down on the inside (now the outer side) of the basket are not used to fill in the bottom, but are cut off later, and the cut ends can be seen inside the base of the finished structure (Fig. 4). Before they are cut off they are pulled tight, so as to diminish the size of the hole at the bottom. The specimen photographed (Fig. 5), shows the basket at the stage at which the *kotungandi* have been pulled tight but have not yet been cut off.

(3) The last stage is the filling in of the hole at the bottom. The rest of the *kotungandi* are pulled out (*i.e.*, the dextral wefts in the diagram), and are plaited on together, four *kotungandi* being taken together to form each weft, until the greater part of the hole is filled in. Then the wefts first plaited are lifted up, and those from the other side interlaced until the opposite side is reached. When the filling in is complete the whole is quite loose. The wefts are then pulled tight. All the *kotungandi* thus meet round the edge of the "patch" which forms the base. The final process is to finish them off and keep them from slipping by plaiting in the ends. This plait can be seen encircling the rim on the interior of the basket in Fig. 4.

The filling in of the hole is called *popoana*,‡ and the hole itself *popopo*. The rim seen round the base of the completed basket on the outside is *vegolai*, and the plaiting on the inside *piriuta*. The "patch" at the bottom of the basket is the *mboto*, or navel.

The essential feature of the filling in of the bottom of the basket producing its

* Dextral wefts are those leaning towards the right, sinistral those leaning towards the left. (O. T. Mason, *Report, U.S. Nat. Mus.*, 1902 [1904], p. 18).

† In the diagram the dextral wefts are shaded and the sinistral left plain. The dextral wefts are shown pulled out ready for the final stage.

‡ The name *popoana* is also applied to the first few rows at the top of the basket.

patch-like appearance is that its level is different from that of the rest of the bottom. It is clear that this difference in level is produced by the fact that the strands, by means of which the base is filled in, have to pass over those turned back. The proximate cause of the special feature of the Solomon basket is the technical fact that half the strands are not used, but are doubled back out of the way.

When we turn to inquire why half of the strands are turned back, the most probable cause would seem to be the fineness of the mesh. If a basket is begun from the top, the filling in of the base will present no special difficulty so long as the strands are broad, and therefore few in number; but when they are fine, they form so great a mass as to become unmanageable, and the makers of the Solomon basket adopted the device of using only half of them.

There can be little doubt that the presence of the "patch" within the basket is due to the turning inside out during the process of manufacture. If this did not take place, and the strands were turned back, the "patch" would be on the outer side of the basket, and it seems most probable that the turning inside out was designed to transfer it to the inside.

We have here a good example of the principle that in technology the obvious explanation from the civilised point of view is not necessarily correct. The basket of the Solomon islander plays a great part in his life, and the obvious explanation of its special feature is that it was devised to strengthen what was otherwise the weakest part. So far from this feature having been due to the need for strength, we have seen that it is more probably the consequence of the fineness of the materials used in making the basket. It has followed as the natural result of a technical difficulty arising from this fineness. It is true that the mode of filling in the basket has actually strengthened it; but, according to the above interpretation, this was not the primary aim of the procedure, though the strength so produced has doubtless promoted survival. The Solomon basket would not have survived if it had not been strong.

This affords a good illustration of a principle which in its application is not confined to technology. Because a social or religious institution has a certain effect it does not follow that it was brought into being to produce that effect, though it may have been that effect which has allowed it to survive.

W. H. R. RIVERS.
A. HINGSTON QUIGGIN.

DESCRIPTION OF PLATE L.

Fig. 1.—Showing the *pinggu* (A) with a few *kotungandi* added.

Fig. 2.—Showing the completed rim pulled apart at the place of junction to illustrate the method of joining when the *pinggu* has been removed.

Fig. 3.—Exterior diagram to illustrate method of forming lower rim (*vegolai*).

Fig. 4.—Showing interior of basket.

Fig. 5.—Showing basket immediately before filling in the base.

Fig. 6.—Showing the completed base.

India. Risley.

India and Anthropology: Extract from a Speech delivered at Winchester College. *By Sir Herbert H. Risley, K.C.I.E., C.S.I., President of the Royal Anthropological Institute.* **94**

It is not only official work that I would ask you to consider when you make up your minds as to your career. Just off the beaten track of your regular duties as a civilian, but only just off it, and overlapping it at many points, there lies a wide field of research which offers endless attractions to a classical scholar trained on modern lines. I mean ethnography, the study of custom, myth, ritual, religion, social structure, and so on. It is hardly an exaggeration to say that you have in