I ft. 6 in. (45.7 cm.) at one end and narrowing to I ft.  $3\frac{1}{2}$  in. (39.4 cm.) at the other. The spacing of the warp threads varies from 120 ends to a crowded 168 ends to the inch; in the middle of the cloth most of the warps are paired.

The patterns are embroidered with a bone needle called sunkit, from which the term kain sunkit is derived. The threads are carried nearly across the cloth in working the pattern, just as if a pick of weft had been used. A lattice design with horizontal lozenges at alternate crossings of the ground lines occupies the centre of the cloth for just over a foot in width, and the pattern has been produced by two needles, sunkit, one carrying red, the other black threads. In the case of the red the needle carries eight threads, which are worked across the cloth as far as the pattern extends as a flat series of strands between two picks of weft. The black is made up of four coarser threads carried by a second needle and used in the same manner. There are three rows of red stitching and three rows of black alternating with one shoot of plain white weft between each row. The needle is turned back at the edge of the pattern and is not carried right across the cloth.

Down the sides there are three narrow embroidered borders divided by narrow composite colour stripes a quarter of an inch wide, and there is a black stripe half an inch wide nearer to the outer edge.

The red warps in the self-colour stripes are much finer than the white used in the body of the cloth, and in these coloured border stripes the warp ends vary in number from 192 to 280 in an inch.

There are 24 picks of the white cloth weft taken right across the web and 24 coloured rows of stitching between them in the patterned section. The introduction of the coloured threads makes this part of the cloth much thicker and heavier than that between the border stripes at the sides, where it is rather open in texture. The loose weave is necessary for such a form of embroidery.

The background of the cloth is white and the central pattern is striped horizontally red and black alternately, and measures 12½ in. (31.8 cm.) across.

The embroidered patterned stripes at the sides are divided by composite stripes of black, red, yellow, black, and still nearer the outer edge is a halfinch black stripe. Pin stripes of white and red finish off the actual edges. No descriptive labels were attached to the pattern, which is planned out geometrically all over the surface. It consists of diagonally crossing lines forming lozenges, averaging  $2\frac{1}{2}$  in. by 1 in.

Horizontal diamonds, about 2 in. by  $\frac{3}{4}$  in. across and more solidly coloured, occur at the alternate crossings of the lines.

The two narrowest embroidered side borders have only alternate squares of red and black as pattern with a rather longer space left between them than their own widths; this is probably the *empetut* pattern, p. 87.

The central border pattern, also needle worked, begins experimentally, settles down to a zigzag stripe in red and black, and before it completes half the length of the cloth changes first to two zigzags meeting diamond-wise, one side red and the other black, and then to a much better design of two zigzag lines crossing one another, one of the lines being red and the other black. The first of the patterns in the stripe may have been suggested by the "crossing the river" design, semerai sungai, so often used on the warpdyed cloths.

The same pattern occurs in the badge of Saribas Iban kalambi, photographed at Limbang by Haddon, Mus. photo. 403 (pl. xvii, m), and as a band pattern on a kalambi and a shawl photographed by Haddon at Kuching, where the lozenges were identified as mata puna, "eye of green pigeon", Mus. photos. 397, 398.

35.886. An embroidered bidang from the Upper Rejang river. Width, 1 ft. 6\frac{1}{4} in. (45.8 cm.); length, 2 ft. 4\frac{1}{4} in. (86.5 cm.). Pl. XXXI, B.

This is an evenly woven cloth with both warp and weft threefold. There are 60 groups of warps (180 ends) and 20 picks of weft to the inch. The resulting cloth is less like a rep than a fine canvas and this quality has been very useful in the working of the elaborate embroidered patterns. In the self-coloured stripes down the sides of the cloth there are, on an average, 48 groups of warp (144 ends) to the inch. This cloth has an extremely rich effect, produced by embroidered pattern lines of thick red and black wool, and is the only example we have found that has any wool in it. When woven the cloth was white bordered by two composite self-coloured stripes with a narrow white stripe between them. The whole of the white portion has been covered by embroidered patterns. The inner composite stripe, part of which has been stitched over, measures  $1\frac{3}{4}$  in. (4·2 cm.) in width and is

made up of the following warp groups: 3 red, 3 white, 3 black, 3 yellow, 3 red and 5 white, and 4 black arranged alternately, then 3 red, 3 yellow, 3 black, 3 white, 6 red, and then the whole repeated. The outer stripe is  $1\frac{5}{8}$  in. (5·3 cm.) and is similarly arranged, except that at the selvedge there is a solid red stripe measuring  $\frac{1}{8}$  in. in width with a solid black stripe inside it of the same size. The threefold weft is white, except for about  $3\frac{1}{2}$  in. near the seam, where a threefold red weft has been used. It is interesting to note that these few inches are less brilliant in their colour effect.

At one end and extending to one-third of the cloth are three zigzag branches; from the upper end and middle of each projects a squared fret and from the lower end an hexagonal fret; these evidently represent the spirals of the usual tie-dye technique. The lozenge-shaped spaces between the branches enclose various devices; two look as if they might be winged insects and one seems to be a squared version of the bunga design of pl. xix, a. The main portion of the cloth is occupied by leeches and they may be intentionally depicted as on the creeper since the pattern is continuous. There are three sets of two leeches which have their mouths interlocked (pls. xvi, a; xxxi, B); their tails are coiled, but in two (shown on the right side of the photograph) the coiled tails are discontinuous from their bodies. Another set of incomplete and irregular leeches complete the main pattern. All the spaces contain bird and other motives.

The border pattern begins with an experimental zigzag and develops into a series of lozenges with a central spot resembling the eye of the green pigeon,  $mata\ puna\ (cf.\ pl.\ xvii,\ l,\ m)$ .

It might be thought that a series of pattern heddles had been used to produce this design, but the constant change of motives which in their lines do not correspond to any re-grouping in the use of a set of heddles and the very short lengths of wool used, just a comfortable needle-full, are two of the proofs against the employment of pattern heddles or that of free spools.

The pattern has been produced in the same way as damask darning; a needle carrying either black or red wool picks up just as much of the cloth as is required for the white outline, passes over the surface of the fabric until the next group of warps is picked up for the next bit of pattern. This process is continued right across the pattern; then one pick of weft being left in between, the needle is turned so as to work back along the width of the

central stripe, picking up each bit of the pattern on the way. Three rows of black darning are followed by three rows of red alternately, and as only the outlines of the pattern or some spots between them are picked up on the needle the result is a white pattern on a background of black and red horizontal stripes. The patterned border stripes are worked separately.

This cloth was given to the Museum by A. E. Lawrence.

## SIRAT, LOIN-CLOTHS

The sirat, called a chawat by the Malays, is a strip of cloth generally 6 yd. in length, and may be as much as a yard wide, but more often about 15 in. It is wound round the loins and between the thighs with great precision; the ends are sometimes elaborately decorated by coloured strips of cloth and embroidery. According to Brooke Low "a klapong sirat, or tail flap, is often worn by the elder men of the latter tribes [Lamanaks and Sakarang tribes]...it is prettily and fancifully embroidered with coloured thread and is sewn on to either end of the sirat to hang before and behind" (Ling Roth, 11, p. 55). The way in which a waist-cloth is wound on, its colour and the fashion of its decoration are indications as to what tribe the wearer belongs. Dark-blue cotton cloth is the material most commonly used, but white is worn in mourning or during outdoor labour.

The only whole *sirat* we have is 35.915; its ends are not very elaborately embroidered and the same applies to the whole *sirat* in the British Museum (1905, 400).

Judging from two specimens in the British Museum (1905, 396, 397), the *klapong sirat* or ends of the loin-cloth are woven as one piece of cloth and are embroidered in the characteristic manner, one being very different from the other. Subsequently they are severed and sewn on to the ends of a *sirat*. All the other specimens we have seen have evidently been cut off from loin cloths, as they are soiled from being worn.

One type of klapong sirat has an elaborate embroidered panel, the central portion of which appears to portray cultivated swamp-land. The designs are very much alike in our three specimens (35.913, 35.917 and Z.2344) and in those in the British Museum and the Sarawak Museum. A careful study of all the available material of this motive would be of considerable

interest, but this would have to be undertaken by someone having local knowledge.

The second type of *klapong sirat* is decorated with horizontal bands. This is represented in our collection by 35.912, Z.2345, and 35.916.

As we have no information as to whether one type is worn in front and the other behind, we are obliged to refer to them as type 1 and type 2 respectively.

The sirat are described in the following order:

35.915	35.917	35.912	35.916
35.913	Z.2344	Z.2345	

35.915. A complete *sirat* or loin-cloth. Width varies from 1 ft. to 1 ft.  $\frac{1}{4}$  in. (30.5-31.1 cm.); length, including fringe, 15 ft. (4.572 metres).

The cloth is of native weaving with decorated ends, and is a simple tabby, or alternately one up, one down weave; the warp and weft are both single, although the warp varies greatly in thickness. There are on an average 48 warp ends and 16 picks to the inch, few enough to produce a cloth into which extra threads in the direction of the weft can easily be introduced. This is an old dirty specimen.

The fringe has been produced by working with a needle over groups of warps whilst still on the loom, each group of about 24 ends being arranged in eights, and a darning or weaving stitch has been worked backwards and forwards over each set of three eights with thick red thread for half an inch and then with thick yellow thread for another half inch. The warps have then been freed from the loom, twisted together in threes or fours, and the twisted strands from each strip of needle-weaving divided so as to form three-stranded plaits about 1½ in. long. To complete the fringe each strand from the plait has been tied round a bunch of short cotton strands to form a tassel; in this way are produced two or three tassels to each plait, usually of different colours, white, red and blue; these are described as kelapong iko (fig. 31).

There are patterns at both ends; the one without the fringe has the more elaborate and certainly embroidered designs; those at the fringed end are all worked in lines right across the cloth and were probably darned or woven in with a needle; the same result could, however, be obtained by picking

up the warps with small free spools to form the pattern, one throw of ordinary weaving being made between each pick of the pattern. In the latter case the shed stick or a heddle would group the warps in threes. Either of the methods would produce a reversible pattern, owing to the passing of the floating threads. The very thick coloured weft, used for working the patterns,

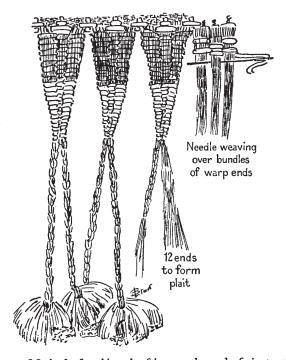


Fig. 31. Method of making the fringe at the end of sirat 35.915.

is made up of a number of fine threads used parallel to one another, as many as 12 being used in the red and yellow and six or eight slightly coarser ones in the blue.

Unbleached cotton provides the stone colour of the background, and the patterns at the fringed end are worked on it in pale blue and in what has been a beautiful bright red. Some yellow is introduced in the heading of the fringe. At the other end all three colours are used.

At the fringed end half-inch bands of plain cloth separate a wide central from two narrow embroidered bands; the whole occupies a depth of  $4\frac{2}{5}$  in.

(IIII cm.). The upper and lower narrow bands consists of a zigzag with chevrons in the angles and is called *lelingkok mata puna* (zigzag, eye, pigeon). The broadest central band contains a complicated pattern of *kukut burong*, "birds' claws", one element of which is shown in pl. x, g. Above this is a stitchery band labelled *penuri pakan belebas*; this is a needleweaving where some weft threads have been drawn out, and above it is a narrow blue band with a central white zigzag, *dabong lelingkok*.

The patterns at the other end of the *sirat* (which is probably the front flap) occupy a rather longer space. Three bands of  $1\frac{3}{4}$  in.,  $1\frac{3}{4}$  in. and 2 in. (4·4, 4·4 and 5·1 cm.) in width are separated from one another by quarter-inch bands of plain cloth which are bordered by a blue band also called dabong lelingkok. The central band labelled bengka senggang (pl. xxv, d) is the counterpart of two transverse bands in the panel of the front flap of a sirat in the Sarawak Museum, no. 262, where it is called tutup long, which signifies the cover of a Kayan bark basket. The bands above and below this are very effective arrangements in red and blue and represent pala buntak and kukut burong, "heads of locusts" and "claws of birds". Above and below these three bands is a half-inch band of plain cloth and beyond this a half-inch embroidered band of lelingkok mata puna.

35.913. Klapong sirat, type A. "Tanda sirat slampor" (?selampur). Pl. XXXII, A.

The embroidered portion has a width of  $11\frac{1}{2}$  in. (29.2 cm.) and a length of 1 ft.  $5\frac{1}{2}$  in. (44.4 cm.). It has been joined, like *sirat* 35.912, to the main part of the waist-cloth by some horizontal bands of navy and yellow imported cotton cloth. The whole of the embroidered portion is edged with a binding, *lilit*, of scarlet flannel. On three sides, where it folds over the edge, its folded width varies from  $\frac{5}{8}$  in. to 1 in. (1.6-2.5 cm.), and on the fourth side, where it is joined to a strip of yellow cotton, there is a flat band of the scarlet flannel  $1\frac{1}{4}$  in. (3.1 cm.) wide.

The weave is simple, one up and one down, both warp and weft being single, but of greatly varying thickness. There are on an average 68 warp ends and 26 picks of weft to the inch.

Two strips of scarlet flannel  $\frac{1}{4}$  in. (0.6 cm.) wide divide an upper and a lower band from the main design. Each band consists of two needle-woven stripes, pakan belebas (pl. xix, g), of three rows of red and black weft.

Above and below the stripes are alternate red and black triangles embroidered with the same yarn as that of the needle-weaving. The triangles are labelled dabong mayang (dog-tooth, blossom of a palm); the central zigzag, judging from a similar sirat in the Sarawak Museum, no. 263, is merely incidental to the disposition of the triangles.

The main design is a rectangular area, 10½ in. by 12 in. (26 cm. by 30.5 cm.), and is treated as a panel; in the centre is a rectangle, 6 in. by 8½ in. This central portion is outlined by very narrow borders, the top and bottom are particularly interesting, as weft threads have been cut and withdrawn and a needle-woven weft inserted in their place. This is called pakan belebas. The side stripes are called penuri daun resam.

At the top and bottom of the panel is an elaborate pattern of pala buntak, "heads of locusts" (pls. xxxII, A; xVII, i). Immediately above and below the central rectangle is a border of mayau tindok, "sleeping cats" (pl. xVII, u), and at the sides is a pattern of hexagons, as also occurs in a sirat in the Sarawak Museum, no. 263, and in cloth 35.917 is termed lalat tampok panggal, "fly resting on a fruit stalk".

The central rectangle is filled with embroidered patterns worked in red and black thread; the position of the black stitches is indicated in the diagram (pl. xxv, a), by solid black lines, the enclosed spaces being filled in with red. The area is covered with designs called tabor paya, "sown swampland" (pl. xxv, b); the lozenges between the X-elements are called (in the Sarawak cloth, no. 262) urat kaia, "the root of a tree". The two lateral vertical designs (pls. xxxII, A; xxv, a) are called paya bepadong or padong paya and have been translated as "rocky ledges in the swamp-land".

The whole embroidery, with its neat, detailed, and evenly distributed patterns in dull red and black and chevrons of blue in the spaces between the sleeping cats and between the hexagons, produces a handsome effect.

35.917. Klapong sirat, type A, labelled slampur. Width, I ft.  $1\frac{3}{4}$  in. (34.9 cm.); length, I ft.  $4\frac{1}{2}$  in. (41.9 cm.).

As is usual in cloths which are to be embroidered, a plain tabby weave, one up and one down, is used; the yarn is of uneven thickness and the resulting cloth is strong but sufficiently loose to permit of the needle working the pattern. There are 56 warp ends and 18 picks of weft to the inch and both are single throughout.

An interesting variation of the weaving method is provided by four narrow horizontal borders occurring near the top and bottom of the piece. After a row of twining in red, which partly helps to group the warps in sixes, the ordinary weft alternates with three rows of stitchery-like weaving in black, red and black. A twofold thread is used and the whole is finished by a second row of twining. This pattern is called *gran pemalu*, "marks made by the bark-cloth beater", and is also described in other *sirat* (35.913) as *pakan belebas*, "made in weaving", but in that case weft threads are withdrawn and the little pattern is really needle-woven.

The cloth is in the natural unbleached colour of cotton, and the embroidery is worked in dull crimson and a greyish black; the figures are mostly outlined in black and filled in with crimson. A rather short fringe finishes off the bottom edge and is made by winding some of the red thread round a flat piece of cane about  $\frac{3}{4}$  in. (1.9 cm.) in width about a dozen times, then slipping it off and tying it tightly in the middle with four of the warp ends. This fringe of tassels is described as tanda kelapong bungai rambu, "an embroidered flower fringed end", a far more picturesque name than it warrants.

The embroidery is very similar to that of 35.913, except that the upper and lower bands are wanting. The top and bottom borders of the panel contain a fringed zigzag motive labelled *lelingkok kaki embayer*, which represents a zigzagging centipede and its legs; on the apices are the heads (only) of locusts, *pala buntak*, and within the angles are more typical *pala buntak*. Between these bands and the central rectangle are two stripes of gran pemalu that stretch right across the cloth and enclose a pattern called *lalat tampok panggal*, which we translate as "fly resting on a fruit stalk". This is the same pattern as that on the vertical borders of the central rectangle of 35.913 (pl. xxx11, A). The same pattern occurs at the sides of the cloth and is bounded on each side by a vertical stripe called *tulang ikan*, "fish bones". An identical stripe is found on 35.913 in the same position, where it is called *penuri daun resam*.

The main patterns of the central rectangle are labelled *paya betabor*, and the *urat kaiku*, "roots of trees", are also indicated, but not labelled. The [-shaped elements are here called *entada paya*. The two lateral vertical designs are labelled *padong paya*, "cleared swamp-land" (pl. xxv, c).

Immediately above the fringe is a horizontal pattern, mata ulat, which consists of alternate blue and white rectangles; a red thread is sewn across their centres so as to form irregular spots, the white rectangles are probably the "grub's eyes".

Z.2344. Klapong sirat, type 1, labelled tanda chawat. The embroidery is in red and grey on a rather fine native cloth. The bright-red cotton fringe at the end is constructed in the same manner as that of 35.917, which sirat it resembles in many details.

At the top is a pakan belebas with alternate red and blue triangles on each side, which are labelled dabong mayang, "notched spathe of the areca palm". It corresponds to one-half of the double row in 35.913 (pl. xxxII, A). The bottom row is like that of 35.913, except that the central white zigzag is embroidered with a red zigzag.

The panel is bordered above with kukut burong, "birds' claws", and below with a more complicated pattern of the same type, and is identical with that in a similar position in 35.913, where, and in other cloths, it is termed pala buntak, "head of locust". Between this border pattern and the central rectangle are two stripes of gran pemalu that stretch right across the cloth and enclose an unnamed pattern similar to one on a sirat in the Sarawak Museum, no. 263; most of the small lozenges of the pattern have a yellow centre. Below the central rectangle the gran pemalu enclose mayau tindok, "cats asleep". On the lateral borders of the cloth is a series of lozenges containing four spots, named buah bangkit, "fruit of the wild mango". Between these and the central rectangle is a stripe of a squared zigzag or fret.

The central rectangle has four vertical rows of X-designs resembling those of other *sirat*, except that they are enclosed in hexagons (as in the Sarawak cloth, no. 263); parts of the hexagons appear to be related to the [-elements of other *sirat*. In this cloth there is a central as well as two lateral vertical designs, which are very similar to those of 35.913.

35.912. Klapong sirat, type 2, with a fringed end. This is an exceedingly interesting example of an embroidered and pattern-darned end to a man's waist-cloth, sirat paya. The decorated portion, which is of native manufacture, is  $10\frac{1}{2}$  in. (26.7 cm.) in width and I ft.  $8\frac{1}{2}$  in. (52.1 cm.) long, including the bead fringe. It is attached, under a strip of red flannel  $2\frac{1}{4}$  in. (5.7 cm.) wide, by a row of running stitches to a band of navy-blue

cotton cloth  $3\frac{1}{2}$  in. (8.9 cm.) wide, which is one of a series of five horizontal bands of navy blue and yellow, used alternately and varying in width from 2 in. (5.1 cm.) to  $3\frac{1}{2}$  in. (8.9 cm.). All this material is imported and the strips are joined by a running stitch, except the last navy-blue band at the top, which is of double material for strength and is joined to its yellow neighbour by a run and fell, also for strength. This navy-blue band was probably part of the main length of the *sirat*. The edges of this striped portion, as well as of the decorated end, are bound with red flannel (fig. 32, a).

The native cloth which forms the end is a plain tabby weave, of one up and one down, both warp and weft being used singly. The warp is generally coarser in section than the weft, but both vary considerably; there are on an average 88 warp ends and 24 picks of weft to an inch.

The ornamentation is divided into five horizontal panels by strips of fine scarlet flannel. The four upper panels are simply and very effectively decorated with horizontal bands—two in each panel, except the uppermost. Each band is composed of darning and embroidery, the first four stripes being practically alike in design although varying in width, and the last three being similar to one another and differing only slightly from the first group. The motive in all seven is the same; the central portion of each, which is darned and edged top and bottom by a row of twining, represents the eye of a green pigeon in a bangkit fruit, mata puna buah bangkit (pl. xv11, k). This part (fig. 32, b) is darned with twofold weft, sometimes red, sometimes black, each being used alternately for a few rows, e.g. in the fourth stripe from the top the red and black is used as follows: a row of black twining, four rows of red darning, seven black, four red and then a row of twining again. Outside the rows of twining in each case is a series of small triangles embroidered in red and black alternately and described as dabong mayang, a dog tooth, blossom of a palm.

The lowest division is the most interesting; it has two embroidered borders, the chief feature of each being a row of "burong", but they are not like any of our bird designs. These figures are partly outlined in black; the remaining portion is red with the exception of a spot in the head and end, where a yellow grass-like fibre has been introduced (fig. 32, c).

Immediately above and below the two bands of burong is a zigzag with spots in the angles, which is called *lelingkok mata puna*.

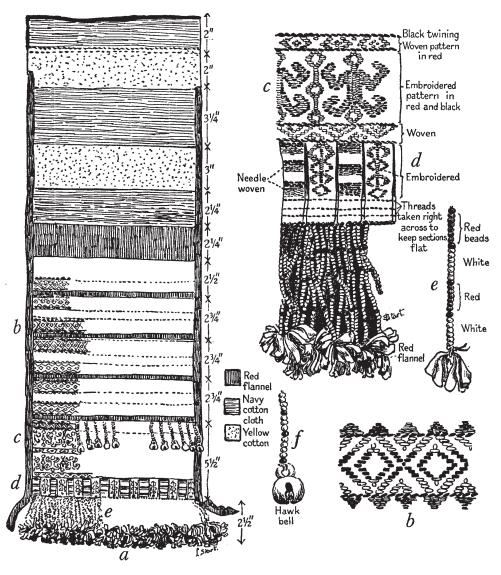


Fig. 32. a, End of sirat 35.912, with embroidered and darned patterns and a bead fringe; b, detail of the patterns, mata puna, buah bangkit, and dabong mayang of the first four bands; c, detail of one of the two burong bands; d, e, details of the fringe; f, detail of a fringe of hawk bells which is immediately below the lowermost strip of scarlet flannel as indicated in a.

99

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The mixture of darning and embroidery is noticeable, and one is at first tempted to think that the embroidered figures have been woven by a brocade method with free shuttles, because there is so much flushing of the thread and it is used twofold in the red parts and threefold in the black. Careful examination, however, proves the work to have been done with the needle, for in the black outlining of the figures, the thread is worked continuously round them, stitches being taken back into the finished fabric, a course impossible with a free shuttle. The few ends in each motive do not occur at the highest point of a downwardly worked line, which would also have to be the case if free shuttles were used, and there are no threads passing at the back.

Below the *burong* comes the fringe, which has two distinct sections and is perhaps, from the point of view of its novelty and the skill necessary in its production, the most interesting part of this example of Iban work.

The upper portion consists of a series of eighteen strips of cloth, varying from  $\frac{1}{2}$  in. to  $\frac{3}{4}$  in. (1·3-1·9 cm.) in width and  $1\frac{1}{2}$  in. (3·8 cm.) in depth. Each of these little tabs is a complete piece of weaving and must have been executed separately; it is probable that for this a needle was used. The patterns on the tabs alternate, one set have needle-woven horizontal stripes, kengkang aning, of black and red and the other set have an embroidered motive representing pala burong, "bird's head" (fig. 32, d). (These two types of tabs, and the two rows of burong, can be perfectly matched on a sirat in the Sarawak Museum, no. 263.) Three rows of running stitches are carried across the ends of these woven tabs to keep them flat, and then their warp ends are grouped in threes and fours and threaded through a series of red, white and black beads, each strand being finished off with a tassel of narrow strips of red flannel (fig. 32, e).

The beads and tassels form a heavy fringe, which has most weight at the sides where the bead fringe is thicker. The actual number of strands to the individual tabs beginning from the left are: 7, 12, 8, 12, 8, 12, 8, 7, 2, 4, 5, 8, 6, 9, 2, 11, 8, 12, 8 and 11.

At the top of the bottom panel there was originally a second fringe of beads finished off with little bronze hawk-bells (fig. 32, f), a considerable portion of which still remains.

Z.2345. Klapong sirat, type 2. This sirat is made of native cloth with both warp and weft used singly. There are 92-100 warp ends and 28 weft picks

to the inch; the warps vary greatly in thickness but the resulting cloth is firm and has a fine texture. It is neatly embroidered in red and black and has an interesting fringe at the end of plaited warp ends with five red cotton balls tied on at the end of each plait.

The pattern (pl. xxxII, B) consists of six rows of lozenges varying slightly in size, they are labelled *mata puna*, "eye of pigeon (*Treson* sp.)", and of two rows of what are probably birds. At the lower end are two rows of simple designs, of which the solid triangles represent *dabong mayang*, "notched spathe of the areca palm".

35.916. Klapong sirat, type 2. Width, 11 in. (27.9 cm.); length, 1 ft.  $2\frac{1}{2}$  in. (36.8 cm.).

The weave is a plain one, one up and down, and there are 72 warp ends and 20 picks of weft to an inch, both warp and weft being single.

The piece of native weaving is joined to a bit of imported black cotton cloth by a counter hem with hemming stitches that meet in the middle of the fold and so are both strong and decorative. The end of the cloth appears at one time to have been bound by a native-made braid, but there are only a few fragments left.

The unbleached colour of the cotton forms the background to embroidered patterns in dull crimson and black.

Seven horizontal band patterns of widths varying from  $\frac{3}{4}$  in. to  $2\frac{3}{10}$  in. (1.9-5.9 cm.) are divided from one another by plain bands half an inch in width (1.3 cm.). Occurring as narrow bands above and below the three middle patterns and singly in the others are one or two picks of black weft or needle-weaving taken through a shed in which the warps are grouped as three up and three down. This is described as gran pemalu tekalong, "the mallet used for beating out bark cloth". A little more elaborate pattern produced in the same way is described for cloth 35.917. The second and sixth bands are described as pala buntak balang, "head of the big yellow grasshopper"; the pattern is the usual one called elsewhere pala buntak; the third and fifth borders are of buah anyam, "woven or plaited fruit" (pl. xxi, f). The repeated element of the central pattern is labelled mayau tindok, "sleeping cat", but this must be a mistake; it appears to be a burong, perhaps a variety of burong besugu.

## BEDONG, WOMAN'S GIRDLE

**35.914.** Dilak bedong, a narrow girdle for a woman. Width averages  $6\frac{3}{4}$  in. (17·1 cm.); length, including a  $4\frac{1}{2}$  in. (11·4 cm.) fringe at each end, 5 ft. 7 in. (170·2 cm.).

The cloth is of an unusually fine, close texture, having paired red warps, which form the 4-in. (10·1 cm.) central stripe, and the narrow stripes at the extreme edges, there being 80 pairs (160 ends) to the inch. The yellow stripes are coarser and have paired warps averaging 50 pairs to the inch, and in the black and white stripes an imported doubled yarn has been used, which has 120 fine single warps to the inch in the black and 88 single, but coarser in section, in the white stripe. The weft is fourfold in some parts, and three-fold in others; the strands are always parallel or tape-wise. The picks average 25 to the inch. The weft is dark grey in colour for two-thirds of the length of the cloth and a threefold red weft is used for the remaining third, which is the part with the principal decoration.

This decoration is worked in silk and, although it appears to have been embroidered, may have been worked with a tiny free shuttle or a needle left hanging from the web when not in use. The description of one motive of concentric triangles as pemuchok anyam, "a woven shoot", seems to indicate the latter method. The use of silk and imported yarn shows a more intimate knowledge of other forms of weaving than most of the other cloths indicate, and judging from the colour and the quality of the workmanship it is probable that the girdle is of Saribas origin.

The girdle has a broad bright-red central band bordered on either side by narrower bands of white, black, yellow and red. The patterns are worked in rows, black and white silk being used more or less alternately; there are dividing lines between some of the patterns, which are in most cases made by two shoots of yellow weft, but in three of the lines thus formed the white silk has been used instead. To introduce these lines it appears as if two weft threads have been withdrawn in some places and the new ones darned in, rather than that they have been introduced during the ordinary weaving process. In one case the line is called anyam belebas, "the long stitch", in the other pakan belebas, or "made in the weaving", so that both processes

may have been used. The small patterns produced are described as gran pemalu tekalong, "marks like the ridges on a bark cloth beater".

The motives used are few and not very interesting; one end is decorated for about a foot and the other has a single band of triangles,  $1\frac{1}{4}$  in. (3·1 cm.) wide. The same shaded or concentric triangles occur as bands in three places at the end of the girdle and are described as *pemuchok*, "shoots". The small lozenge set corner-wise at the apex is described as *pemuchok pala buntak*, "a grasshopper's head on a shoot". Lozenges, with a central spot like the grasshopper's head, are the only other motives.

The warps are twisted together to form the fringes at the ends, and where two colours come together at the junction of the stripes, a thicker strand of the two colours is twisted and adds some interest to the general effect.

# DANGDONG, SHAWLS

35.918. This is probably a dangdong or shawl, or it may have been used as a small coverlet. The width of the woven section is 1 ft.  $11\frac{3}{4}$  in. (60·3 cm.) and the length 3 ft.  $3\frac{1}{2}$  in. (100·4 cm.). It has coloured ends of strips of imported cotton cloth, white, red and yellow, measuring  $1\frac{1}{4}$  in. and  $\frac{3}{4}$  in. respectively at either end, neither being complete.

This is an extremely finely woven cloth; the skill shown in the actual cloth making, the fine red colour and the very accurate stitching in the embroidered patterns indicate Saribas origin.

The warp is red in the main part of the cloth and there are from 136 to 152 ends to the inch, which are paired; there are 26 west picks to the inch.

At either side of the cloth there is a broad greyish black stripe, 13/4 in. wide, then a series of narrow coloured stripes, white, red, yellow, pale green and black, measuring three-quarters of an inch over all. Between these stripes and the embroidered central portion there are four narrow embroidered stripes divided by narrow compound stripes of white, black, yellow, red, and a horizontal black and white, each totalling about a quarter of an inch in width.

The white and black warps used in the stripes also provide the thread for the embroidery and are much thicker in section than the other colours; they appear to be mechanically twisted threads and are used singly. The red and yellow are of native hand-spun yarn and are paired.

The bright red background provided by the red warp forms a splendid contrast to the patterns, which are embroidered in black and outlined with white and occasional touches of yellow. The narrow embroidered border stripes are worked in black and white only and are separated by the composite colour stripes described in the previous paragraph.

There are eight horizontal rows of patterns across the cloth. The first row consists of two broad zigzags between which is a series of hexagonal panels filled in with *lelambak*, "a wasp and flower design plaited in mats" (pl. xxii, i). The second, fourth and fifth are alike and have representations of biyak, "the monitor lizard (Varanus sp.)" (pl. xii, I). The design in the third and sixth rows is the most elaborate, two repeats almost fill the width; they are described as taio gasieng, "thread driving the spinning wheel" (pl. xxiv, c). The two dark bands are apparently the vertical supports of the wheel, but the whole design is inconclusive. Between these motives is buah bunut, "the horse mango (Mangifera sp.)"; the label, which also says "fruit and root", is attached to the central portion (pl. xxii, r) of a larger design comprising a diamond decorated with squared scrolls; the label may apply to the whole pattern. In the sixth row one of the dark vertical bands is labelled nemaiar, "centipede" (pl. xvi, g), which adds to the confusion.

The seventh row consists of two white and two black rows of lozenges representing buah angkong, "fruit of a species of Mangifera (mango)" (pl. xxII, s). Above and below is a white zigzag edged by a pick of white weft. The last pattern is worked in chain-stitch and is the only example of chain-stitch in the collection; it is labelled tankei marau, "bundles of marau cane (Calamus sp.)"; tangkai in the S.D.D. is translated as a fruit stalk, but evidently it may mean other kinds of stalk.

The border patterns are very simple.

35.926. A shawl, dangdong, or a coverlet. Width, 1 ft.  $6\frac{1}{2}$  in. (47 cm.); length, with fringe, 7 ft. (213.4 cm.).

A label said the name of this cloth is kumbu. The S.D.D. gives "kumbu or pua kumbu, a Dyak-made blanket or coverlet". This cloth is too narrow to serve as a blanket or coverlet, so we can only regard it as a shawl. Ling Roth (II, p. 42), on the authority of Brooke Low, says a dangdong or shawl is part

of the full dress of an Iban man and the garment under consideration is decorated in such a manner as to suggest that it was worn on a very special occasion.

This cloth has an average of 120 warp ends to the inch throughout its width. The border stripes, which are less important in effect than usual, have, at one side only, some red self-colour stripes in which four warp ends are grouped together. This number is, however, counterbalanced by the use of single warps in the black and white stripes, whilst in the rest of the cloth they are paired. At each end the warps are twisted together and knotted to form a fringe, which appears at one time to have had a knotted heading also.

The rather coarse, bluish-grey weft is used singly and there are 24 picks to the inch.

Dull Indian red forms the background to the pale buff patterns, which have touches of a darker brown. At the sides there are three patterned stripes, divided by composite ones, in which pin-stripes of white, red, black, yellow, red, a horizontally striped black and white, red, yellow, black and white are arranged in the width of half an inch. Near the edge of the cloth there are five wider solid colour stripes, totalling  $\frac{7}{8}$  in. and consisting of black, white, red, yellow and blue, the last being at the actual edge.

The wide central band has a blank space about  $2\frac{1}{4}$  in. wide across its middle. The designs of one-half of the cloth duplicate those of the other; they are disposed in 14 transverse rows and all are well arranged and clearly defined human figures, which are termed *engkaramba*, that ward off evil and prevent harm coming to crops. For the sake of convenience only one-half of the *kumbu* need be described; the first row is that nearest to the middle and the seventh is close to the fringe.

Row I: Engkaramba gajai (pl. XIII, i). "The gajai figure. The gajai is said to be an animal. It comes into the Dayak songs but it is not known what it is like. Ningal n'obat pandai, ambi timbai, lau nyapai gajai ambi perambai manoh menang, '(I) leave the drug (to make you) skilful and able to work the gajai, like those who take the feathers of the winning fighting cock', i.e. better than anyone else. Said to a girl to make her skilful in making cloths. The drug is a pig's tusk or some such thing, but generally it is only a blessing from Petara that is asked" (C. Hose MS.). Petara is alluded to on

pp. 142, 144: "Engkramba, a representation of anything cut out of wood", S.D.D. "Gajai, as kalambi gajai, a jacket with a frog pattern", S.D.D. We cannot add any further information about this figure.

Rows 2 and 5: Engkaramba, figure used to keep off harm, etc. Rows 3 and 6: Engkaramba engkatak, "the frog figure, the engkaramba part is the head only, the body is that of a frog" (pl. xIII, h). Rows 4 and 7: Engkaramba besuga, "a female figure with a comb in the hair. The Dayak comb is ornamented with silver" (pl. I, i, the rest of the figure is like that of h).

There are five variously coloured longitudinal stripes in the border, the outermost, ara surik betong, "the striped betong bamboo pattern", is a large kind of bamboo used for carrying water; the colours are indigo, yellow, red, white, indigo. Two of the others are ara buloh bala, "the yellow bamboo ara pattern", and the other two, with a black and white central stripe, ara rinik, "close (rainbow) pattern". Two patterned stripes are daun wi, "ratan leaf" and the central contains numerous birds, among which are: burong berdayong, "bird paddling (or rowing)" (pl. viii, i), burong besugu, "bird with a comb" (pl. vii, l), burong berspit, "bird grasping (with its claws)", burong surong dayong, "bird pushing the oar".

# PUA, BLANKETS

The blankets always consist of two pieces of cloth joined down the centre, usually by a lacing stitch, similar to that used for joining the side seams of the kalambi. The two pieces of cloth are the upper and lower webs from a loom. The web threads which have been tied together in the dyeing process, have patterns alike, but reversed, so that if half a motive comes to the edge of the cloth its other half completes it when the central joining is made. The pua are usually fringed at both ends, and to make this possible a gap must be left in the weaving between the upper and lower webs; it is not continuously woven like the cloth for a kalambi, which has only a fringe at the lower edge, if at all. There are generally one or two rows of coarse twining at the ends of a pua, which help to give firmness and a good wearing quality to those edges. According to the Catalogue of the Lady Brooke collection in the British Museum, pua with anthropomorphic patterns are used at the Dayak feasts.

The pua are described in the following order:

35.930	35.925	35.920	35.927
35.929	35.923	35.922	35.921
35.931	35.924	35.928	

35.930. Pua with human figures. Width, 3 ft.  $9\frac{1}{2}$  in. (115.6 cm.); length, 6 ft. 4 in. (193.1 cm.).

In the body of the cloth the warps are generally paired and average 52 pairs or 104 ends to the inch; but in the self-coloured stripes at the side, whilst paired in the white and blue stripes, they are arranged in threes, parallel, in the red stripes and average 128 ends to the inch. The weft is threefold, brown in colour and there are 20 picks to the inch.

The pattern is in buff colour, in which there are spots of dark purplish brown, on a ground of Indian red. At the extreme edge of the cloth is a red and white strip an inch in width, and inside this a series of composite stripes edging a pattern stripe  $1\frac{5}{8}$  in. (4·1 cm.) wide and two narrower ones just over a quarter of an inch wide (6 mm.). The composite stripes are made up of a red stripe, a horizontally banded one of indigo and white, another red, then blue, white, blue and red, the whole measuring  $\frac{7}{8}$  in. (2·2 cm.).

This is one of the cloths in which the middle is quite plain and the ends are patterned and alike.

A geometrically arranged motive which produces the effect of three rows of elongated hexagons is the terminal pattern; it has not been identified. A dark brown band of irregular outline on a white ground separates this design from a row of six male anthropomorphs, which are divided by pairs of bird motives. The human motives show the lobes of the ears distended (pl. 11, c).

The two narrow patterned borders at each side are ornamented entirely with young grass lizards, anak lachau, and the wider one has two types of human figures (pl 11, d, e) and some curiously mixed motives.

35.929. Kalaka Dyak pua. Width, 3 ft. 8½ in. (112.4 cm.); length, 6 ft. 7 in. (200.7 cm.), including fringe. Pl. xxxIII.

This is one of the rougher fabrics in which a thick, coarse yarn is used. In the central band the warps are paired, 30 pairs or 60 warp ends being the average to an inch. In the self-colour stripes down the sides the red remain in the same proportion to the main part of the cloth, 60 ends to an inch, but the greyish and purple stripes are very fine yarn and are grouped in fours, whilst the white is thicker and paired. The average warp ends to an inch, taking the self-colour stripes without the red is 168, rising to 192 in the purple stripe which has the finest yarn. The weft is brown, single and of very uneven thickness, sometimes very coarse and at other times quite fine and so producing an uneven rib in the cloth. There are on an average only 12 picks to the inch. The cloth is a very heavy one and has short warp fringes.

The wide central stripe and the patterned border stripes have dull Indian red backgrounds with buff patterns accentuated in places by spots of a dark purplish brown. At the edge there is a series of solid colour stripes which total  $3\frac{3}{4}$  in. (9.5 cm.) in width. Beginning at the outer edge the colour order is white, dull red, green, dull red, white, violet and white. Next to the white row come two narrow patterned stripes divided by composite stripes of green, red, white, red and green, making a total of  $\frac{1}{2}$  in. (1.3 cm.) in width.

At the upper end is a row of six human figures wearing masks and elaborate head-dresses; they have distended ear-lobes (pl. 11, g), between which are probably long-tailed burong in an inverted position. A simple buff linear design separates this border from the main pattern. In this are two rows of six baia, "crocodiles" (pl. x1, b); the remainder of the surface is covered with varied human figures, some like those at the top; one type is shown on pl. 11, f, and on the second row from the bottom are three headless corpses (pl. 11, h). One form (pl. x111, g) is labelled "pama, frog, Dayak; katak Malay"; it evidently is a man-frog, the original is spotted.

A buff line separates the foregoing from the lower border pattern, which is 1 ft. 5 in. (43.2 cm.) in depth. We have no names for the designs, the character of which can best be ascertained from the photograph (pl. xxxIII).

The narrow border patterns running lengthways are in some cases confused by the coarseness of the fabric blurring the outline, but they appear to be ratan leaves, daun wi, and young grass lizards, anak lachau. Both stripes are alike. The bold self-coloured stripes at the edge are labelled pamanyar, the colours are white, red, green, red, white, mauve, white. Probably the informant said pama nya, "good (are) those".

The end of the cloth is finished by a fringe of warp ends and about half an inch above the fringe there is a row of twining in white and mauve. 35.931. Crocodile pattern pua. Width 3 ft.  $3\frac{1}{2}$  in. (100.4 cm.); length 4 ft. 1 in. (124.5 cm.).

The warps are paired throughout except in the red border stripes, where the much finer yarn necessitates grouping in threes. There are 52 pairs or 104 warp ends to the inch in the main body of the cloth. The weft is pale blue, coarse, and three parallel threads are used, resulting in a heavier cloth than is found in the majority of the finer quality blankets. There are 24 weft picks to the inch.

The thick blue weft used has sufficient value in the surface colour to give the otherwise dull Indian red background a purplish tone upon which the pattern appears in pale buff with black lines and dots and touches of red.

The outer edges of the blanket have wide border stripes of red, white and dark indigo on one side and of red, white, red, white and indigo on the other, totalling  $1\frac{1}{4}$  in. (3·1 cm.). Inside there are four composite stripes dividing three very narrow patterned ones. The composite stripes are made up of a blue centre with four or five pin stripes of white, the whole being edged with bright red on either side and the entire stripe measuring  $\frac{1}{2}$  in. (1·3 cm.) in width.

The upper and lower halves of the cloth are precisely alike and therefore only one-half need be described. The main design consists of twelve crocodiles, six of which (pl. xi, a) differ slightly from the other six (pl. xi, c). We identified these as crocodiles, as the cloth was labelled a crocodile cloth, but they may represent monitor lizards. There is an upper row of three men (pl. ii, a) between the "crocodiles" and a lower row of three men with feathers in their hair; owing to the constricted space these men have no arms.

A line, elsewhere identified as *resam* leaves, divides the main pattern from the border pattern; these are alike at both ends, which is an unusual feature. Three very large toothed lozenges occupy the whole width of the cloth, except the lateral borders, and each lozenge contains two standing men (pl. II, b); a grass lizard is placed between the heads of the men and a white bird between their bodies and two white birds on either side.

In the spaces between the lozenges and the *resam* line is a triangular figure (pl. xxIII, e), which, except for the lateral scrolls, resembles that called *ladang*, "a farm", or ridge of earth round a paddy farm, on cloth 35.927 (pl. xxIII, f), on either side of it is what appears to be a swift or swallow

(cf. pl. 1x, a). Round the apex of the "farm" are some spots resembling those often called "rice grains" and have been so named by us in our sketch. Is it possible that the whole border pattern may be regarded as an invocation to success in the cultivation of paddy? The necessary good omen birds are represented around the men.

35.925. This is a blanket cloth just as it is taken from the loom, with some of the heading rods made of bamboo leaves still in place. The cloth is extremely coarse, and there is just enough material to make a blanket by cutting the strip in two and joining up two of the long sides. The width is I ft.  $7\frac{1}{2}$  in. (49.5 cm.) and the length 13 ft. 6 in. (411.4 cm.).

A very coarse, thick but tightly twisted yarn is used for the warp, which is paired in the central part of the cloth, there being 26 pairs or 52 ends to the inch.

In the self-coloured stripes at the one side the grouping of the warps varies, the red-brown ground colour is used singly, the white double, the yellow fourfold, and taking an average between these groupings the warp ends are 100 to the inch, the high number being entirely due to the fine yarn used in the yellow stripes, where four parallel warps are grouped as one. The weft is double and very coarse in most of the cloth, averaging only nine picks to the inch, but in another section where a single weft has been used the number of picks rises to 12.

The tightly twisted coarse yarn produces a cloth which is strong but very harsh to the touch.

The colour is a dull red with patterns in half in the main portion of the cloth, and at one side there is a series of solid colour stripes, beginning at the edge with red and following on with yellow, black, white, red, yellow, then very narrow stripes of white, yellow, red, yellow, white. The whole group is about 4 in. (10·1 cm.) in width. When the blanket is made up the stripes will appear at both the long edges.

The horizontal border pattern at one end is described as a frog pattern, but it is more like a human figure and there is also a very indistinct bird motive called *burong semalau* (a species of thrush, *Copsychus amaenus*).

The border pattern at the other end consists of two rows of hexagons with a buff spot in the centre of each; they are labelled *sempong*.

Owing to the coarse texture of the material all the patterns are very in-

distinct, but the main pattern between the borders appears to consist of plant motives, resembling the arrangement of the tangkong creeper pattern on other cloths.

There are no subsidiary pattern stripes at the side of the cloth.

35.923. Engkaramba pua. Width, 3 ft. (91.5 cm.); length, 6 ft. 10 in. (208.4 cm.), including fringe. Pl. xxxIV.

The warps are twofold (paired) throughout and there is little difference between the weaving of the coloured self stripes at the sides and the main pattern. The yarn used for this cloth is a fine one and there are 60 pairs of warps or 120 ends to the inch. A twofold blue weft is used and there are 18 picks to the inch.

A central band nearly 2 ft. (61 cm.) wide of buff-coloured figures with touches of a deep purplish brown on a red background has its general effect enhanced by a group of very distinctive border stripes. Three of these on each side are patterned and coloured similarly to the main pattern. They are separated from one another by composite stripes, averaging  $\frac{5}{8}$  in. (1.6 cm.) in width, consisting of a central pale gold stripe edged with white and light red. Beyond these and towards the outer edge of the cloth solid colour stripes make an effective finish. Beginning at the outer edge there is a red stripe  $\frac{5}{8}$  in. wide (1.6 cm.), then white, blue, red, white and yellow, each about  $\frac{3}{8}$  in. (0.9 mm.). It is labelled dilah kendawang, "tongue of the snake" (pp. 29, 112); but an informant in Sarawak called it sulor nyang and said it was the four colours in the sky at dawn ("nyang, sunset", S.D.D.). The general effect is excellent.

The border of the photographed end of the cloth (pl. xxxiv) consists of lozenge-shaped papan sengayoh, blades of paddles, with their W-shaped handles ulu sengayoh below (pl. xxiii, l). At the apex of the blade is a pala buntak, "head of locust", and the fringe of hooks is labelled kukut burong, "claws of bird". Within the lozenge is an anak engkatak, "young frog" (pl. xiii, a). The transverse black band on a white ground is slaku, a ratan used as a rope; there is another at the other end of the main pattern.

The central portion of the *pua* is entirely covered by finely drawn rows of *engkaramba*; there are eight figures in each row. There are nine rows, and in every third row there is a change in the appearance of the figures (pl. 1, c), the body is spotted and the legs turned down as in representations of frogs

and in an engkaramba engkatak (pl. xIII, h). All the other figures (pl. I, b) have elongated ear-lobes and feathers (?) in the hair and all but the first row have tall head-dresses that vary from row to row. The first row is labelled zanggoi langgeng, for which we cannot find a translation. The small spaces between the figures are filled very skilfully with frogs, lizards, etc., one between the heads of the sixth row is called bubul pantak, space-filling wasp; in the first row the banded fillings are kites' feathers (cf. pl. x, e, f).

The other border of the cloth, below the slaku, consists of light engkaramba with large white triangular body and without legs, separated by ratan leaves.

The outer of the three patterned stripes at the sides have anak lachau, "young lizards" (pl. xII, c); one of them is wrongly labelled as burong andin (pl. IX, f). The central stripe contains various birds, including birds with white breasts and burong jengkuan, "bird on a spool" (pl. VIII, g).

35.924. Width, 2 ft. 10 in. (86.4 cm.); length, 6 ft. 3 in. (190.5 cm.). The pua is, as usual, made of two strips of cloth joined by a fish-bone stitch down the centre.

The yarn is rather coarse and the warps are paired throughout except in the yellow self stripes of the border, where three parallel warps are treated as one. There are 56 pairs or 112 ends to the inch in the cloth, but in the yellow stripes there are 48 groups of threes or 144 ends to the inch, the yarn used in these stripes being of a much finer quality. The weft averages 20 picks to the inch throughout the whole length, is of a dull brown, not the reddish tone of the background, and is coarse and therefore used singly.

The central pattern band has a reddish brown background with a buffcoloured pattern, sometimes strengthened by lines and patches of black, produced by dyeing with indigo over the brown. An interesting feature, which makes this one of the most charmingly coloured of the blankets, is the use of touches of pale blue as emphasis for the main lines of the design.

The self-coloured border stripes of yellow, dark indigo, yellow, dark indigo, white and dull red are of a more even width than is usual, the group being 2 in. across, and their colour being very distinctive adds charm to the whole scheme. They are labelled ara dilah kendawang, the different coloured stripes of the tongue of the kendawang snake.

The pattern, which has a main central portion with important borders

above and below, is very beautiful from the purely aesthetic point of view. The spacing out, which is chiefly done by the bluer parts of the pattern, is very interesting in shape and well distributed, the lines forming a pleasing contrast with the curved forms used as motives for filling in the spaces.

An inch from both the edges two rows of twining, described as kelalin lantai (interlaced bamboo), strengthens the fabric. Just below is the first row of patterns representing pemuchok tubu bekengkang, "striped bamboo shoots"; these are hollow triangles between every two of which is a solid white triangle below which and connected with it by a thin line is a burong burak, "white bird": it has no head. Below the burong is a widely spaced irregular double zigzag lelingkok tebok igi bras, "zigzag with rice grains"; its internal projections are called dabong beserang. The interior space contains pantak penandok iku ruai (pl. xvII, e), which may mean the wound caused by the sting of a wasp or a cupping scarification (resembling the ocelli on the) tail (wing, not tail, feathers of the) argus pheasant; but ruai also means the verandah of a long house (see p. 132). Below the lower zigzag are curious little designs, gari enk (engku), my clothes (pl. 11, i). A wide horizontal stripe of white, black, white kengkang slaku, "striped ratan", divides these patterns and the precisely similar patterns at the other end of the cloth from the main central pattern.

In the central pattern is a framework (as in pl. xxxv, though very different from it) which is difficult to interpret, and the names for various parts are obscure and vary in spelling. In the interspaces are engkaramba, engkatak, etc. About 2 ft. 3 in. (68.6 cm.) from the upper end of the blanket are five prominent kengkang bulu lang, "striped feathers of the kite" (pl. x, e), coloured white, red and black. Above them are three bukang engkaramba (pl. 1, d), but these "headless engkaramba" seem to possess heads!

Three long spaces about the middle of the cloth are filled by an anak engkaramba, "young engkaramba" (pl. 1, e), who does not wear a head-dress, and by what is apparently a frog (pl. x111, c). Lower down are some engkaramba mensia, engkaramba people (pl. 1, f). In the next row are some good frogs (pl. x111, b), and between them is what are described as ruyit, "the barb of a fish-spear" (pl. xx1v, j), and serpang pala tangga beji (pl. xx1v, k), which may mean forks or hooks at the top of the ladder of a house; for barbed spears see Ling Roth, 11, p. 108.

The lower border consists of bukang, "headless corpse" (pl. 1, g). Near the fringed end are two rows of twining, kelalin lantai.

At the sides of the blanket are three patterned vertical stripes. The middle and wider one is decorated with burong buah bangkit, burong jengkuan and burong bedayong (cf. pl. vIII). On either side the stripe contains lachau, "green grass lizards" (pl. xII, h), alternating with kengkang bulu lang, "striped feather of the kite", similar to pl. x, f.

35.920. This is a *pua gajai burong*, blanket with omen *gajai*. Width, 2 ft.  $10\frac{1}{2}$  in. (87.7 cm.); length 6 ft. 5 in. (1.956 m.) with a fringe at one end.

The warps are paired except in the black and white border stripes, where they are coarser and used singly. There are 52 pairs (104 ends) of warp to the inch in the main body of the cloth and 54 warp ends in the self borders where the yarn is coarser. The brown weft is used singly and there are 20 picks to the inch. Instead of the more usual row of twining, near the ends there is some rough stitching called *kelalin gelegar*, to interlace ratan, etc. for the flooring of a house. One end is fringed, and where the self-colour stripes occur, the warp ends are twisted and knotted to form the fringe.

The general effect is quiet, the narrow self borders at the sides being black and white and the remainder of the cloth dull red with patterns in pale buff and a dull purplish brown, probably produced by using weak indigo dye over the red.

The patterns are unusually interesting and include fanciful designs resembling frogs.

The elements ras of the horizontal border pattern at the fringed end are something like handled vases in form. A ras is found in cloth 35.922 (at the top of pl. xxxv), and it occurs on other cloths not in the collection; we think this signifies a plot of land. Between the ras are unnamed designs. The row of ras is divided from the main pattern by a slaku, a dark line on a white ground.

Six entilang gajai form the first row of the main pattern; they have four-pronged projections from the head labelled perambai gajai and fringes on the fore-legs (pl. xIII, k). The next row consists of gagai burong, omen gajai (pl. vIII, n). Below it are two rows of entilang gajai, figures something like those of the first row but with two curled projections from the head (pl. xIII, j).

There is a row of unnamed figures between the legs of one row and the heads of the next. These are followed by a row of tuboh gajai, gajai person, these are somewhat similar to the gajai burong. From this point, which is halfway down the cloth, the figures are reversed so as to face the opposite end. Those of the first row are similar to pl. XIII, k and the head projections are labelled perambai. Then follows a row of very simple tuboh gajai, succeeded by a row of gajai something like pl. XIII, j. This is followed by a row of another kind of tuboh gajai alternating with bubul lapang, "design to fill a space". The last row consists of six entilang gajai with two pairs of hind legs (pl. VIII, o), and on both sides of the body of each is a white disc with black spots, telu gajai, spawn or eggs of the gajai, pl. XIII, l.

A transverse band of white, red, white, black, white named kengkang kelikut, striped —?, separates the central patterns from the elaborate border pattern at the non-fringed end. This has a row of entilang gajai, something like pl. xiii, k; there is a vertical line from each head which passes through a burong burak and ends in a lancham pemuchok, "pointed shoot", a solid white triangle with two streamers. Alternating with the entilang gajai is another type of gajai burong (pl. viii, m), and alternating with the burong burak are jengam jengkuan tali, solid white triangles with lateral scrolls and convergent projections at each end, which seems to signify a forked spool.

Of the three patterned stripes at the side the central one is nearly an inch wide and is ornamented with various kinds of burong: bird on spool, bird dancing, bird with comb, etc. divided by portions of kite feathers. The two narrower stripes are filled with unak wi, thorn of ratan (pl. xxII, I), alternating with kite feathers.

Most of the figures on this cloth are fabulous creatures which appear to be more frog-like than human, and some of them may represent Salampandai, who in unseen regions hammers out children as they are born into the world. She makes people either by her independent power as a petara or by command of Petara. She is never visible in her own person but is supposed to have a visible manifestation in a creature something like a frog, which is also called Salampandai. "This creature is regarded with reverence and must not be killed. It if goes up into a Dayak house, they offer it sacrifice, and let it go again, but it is very seldom seen... The noise it makes is said to be

115

the sound of the spirit's hammer, as she works at her anvil" (Perham in Ling Roth, 1, pp. 176, 177). This blanket should be a sure shield against evil for the beneficent gajai are equivalent to a blessing from Petara.

35.922. This cloth, Pl. xxxv, as is usual with the blanket type, consists of two strips of material joined by a lacing stitch, *kelalin lambai*, down the centre; including the fringe it is 2 ft. 10 in. (86.4 cm.) wide and 6 ft. 8 in. (203.2 cm.) long.

This is an evenly woven cloth of medium texture, the warps in the main body of the cloth average 26 pairs (52 ends) to the inch and there are 22 picks of weft to the inch. The weft is single and light blue in colour, a pale tint of indigo. In the border stripes the arrangement of the warps varies, those in the yellow bands are grouped in threes and are of a much finer yarn, whilst the white and pale blue are each single warp strands. There are 88 ends to the inch in the border. Two horizontal stripes of twining in white and blue, each consisting of three rows, are used to strengthen the ends of the blanket; they are  $\frac{3}{8}$  in. (9 mm.) apart and the first is 2 in. from the end of the cloth.

This beautiful blanket owes its great charm to well-arranged patterns and the very effective use of a limited range of colours. The background of the broad central band is a ruddy brown, almost Indian red in tone, and on it the patterns are clearly outlined in pale buff. Between the lines enclosing the pattern effective use is made of a very dark filling, varied by lines and spots of the buff or stone colour. This dark tone is obtained by a second dyeing of indigo over the reddish brown, and the accuracy of workmanship combined with a skilful use of dye stuffs indicates a Saribas origin.

The upper border of the main pattern consists of two patterned rows, the upper a series of ras alternating with anak lachau, "young grass lizards" (pl. XII, d). A white line separates these from a row of burong burak prut, "birds with a white breast"; the dark interspaces are petik igi bras, "spotted with rice grains". Then follows a transverse band, kengkang selaku, "striped ratan", which divides the border from the main pattern.

The handsome central pattern is most unusual, consisting chiefly of trunks, batang, and branches, dan, of trees arranged to form elongated polygonal spaces which are filled with leaves and pendant branches with blossoms (pl. xxi, c). The trunks and branches are outlined by a pale buff

edge, and spots of this pale colour occur regularly between the outlines. This bright outline is described as being caused by the light of the fireflies, sepepat (selempepat), with which the tree is covered, and it is not unusual for these insects to settle all over a tree or shrub so that it looks as if on fire. In speaking of these insects Beccari says (p. 75): "The intense darkness was lit up from time to time by brilliant intermittent flashes—the love-lights of enormous fireflies!" At least six species of firefly have been observed in Sarawak, some as large as 21 mm. by 9 mm., that is, fully three-quarters of an inch in length. Trees entirely illuminated by innumerable fireflies which emit their light in rhythmic pulsations of intensity are well known in New Guinea and elsewhere.

The central lozenge of pl. xxi, c is a buah bangkit, "bangkit fruit", the second fork or branch below it is labelled batang sepepat tebok igi bras; the white spots are here referred to as rice grains, igi bras, which seems improbable. From these branches depend tangkai sepepat, "branch with fireflies".

At the top, in each of the two bays of the branches is an inverted triangular design with bent projections which enclose two hooks labelled jangkam spit, "to squeeze with pincers", and immediately below this is a large design, jerit bubul indu buyah, "filling pattern like the insect which eats honey"; in cloth 39.928 (pl. xvII, c) the same figure is called buyah, "beetle", but in S.D.D. "buyah a species of moth often seen round lamps"—indu signifies female. In the same row and between these insects are three smaller designs, jerit bubul mata lungu, "filling-in design, blade of spear". The three white spots below the spears are the bodies of burong berayah, bird dancing with extended wings (pl. vIII, k). "Berayah, a ceremonious dance performed by chiefs leaping up with their arms extended in imitation of a soaring kite...[it] is an imitation of the soaring of the menaul [hawk, kite], the spirit representative of Singalang Burong....(One of three ancient Dayak dances.) All these dances are of a processional character" (S.D.D.). Lower down are two white spots with four projections called *ketam*, "crab" (pl. xvII, p); crabs are frequently found on the mud banks of rivers and are used for food. The scrolls on the three cross bars close to the crabs are labelled spit api behilak, "fire-tongs?" The three lozenges near the bottom are buah bangkit, and below them are striped feathers of the kite; the white triangles with converging projections are spit, "pincers".

The lower border begins with a white, black, white, red band, kengkang slaku, "striped ratan"; the six double hooks on it are kait slaku, "slaku hooks". A slaku is a ratan which is used for climbing down trees. The triangles are called dilah munsang, "the tongue of a wild animal", but similar designs on other cloths are pemuchok tubu, "shoots of bamboo".

There are three narrow patterned borders at the outer edges, divided by plain reddish brown ones which have a fine yellow line down their centres and are bordered on either side by narrow white, blue and white stripes. At the selvedge there is a reddish-brown stripe, next to it a yellow band with white and blue striped edges, this combination of white, blue, yellow and red is known as "break of day", sulor nyang, as it represents the four colours of the eastern sky at dawn ("nyang, sunset", S.D.D.). The patterned stripes contain lachau, "lizard", alternating with kengkang lang, "striped feather of kite" (pl. x, f).

35.928. Width, 3 ft.  $1\frac{1}{2}$  in. (95.3 cm.); length, 7 ft. 1 in. (215.9 cm.).

The major portion of this cloth has its warps paired; they number 48 pairs or 96 warp ends to the inch, but in the narrow pale blue and white stripes of the border, which appear to be more closely woven, the warps are single and there are only 60 ends to an inch.

The weft is brown in colour and single, which makes the resulting fabric much softer to handle. There are 20 picks to the inch.

The background to the central band of pattern is a dull Indian red, the pattern itself is outlined in buff, with spots of pale buff and streaks of dark brown accentuating certain portions of the design. The outer borders are narrow, only one is patterned and this has a composite stripe on either side of pale blue, red, pale blue divided by pin stripes of white. At the edge there are two broader self stripes, totalling  $\frac{7}{8}$  in. (22 mm.), of which the outer is red and the inner white.

The elaborate transverse band at the upper end of the cloth consists of a folded zigzag, in the band of which are tebok igi bras, "holes like the rice grains". The zigzag encloses two rows of lozenges; each upper lozenge contains pantak penandok, which may signify the wound caused by the sting of a wasp (see p. 132 and Vocabulary). The lower lozenges contain sesimpong, "a creeper cut off its stem". On the apices of the upper row are sanggul sesimpong, "tendrils of a creeper which has been cut in two" (pl. xix, b);

on the top of these is a pala burong, "bird's head". Below the lozenges are pemuchok bubul lapang, "a shoot filling up a space"; they stand on a transverse band, penuri daun resam, "the spiky leaf of the resam", a species of fern, Pteris arachnoiden, which usually grows in secondary jungle where the primaeval forest has been destroyed.

The central space of the cloth is almost a duplicate of that of 35.922 and like it is divided by trunks and branches of the bangkit tree; the fruit, buah, and flowers, bunga, are shown in pl. xxi, e. The branches divide and unite in regular order, but some of the junctions are labelled entilang dapur, "fire hearth" (pl. xxiii, j, k). The scrolls at these places are called spit, which judging from cloth 35.922 are fire-tongs. Here also, fireflies, sepepat, are noted as being on forks, spit, twigs, pating, tendrils, sanggul, etc., all being outlined with their light.

The two buyah, "beetle", designs (pl. xvii, c) occupy the same position as the "insect which eats honey" on cloth 35.922. The burong berayah of that cloth are here ignominiously called bubul lapang, "space-filling". Two crabs, ketam (pl. xvii, n), occupy the same position as in the former cloth and three crabs (pl. xvii, o) occur near the bottom.

The border at the lower end is separated from the main pattern by a penuri daun resam; it has two zigzagged bands, lelingkok tebok igi bras, "zigzag with holes (like) rice grains". In the lozenges thus formed are diamonds, which are the ocelli of the tail feathers of the argus pheasant, tugang langgai burong ruai, as the whole pattern is called. In the lower angles of the zigzag are burong (pl. vii, c). Finally there is a row of alternate white and speckled pemuchok tubu, "bamboo shoots" (pl. xviii, h).

There is only one patterned border at the sides of the cloth; it contains rather indistinct birds: burong buah bangkit (pl. xVIII, i), burong lelayang (pl. IX, a) and burong entepa, "bird with outstretched wings".

The whole blanket is most decorative and shows a highly developed sense of appreciation in the placing of regular pattern over a large surface; the same applies to 35.922, which, however, has more brilliant coloration.

35.927. This is only one-half of a blanket and is very much soiled so that its colour is faded. Width 1 ft.  $10\frac{1}{2}$  in. (57·1 cm.); length, 6 ft. 6 in. (198·1 cm.) with the fringe.

The workmanship in this cloth is inferior and the weaving is very irregular

and coarse. The warps are paired and there are 36 pairs (72 ends) to the inch in the central part and 60 ends to the inch in the coloured border stripes, where they are woven singly.

The weft varies in colour, without any attempt at regularity; it is sometimes red and at others a dull stone colour. On the spool it has been wound sometimes singly and sometimes twofold; this also helps to produce irregular weaving.

The colour has been mostly lost through use and soiling, but originally the pattern was in buff and dark indigo on a reddish background, and apparently there have been pale blue and white stripes enclosing a narrow border down the sides.

The middle of the blanket is plain, and at each end there are three rows of somewhat unusual designs.

At one end a squat lozenge-like form represents sanggul simpong, "tendrils of a creeper cut off" (pl. xxi, d). This is divided from the next pattern by a horizontal line of daun resam, "resam fern leaves" (pl. xxiii, p). The second band consists of sarong kris, "dagger sheaths" (pl. xxiii, d), and one ladang (pl. xxiii, f), a bank surrounding a paddy field, a farm, or a division of land. Compare with pl. xxiii, e, which has a similar form but with what we take to be rice grains. The third row represents mayau tindok, "sleeping cats" (pl. xvii, s), enclosed between two stripes of kengkang slaku, "ratan used for climbing".

At the other end of the cloth are two rows of sleeping cats, though they are labelled *chayam*, "pig's whiskers" (pl. xvII, t). They are divided by a row of *resam* fern leaves from two rows of larger representations of sleeping cats (pl. xvII, r) provided with what apparently are whiskers; the spots on the bodies of the cats are *mata ulat*, "eye of grub". Another row of *resam* leaves divides these cats from a row of *tubu*, "bamboo shoots".

The border pattern at the side has designs only at the ends; these are: burong jengkuan, here termed a kingfisher, though elsewhere "bird and spool", and burong entepa, "bird with outstretched wings" (cf. pl. VII, r).

35.921. Pua bulan menyembang. Saribas. A moon cloth. Width 2 ft.  $7\frac{1}{2}$  in. (80 cm.); length, 7 ft.  $\frac{1}{2}$  in. (214.7 cm.).

The cloth has a coarsely woven effect in the main pattern, partly due to the irregular grouping of the warps in twos and threes, without apparent plan, but averaging 40 groups with approximately 116 warp ends to the inch. In the self-coloured borders at the sides the warps are arranged in threes, with 44 groups and 132 ends to an inch.

The weft is threefold and there are 22 picks to the inch; the thickness of the weft is a contributary cause to the coarse texture of the fabric. In colour the weft is unusual, being blue.

The cloth is fringed at the ends to a depth of  $\frac{3}{4}$  in. (1.9 cm.) and then  $\frac{1}{2}$  in. (1.3 cm.) further in it has a series of three very coarse twined patterns, one single in white, one double in dark blue and white and then another single in white.

The colour is simple and effective because it is more massed than usual, partly owing to the fact that one simple motive recurs again and again. This motive appears as light stone colour with indigo lines in it on a background of dull light red. The border stripes, which provide the strongest colour in the cloth, have a total width of  $4\frac{1}{4}$  in. (10.7 cm.) and consist of four halfinch stripes beginning with red at the outer edge, then yellow, black and white; this composite stripe is called ara belampang; this is followed by a  $\frac{1}{4}$  in. (0.6 mm.) stripe of horizontally banded black and white, ara rinik, and black, and yellow and red stripes, surik, each  $\frac{1}{8}$  in. (0.3 mm.) in width. A patterned stripe  $\frac{5}{8}$  in. (1.3 cm.) wide comes next and its edge nearest the centre of the cloth is bordered by a composite stripe of red, yellow, black, black and white horizontally banded, black, yellow and red, of a total width of 1 in. (2.5 cm.).

At each end of the cloth is a line of black and white twined weaving, ungki, "edge of pattern", below this a row of penuchok pala burong, "shoots with head of a bird" (pl. xviii, f), and below this a dark blue line on a white background, ladi burak unggo chilom, which at the other end of the cloth is called kengkang slaku.

At the ends of the main series of designs is a row of simple triangular motives called *burong lelayang*, "swallows (without heads)" or *bulan*, "moon" (pl. xxv, h); these do not look like other swallow designs, nor do they look like the moon. The next row consists of diamonds with converging arms and a central solid red oblong.

The rest of the cloth is covered with groups of four of these devices arranged to form a large lozenge (pl. i, j), in the centre of which is a simple

design; in one it is buah angkong, "fruit of the horse-mango", in another buah bangkit, "bangkit fruit". In this cloth the two lateral devices of each lozenge have a red oblong with a white spot with a black clot in the middle —doubtless an eye spot; one of these lateral devices is named Bulan menimbang, "name of a god in the heavens", and another Bulan menyembang. There is nothing to identify this personage with Grandfather Ungkok, the man in the moon, cf. bidang 35.854 (pl. 1, a). In the section on Religion it is stated on the authority of Perham that the moon is not regarded as a divinity, but merely that it is the seat of a *Petara*. We have not been able to find a meaning for menyembang and its variants. In this cloth the upper and lower devices of each lozenge have red and black comb-like designs, which may possibly represent closed eyes and eyelashes, except the terminal ones at both ends, which have a solid red oblong, but this regularity does not occur on a cloth in the Sarawak Museum, no. 257; Camb. Mus. photo. Indon. Born. 374, on which there are only eyes and solid red oblongs. In this pua the pattern is labelled simpang taribang, and an Iban gave the name of simang taraba for the same pattern on another pua. In the S.D.D. simpang is given as "branch of a path or river, a junction"; the other word is not given. This evidently refers to the red background, which has the appearance of narrow branched bands which join one another; these bands are outlined by white lines in no. 257, but not in our pua. The lateral devices are connected with the central buah design by a broad horizontal white line. This device seems to have a special significance as it is found on other pua (cf. Sarawak Museum, no. 257; Camb. Mus. photo. 374) and it occurs in two rows on the upper part of the back of an Iban "priest's coat" from the Batang Lupar (Verslag Mus. voor Land- en Volkenkunde en Marit. Mus., Rotterdam, 1925, pl. 1).

There is a central transverse band across the main field of the cloth consisting of narrow acute lozenges, lancham puchok, "sharpened points", and fringed oblongs, dabong penuri, "serrated"; S.D.D. gives "penuri, pressed down, hole made with the fingers". Down the sides of the cloth is a narrow patterned stripe of what we identify as intercrossing ratan (pl. xxII, n), at each end of which is an engkarong, "the green lizard", but it closely resembles the lachau figured on pl. xII, g.

#### AN ANALYSIS OF THE PATTERNS

The particular fascination of a study of the woven textiles of the Iban lies in their patterns. These are traditional and hereditary, being handed down from mother to daughter, and we have already stated (p. 44) that the *engkaramba* figures may be made only by women belonging to ancient and honourable families.

The motives employed on the cloths include human and fabulous forms, zoomorphs (mammals, birds, reptiles, insects, etc.), phyllomorphs (trunks, branches, tendrils, leaves, flowers, fruit, etc.), material culture (hooks, spools, boats, paddles, ladders, fences, etc.) and finally natural phenomena (clouds, rivers, and the moon), but examples of this group are rare.

Some of the designs are fairly realistic, but most of them are highly conventionalized, so much so that it would be impossible to recognize what they were intended to represent were local information not forthcoming. We have referred in the Introduction to the difficulties we have experienced in the identification of some of the designs.

Hose and McDougall (1, pp. 242-244) state that: "In wealth of decorative designs the Ibans surpass all the other tribes. These designs are displayed most abundantly in the decoration of bamboo surfaces and in the dyeing of cloths. The designs on bamboo surfaces are largely foliate scrolls, especially the yam-leaf, but also occasionally animal derivatives.

"The designs dyed upon the cloths (fig. 61) are largely animal derivatives; but the artists themselves seldom are aware of the derivation, even when the pattern bears the name of its animal origin; and as to the names of all, except the most obvious animal derivatives, even experts will differ. The frog, the young bird, the human form, and the lizard are the originals most frequently claimed. Parts of the animal, such as the head or eye, are commonly repeated in serial fashion detached from the rest of its form. And in many cases it is, of course, impossible to identify the parts of the pattern, although it may show a general affinity with unmistakable animal patterns. One such pattern very commonly used in dyeing is named after Agi bulan, the large shrew (Gymnura); but we have not been able to trace the slightest resemblance to the animal in any of the various examples we have seen (pls. 131, 132)."

#### ANTHROPOMORPHS

Two plates, I and II, are devoted to the representation of human figures, engkaramba, and another set is drawn in connection with the manang bali jacket referred to on pp. 37-46. The S.D.D. defines an engkaramba as "a representation of anything cut out of wood"; labels on cloth 35.926 state, "figure used to keep off harm", "engkarambas are used to prevent harm coming to crops, etc." We have failed to find any reference to engkaramba in the literature dealing with the Iban (see Vocabulary).

These designs occur chiefly on blankets, pua, and jackets, kalambi, and may be made only by the wives and daughters of chiefs, and even they must begin by making other patterns. They have a protective and beneficent influence, except in the case of headless corpses, bukang (pls. 1, d, g; 11, h), which may only be made in the pua by old women, as sickness is feared if this pattern is produced; it is mali (tabooed, forbidden) for young people to make it.

In a fairly large number of examples the legs are turned up, probably because in this way the figure fits better into the horizontal band of pattern of which it is a motive (pl. 1, b, e, f, h). A "female figure" engkaramba besugu is depicted on a shawl (p. 106; pl. 1, i) but the design is the same as that for a man, except for the "comb" in the hair. "Feathers" are shown in the hair of men in fig. 22, c, d. The only other representations of women are found in a jacket (pp. 41, 44 and figs. 19, 20, 21) where they alternate with men.

In addition to the typical engkaramba, Aki Ungkok, grandfather Ungkok who lives in the moon and whose face is seen there, is figured in pl. 1, a. One label refers to his bungkok, "bent back" (it also signifies "hunchbacked") and another label to tiang penyandih, "the post against which he leans when tired". This design is quite unlike the other anthropomorphic figures, but has great similarity to the deer patterns. An unusual figure (pl. 1, j) (could it be a stooping figure making obeisance to the moon?) occurs as an all-over pattern on the pua called a moon cloth (pp. 120–122). A similar pua is seen in Camb. Mus. photo. Indon. Born. no. 374.

On pl. 11 all the figures from a to g are merely entitled human figures, engkaramba; that at j is named a "diving pattern" and is the only anthropomorph (if it be one) on a bidang. The attitude of this figure is quite realistic.

One other very interesting little detail occurs on cloth 35.924 and is figured on pl. 11, i; this is called gari enk [engku], my clothes; perhaps it is a private mark or a mark of possession.

Further details of the meaning of some anthropomorphs are given at length in the note on the manang bali jacket, pp. 40-46.

#### ZOOMORPHS

# VERTEBRATES

#### Deer

Three kinds of animals are usually termed "deer" by most authors on Bornean ethnography. These are rusa, a true deer (Cervus equinus)—this is a variety of the sambar which is widely distributed in the East—kijang, the barking deer (Cervulus muntjac) and plandok, the diminutive mouse-deer (Tragulus, two sp.), which is not really a deer; this inhabits the jungle, whereas the two former are generally found in clearings.

The patterns in the deer cloths are particularly interesting but difficult to follow. When, however, they are carefully traced out, representations of the stag have "branching" or "crossed antlers", the doe is hornless and the udder is represented; on one cloth where both sexes occur another pattern, a "young deer", anak rusa, is also shown (pl. 111, h). All the deer patterns have a line of darker spots down the centre of the form, but the deer have a uniform brown colour without any markings; this type of decoration is used in some other patterns.

The muntjac is very important as an omen to all Bornean peoples, but least so to the Iban. The bark of the deer prevents people from continuing their journey, and even divorces people who are newly married. The little chevrotains, plandok, have the same function so far as a journey is concerned, but otherwise they are not very important. Sir Spencer St John says (1, p. 64): "To hear the cry of a deer is at all times unlucky"; we cannot find any specific mention of the rusa as being an omen animal apart from the general statement that the noises made by all "deer" are bad omens. If, as we suppose, the patterns on the cloths act largely as talismans or as amulets, it seems rather strange that the kijang and plandok are entirely unrepresented

so far as we are aware, whereas the *rusa*, which apparently is the least important in this respect, is frequently represented. It may be that the decorative branching antlers, which this species alone possesses, appeal strongly to these artistic women. Deer are regularly hunted with dogs for food, and perhaps success in the chase may be the underlying idea of these representations on the cloths.

# Tigers

Highly conventionalized tiger, remaung, patterns are frequent on cloths (pl. IV), and in basketry the foot of a remaung is sometimes represented. As the true tiger, remaung bendar, does not inhabit Borneo, it can be known to the Iban only by repute. Of the six species of Felis in Sarawak, by far the most important is the clouded tiger-cat or clouded tree-leopard, engkuli, Felis nebulosa, and it is the remaung most frequently depicted. F. planiceps, jelu mayau, is often very destructive in the gardens, as it is very fond of fruit, and digs up and eats sweet potatoes. F. bengalensis, mayau kuching bata, is about the size of a domestic cat and steals fowls; it lives in rocks (batu). F. marmorata, remaung raras, the marbled cat, is larger than a domestic cat and is very fierce. The other two species are very rare.

The supernumerary legs and paws which appear in many designs, as in pl. IV, may be suggestive of the agility and ferocity of these animals. The large size of the paws is especially noticeable in most of the designs.

It might be supposed that the patterns were intended to confer strength, agility and fierceness on the wearers, but as the designs are almost confined to the *bidang* of the woman the idea of protection seems here to be indicated, not only of the woman herself but of her crops and fowls.

Interesting designs are the sleeping cats, mayau tindok, represented on pl. xvII, r-u.

#### Shrews

The Gymnura rafflesi, aji, aji bulan (tikus bulan, "moon rat"; tikus antu, "spirit rat", Malay) is the survivor of a Tertiary group of Insectivora. It is not unlike a large rough-haired shrew and it has some affinities with hedgehogs; for convenience it may be termed a shrew. It is mainly white in colour. It is purely nocturnal and lives in the jungle close to water under the

roots of trees or in holes it has excavated. Its favourite food seems to be cockroaches, termites and various larvae, but it eats all kinds of insects and some vegetable matter, such as leaves and small berries. It has a peculiar offensive odour. When caught alive it is extremely savage and bites at anything within reach, snarling and growling.

Aji is one of the subsidiary omen animals, and is supposed to be a manifestation of Klieng, the war god and greatest hero of Iban legends. In the S.D.D. aji is also stated to be "a title of the Dayak fairy god Kling", and he is referred to as "The god Kling Aji who is brave". Ling Roth (1, p. 332) gives a tale from Brooke Low's notes in which Aji is the brother-in-law of Klieng and there is nothing to associate him with the moon rat. Klieng is a hero, not a god. Endless stories are told of this mythical being, most of them warlike and spectacular, and so representations of the shrew might be expected to confer bravery on the wearer of the garment, if it were not almost confined to bidang; perhaps the aji patterns refer in some way to the hero.

The well-known pugnacity of the animal is suggested in the fighting attitude of two shrews facing one another (pl. v, g), a favourite motive on shrew-patterned cloths.

Examples of characteristic shrew patterns are illustrated on pl. v, a-e; f is a shrew which occurs on a tiger cloth and is an example of the influence of one pattern upon another, as characteristic remaung paws are indicated in addition to shrew legs; the distinctive snout is clearly shown. Judging from the cloths the shrew appears to like the sweet-smelling bangkit fruit, for several designs show the aji on one (pl. vi, a, d, e). One shrew (pls. xxix; vi, c) has white spots, which may be rice grains, in its stomach and another (pls. xxx, A; vi, b) is actually depicted inside a plangka, "husking box", but there is a very different kind of plangka, see p. 78. There is no record of the shrew feeding on rice grains, and it seems very improbable that a jungle animal would enter the houses even if it could climb up the ladder.

# Burong, or bird, patterns

The reason for the preponderance of bird patterns is evident, for mostly good omen birds are portrayed which will ensure success in whatever venture is being undertaken, although other birds are also represented. In

the illustration on pls. VII, VIII, IX, no special types of birds can be distinguished, except pl. IX, a, which is a variety of swift or swallow and is always represented by a large wing, and e, which has distinctive tail feathers of the argus pheasant. Bird patterns are most often used in the narrow borders at the sides of the cloths and therefore have to fit into rather narrow parallel lines. Birds whose wings are covering their bodies are represented at pl. VII, i, j, k, and birds with "combs" at pl. VII, l, m, n, o, p; these seem to refer to the comb-like effect of the feathers on the wings rather than to a comb on a bird's head; q and r of pl. VII represent a bird with limbs outstretched.

Birds in action are figured on pl. VIII, where some are shown eating the sweet bangkit fruit, in a and b part of the fruit is seen with the bird almost hidden by it; others are depicted on a netting needle or spool of which a clear shape is seen at e and degenerate forms at f and g. Three birds are described as "rowing" or swimming, h, i, j. Those at k and l, which are dancing, are particularly interesting, as in one of the three ancient Dyak dances in which the chiefs leap up and down with extended arms in imitation of the flight of a soaring hawk. It will be noticed that these two figures are quite distinct from all the other bird designs.

Special types of birds are illustrated on pl. 1x, but as their designations are obscure we are not able to discuss them; one (h) seems to be an omen for rain. We have a note that burong belingkian (pl. 1x, e) is the argus pheasant, Argusianus grayi, which has two distinctively long tail feathers, but ruai is the common Iban name for the bird. The ocelli of the long wing feathers are perhaps represented on pl. xvII, e, and possibly on pl. xvII, d.

At the foot of plate ix are four young birds, j-m, and a fifth, n, has wings typical of swifts in other designs. A bird with long legs is shown in fig. 7 and in the bottom row of fig. 23, B.

The elaborate figures on pl. x are named after Singalang Burong himself, whose earthly form is lang, the kite, Haliastur intermedius, a sub-species of H. indus, the Brahminy kite of India. The striped feathers of the kite, e, f, are occasionally represented as independent designs and doubtless have the same significance as the whole bird. The obscure design labelled "kengkang lang", referred to on pp. 33, 35, 36, 37, 73, 84, 113, 118 and illustrated in fig. 18, b and in pl. xxvIII, B, is of peculiar interest.

Favourite designs, especially on sirat, are mata puna, "the eyes of the

small green pigeon" ("Treron, all species except T. capellei", S.D.D.); perhaps it is represented for the purpose of protecting the crops from the pigeons (pl. xVII, k, l, m).

#### Crocodiles

Although the crocodile, baya, is frequently used as a decorative motive in war-boats and is carved on the posts of the long house, it seems only to appear on the textiles used as blankets.

The crocodile designs, as will be seen from those figured on pl. x1, are amongst the most life-like representations on the cloths. The blankets upon which they appear and other designs are used as wall decorations as well as for their more practical purpose. Crocodiles on *pua* are shown in Camb. Mus. photos. Indon. Born. 362, 387, 394.

"A special deity, Pulang Gana, presides over the rice-culture of the Ibans, but the crocodile also is intimately concerned with their rice-culture.... On going to a new district Ibans always make a life-size image of a crocodile in clay on the land chosen for the paddy-farm... When the rites are duly performed this clay crocodile destroys all the pests which eat the rice.... Many Ibans claim the live crocodile as a relative and.. will not eat the flesh of crocodiles nor kill them, save in revenge when a crocodile has taken one of their household. They say that the spirit of the crocodile sometimes becomes a man just like an Iban... Another reason given for their fear of killing crocodiles is that Ribai, the river-god, sometimes becomes a crocodile", as may Klieng, who gives them heads in war and first advised the Iban to make friends with Pulang Gana (Hose and McDougall, 1901, pp. 198, 199; 1912, 11, pp. 88, 89). The belief that crocodiles are afraid to eat Iban is reported by the Rev. W. Chalmers as quoted by Ling Roth, 1, pp. 348-350.

#### Lizards

Borneo abounds in lizards; Beccari mentions 49 species, one of which is the monitor lizard, bayak, Varanus sp., which reaches a yard in length; it is common and its flesh is highly esteemed. This is conventionally represented on pl. x11, l, but what is evidently the same lizard is realistically shown in shell-work on certain kalambi, pp. 51, 52. Large "lizards" adorn a pua (1905, 419) in the British Museum, which, if they are lizards, are probably

monitors; and it is possible that the six reptiles on our cloth 35.931 are monitors and not crocodiles.

The much smaller green grass lizards which are represented from a to e as young ones, anak lachau, are depicted as full grown in f, g, h, but except at h the legs are not shown. This may possibly be due to the fact that the narrow borders in which they usually appear do not leave much room for them.

Examples of skink lizards, known as engkarong, are shown at i and j on pl. xII, and are interesting because they have distinct heads and tails. The stiff lizard or skink, engkarong kejong, figured at k occurs only once in the cloths.

#### Snakes

Snakes, as such, are not shown on our cloths, though several border stripes are said to represent banded snakes, pp. 29, 33, 55, 68, 73, 112. This seems to be more in the nature of a colour effect than an intention to delineate actual snakes. Two pua in the Sarawak Museum, nos. 244, 247 (Camb. Mus. photo. Indon. Born. nos. 357, 360) have six large snakes that extend along the whole length of each cloth.

Occasionally, as on a cloth, no. 407 in the British Museum, and on a sirat in the Sarawak Museum, no. 262 (Camb. Mus. photo. Indon. Born. no. 407), one finds a folded band termed leku sawa, "twining of the python or twisting like a python".

Perham says that the feeling of the Iban towards prominent members of the snake tribe is something more than reverential regard, much the same as is given to antu, but it is "a personal and not a tribal deity". The python, sawa, and the cobra, tedong, are the snakes generally selected by the antu for their habitation, but only individual ones.

## Frogs

The frog designs naturally fall into two categories: (1) the true frog, engkatak, and (2) more or less mythical conceptions of it and those frog-like creatures known as gajai; we do not know why that shown in pl. x111, k was labelled "entilang gajai".

(1) Of the first group one, a species of frog, known as  $pam\bar{a}$ , is sometimes represented anthropomorphically, pl. XIII, g, but at f it is somewhat more like a frog.

Frogs are used for food and they are considered a great delicacy; quite life-like representations of them are not uncommon, such as the examples drawn on pl. xxxx, a, b, c, d. The curious appendages on the fore-limbs of d cannot be accounted for.

(2) The other designs are of mythical creatures with more or less froglike bodies and human heads, whose special significance is unknown to us. That on pl. XIII, h is labelled engkaramba engkatak. Engkaramba gajai, i, gajai, j, and entilang gajai, k, can scarcely be expected to look like frogs as they are mythical creatures. All these occur on pua.

Salampandai is a female spirit and the maker of men. Apparently she is never visible in her own person, but she is supposed to have a manifestation in a creature something like a frog, which is also called Salampandai. This creature is regarded with reverence and must not be killed. If it goes up into an Iban house, they offer it sacrifice and let it go again, but it is very seldom seen. The noise it makes is said to be the sound of the spirit's hammer, as she works at her anvil in the unseen regions hammering out children as they are born into the world. The creature is supposed to be somewhere near the house whenever a child is born; it approaches from behind if the infant is a girl and in front if a boy (see p. 115). The S.D.D. says: "Selampandai, a species of locust only heard at night. It is the manifestation on earth of Selampandai".

Kalambi gajai is a jacket with a frog pattern (S.D.D.) and it appears to us that this gajai may be a representation of Salampandai as a frog. If this be so its occurrence on a cloth worn by women would be very appropriate, but we do not know if this is a woman's kalambi.

# INVERTEBRATES

#### Spiders

Many species of spiders exist in Borneo, and some are large and have a poisonous bite; it is probably as a protection from such harm that they are portrayed on the cloths.

Spiders, *emplawa*, usually are delineated correctly with eight legs, but exuberance in design and perhaps the speed at which they travel occasionally makes them appear as if they had more. They are sometimes represented with another animal inside them: (pl. xv, a), a lizard (pl. xv, c), a bird

(pl. xv, b) and birds' heads (pl. xv, d). This is, of course, impossible, and may be due merely to the artist's urge to fill up a vacant space. Examples of young spiders are drawn on pl. xiv at a and b (these usually have but four legs), and of other spiders at c, d and e on the same plate.

# Centipedes

This group of designs on pl. xvi, a-f, is very common on narrow border stripes of bidang, and its use is probably protective. The designs are very suggestive of the embayar itself, the so-called "hundred legs" making a definite appeal. In one cloth, 35.881, the centipede (pl. xvi, d) extends for half of the length of the cloth and finishes with a curly twist at each end. The ardent desire for bi-symmetry which the Iban designer possesses often results in the head and tail of a creature being represented as much alike, but in the centipede there is actually this similarity.

# Scorpions, insects, etc.

There are other zoomorphs, some of which are not of very frequent occurrence in the cloths, such as those illustrated on pl. xvII. A scorpion, kala, is shown by a; and a scorpion's nippers, spit kala, by b. The buyah, a beetle or moth, is represented by c. Pantak is a wasp, the S.D.D. gives: "Pantak, a small dark-coloured wasp which inhabits holes in trees, or perhaps, more frequently holes in the banks of streams". Pantak penandok (pp. 74, 118; pl. xxvII, d) may be translated as the wound caused by the sting of a wasp, and pantak penandok iku ruai (p. 113; pl. xxvII, e) may be such a wound, or possibly the scarification preparatory to the cupping process (nandok), which may be likened to the ocelli on the feathers of the argus pheasant (p. 128); but ruai also means the verandah of a Dayak house. At one time we thought that the term on p. 113 might have reference to clay nests of solitary wasps sheltering under the verandah of a long house. Here we must leave it pending local information. A stylized wasp is shown in f on a flower pattern, pantak lelambak. A grub, empetut, g. Heads of locusts, pala buntak, h, i, are very commonly represented, perhaps for the purpose of protecting the crops. Crabs are eaten; young crabs, anak ketam, are shown in n, o, p with only four legs, and at q, the nippers, spit, of the freshwater crab, grama.

#### Leeches

All those who have travelled through the jungle in Borneo are unpleasantly acquainted with the land leeches, *lintah*, which stretch out from the foliage and fasten themselves not only on exposed portions of the body but find their way beneath the clothing; periodic examination of the whole person is sometimes necessary in order to remove these blood-suckers. It is rather surprising that these creatures are depicted, so far as we know, on but a few bidang. On pl. xvi, j, k, are seen leeches on a creeper and a flower. Leeches with interlocked mouths are called betegam, which means "to swallow all at once"; it is physically impossible for a leech to swallow anything except blood. Their coiled-up (besimpan) tails are shown at l and m; the former is from one of four bidang in the Sarawak Museum (nos. 213, 217, 219, 465; Camb. Mus. photos. Indon. Born. 324, 329, 330, 409).

We do not understand the significance of the hooks on the bodies of the leeches. It is tempting to assume that leeches are represented as charms to keep them away from the wearer of the *bidang*.

The S.D.D. gives "Lintah, the water leech", but the lintah on the cloths are certainly land leeches.

#### **PHYLLOMORPHS**

The *empili*, mast, drawn on pl. xVIII, a, b, c, d, e, is a wild nut which is the favourite food of wild pigs; it, in conjunction with the arenga palm, *entibap* (pl. xXII, a, b, c, d), and ratan leaves is very frequently used as the decoration for the narrow patterned stripes at the sides of the cloths.

The arenga palm, Arenga saccharifera, has many uses: the juice from the inflorescence makes sugar and, when fermented, toddy or palm-wine; the black fibres around the trunk and the bases of the fronds make very strong and durable rope, preferred to ratan in house-building; the cotton-like down is used as tinder, lulup; and the trunks afford excellent sago.

There are many varieties of the climbing palm (Calamus sp.) known as rotan by the Skarang and Saribas Iban and as wi by other Iban: the thinner kinds are the more valuable. Baskets and mats are made of split ratan and pliable ratans are used as ropes. The thorny tendrils (tangai) and leaves of the ratan (daun wi) are very frequently represented in the narrow border patterns of bidang and occasionally in those of pua (pl. xxII, j, k, l, m, n).

Many other jungle plants and one species of ratan have very large thorns which make the clearing of the jungle very difficult; two crossed thorny stems of ratan, unak wi bekait, are illustrated on pl. xxII, o.

The tangkong "creeper" (? a climbing plant), which is a jungle plant with scented pendant flowers, provides many characteristic patterns. The designs b, c on pl. xix and all those on pl. xx are derived from this plant. The randau is some kind of creeper or climbing plant.

Illustrations of *bangkit* flowers are given in pls. xix, a; xxi, e; the fruit is always represented as lozenge-shaped (pls. vi, a, d, e; xviii, i, j, k) and is one of the most common motives on woven and embroidered cloths. The S.D.D. says, "Bangkit, a scented flower, scented leaves or fruit of certain jungle trees used as scent or ornaments to decorate the hair or body".

The fruit of the *beringen* tree is occasionally represented (pl. xvIII, l) and much more often that of various species of mango (*Mangifera*): we illustrate buah bunut, "horse-mango" (pl. xxII, r) and buah angkong (pl. xXII, q, s). "Angkong, a tree bearing strong-scented diamond-shaped fruit (the horse manggo)", S.D.D.

A tree with its trunk and branches outlined by the light of fireflies dominates the surface of pua 35.922 (pl. xxi, c), and pua 35.928 is very similar. Species of large fireflies are common in Borneo, and when they settle in enormous numbers on a bush or tree it appears as if on fire; the white line round the designs suggests this remarkable phenomenon.

Very frequently repeated in all the kinds of cloths are the young shoots of the bamboo *pemuchok tubu*, which are used as a vegetable; we illustrate a few on pl. xviii, f, g, h.

The curled tops of the resam fern, gelong paku resam, are occasionally depicted in a realistic manner (pl. xvIII, m, n, o). Paku is the general name for ferns, particularly for Hollenium esculentum, which is eaten as a vegetable. The deman is the fern Gleichenia dichotoma.

Other useful plants are represented on cloths, the most frequent being the bingka lia, "root of the ginger" (lia or liah), and gourds. Seeds, leka, are shown on pl. xix, f of the labu, "a white pumpkin, gourd, calabash (Cucurbita lagenaria)", S.D.D., the dried fruit of which is used as a water vessel. The serok genok is shown on pl. xxii, f; the label says, "genok, a gourd with a long twisted stalk; the fruit is used by the Dayaks to rub their bodies in the place

of soap". The S.D.D. says, "Genok, gourd, a white pumpkin (when dried these are used as water vessels)". Bunga janggat, flower of the janggat, "a white pumpkin, a fruit resembling a vegetable marrow", S.D.D., is embroidered on jacket 35.904 and illustrated on pl. xxII, g.

Lelambak is a conventionalized flower very frequently plaited in mats and baskets; it is embroidered on jacket 35.918 (2) (pl. xxII, i).

It will be noticed that practically all of the plants represented are of value to the Iban in their daily life, though the thorny plants may form an exception.

# OBJECTS IN DAILY USE

A small number of the designs, probably about 3 per cent., represent objects connected with the daily life of the Iban.

A plot of land, ras, and the balk or ridge of earth around a plot of land, ladang, are illustrated at e and f on pl. xxIII. A rocky ledge in swamp-land, padong paya or paya bepadong, a, c, and sown swamp-land, tabor paya, b, are shown on pl. xxv, and mentioned on pp. 91, 92, 95; we do not profess to understand the designs. Zigzag fences, pempang lelingkok, are sometimes shown (pl. xxIII, g).

Connected with houses are: the plank where the prop is tied, papan penukoh, and serrated notch in an upright post for a cross bar, dabong betangkal (pl. xxiv, m, l). Boards or planks and poles are represented on other cloths, and the notched steps of a pole-ladder, tangkal tangga, or tebok tangga pantok, on bidang 35.877 (27), 35.862 (21) respectively. The framework of an Iban cooking place, entilang, with its shelves and a bird on the middle shelf is depicted on pl. xxiii, h, two hearths, entilang dapur, j, k, and fire-tongs, spit api behilak, i. A tripod for cooking rice, tanku asi, is seen on pl. xxiv, f, and a "box" for paddy husking, entilang pelangka, at i and pl. xxx, A; see p. 78 for another kind of plangka. Hooks, kait (pl. xxiii, o, p, q), are frequent and also wedges, pasak (r, s, t, u).

Warlike pursuits are represented by the shield, trabai bungkok at a, the handle of a shield, gelang trabai, at b, and the sheath of a kris or dagger, sarang kris, at d. A canoe, besampan, with a suggestion of the stern platform, dandan, and oars, dayong, projecting from its sides is drawn at c, and a paddle, ulu, at n, and crutch-handles of paddles at l, m, all on pl. xxIII.

A hooked fish-trap, sergang pala tangga beji, is indicated on pl. xxiv, k, which seems to mean a bamboo fish-trap at the head of a staircase or ladder. We have no translation for beji. A description of the different nets, baskets and traps used for fishing is given by Ling Roth (1, pp. 454–464). Two barbed fish spears, ruit gansai, are shown on pl. xxii, p, and a barb, ruit, on pl. xxiv, j.

The pursuits of the women are represented by shaped pieces of wood upon which the spun thread is wound, tayok gasing, at a, b, pl. xxiv, and at c a more elaborate example which possibly includes the uprights of that part of the spinning wheel through which the driving thread passes to the spindle. A weaving spool, or "netting needle", jengkuan, is seen at e. The ridges on a mallet used for beating bark-cloth, surik gran pemalu tekalong, are indicated in or suggested by certain patterns on bidang 35.859 and on other cloths. Women's combs, sugu, are represented at g and h on pl. xxiv.

#### NATURAL PHENOMENA

Representations of natural phenomena occur very rarely in the cloths; all the examples, except the moon, are to be found on bidang 35.859, which has unusual patterns, and these include clouds, possibly cumulus, miga dudok, and cirrus, rayok miga dudok, literally, "the clouds in steps", figured at i, j, k on pl. xxv, with a bird in flight against the cumulus cloud at j. Clouds are shown on cloths nos. 416, 418 in the British Museum. The moon, bulan (pl. xxv, h), is an unsatisfactory design on one of the pua, upon which the chief motive is an ambiguous design which was termed in Sarawak "simpang taribang" or "simang taraba"; we have a note which we cannot trace describing it as "making obeisance to the moon" (pl. 1, j). A rocky ledge upon which a tiger-cat is resting, kaki padong remaung, is shown at e on pl. xxv and occurs on the same cloth as the clouds. Tigers or tiger-cats are supposed to live in holes in the rocks and only the legs of the animal are seen in the design.

A very frequent design in borders of bidang and elsewhere is a zigzag which is constantly described as "crossing a river", lelingkok semerai sungai; it indicates the zigzag course frequently made by canoes when travelling along a river in order to avoid the stronger current (pl. xxv, f, g). "Lelingkok, crooked, zigzag", S.D.D.; it has been likened to the movement of a snake.

# GENERAL CONSIDERATIONS

We now pass on to a brief consideration of the broader issues connected with the Iban cloths and begin with a quotation from Hose and McDougall (1, p. 244):

"We are inclined to suppose that the Ibans have copied many of their cloth-patterns from the Malays together with the crafts of dyeing and weaving. For their technique is similar to that of the Malays all over the peninsula, and the same is true of some of their designs. Only in this way, we think, can we account for their possession of these crafts, which are practised by but very few of the other inland peoples. The fact that plant derivatives predominate greatly over animals in their designs, whereas the reverse is true of almost all other tribes, bears out this supposition, for the Malays are forbidden by their religion to represent animal forms, and make use largely of plant forms."

We have quoted in full here and on p. 123 what has been written on the decorative art of the Iban (with the exception of tattooing) by Hose and McDougall in their authoritative book on Sarawak, but we venture to question some of their statements. It is true that the carvings and engravings of the male Iban show predominantly plant forms, and the textiles of the women depict predominantly animal forms. If the men were influenced by Muhammadan Malays, why were not the women? The Iban have not embraced Islam and there is no reason why their designs should be influenced by that religion, nor is there sufficient evidence that they have borrowed some of their designs from the Malays; what designs they have in common might as well be attributed to their supposed common ancestry. The vast majority of the decorative designs of the Iban are not only markedly different from those of other Bornean peoples but equally so from those of the Malay, and almost all are intimately connected with their environment, pursuits, or beliefs.

The technique of producing the pattern by tying up the warps before dyeing is used only in isolated cases in the Malay peninsula. Other resist methods are referred to later. The Iban loom is the simplest of the Indonesian looms and therefore is not likely to have been copied from the Malay type with its fixed frame, heddles, treadles and other refinements.

We have now to consider to what extent the Iban owed this part of their culture to other peoples, or if there is any evidence to show that the technical methods employed and the majority of the actual patterns have developed within the period of time in which they may be considered to have been a separate people.

A comparison has been made by L. E. Start between the cloths from Sarawak and the technical construction and patterns of the cloths of the Chinese, Hindu, Malay, or other inhabitants of the Indo-Chinese peninsula, as well as those of Java, Sumatra and the nearer island groups of Oceania.

The method of weaving is mostly carried out by the Iban in the simplest possible way on the most primitive type of Indonesian loom, the tumpoh, for although a few Iban use a simple Malay loom, the tenjak, they usually produce only coarse work upon it and that apparently in very small amount. We have no example of this in our collection, nor is there one in the large series in the British Museum, or in the collections in the Bankfield Museum, Halifax, or the Castle Museum, Norwich. The bulk of the Iban cloths and all the skilled weaving of the warp-dyed pattern cloths are done on the primitive tumpoh; this supports Ling Roth's argument that "if the Ibans had learnt [weaving] from the Malays I think we are more likely to have found among them an imperfect or degenerate form of loom, rather than a more primitive one than that used by the Malays" (1918, pp. 71, 72).

The patterned weaving in Europe and civilized Asia is based on employing coloured warp and weft threads, but this technique is lacking, or almost so, in Indonesia. There is one method of making designs on cloths in Great Britain and Europe in which the warp is printed before weaving and "shadow" patterns are produced. Cretonnes, linens, and silks may have "shadow" patterns.

In one technique in Indonesia the pattern is entirely developed before the actual weaving takes place and it is accomplished by tie-dyeing of the warp. This under skilful hands affords beautiful and elaborate patterns and it has a peculiar charm.

There are various terms for this tying technique in Indonesia. According to Loeber (1903, p. 14) the Malay and Iban term *ikat* was first introduced into Europe by Prof. A. R. Hein (1890), who in 1901 turned it into a Dutch verb "ikatten". We suggest that the word "ikat" might be

adopted in English for the finished product and "to ikat" for the technical process.

The method of producing patterns by tying-up the warps before dyeing is not in general use among the peoples of the Malay peninsula nor of those of southern China. The only account we have been able to find of the use of a similar technique is that by L. Wray (1902), who says that it is carried on to a limited extent by a few Malay women at Sitiawan in Perak. The fabrics are made of silk which comes from China in a raw state and is treated locally before dyeing.

The ikat method is nearly always used by the Iban and is carried by them to a degree of great excellence, but it is not confined to them in Indonesia.

Lamster (1929, p. 125) refers to the bold and effective ikat technique of the women of Sumba and Flores and to the delicately worked and beautifully tinted patterns of Roti, Savu, Timor, Alor and other islands. The art of ikat weaving is practised throughout nearly the whole of Indonesia. Two pieces of hempen cloth from Mindanao, Philippine Islands, in the Haddon collection in the Cambridge Museum also illustrate this technique.

The woof, and not the warp, is ikated on the silk fabrics of Palembang, south-east Sumatra, at Gresik in east Java, and in Bali. At Tenganan, a small mountain village in south Bali, and nowhere else in Indonesia, the warp and the woof are ikated, a very difficult technique that produces cloths, termed kain gringsing, of unequalled beauty; they are the most splendid and costly of Indonesian woven cotton fabrics. Their manufacture is associated with all kinds of precautionary regulations; it can be done only in secret and the girls or women must work naked. Formerly the cloth was dyed with the blood of a human victim: the blood of animals must not be used; now they employ the bark of the kemiri tree, Aleurites triloba, with shredded Curcuma (turmeric) stamped in water. On various important occasions a person (or a young couple) is engirdled with a kain gringsing, and one wrapped round a sick person ensures recovery. The designs are mainly plant motives. (Lamster, 1929, p. 126; Wirz, 1931.)

Loeber points out that the material used for the tying is not unimportant. Winding cotton around cotton is ineffectual and the binding ribbon must be of some other material that takes the dye less readily than the cotton warp. The manner in which the warp is wrapped around is decisive for the

character of the decoration. The simplest type is found on Flores, whence Prof. Max Weber in 1888 brought back bundles of yarn in various stages of "ikat". Each skein is tied round at regular intervals, and consequently uncoloured rings appear after the dyeing. That at any rate is what it looks like on the skein; when this is wound off the rings disappear and each thread is furnished with regular white dots. After the threads have been stretched on the frame of the loom they naturally come into a different order and an irregularly dotted background results—the parts that have been "reserved" from the dye have shifted their position.

The patterns in all these cases are different from those of the Iban and frequently the workmanship is less expert. Illustrations of patterns made by these techniques are given by the Dutch authors quoted and by others.

In some parts of Indonesia there is found another entirely different method of resist-dyeing, which is accomplished by applying wax to the fabric at those places where the dyeing is not desired. This highly developed batik technique, by which beautiful and elaborate patterns are made, is especially characteristic of Java. An analogous wax technique is used in southern China and by some Malays.

There are other methods of making patterned cloths in Indonesia, but these do not concern us here.

When Iban patterns are produced by other means than warp-tying, whether by floating shuttles, the use of more heddles or shed sticks, or by embroidery, the quality of the work is more variable and the patterns themselves differ from those characteristic of warp-tying. These technical methods may have been adopted by the Iban from other peoples, and their own patterns made by these techniques have suffered modification through these alien influences.

Among all the cloths in England examined by us, not more than I per cent. of the patterns are like those of the Malay peninsula or the surrounding islands. The designs on our Bornean cloths have been compared by L. E. Start with traditional Chinese and Hindu designs, with those of the hill tribes of southern China, the Shan, Kachin and Burmese printed and embroidered fabrics, as well as with the resist-dyed fabrics of Java and Sumatra. With the exception of the occasional tendency to make a fret-like completion to a design, which does not necessarily prove anything, there

seems to be no outside influence in the style of the warp-dyed patterns of the Iban.

The motives chosen, with the exception of the crocodile, do not seem to be used by the other peoples mentioned. A strong argument against Malay influence is the predominance of animal forms, which are forbidden by Islam. The sources of the patterns themselves are all intimately connected with religious beliefs, daily life and environment of the Iban. The animals are those with which the island abounds, the plants drawn are in daily use and indigenous to Borneo, and the remaining subjects are connected with agriculture and other daily pursuits and domestic objects.

We would however refer to the ambiguous gajah motive (pp. 41–43), which certainly is not Bornean. It seems to us quite possible that it may be a dim relic of some higher culture that presumably had its origin in India, but we cannot pursue this conjecture further owing to lack of data. The correspondence between the spiritual personages of the Iban and those of Hinduism is discussed by the Venerable Archdeacon J. Perham (cf. Ling Roth, 1, pp. 181, 182).

It is a remarkable fact that the textile designs of the Iban women are quite distinct from the patterns carved by the Iban men on bamboo and wooden objects (see Haddon, 1905), and these are also very different from those carved by the Kayan, Kenyah, Murut and other peoples of Sarawak with whom the Iban come more or less into contact. These peoples do not practise the art of weaving to any extent and they do not make the patterns characteristic of the Iban women.

Taking all these points into consideration it seems reasonable to suggest that the traditional designs used by the Iban women in their textiles have been developed since the Iban became separated from other peoples, and thus the designs would be a native art peculiar to the Iban.

It has previously been stated (pp. 1, 2) that Dr Hose dates the migration to Borneo of the ancestors of the present Iban at less than three centuries ago. We wonder whether this highly developed technique could have reached such perfection within that period of time.

It is interesting to note that in some parts of New Guinea fibre skirts are tied in various places and dyed so as to produce horizontal stripes of a dark colour on the natural colour of the fibres. Loeber (1903, footnote, p. 15)

states that he saw, in Barmen in New Guinea, petticoats which had been dyed by this manner in three colours; probably one colour was the natural colour of the fibre. This method of resist-dyeing is probably an ancient one and doubtless will be found to have a wide distribution in scattered areas.

There are other methods of resist-dyeing in Melanesia in which the finished cloth is tied so as to resist the dye. Tie-dyeing of cloth is also practised in West Africa.

It does not appear unreasonable to regard the tie-dyeing of the warp of the cloth by the Iban as a development and refinement of the similar though crude technique now seen in certain fringe-like fibre skirts elsewhere. In the British Museum a fringe on a Konyak Naga dao (a knife-chopper) is of goats' hair with transverse bands of red dyed by this technique.

# IBAN RELIGION AND ITS EXPRESSION IN DECORATIVE ART

A brief account of the personnel of Iban religion will help towards an understanding of some of the designs shown on the cloths. This is abstracted from Perham as quoted by Ling Roth (1, pp. 168-213).

The Iban believe in an indefinite number of spiritual beings termed *Petara*; these "gods" have their several functions. Some Iban say that there is only one *Petara*, but when confronted with the references to many gods in their incantations they explain this as merely implying a unity of origin, which does not amount in their minds to a conception of a First Great Cause. An *antu*, or spirit, causes sickness or wants to kill persons and so has to be scared away, but *Petara* is regarded as saving power, the preserver of men; in extreme cases *Petara* alone can help a man; if he dies it is *Petara* alone who has allowed the life to pass away.

The moon and stars are not invoked, but they have an "invisible belonging", a *Petara*, just as all parts of the earth have. It is probable that no inanimate objects themselves, not even the sun, are supposed to be divinities; "it is an underlying spirit in them which is adored, a hidden living influence in them which effects their operations" (Ling Roth, I, p. 201).

Three beings with definite functions occupy a peculiar position in Iban belief. (1) Salampandai, a female spirit and the maker of men. (2) Pulang

Gana, the tutelary deity of the soil and the spirit presiding over the whole work of rice-farming. (3) Singalang Burong, whose name probably means the Bird Chief. The Iban trace their descent from him and from him they learned the system of omens, and through the flights or calls of the omenbirds, his sons-in-law, he still communicates with his descendants. "These birds", said he, "possess my mind and spirit and represent me in the lower world. When you hear them, remember it is we who speak for encouragement or for warning" (Ling Roth, 1, p. 200). His earthly form is the kite, Haliastur intermedius, a sub-species of H. indus, the Brahminy kite, which is reverenced by Hindus as sacred to Vishnu. He may also be said to be the Iban god of war and the guardian spirit of brave men. Hose and McDougall (11, p. 86) state that the Iban say that Singalang Burong never leaves his house and that for this reason they do not take omens from the hawks when going on the warpath.

The observance of omens occupies a large share of the thoughts of the Iban, and the system as carried out by them is most elaborate. The birds "used" by them are: Membuas (a kingfisher, Carcineutes melanops), papau (a trogon, Harpactes diardi, or ? Dendrocitta cinerascens), beragai (a trogon, Harpactes duvauceli), kutok (Lepocestes porphyromelas), katupong (a woodpecker, Sasia abnormis), nendak (a kind of thrush, Cittocincla suavis), briak (Orthotomus cineraceus, the tailor bird, or O. ruficeps), bejampong (a shrike, Platylophus coronatus or Hydrocichla frontalis), Enkrasak (the spider-hunter, arachnothera, three sp.). The system also embraces the rusa (the deer, Cervus equinus), kijang (barking deer, Cervulus munijak), plandok (mousedeer, Tragulus), and sometimes even aji (the moon rat), tengiling (scaly anteater, Manis), sandah (bat), the sawa (python) and tedong (cobra), tuchok (house lizard, gecko) ("a species of grasshopper", S.D.D.), and the following insects rioh, rejah, burong malam (a cricket, Gryllacris nigrilabris). All these may be omens in various ways and circumstances and therefore, in this connection, they are designated burong (birds), and to augur from any of them is beburong. But these other creatures are subordinate to the birds, from which alone augury is sought at the beginning of any important business. Augury is sometimes taken from other animals. In the S.D.D. (p. 16) it is stated that the eight relatives or followers of Singalang Burong are: beragai, katupong, bejampong, membuas, kutok, nendak, papau, briak. Called

"birds" but holding a lower place and not considered "sacred" (indeed they are often eaten) are the insects rioh, rejah (grasshopper) and burong malam (ground cricket); the snakes tedong (cobra), sawa (python); the animals rusa, kijang, plandok, remaung, tengiling (the Manis), aji (moon rat), engkarong (the skinks), and bat. Good accounts of the omen animals of Sarawak are given by Ling Roth from various sources (1896, 1, pp. 191–197, 221 ff.), Haddon (1901, pp. 381 ff.), Hose and McDougall (1901, pp. 173 ff.; 1912, 11, pp. 51–90), in all of which references are made to the Iban. The most authoritative account of the religion and the omen animals of the Iban is that given by the Ven. Archdeacon J. Perham (see Ling Roth).

The Iban has surrounded himself with thousands of antu, or spirits, which are supposed to fill earth and air, sea and sky; they are adversaries or helpers of men, and the difference between them and Petara is imperceptible. The good ones are nearly identified with Petara, of whom no evil is predicated; but the bad and angry spirits are far more numerous than the good ones. Antu may appear to men as animals, such as deer, python, crocodiles, etc. In order to communicate with the supernatural, an Iban may nampok, sleep on the tops of mountains with the hope of meeting with the good spirits of the unseen world, but this custom is now much less frequent.

Some Iban men, and they mainly or solely Ulu Ai Iban, have a ngarong or secret helper, usually the spirit of some ancestor or dead relative, who may or may not inform the individual Iban to whom he manifests himself in what form he will appear in the future. An Ulu Ai Iban of the Batang Lupar informed Dr Hose that every Iban who has no ngarong hopes to get some bird or beast as his helper at the begawai, the feast given to the Petara. As the ngarong is one of the very few topics in regard to which the Iban display any reluctance to speak freely (Hose and McDougall, 11, pp. 90 ff. and J.A.I. xxxi, 1901, pp. 199 ff.), it is very improbable that the animal form of this mysterious secret, the ngarong, should be represented on a cloth. It seems probable that the ngarong is an institution related to the nampok. There may have been some connection between the gaining of a ngarong and nampok.

The engkaramba figures that ward off harm have been noted on p. 105. Very many of the designs and patterns appear to have been adopted for some reason connected with Iban beliefs; the choice of the motive to some extent may correspond with the ultimate use to which the cloth will be put.

Pua, or blankets, which may be used on ceremonial occasions as well as for coverings, are frequently decorated with anthropomorphic and crocodile figures. We do not know whether there is any connection between the representations of crocodiles and the belief that spirits of the departed may choose crocodiles as abiding places.

The kalambi, or coats, particularly those worn by the men, are often ceremonial garments and are usually patterned chiefly with omen birds and animals, doubtless in order that their good influences may be experienced by the wearer. In such a highly specialised coat as 35.904 (pp. 37–46) the patterns suggest that it was worn by a man who conducted the most important of Iban feasts, and we suggest that it was the property of a manang bali.

The everyday garments, the bidang and the sirat, are decorated with less important motives.

Those on the bidang are more varied and interesting and consist chiefly of mammals, birds and other animals; there are also some plant motives, mostly the bangkit fruit and the tangkong creeper with its hanging blossoms. The crossed posts of houses and the wedge usually occur together, and there are examples of fire-places, a boat, and paddles. The arenga palm and mast ("acorn") patterns are frequently used in the borders and both are of importance in the daily life of the Iban, who make toddy and sugar from the juice of the flower and ropes from the black fibres of the trunk of the arenga. The pig is one of the animals always found in abundance near an Iban village, and the so-called "acorn" empili is really the nut-like fruit of a tree greatly liked by both tame and wild pigs, but "mast" is a better designation. The blossoms of the bangkit, and probably those of the tangkong, are sweet-smelling. The plants and flowers and the objects of material culture are all intimately connected with the needs of daily life, shelter, food and adornment.

Many of the designs or patterns on the *sirat*, or loin-cloths of the men, are mainly or solely confined to them, and doubtless have a special reference to the pursuits (such as the paddy fields), dangers or interests that more particularly affect men. Very common are parts of the creatures that injure crops, such as pigeons or other birds, and locusts. A curious design is that called "sleeping cats".

It is characteristic of the Iban, as well as of other peoples in Borneo, that

the whole of their life is permeated with religious conceptions, and indeed no distinction can be drawn in their daily life between technical and religious operations: they are equally necessary.

In the background is the belief in *Petara* and in the associated lesser agencies, also known as *petara*, who appear to be in practice the executive staff of *Petara*.

It is futile to attempt any operation of importance without the assurance that *Petara* sanctions it, but this approval can only be ascertained by the messages that he conveys through omens. The most common of these messengers are omen birds, and anyone who has lived in Sarawak is fully aware of their importance.

The designs and patterns on the cloths clearly indicate this psychic attitude towards everyday life. They may be regarded in some cases as being protective, to ward off dangers of various kinds, in others as being a means to obtain blessings and good fortune. Thus they express a constant reliance upon supernormal power, and it is probably no exaggeration to say that these attractive people are literally clothed with prayers.

# VOCABULARY OF IBAN WORDS USED IN CONNECTION WITH THE CLOTHS AND IN DESCRIBING THE PATTERNS

The English equivalents have been taken from the Sea Dyak Dictionary, from translations by Dr C. Hose on numerous labels and from information received in Sarawak. We have omitted those words for which we could not find a translation. We are painfully aware of the imperfections and inadequacy of this list of words, but it is the best we can offer to students from the material at our disposal.

A-a: an open slit

Adap: manner, way, from or on the side of, towards

Aji, aji bulan: white shrew, moon rat, a title for the god Kling (Malay tikus bulan, rat, moon), Gymnura rafflesi (pp. 72, 126, 127; pls. v, vi)

Akar: a creeper, anything that can be used for binding

Aki: grandfather

Aki Ungkok: Grandfather Ungkok, the man in the moon. He is also spoken of as "the ancient Ungkok, the brave leader" (pp. 64, 124)

Ambun: dew, fog, mist

Ampat: four

Anak: a child, young of animals and plants

Andi: rumour

Andin: ? fabulous, imaginary

Angkong: a species of *Mangifera* (mango); a tree bearing strong-scented, diamond-shaped fruit, the horse-mango (p. 134; pl. xxII)

Antu: ghost, demon, spirit (pp. 130, 142, 144)
Anyam: to weave, the plait (of baskets or mats);

anyam belebas, woven stripes imitated by using a needle (p. 102)

Api: fire

Ara: stripes of different solid colours, to arrange different coloured stripes; to spread out

Ariniek: alternate markings

Asi: cooked rice; a victim, prey; fair, right, proper

Baju: a coat

Baku: a brass betel-box

Bala: a multitude, a war party

Balang: a bottle; unsuccessful; leka balang, an enemy's head

Bali, mali, bebali: to exchange, change colour, fade; an alteration

Baloi: a striped kind of bamboo

Balu: a widow, widower

Balut, bebalut: a band, small bundle; to wrap up, entangle

Bangkit: a scented flower, scented leaves or fruit of certain jungle trees used as scent or personal ornaments. Sometimes described as a creeping (? climbing) jungle plant (p. 134; pls. xvIII, xIX, xXI)

Bara: a tumour, a knot of wood

Batang: trunk or stem of tree, a tree, a stick, main branch of a river or road

Batebok: to make holes like a woodpecker

Batu: stone, rock

Baya, baia, jagu: crocodile (pp. 129, 145; pl. x1)

Bayak: the iguana, S.D.D. This is the monitor lizard, Varanus sp. (p. 129; pl. XII)

Be, bei, ber: the inseparable prefix which expresses a state or condition of being and thereby denotes the intransitive state of the verb

Bedayong, berdayong: to row with an oar, rowing

Bedong: a woman's girdle or waist band (p. 102)

Bejangkam: to squeeze (with thumband finger),

Bekait: to hook, hooked, ? crossed

Bekarong: to cover, conceal, enclose in a case

Bekatapu: wearing a war-cap

Bekaul, berkaul: twisted over one another,

entangled, ? crossed

Bekengkang: to be striped

Bekikiang: crooked

Belambang: alternately, not regularly Belingkian: the argus pheasant (p. 37)

Bendar: true, very

Bengkah: a division, class, lot, to put aside Beparang: to cut (parang, sword, chopper)

Beprang: to make war, attack

Beradap: facing (aji beradap, shrews facing one another), to interview face-to-face. See adap (pl. v)

Beranak: to give birth to

Berasok: overlapping, to put on, fit together
Berayah: outstretched wings or hands; a
ceremonial dance performed by chiefs
leaping up with their arms extended in
imitation of a soaring kite (p. 117)

Beringan: a collection of any articles tied

together

Beringin: a fruit tree (p. 70) Berkingking: a brass bangle Berspit: grasp with claws

Besampan: a small native boat, a canoe (p. 135)

Besarang: to build a nest Besarong: to encase, sheath

Besepit (bespit): to take between the fingers, or with a pair of tongs or pincers; provided with nippers or claws

Besi: iron

Besimpan: to pack up (coiled)

Besugu: with a comb

Besumpiang: to fill up, complete, finish off

Besurong: to push on

Betampong: a ceremony to cure sickness
Betangkal: to have a notch in a post for a

Betangkin: to gird on a sword

Betayok: calling attention with the hand, to becken ("to strike with the open hand", S.D.D.)

Betegam: to swallow all at once, to bolt food Betong: a large bamboo used for carrying water Betulak, betula: to push off, put aside, make a departure, to go in opposite directions

Betunga: face-to-face, opposite, interview

Betungku: to thresh paddy Bidang: a petticoat (p. 52)

Bingka: a root

Bintang: a star Biyak: see bayak Brang: the upper arm Brani: brave

Bras, brau: uncooked rice

Bruang: a bear, Helarctos malayanus

Buah: fruit

Buan: a small shrub whose fruit and flowers are the favourite food of the mouse-deer, plandok (p. 84)

Bubul: a collection, to add to, to fill up spaces; bubul lapang, a pattern so described as it fills up a space; bubul jerit, the pattern collected together to fill up the space; the pattern completed

Buchai: a fringe

Bujak: the monitor lizard, Varanus sp.; a spear

Bukang: a headless corpse

Bulan: the moon (pp. 122, 136, 142)

Buloh: a bamboo which grows very high;

buloh bala, a yellow bamboo Bulu: a feather, quill, hair

Bungai, bunga: a flower, the name of a snake

Bungkok: bent back, bent, hunchbacked

Buntak: a locust; buntak balang, a large yellow grasshopper

Bunut: the horse-mango, Mangifera sp.

Burak, borak: white

Buri: "cowry shells which are sewn as ornaments on jackets, petticoats, etc.", S.D.D.
These are Nassa, not Cypraea shells (p. 49)

Burong: a bird (pp. 127-129; pls. vii, viii, ix), an omen. For omen birds and animals see pp. 143, 144. Burong belingkian, the argus pheasant; burong malam, a night omen, a kind of cricket

Buyah: a beetle, a species of moth (p. 119)

Chayam: pig's whiskers? Chelum, chilom: black

Dabong: serrated, notched, dog-toothed

Dadong: a shawl

Dandan: a platform at the stern of a war-boat Dangdong: a shawl worn by a man in full dress (p. 103); "a Malay sarong or long skirt", 8.D.D.

Dapur: a fire hearth, a cooking place

Daun: a leaf; daun wi, ratan leaves (p. 134, pl. XXII)

Dayong: an oar; shoulder blade, scapula

Deman: a species of fern, Gleichenia dichotoma

Di: at, on, in

Dilah, dila: the tongue

Dua: two

Dudok: in steps; to sit, settle, reside Dulang: a wooden dish or trough

Embayar: a phosphorescent centipede (p. 132;

pl. xvı)

Embun, ambun: dew

Empalai: a little garden, a small paddy farm Empetut: a grub; alternate light and dark square markings as on the snake (ular or urar) called empetut, Tropidonotus petersii

Empili: a tree producing a species of wild nut, the favourite food of wild pigs. This is best translated by "mast", the fruit of various forest trees, especially as food for swine (pp. 62, 133, 145; figs. 28, 29; pl. xvIII)

Empirjungau: a long-nosed fish

Emplawa: a spider (p. 131; pls. xiv, xv)

Engkaramba, engkramba: some kind of man or male personage; a representation of anything cut out of wood, used to prevent harm from coming to crops, etc. (pp. 40–44, 105, 106, 111–113, 124; pl. 1)

Engkarong: a species of skink lizard, Lygosoma, sp.; engkarong kijong, a stiff skink lizard

Engkatak: a frog (pp. 130, 131; pl. XIII)

Engkerbai: a shrub (pp. 11, 21)

Engklait: wild gambier, Uncaria gambier, a shrub which climbs by means of hooked spines; it is used medicinally and is extensively employed for tanning and dyeing. One of the most powerful of astringents

Engku, enk: my, mine

Engkudu: red; a plant of which the skin of the root produces a red dye

Entadu: a caterpillar Entali: string

Entepa: outstretched wings or hands

Entibap: the palm, Arenga saccharifera (pp.

133, 145; pl. xxII) Entilan: a boat shed

Entilang: a framework of an Iban cooking place (p. 65)

Gajah: an elephant (pp. 41-43, 141)
Gajai: a mythical creature, something like a
frog (pp. 105, 106, 114, 115, 130,
131)

Gambar: a picture; gambar mensia, portraits of people

Gansai: a spear with one barb Gari: a garment, clothes

Gasing, gasieng: a spinning-wheel, top, to spin (p. 7)

Gawai: a feast

Gelang: a handle (of a shield)
Gelegar: the flooring of a house
Gelong, giling: to roll up, to curl

Gelong paku resam: curled top of the resam

fern (p. 134)

Genok: a gourd, white pumpkin (used as a water vessel); a gourd with a long twisted stalk, the fruit is used as soap (p. 134)

Gerunggong: a joint of the larger bones

Gigi: a step of a ladder; tooth Grama: a fresh-water crab (p. 66)

Gran: to cut with a knife

Gran pemalu tekalong: grooves in the barkcloth mallet

Grunong: small bells used as a fringe, "hawkbells"

Home: a plant used instead of indigo (p. 20)

Igi: seed Ikan: a fish

Ikat; ngikat, beikat or bikat: anything tied up; to tie, bind

Iko, iku: a tail

Imbai: horizontal, alongside, side by side,

Indang: soaring, to lift the arm; a sieve Indu: a woman, female of any animal

Ipoh: a tree, ? Antiaris sp., from which a white bark-cloth is made for pua; A. toxicaria, the sap of which is very poisonous (p. 4)

Jagu: the crocodile

Janga: an angle

Janggat: a white pumpkin, a fruit resembling a vegetable marrow

Jangkam, bejangkam: squeeze

Jangkit: a tree the bark of which gives a red dye

kara jangkit, a tree, Ficus sp.

Jari: a hand Jaul: twisted?

Jelu: wild, a wild animal

Jengam: to press with a forked stick
Jengkong: curved, to bend round, arch

Jengku: an artificial spur, curved, bent

Jengkuan: a netting needle; a weaving spool

(pl. xxiv); a kingfisher **Jerit** or **jarit**: the horizon

Jerit: many, in order, in series, a branch; jerit betayu, to beckon with the hand?

Jernang: a species of ratan, *Calamus*, employed in house-building; from the fruit is obtained the red "dragon's blood" which is used as a stain (p. 20)

Junggur: a snout, point of land

Kabu: the fringe of a sirat

Kain: cloth, clothes, woman's petticoat

Kait: a hook

Kaiu, ? kaiku: a kind of tree

Kaki: a leg, foot; foot of a hill or ladder

Kala: a scorpion (pp. 47, 132)
Kalambi: a jacket, coat (p. 22)
Kanggan: Chinese black calico
Kanji: rice gruel; sensuous
Kanulong: a long-nosed fish
Kapayang: a plant, Pangium edule

Karak, ? kara: scattered, spread or pour out

Karam: sunk, immersed Karong: a coverlet, case, bag Katapu: a cap, war-cap Kebat, ngebat: tie, bind

Keberair: best Kejong, kejoh: stiff Kelabong: a scorpion

Kelalin: to interlace, tie, or fasten a wooden flooring with ratan; in-and-out plaiting like the *nibong* floor of a house

Kembong: swollen, full

Kendawang: a snake with a red head, red tip to its tail and body striped black, white, and red, Cylindrophis rufus (pp. 29, 36, 55, 112, 130), which is not poisonous; or doubtfully Callophis flaviceps (p. 68), this is a synonym for Doliophis bivirgatus which is poisonous

Kengkang: a stripe or knot

Kenyalang: the hornbill, Buceros rhinoceros Kepong: cut off, amputate, surround, tailless

Kerchpaka: a kind of fruit Ketam: a crab (pl. xvII) Ketup, ketupang: bite

Klabumbu, kelamambang, klabembang: a butterfly

Klait: see engklait

Klapong, kelapong: the end or remnant of

anything, a fringe; "Tu klapong sirat iya, this is the fringe of his waist-cloth", S.D.D.

Koali: a cotton-stretcher

Kris: a dagger

Kukut: a claw, talon, nail

Kumbu, pua kumbu: a coverlet or blanket Kunding: nominally an omen bird, but really a cricket, *Gryllacris nigrilabris*, used as an omen (p. 143)

Kuning: yellow

Kunyit: turmeric, Cucurma longa, the plant from which the yellow dye is obtained; some species supply starch

Labang: white

Labong: a headkerchief, head-covering

Labu: the white pumpkin, gourd, Gucurbita lagenaria

Lachau, lachaur: a green grass lizard (p. 130; figs. 13, 30; pl. XII)

Ladang: a bulwark, bank of earth surrounding a paddy farm; (beladang, to separate, 8.D.D.). A farm or a division of land. C.H. (p. 135)

Ladi, ladei: separate, ? a spot Ladu: mud used as a black dye

Laki: a male of human beings or animals

Lalat: a fly

Lalau: a hand-rail; a bees' nest on a tree

Lalin: in-and-out (as of plaiting)
Lancham: pointed, cut to a point
Landak: a porcupine, Hystrix

Lang: a kite, the bodily form of Singalang Burong, the Bird king; kengkang lang, striped kite (p. 128; fig. 186; pl. x)

Langgai: the extremity of anything, the longest tail feathers of a bird

Langgu: a pendant, young fruit; langgu lungping, earring

Langit: the heavens, sky

Langkiang: a kind of lizard with a long tail
Lantai, luntai: split bamboo or cane; the floor
of a house

Lapang: spacious, roomy, an open space, an opening; bubul lapang, space-filling

Leka, lika: a seed, grain; give up, let go Leka balang, leka nanga, leka mudan: an enemy's head

Leku: bend, curve

Lelambak: the flower pattern plaited in mats

(pp. 31, 104, 135; pl. xxII)

Lelayang: a swallow, Hirundo; a swift, Chaetura; lelayang bata, Collocalia fuciphaga (fig. 13; pl. 1x)

Lelingkok: curved, crooked, zigzag

Lemba: leaf of Curculigo latifolia used for tying warp threads preparatory to dyeing

Lemiding: a creeping fern, Acrostichun scandens; the tops are used as a vegetable by most tribes

Lensat: a fruit tree, Lansium domesticum Lia, liah: ginger, Zingiber officinale (p. 134; pl. xix)

Likau: a zigzag decoration, striped like a python or tiger

Lilit: gold embroidery, yellow, a binding

Lintah: a leech (p. 133; pl. xvi)

Long: a Kayan bark basket; a species of grasshopper

Luas: wide, spacious

Lunju: a spear with a narrow blade

Macham: sort, species, kind

Malam: night Mampul: re-tying Manah: good, beautiful

Manang: a medicine-man (or woman); manang bali, "a sham-female witch doctor" S.D.D.; a medicine-man who behaves as a woman (pp. 40-46, 145)

Manok: a domestic fowl Mansau: ripe, red, cooked Marau: a large cane, Calamus sp. Marik, mariek: a bead, bead necklace

Mata: an eye, edge of a weapon; raw, unripe Mayang, the blossom of palms

Mayau: a cat, a wild cat, Felis bengalensis; mayau tindok, sleeping cat (pl. xvII)

Melanjan: a wild species of rambutan, Nephelium

Melintang: crossways, across Menaul: a hawk, kite Mengkatak: a frog

Menyembang, Menimbang: bulan menimbang, name of a god in the heavens (p. 122)

Mensia: people, persons Menyeti: the best kind of pua Miga: clouds (p. 136)

Mudan, leka mudan: an enemy's head

Mulai: to twist back Mulut: mouth, the lips Munsang: a wild animal Munti: a species of small bamboo the shoots of which are eaten

Nabu: rolled up in a ball

Nadai: no, not

Nakar, ngar: a special red dye Nama: name, reputation

Nandok, betandok: to butt, to gore, to cup; cupping is done by gashing the flesh and sucking out the blood by means of a bamboo cylinder [or a horn?]

Nanga: the mouth of a river; leka nanga, an enemy's head

Nemaiar: a centipede (p. 104)

Ngelambai, lambai: to wave, beckon to, shout

Ngelepan: a centipede (pl. xvi)

Ngikat: see ikat

Nibong: a thorny palm, Oncosperma tigillaria Niga: the sky (white clouds in the heavens visible only on fine days or nights); niga dudok, clouds on the horizon on a fine day (dudok, sit)

Nya: that, those

Nyandih, penyandih: lean against

Nyang: sunset

Nyangking: ? by itself; jerit nyangking, a pattern by itself

Orang: a man, person, people

Padang: a cleared piece of land, field; renowned Padi: rice in the husk

Padong: a bed place; rocky ledge across a river bed; shelf; padong buah, a fruit store

Pakan: the woof in weaving or plaiting, S.D.D. Pakan belebas: a small striped pattern formed by grouping warp threads together with the weft or woof, so leaving spaces, as this is done with a needle it is termed needle-weaving (pp. 94, 96, 97, 102)

Paku: the general name for ferns, particularly Hoplenium esculentum

Pala: the head; antu pala, the smoke-dried head of an enemy

Pama: a species of frog; well, good

Pampul: to cover, cover the face with the hands

Pandin: a buckle

Panggal: a pillow, resting place

Panjai: long

Pantak: a small dark-coloured wasp (p. 132)
Pantak penandok: the wound caused by the sting of a wasp? or perhaps the clay nest of a wasp, or even scarifying the skin preparatory to the cupping process (pp. 74, 113, 118, 132)

Pantok, bepantok: the bite (of a snake, bird, etc.), peck (as a fowl); the shoot of a plant

Papan: a plank, board

Pasak: a wedge; a paddy-destroying insect
Pating, patieng: the stem of a flower, bunch
of fruit with its stem, a twig

Patok: a beak or bill of a bird; tender shoot of a seed

Patong: the knee; pala patong, knee cap Paya: swamp land, a wet-land paddy farm (p. 135; pl. xxv); sirat paya an especial kind of waist-cloth

Payong paya: cleared space in swamp land Pe, pem, pen, peng: the inseparable prefixes used in the formation of derivative nouns

Pedalai: the bread-fruit tree, Artocarpus incisa, and also the jack-fruit tree, or jaca tree, A. integrifolia, from the wood of which a yellow dye is obtained (pp. 4, 19)

Pernadu, pernadam: the end of anything
Pernalu, pernalu: a bark-cloth beater or mallet;
pemalu tekalong, a mallet for beating the
tekalong bark to make it into bark cloth

Pemigi: a cotton-gin Pempang: a fence

Pemuchok: a shoot of a plant Penan: a shelter, defence Penandok: see nandok Pendal: stuck fast

Pendawan, penawan: a fish-spear with a single

Penjuang: posts on either side of the staircase supporting railings, cross-pieces, wood or sticks in the shape of an X

**Penukoh:** possibly a flowering tree, but Hose says the meaning is uncertain; trestles

Penukok, punchok: a shoot

Penumboh: a growth, opening, foundation Penuri, penori: thorns, spiky, hole made with the finger, pressed down

Penyadi: condition, existence Penyandih: lean against

Petara: spiritual beings who have their several functions. Some Iban say there is only one *Petara* who has saving power (pp. 105, 115,

142, 144, 146). "A god, gods. It is probably a corruption of the Hindu Avatara", S.D.D.

**Petik:** spotted

Pinang: a palm, Areca catechu, "betel" nut Pisang: the banana, Musa sapientum

Plangka, pelangka: the paddy foot-sieve through which by stamping paddy the grains fall through and the stalks and the ears remain. An oblong wooden frame about 6 ft. by 3 ft. enclosing ratan-work which is used for threshing paddy; a propitiatory offering on behalf of a sick person, the offering may be a common plate or a square wooden box without a cover standing upon four ornamental legs. When a person is taken ill the medicine-man, manang, sometimes recommends that the ceremony of saut be gone through, a plangka is then got ready for the saut ceremony (p. 78; pl. xxiv)

Plir: testes

Prut: a stomach, breast, intestines

Pua: a blanket, the old blankets of the Iban were made of bark-cloth; pua tengkebang, a blanket with a new pattern, the maker must not copy any other (p. 106)

Puchok, muchok; bepuchok: a point, top of anything; to attain the summit

Pun: a tree, stem, origin, basis, foundation,

commencement

Puna: a green pigeon (*Treron*, all species except *T. capellei*) (p. 129)

Punggang, punggai: the end

Punggong: the waist Pusat: the navel, centre

Raia: large; burong raia, a heron, Ardea sumatrana

Rambut: a fringe

Rambutan: a lofty fruit tree with hairy fruit, Nephelium echinatum

Randau: a creeping plant, a creeper of any kind, a parasite

Raras: a small stick or branch; likeness, picture; build

Ras: a farm, a cleared space

Ratan: a climbing plant, Calamus sp., the Skarang and Saribas Dayaks use the word rotan, but the other Dayaks call it wi (p. 133; fig. 13; pl. xxII)

Rawai: a Dayak woman's corset made of rings of ratan strung with brass rings

Rebong: a bamboo shoot; muchok rebong, coneshaped

Rejang: to bore a hole, pierce or thrust upwards Rekong: the neck

Remang: light fleecy clouds (not rain clouds)
Remaung: a tiger cat, Felis nebulosa; remaung
raras, F. marmorata; remaung bendar, the
true tiger (pp. 69, 71, 126; pl. IV)

Resam: a species of fern, *Pteris arechnoiden*, which usually grows in secondary jungle where the primeval forest has been destroyed (p. 134; pl. xVIII)

Resam: to press down with the hand, make a hole with the hand or finger

Riang: a creeper the leaves of which are eaten

Rinik, renik: close to

Rotan: see ratan and sega

Ruai: the verandah or long reception room of a Dayak house; burong ruai, the argus pheasant

Ruat: stripped; pull out, overflow; numerous

Ruman: a house Ruman: ears of grain after threshing, chaff Rundai: hanging down, dangling (pl. xx) Rusa: the deer Cervus equinus (p. 125; pl. 111)

Ruyit, ruit: barb of fish spear

Sabaka: equal, alike

Sabong: fighting, butting, to match, to set cocks to fight

Salampandai, Slampandai: the maker of mankind (pp. 131, 142, 151)

Salapok: a skull-cap made of ratan or pandanus Samak: a reddish brown dye obtained from the

samak tree (p. 19) Samoa: all, everyone

Sampan: a small native boat, a dugout canoe

Sampok: a white ant, termite Sandong: a jungle tree with fruit

Sanggol, sanggul: a braid, roll, plait of hair,

S.D.D.; a knot, a tendril Sarang: a nest, dwelling-place Saribu: a thousand legs, millepede

Sarong: a case, sheath Satu: one, first, good

Saut: an answer, reply; a manang ceremony performed when a person is ill. The ceremony is fully described in  $\mathcal{S}.D.D$ .

Sawa: a python, *Python reticulatus* (p. 130); paddy sown in a nursery plot and transplanted to the wet field

Sawang: an opening, hole, to enlarge a hole Sayap: a wing

Sega: a species of ratan; there are two kinds of sega: sega balau (or bulu) and sega enseluang (enseluai or ikan), a smaller and more valuable kind of cane, 8.D.D. See buloh, ratan and rotan

Selam: to dive, diving

Selampur: the whole, all; serampor, of one colour

Selempepat, sepepat, semperpat, slampepat: fireflies (pp. 117, 134; pl. XXI)

Semalau: a species of thrush, Copsychus amaenus Sembrang, semberai, semerai: to go across water or a boundary

Semerai: to cross over Sengayoh: a paddle

Senggang: a species of gigantic lily

Serepang, serpang: a fork, trident, split, slit Sergang: a bamboo fish trap with a wide mouth, a bamboo receptacle for plates

Serok genok: a white pumpkin (used as soap by Dayaks)

Serpan, serpang: dark

Serundan: usually kain serundan, a petticoat with the central part plain and coloured borders (p. 85)

Siko: one person or animal

Siku: the elbow

Simbang: a corner; to sharpen a bamboo or piece of stick by cutting it on one side only into a point

Simbing, Simbieng: one-sided, crooked, aslant Simpan: keep, put by, hide

Simpang: the branch of a path or a river, a junction

Simpong, besimpong, sesimpong: to cut in two; to cut off the top of anything

Singalang Burong: the Bird-king who once appeared in human form, but is manifest as a kite, *Haliastur intermedius*, a sub-species of *H. indus*, the Brahmin kite (pp. 33, 46, 128, 143, and 8.D.D. p. 157)

Sirat: a waist or loin cloth, the *chawat* of the Malays (p. 91)

Sit: a cluster of pinang nuts Skelat, sklat: red flannel

Skut: foundation

Slaku, selaku: a ratan used as a rope for climbing

Spiak: one side only, half

Spit, sepit: pincers, tongs, nippers, claws Srepang: a spear with three points, a trident,

Sugu, besugu: a comb (fig. 13; pl. xxiv) Sulor nyang: break of day, the colours of the sky at dawn

Sungai, sungei: a river, stream, brook

Sungkit, sunkit: a bone needle used for embroidery; kain sungkit, an embroidered cloth (p. 88); besungkit, to prick, pierce, insert

Suri: a ripple on the water Surik, suriek: stripes, striped

Surong: a temporary bridge or path made of poles; push on, push

Tabor: sprinkle, scatter, sow (seed)

Tali: string, rope

Tampok: a fruit stalk; ? a knot

Tampong: follow, join, splice, sew on, patch

Tanda: the stem of a palm blossom

Tanda: a sign, mark, figleaf ornament, ? decorated; tanda sirat, the embroidered end of a waist cloth

Tandok: horns, antlers, see nandok

Tangai: a thorny tendril?

Tangga, tanggai: the notched pole which serves as a ladder up to the floor of a house, a ladder Tangga ubong: a tying frame (p. 9)

Tanggi: a sun-hat

Tangkai: a peduncle, fruit stalk, bunch of fruit; ear of paddy

Tangkal: a notch

Tangkin: a sword (scabbard and belt)

Tangkong: a jungle (? climbing) plant with scented pendant flowers (p. 133; pl. xx); the horny excrescence on the beak of the hornbill; ?a handle or knob (p. 134)

Tangku: the supports of a cooking-pot

Tanjong: Mimusops elengi, a tree with hard, heavy durable timber, the bark has astringent and tonic properties. A fragrant nectar can be distilled from the flowers. A cape, projection

Tanju: a platform

Tanka asi: a tripod for cooking rice

Tarum: indigo, Indigofera tinctoria (pp. 19, 20, 87)

Taya: cotton when growing; to clear away

Tayok: to strike a person with the open hand, strike (of a flint and steel)

Tayok gasing: a hooked piece of wood for winding thread upon from the spinning wheel; the curves a top makes when spinning

Tebok: a hole, notch

Tekalong: a species of bread-fruit tree the bark of which is used for making sirat, kalambi, and pua (pp. 4, 69)

Teku, teko: curved; a kind of earring Telu, telo: an egg (Malay, telor)

Tengang: a long and straight creeper, the bark makes durable cords; it is cultivated

Tenggak: a necklace

Tengiling, tengilang: the scaly anteater, Manis javanicus

Tenjak: a treadle loom with a rigid framework; the type used by the Malays

Tenyalang: hornbill, Buceros rhinoceros

Tetak, betetak: to cut; setetak nadai tampong,

cut off with nothing to follow

Tiang: a post, pole, mast

Tiga: three

Tikai burit: a seat-mat Tikal: fold up, tie, turn back

Tikup: to close, shut

Tindok: sleeping, asleep, to sleep Tinggang: to fall upon, press Tisik: scales of a fish or animal Trabai, terabai: a shield Trong: the egg-plant, Solanum sp.

Truju, trugu: push with violence

Tu: this, these

Tuboh: the body, people, a person Tubu: edible bamboo shoot (pl. xviii)

Tugang: a decoration of various colours or coloured stripes

Tukal: a wooden frame about three feet long upon which cotton thread is strung ready for weaving (Malay, a skein)

Tulang: a bone

Tumpoh: the ordinary Iban loom (p. 11) Tungku: the supports of a cooking-pot; tungku asi, tripod for cooking rice

Tunjing: a hoof

Tusu: the breast, udder, milk

Tutup: a lid, cover

Tutup long: the cover of a Kayan bark basket

Ubi: a yam, Dioscorea

Ubiara: the wild potato used as a dye

**Ubong:** cotton thread Udah: finish, end

Udun: a species of fresh-water fish

Ujan: rain

Ujok: a feather or anything put in the headker-

chief or hat as an ornament

Ujong: end, point Ular, urar: a snake

Ulat: a grub, maggot, caterpillar
Ulu: a handle (of a sword, etc.); head waters
of a stream, up river

Unak: a thorn

Ungki: edge of a pattern Ungkoi: the red or black trimming to the collar

of a jacket

Upeh: the spathe of palm blossoms
Upong: the spathe of palm blossoms, flower or

fruit stalk Urat: a root

Wi: the ratan, Calamus sp., see ratan and sega

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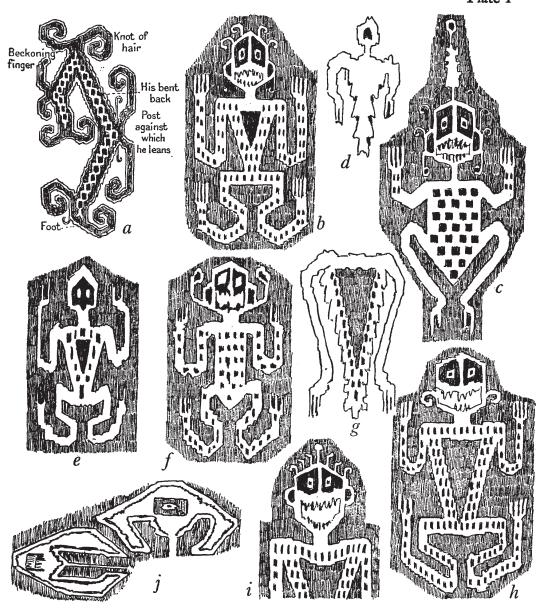
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PLATES I-XXXV

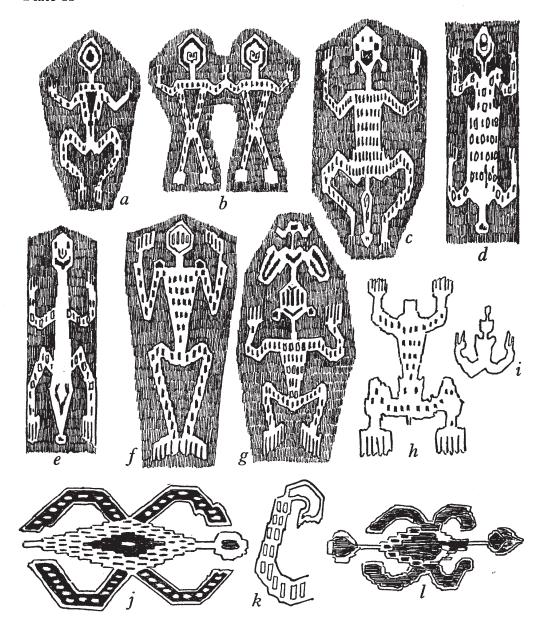


## ANTHROPOMORPHS

- a, Aki Ungkok: "Grandfather Ungkok, who lives in the moon". 35.854 (13).
- b, f, h, Engkaramba. b, 35.923 (9); f, 35.924 (36, 38); h, 35.926 (2).
- c, Engkaramba. 35.923 (17); perhaps an engkaramba engkatak, frog figure.
- d, g, Bukang engkaramba: headless engkaramba. d, 35.924 (14, 15); g, 35.924 (46).
- e, Anak engkaramba: young engkaramba. 35.924 (22, 23).
- i, Engkaramba besugu: "a female figure with a comb in the hair". 35.926 (7).
- j, Bulan menyembang. 35.921 (7).

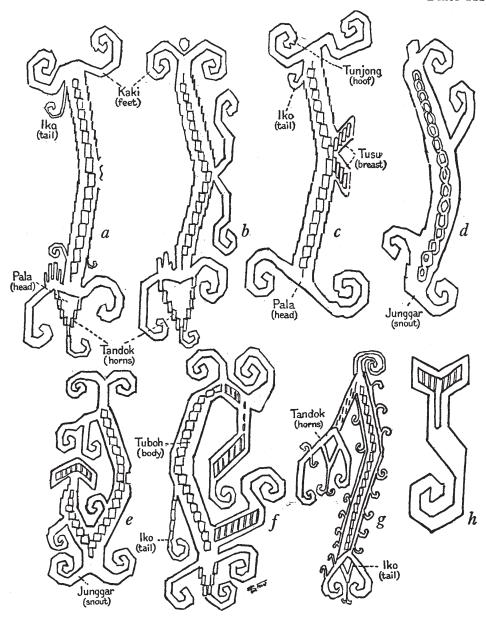
[Many of the drawings on pls. 1-xxv were made from the opposite side of the cloth than that to which the labels are attached, so in these cases the design appears reversed when looking at the labelled side.

The numbers in brackets indicate the numbered patterns on the cloths. A complete list of the numbered and named patterns is entered in a book in the Museum. A star after a number in brackets denotes that the identification was made by us. The translations in quotes are taken from labels.?



### **ANTHROPOMORPHS**

- a-g, Human figures (?engkaramba). a, 35.931 (1\*); b, 35.931 (2\*); c, 35.930 (1\*); d, 35.930 (2\*); e, 35.930 (3\*); f. 35.929 (1\*); g, 35.929 (5\*).
- h, Bukang: a headless corpse. 35.929 (3\*).
- i, Gari enk (engku): my clothes. 35.924 (7).
- j, l, Selam: "diving pattern". j, 35.882 (1\*); l, Sarawak Museum, pua, No. 251 (Camb. Museum photo. Indo. Born. 365).
- k, Betayok: "calling attention with the hand, to beckon" ("to strike with the open hand", S.D.D.). 35.859 (8).



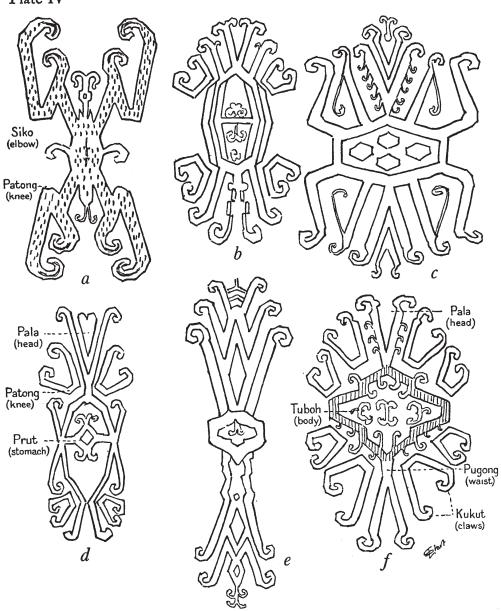
DEER

a, b, Rusa: "deer". a, 35.854 (44); b, 35.854 (45, 51).
c, d, Rusa indu: hind. c, 35.878 (11, 13); d, 35.870 (15).

e-g, Deer curled up. e, 35.870 (25, 29); f, 35.878 (17, 27, 29); g, 35.863 (31, 34, 38, 42). h, Anak rusa: young deer. 35.878 (2, ?9).

d and e, junggar (snout) should be junggur.

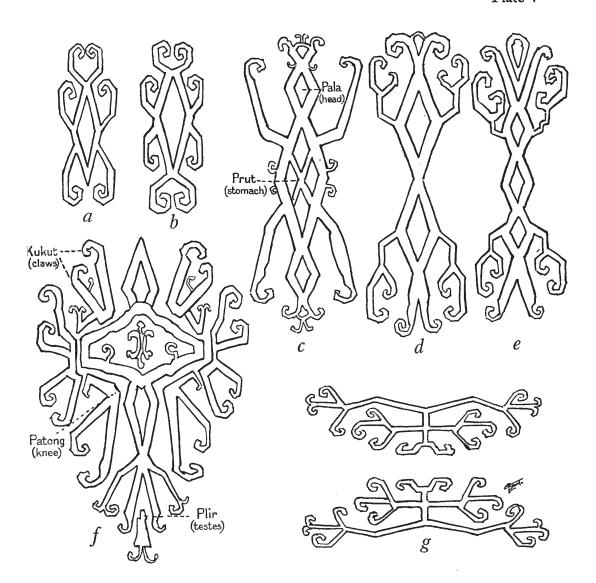
## Plate IV



TIGER-CATS

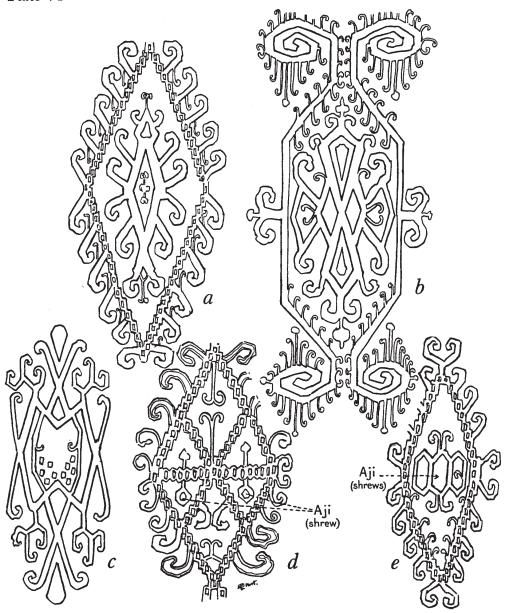
a, Remaung: "tiger". 35.862 (3, 6).

b-f, Remaung: "tiger-cat" (Felis nebulosa). b, 35.868 (12, 16, 21); c, 35.866 (45, 46, 48, 53); d, 35.868 (2, 5); e, 35.859 (11, 13, 14, 17, 20, 22); the head is towards the foot of the page; f, 35.873 (4, 7, 13); pugong (waist) should be punggong.



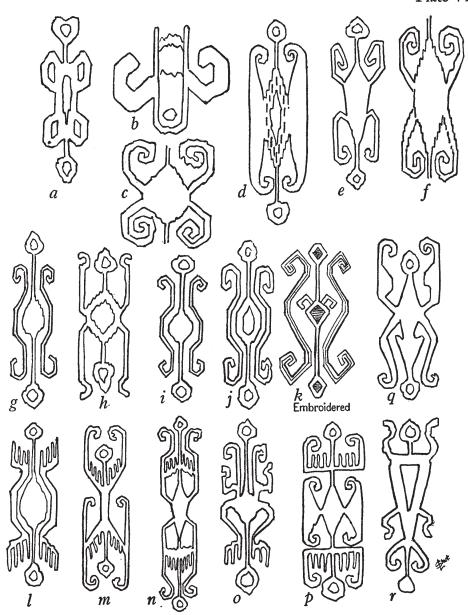
SHREWS

a, Anak aji: young shrew. 35.877 (19).
b-f, Aji: "shrew". b, 35.865 (18); c, 35.866 (27, 32, 38); d, 35.895 (1\*); e, 35.894 (1\*);
f, 35.862 (25, 28, 38); this is labelled "aji bulan".
g, Aji beradap: "shrews face to face". 35.865 (17).



SHREWS

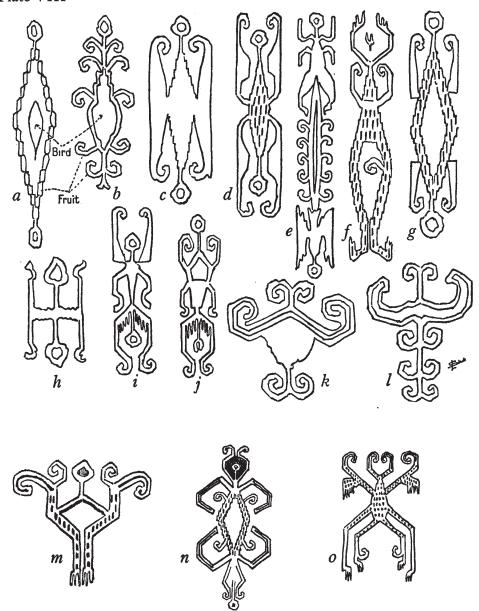
- a, d e, Aji bulan buah bangkit: white shrew on a bangkit fruit. a, 35.862 (22); d, 35.855 (39); e, 35.865 (2, 4) see pl. xxix. The lozenge outside the aji is the fruit, buah, of the bangkit, the stepped outline is labelled "tebok tangga pantok, pole-ladder with notched steps, pantok means to peck as a fowl", the scrolls outside are jerit nyangking, "a pattern of itself".
- b, Aji pelangka: shrew in a "husking box (plangka)". 35.872 (17) and pl. xxx, A.
- c, Shrew with white spots (rice grains?) in its stomach. 35.865 (6, 7, 8, 11, 14), see pl. xxix.



BIRDS

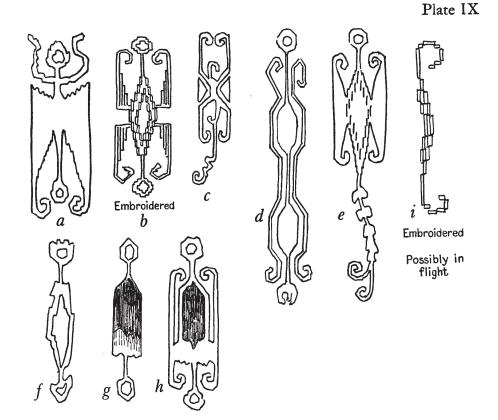
- a-d, Burong: "bird". a, 35.854 (35); b, 35.870 (19); c, 35.928 (46); d, 35.862 (20).
- e, Burong burak prut: "bird with white breast". 35.860 (31).
- f, Burong burak: a white bird. 35.924 (3).
- g, h, Burong sawang prut: "bird with opening in breast". g, 35.907 (7); h, 35.860 (26).
- i-k, Burong bekarong: covered or concealed bird. i, 35.904 (31); j, 35.905 (5); k, 35.906 (13).
- l-p, Burong besugu: "bird with comb". 1, 35.926 (4); m, 35.856 (17); n, 35.860 (27); o, 35.872 (5); p, 35.908 (54).
- q, r, Burong entepa: bird with outstretched wings. q, 35.908 (47); r, 35.908 (43, 44).

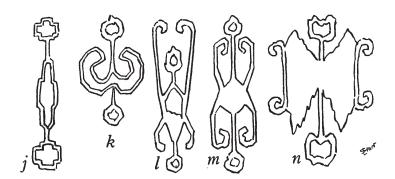
## Plate VIII



#### BIRDS IN ACTION

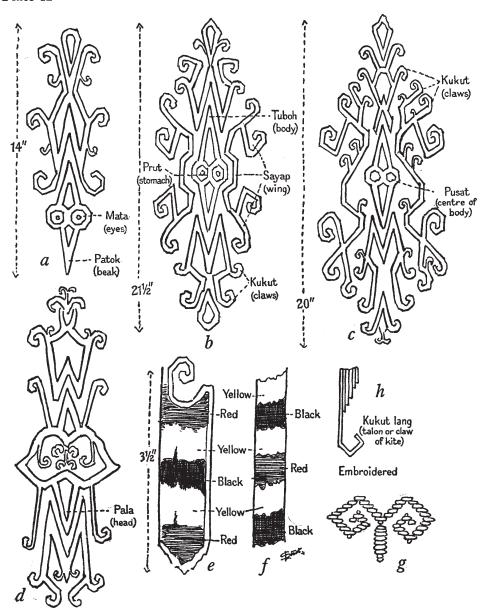
- a-d, Burong buah bangkit: "bird with the bangkit fruit". a, 35.903 (18); b, 35.855 (2); c, 35.908 (45); d, 35.856 (13).
- e-g, Burong jengkuam: bird and the netting needle or spool. e, 35.858 (8); f, 35.856 (16); g, 35.923 (14).
- h-j, Burong bedayong: "bird rowing". h, 35.860 (22); i, 35.926 (1); j, 35.856 (15).
- k, l, Burong berayah: "bird with wings extended". k, 35.922 (30); l, 35.859 (1, 4).
- m, n, Gajai burong: gajai-bird. m, 35.920 (27); n, 35.920 (5-8).
- o, entilang gajai. 35.920 (16, 17, 19).





#### SPECIAL BIRDS AND YOUNG BIRDS

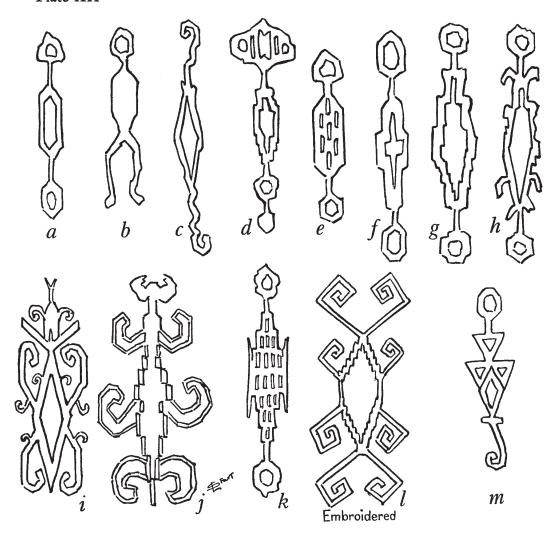
- a-c, Burong lelayang: "swallow". a, 35.928 (49); b, 35.904 (30); c, 35.872 (26).
- d, Burong betampang: a ceremonial bird. 35.907 (3).
- e, Burong belingkian: argus pheasant? 35.908 (39, 40).
- f, Burong andin: a fabulous bird? 35.923 (16).
- g, Perhaps a variant of the next one on the same cloth.
- h, Burong enchoyok (tinggang ujan). We cannot find a translation for enchyok; the following words are "falling rain". 35.905 (11).
- i, Burong jagi. 35.904 (40).
- j-m, Anak burong: "young bird". j, 35.904 (43); k, 35.881 (7); l, 35.856 (11); m, 35.873 (3).
- n, Anak burong: "young bird" (the large wings indicate a swallow). 35.870 (7).



KITES

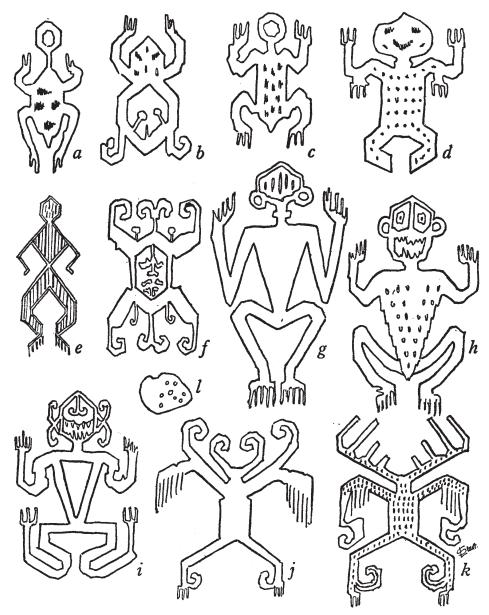
- a-d, Lang: "hawk", the kite. a, 35.881 (15, 17, 19, 20); b, 35.881 (22, 26, 28, 30, 33, 34); c, 35.877 (2, 4, 5, 7, 10, 11); d, 35.857 (7, 9, 11).
- e, f, Kengkang bulu lang: striped feather of kite (Singalang Burong). e, 35.924 (17); f, 35.922 (22, 23).
- g, Kukut burong: "bird's claw". 35.915 (5).
- h, Kukut lang: talon of kite. 35.904 (33).
- a, b, c have their heads towards the foot of the page. The eyes and beak of a are so labelled, but in c this lozenge-shaped device is the centre of the kite's body, and in the cloth there is, as in c, a continuation of the pattern which is not drawn.

## Plate XII



LIZARDS

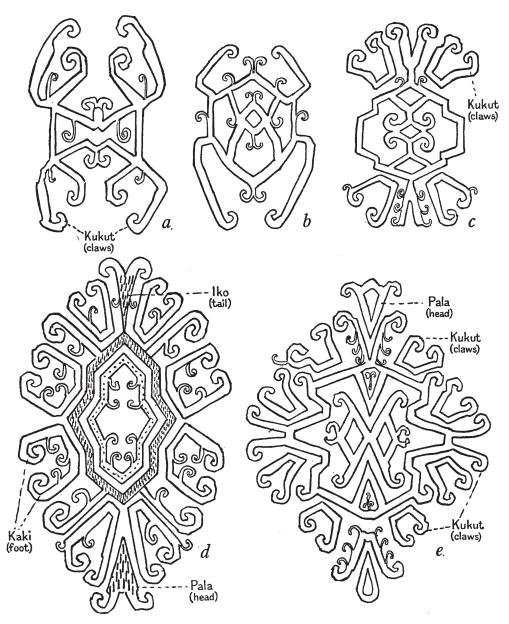
- b-e, Anak lachau: young grass lizard. b, 35.858 (6); c, 35.923 (12); d, 35.922 (45); e, 35.908 (12, 13, 14).
- a, f-h, Lachau: "green grass lizard". a, 35.906 (10); f, 35.903 (3), fig. 13 g; g, 35.922 (27); h, 35.924 (12).
- i, j, Engkarong: lizard (skink). i, 35.880 (4, 5, 8, 9); j, 35.861 (6, 7, 8).
- k, Engkarong kejong: a stiff skink lizard. 35.871 (1, 8).
- 1, Biyak: monitor lizard (Varanus sp.). 35.918 (1).
- m, Engkarong tisik: lizard with scales. On a bidang drawn by Haddon at Baram.



**FROGS** 

- a-e, Engkatak: "frog". a, 35.923 (4), labelled anak engkatak; b, 35.924 (42); c, 35.924 (23), labelled anak engkaramba; d, 35.908 (16); e, 35.906 (8).
- f, Pama: a species of frog. 35.868 (13).
- g, Although this is labelled pama, we think this is an engkaramba engkatak. 35.929 (2).
- h, Engkaramba engkatak: frog figure. 35.926 (9).
- i, Engkaramba gajai: gajai figure. 35.926 (13).
- j, Gajai. 35.920 (16); these figures are spotted.
- k, Entilang gajai. 35.920 (4).
- l, Telu gajai: egg of gajai, it looks like frog spawn. 35.920 (18).

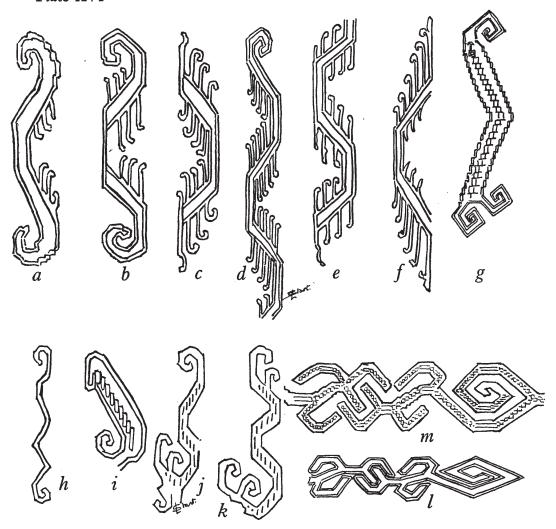
## Plate XIV



SPIDERS

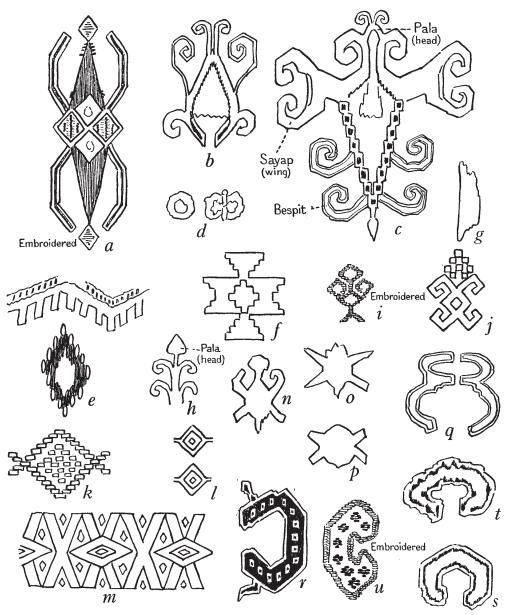
a, b, Anak emplawa: "young spider". a, 35.862 (43); b, 35.857 (19\*). c, d, e, Emplawa: "spider". c, 35.862 (42); d, 35.857 (14); e, 35.866 (13, 15, 24).

### Plate XVI



#### CENTIPEDES AND LEECHES

- a, Anak embayar: young centipede. 35.856 (2).
- b-d, Embayar: "centipede". b, 35.868 (3); c, 35.872 (12); d, 35.881 (6, ngelepan 10).
- e, Embayar semerai sungai: "centipede crossing a river". 35.857 (31).
- f, Kaki embayar: feet of centipede. 35.856 (7).
  g, Nemaiar: "centipede" (from embroidered cloth). 35.918 (6).
  h, i, Lintah: "leech". h, 35.906 (14); i, 35.860 (14).
- j, Randau lintah: leech on a creeping plant. 35.877 (23, 24, 26).
- k, Bungai lintah: "flower of the leech". 35.881 (8, 14).
  l, m, Lintah betegam: "leeches swallowing" (one another). l, Sarawak Museum. Saribas bidang
  No. 219; Camb. Mus. photo. Indo. Born. 330 A; m, 35.886 (Pl. xxxx, B).



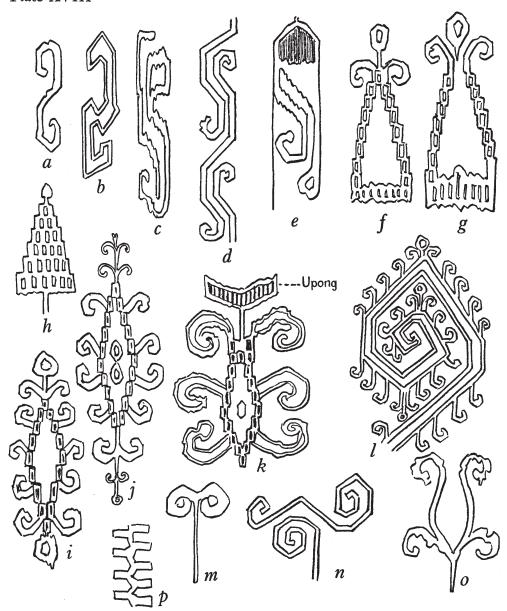
#### SCORPIONS, INSECTS, ETC.

- a, Kala: "scorpion". 35.906 (12).
  b, Spit kala: scorpion's nippers. 35.872 (21).
  c, Buyah: "beetle" ("buyah, a species of moth", S.D.D.). 35.928 (11, 12, 14).
- d, Pantak penandok: the wound caused by the sting of a wasp? It might even represent the clay nest of a wasp (see p. 132). 35.865 (4).

  e, Pantak penandok iku ruai: iku, tail; ruai, argus pheasant, or the verandah of an Iban house
- (see p. 132). 35.924 (4).

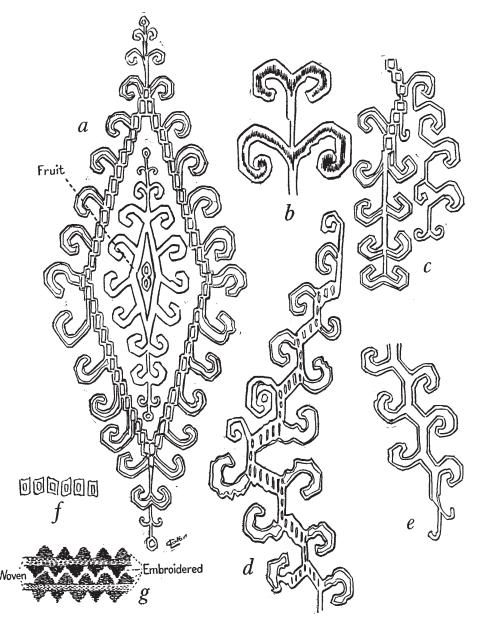
  f, Pantak lelambak: wasp and flower pattern. 35.903 (16); cf. fig. 14.

- g, Empetut: "grub". 35.881 (9, 11).
  h-j, Pala buntak: "head of a grasshopper". h, 35.855 (10, 14); i, 35.913 (4); j, drawn by Haddon from a sirat at Marudi.
- k, l, m, Mata puna: eye of green pigeon. k, 35.912 (10, 12, 15); l, a pua border pattern, Kuching, Camb. Mus. photo. Indo. Born. 415; m, from the badge of a Saribas Iban kalambi at Limbang, Camb. Mus. photo. Indo. Born. 403, a similar pattern covers bidang 35.883.
- n-p, Anak ketam: "young crab". n, 35.928 (25); o, 35.928 (39); p, 35.922 (15, 16). q, Spit grama: "crab's nippers". 35.855 (30). r-u, Mayau tindok: "sleeping cat". r, 35.927 (17); s, 35.927 (13); t, 35.927 (15); u, 35.913 (5).



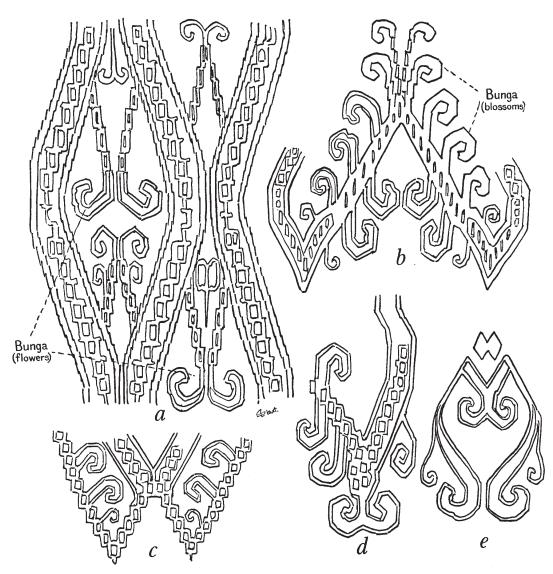
MAST, BAMBOO SHOOTS, FRUITS, AND FERNS

- a-e, Empili: mast ("acorns"). a, 35.854 (32); b, 35.868 (9); c, 35.867 (7); d, 35.860 (6, 8); e, 35.856 (9).
- f-h, Pemuchok tubu: "bamboo shoots". f, 35.921 (2); g, 35.905 (6); h, 35.928 (51).
- i, Burong buah bangkit: bird and bangkit fruit. 35.928 (47).
- j, Buah bangkit: fruit of the bangkit. 35.855 (5).
- k, Buah bangkit bebunga: fruit and flower of the bangkit, hanging from upong bunga, flower stalk. 35.928 (19).
- l, Upong buah beringin: "bunch of beringin fruit". 35.860 (2, 3, 4).
- m-o, Gelong paku resam: "curled tops of the resam fern". m, 35.854 (5); n, 35.854 (74); o, 35.860 (5).
- p, Daun resam: "leaf of the resam". 35.927 (5).



BLOSSOMS, GINGER ROOT, AND GOURD SEEDS

- a, Jerit tangkai bunga: "blossoms [of the bangkit] completely covering the bunch" (jerit, "many, in series"; tangkai, "stalk"); the fruit, buah bangkit, is in the centre. 35.855 (3, 5).
- b, Sanggul sesimpong: "tendrils of a creeper which has been cut in two". 35.928 (2).
- c, Rundai bunga tangkong: "dangling flower of a creeper". 35.855 (21).
- d, e, Bingka lia: "ginger root". d, 35.863 (19); e, 35.869 (4) (labelled "bingka liah bubul lapang", ginger root to fill up a space).
- f, Tebok leka labu: gourd seeds with holes. 35.875 (14).
- g, Dabong mayang: serrated mayang, blossom of a palm. 35.913 (17, 18).

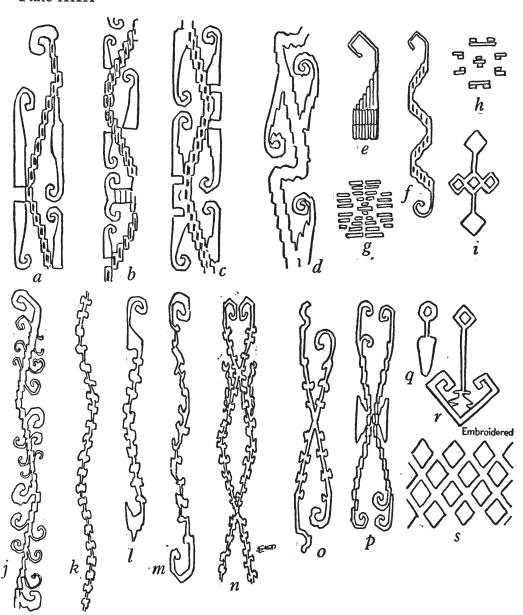


THE TANGKONG

Randau tangkong, "a creeping (climbing) jungle plant with scented pendant flowers".

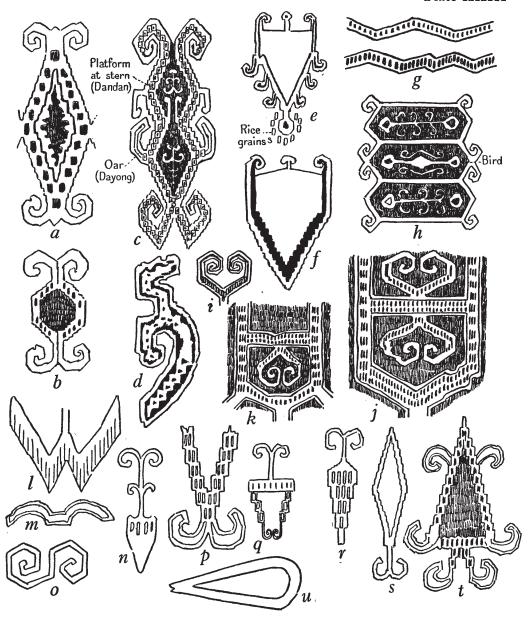
- a, Randau tangkong bi penyuang: "the lattice-work pattern of the tangkong creeper". 35.871 (6).
- b, Bunga tangkong: "flowers of the tangkong". 35.863 (7).
- c, Tangkong mulai: "a creeper which bends back from where it started". 35.855 (18).
- d, Daun tangkong mulai: "leaf of the tangkong twisted back". 35.863 (24, 27).
- e, Upong bunga tangkong: the spathe of the spadix (cluster of flowers) of the tangkong. 35.863 (26).

### Plate XXII



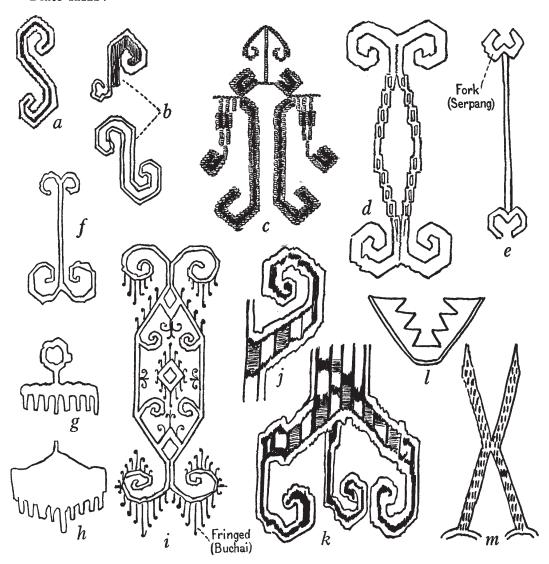
## ARENGA PALM, PUMPKIN, RATAN, THORNS, AND MANGO FRUIT

- a-d, Entibap: "arenga palm". a, 35.862 (15); b, 35.860 (13); c, 35.856 (19); d, 35.868 (7).
- e, Daun entibap: "leaf of the arenga palm". 35.904 (5).
- f, Serok genok: "a gourd". 35.860 (20).
- g, Bunga janggat: flower of a white pumpkin. 35.904 (11).
- h, i, Lelambak: a flower design plaited on mats. h, 35.906 (17); i, 35.918 (2).
- j-n, Daun wi: "ratan leaves". i, 35.926 (6); k, 35.863 (12, 13); l (unak wi), 35.920 (22); m, 35.903 (7), see fig. 13 d; n, 35.921 (5).
- o, Unak wi bekait: crossed thorny ratan. o, 35.856 (3).
- p, Ruit gansai: barbed fish spear. 35.887 (1).
- q, s, Buah angkong: fruit of a species of Mangifera (mango). q, 35.921 (6); s, 35.918 (4).
- r, Buah bunut: "fruit of the horse mango (Mangifera sp.)". 35.918 (5).



#### OBJECTS IN DAILY USE

```
a, Trabai bungkok: shield. 35.870 (10).
b, Gelong trabai: "handle of shield". 35.871 (2, 3).
c, Besampan: canoe. 35.875 (9, 13).
d, Sarong kris: "kris sheath". 35.927 (7).
e, f, Ladang: "a farm, a division of land". e, 35.931 (5); f, 35.927 (6).
g, Pempang lelingkok: zigzag fence. 35.854 (4, 75).
h, Entilang: "framework of an Iban cooking-place". 35.855 (23-26).
i, Spit api behilak: fire-tongs. 35.922 (17-19).
j, Entilang dapur: "fire-hearth". 35.928 (24).
k, Baku entilang: "fire-hearth without the earth for firing on". 35.928 (9, 10).
l-n, Ulu sengayoh: "(crutch) handle of a paddle". l, 35.923 (6); m, 35.855 (31, 32, 42);
n, "a complete paddle with extra scrolls", 35.855 (37).
o, p, Kait: hooks. o, Gelong bekait, "a hooked scroll or curve", 35.854 (16); p, kait betulak,
"a hook pushing another back", 35.863 (3).
q, Jengku ruyit: a curved barb. 35.880 (35).
r, s, Pasak serpang: "the wedge of the fork". r, 35.861 (31); s, 35.867 (8).
t, Serpang bekait: "hooked wedge" [serpang, a trident, fork]. 35.872 (3).
u, Pasak: "wedge". 35.865 (39).
```



### OBJECTS IN DAILY USE

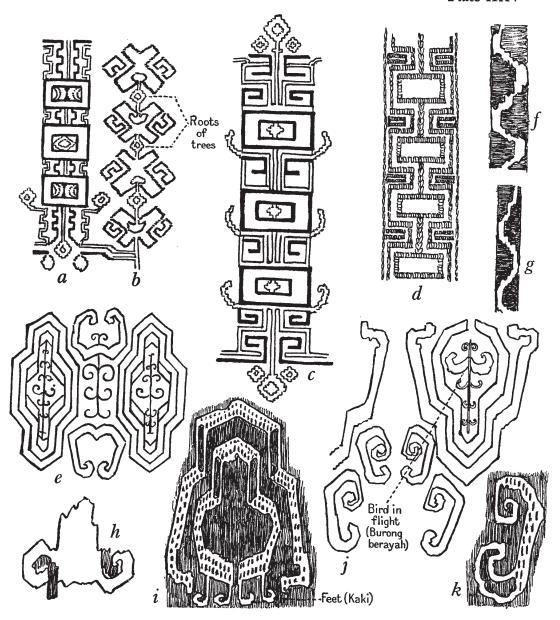
- a, b, Tayok gasing: a hooked piece of wood on which thread is wound from spinning wheel. a, 35.865 (40); b, 35.869 (39).
- c, Part of spinning wheel with spindle. 35.918 (3); it is labelled "taio [?taya, cotton] gasieng, thread driving the spinning wheel".
- d, Tukal jengkuan: "frame for winding cotton", "a wooden frame about 3 ft. long upon which cotton thread is strung ready for weaving", S.D.D. 35.878 (1, 3, 4).
- e, Serpang jengkuan: "the slit in the weaving needle"; a netting needle with forked ends or a spool

- with slit ends. 35.861 (22, 27).

  f, Tunku asi: "tripod for cooking rice". 35.870 (13, 14).

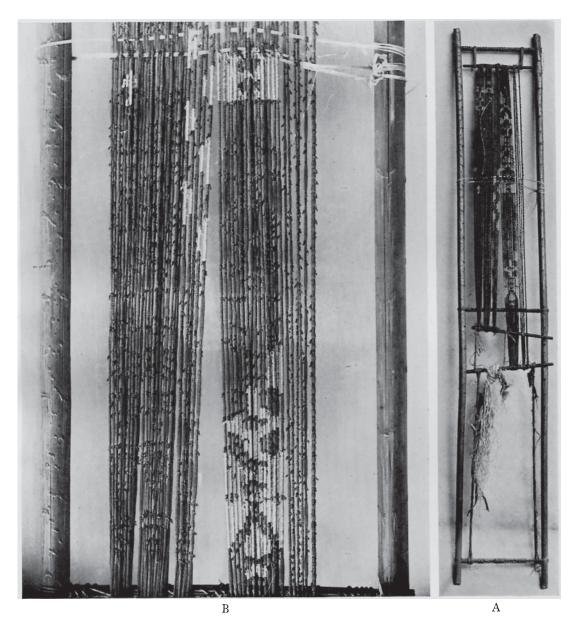
  g, h, Sugu: "comb". g, 35.903 (10); h, 35.854 (30, 40).

  i, Entilang plangka: "box for padi husking". 35.872 (14, 15, 16, 18, 20). No. 15 is labelled "pelangka (manang besaut)" which indicates a box without a lid; a plangka of this kind is used by a manang, medicine man, at the saut ceremony, which is performed when a person is ill (see p. 78).
- j, Ruyit: barb of a fish spear. 35.924 (41).
  k, Sergang pala tangga beji: bamboo fish trap, head, pole-ladder, —? 35.924 (43, 44).
- l, Dabong betangkal: a serrated notch in an upright post for a cross-bar. 35.903 (14).
- m, Papan penukoh: "the plank where the prop is tied". 35.855 (34).



#### NATURAL PHENOMENA

- a, c, Padong paya: a rocky ledge in swamp land. a, 35.913 (10, 12); c, 35.917 (8, 10).
- b, Tabor paya: sown swamp land. 35.913 (11).
- d, Bengka senggang. 35.915 (12).
- e, Kaki padong remaung: foot, rocky ledge, tiger. 35.859 (27, 28, 33, 34).
- f, g, Lelingkok semerai sungai: "crossing backwards and forwards across a river". f, 35.871 (10); g, 35.857 (13).
- h, Bulan: the moon. 35.921 (16).
  i, Kaki miga dudok: "foot of the clouds in steps". 35.859 (2).
- j, Burong berayah: bird with extended wings on miga dudok, between this and the next clouds in steps are four rayok miga dudok. 35.859 (4, 9).
- k, Rayok miga dudok: "clouds in steps". 35.859(12); one only is drawn which varies from those in j.

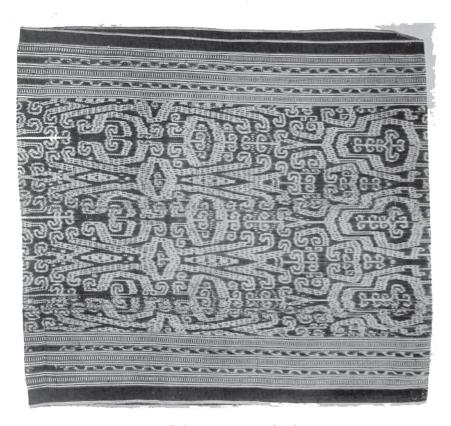


A. Tangga ubong, tying frame. Museum of Ethnology, Cambridge. B. Detail of a portion of the tied and partly dyed warp threads of A, p. 9.

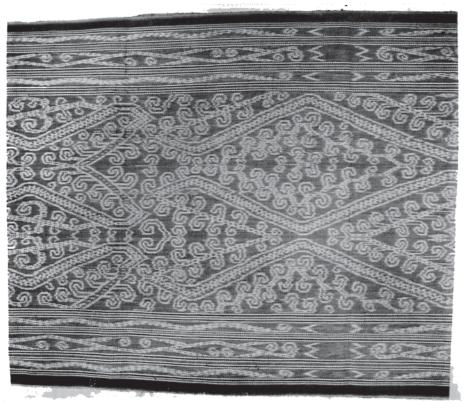
# Plate XXVII



Cloth for a kalambi as taken from the loom, 35.919, pp. 35, 36.

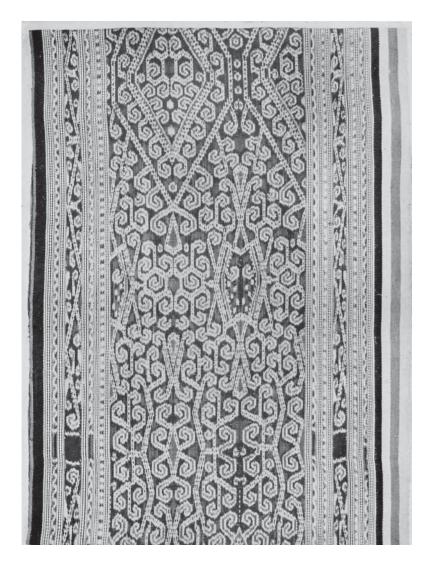


A. Bidang 35.859, pp. 68, 69.



B. Bidang 35.863, pp. 72, 73.

## Plate XXIX



Bidang 35.865, pp. 73, 74.

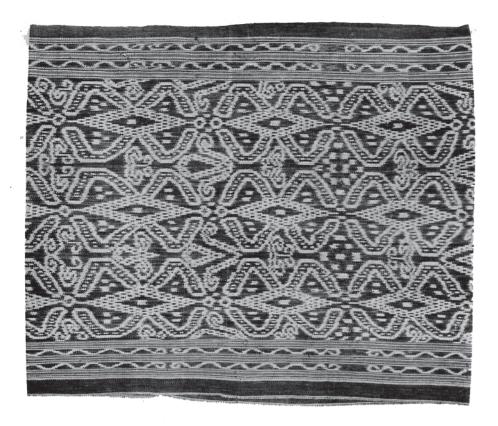


A. Bidang 35.872, pp. 78, 79.

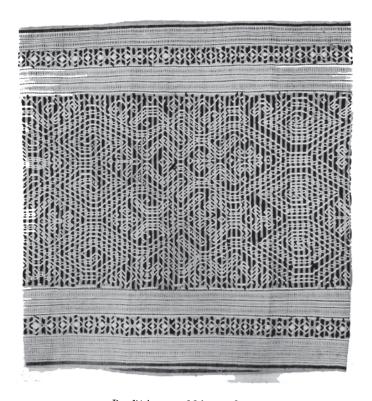


B. Bidang 35.878, pp. 81, 82

### Plate XXXI

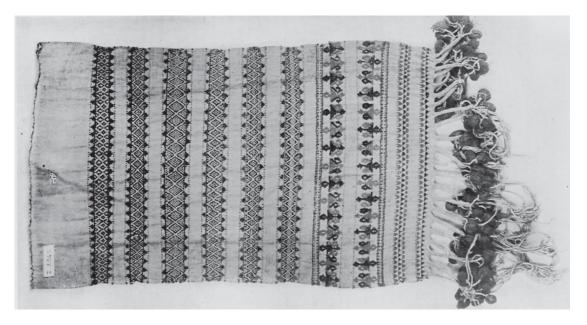


A. Bidang 35.882, pp. 83, 84.



B. Bidang 35.886, pp. 89, 90.

## Plate XXXII





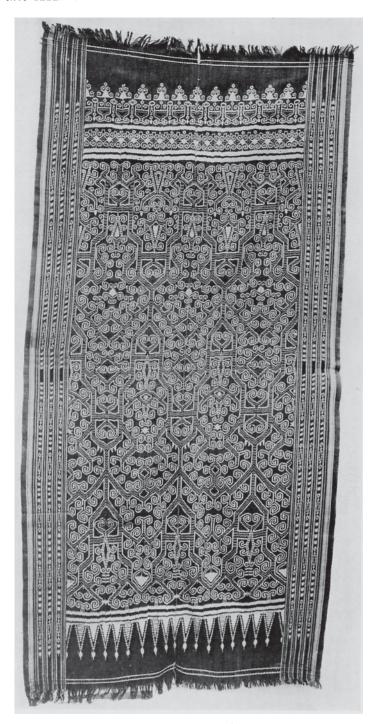


A. Klapong sirat, type 1, 35.913, pp. 94, 95.

# Plate XXXIII



Pua 35.929, pp. 107, 108.



Pua 35.922, pp. 116-118.

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