

GEOMETRICAL DRAWINGS FROM MALEKULA AND OTHER ISLANDS OF THE
NEW HEBRIDES.

[WITH PLATE XIII.]

By *the late* A. BERNARD DEACON.

Edited by Camilla H. Wedgwood, *with notes by* A. C. Haddon.

MALEKULA is the second largest island of the New Hebrides group and is inhabited by a people speaking dialects of a Melanesian language. It is divided into a number of districts which differ from each other both culturally and linguistically, those which have been studied most closely are Seniang and Mewun in the south-west, and Lambumbu and Lagalag in the narrow part of the island towards the north (*see* Map, p. 130). We owe our knowledge of these to the late A. Bernard Deacon, who, during 1926 and 1927, spent a year in making an ethnographical study of the natives. Deacon's death in March, 1927, was a tragedy to the science of Anthropology, had he lived he would have given us an account of Malekulan culture of inestimable value. Fortunately from his field-notes and letters it has been possible to construct a record which every student of Melanesia must recognize as being of first importance.¹

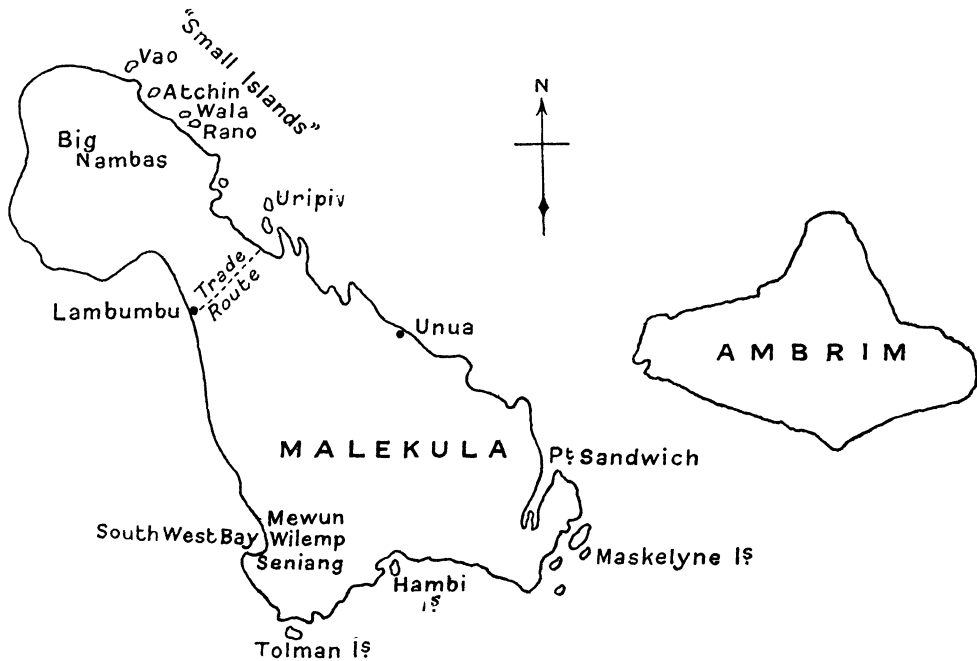
It was intended to incorporate the geometrical designs collected by Deacon in this book, but as they would have added greatly to its cost, we decided to publish them separately, and we have to thank the Council of the Royal Anthropological Institute for undertaking their publication and the Trustees of the Rivers' Memorial Fund for applying a portion of the Fund for this purpose. We feel sure that this remarkable collection of geometrical designs would have appealed to Dr. Rivers, not only on account of their intrinsic interest but also because they afford a problem of cultural diffusion which cannot be solved until further inquiry and research be made.

In a letter from Lambumbu, dated October, 1926, Deacon, in reporting progress to Dr. Haddon, writes: "and above all, the remarkable geometrical figures, of which I have now collected some forty-five, which, in native art, I regard as my one important catch. I've certainly never seen or heard of anything like it. I hope to goodness I'm not duplicating Layard, as I've spent some time in getting a complete set of designs. He never showed me or referred to anything of the kind. Knowledge of the art is entirely limited to the men; women, of course, may see the designs. The whole point of the art is to execute the designs perfectly, smoothly, and continuously; to halt in the middle is regarded as an imperfection. I have photographed and got native drawings of some of the designs, but to the native these are not interesting, what is

¹ *Malekula: a vanishing people in the New Hebrides*, by A. Bernard Deacon, edited by Camilla H. Wedgwood. London: G. Routledge & Sons, 1934.

interesting is my execution of designs which I have taken down and numbered. Each design is regarded rather as a kind of maze, the great thing is to move smoothly and continuously through it from starting-point to starting point.” In a letter of 15 February, 1927, he writes, “I have collected some fifty to sixty geometrical drawings from Ambrym and Oba [Omba or Aoba] as well as from Malekula.”

Ghosts of the dead of the Seniang district pass along a “road” to Wies, the land of the dead. At a certain point on their way they come to a rock called Lembwil Song lying in the sea at the boundary between the Seniang and Mewun districts, but formerly it stood upright. The land of the dead is situated vaguely in the wooded open ground behind this rock and is surrounded by a high fence. Always sitting by the rock is a female ghost, Temes Savsap, and on the ground in



SKETCH-MAP OF MALEKULA. (AFTER J. W. LAYARD, *Journ. Roy. Anthropol. Inst.*, vol. lviii, p. 141.)

front of her is drawn the completed geometrical figure known as *Nahal*, “the Path.” The path which the ghost must traverse lies between the two halves of the figure (Fig. 52).

As each ghost comes along the road the guardian ghost hurriedly rubs out one half of the figure. The ghost now comes up, but loses his track and cannot find it. He wanders about searching for a way to get past the Temes of the rock, but in vain. Only a knowledge of the completed geometrical figure can release him from this impasse. If he knows this figure, he at once completes the half which Temes Savsap rubbed out; and passes down the track through the middle of the figure. If, however, he does not know the figure, the Temes, seeing he will never find the road, eats him, and he never reaches the abode of the dead [Deacon’s notes and p. 554].*

* The references in square brackets are to the pages and figures of A. B. Deacon’s *Malekula*.

THE KILLING OF TEMES SAVSAP.

A famous warrior named Airong, the grandfather of Aipeno, died at Benaour. His ghost, sharing the fate of all ghosts, passed along the road leading to Wies and came to the rock where Temes Savsap sat with the geometrical figure *Nahal* half rubbed out in front of her. Airong had never learned this figure, he sought in vain to pass the rock, but could not. The guardian Temes was about to devour him, when he turned and ran back along the road. The watchers by his body on the funeral stretcher saw him wake up and heard him ask for his bow and arrow. He had become alive again, but they spoke among themselves and said, "He is mad." But he turned to them and said, "Give me my bow and arrow, I am not mad." So they brought his bow and arrow and gave them to him. He spoke to the bystanders and said, "If you look out to-morrow and see that the rock (of Temes Savsap) has fallen into the sea, then you will know that I have killed the Temes." Grasping the bow and arrow he became rigid with death and his ghost again passed along the road. When he came near the rock he drew his bow and, aiming at the Temes, shot her dead. That night the rock crashed down into the sea. Next morning the people from all round Benaour went to look, and saw the rock fallen into the sea. Ever since, the ghosts have passed freely on their way to the abode of the dead—the Temes and her sand-figure have gone.

In his notes Deacon says: "The ghosts from Seniang go north, those from Meaum [Mewun] go south to reach this land of the dead, Wikise," and he implies that the procedure is the same for them as for the Seniang ghosts [p. 563]. A bark-cloth coverlet painted with a design representing Temes Savsap is placed over the corpse of a man of a certain grade of the *Nalawan* in Seniang [p. 523, Fig. 35].

The ghosts of Lambumbu district on their way to Iambi, the land of the dead, have to pass through an analogous, but not identical geometrical design, the *Nevet hor Iambi*, "Stone of the land of the dead," Fig. 51 [p. 580].

The home of the dead, Bwialou, of the Big Nambas of the north of Malekula is entered near a big rock in the neighbourhood of the village of Ten Marou [*Malekula*, Map. I, p. 2]. There are said to be "pictures" on this rock. The ghosts on their way to Bwialou have to pass a ghost called Lisevsep, who destroys the ghosts of evil men, but there is no mention that the ghosts have to pass through a geometrical design. Lisevsep is, however, represented by a geometrical design which precisely resembles the *Nahal* [p. 585.]

These designs are called *nitüs* or *nitüs na-ana* in Seniang and *rolu* in Laravat, the terms employed in other districts do not appear to have been recorded. *Nitüs* is derived from the verb *tüs*, to paint, *itüs* means "he draws" or "he paints," and *tüs* is used to-day by missionized natives to designate the writing of Europeans.

C. H. W. and A. C. H.

When inquiring into the manner in which the ghost of a man of Seniang reaches the land of the dead, Deacon was informed about the geometrical design called *Nahal*, "the path." This led to the discovery that the drawing of designs on the ground was also a popular amusement of men, and later he found that it was prevalent throughout the whole of the South West Bay

area of Malekula and along the south coast and on Tomman Island, as well as in the districts of Lambumbu and Lagalag and in the territory of the Big Nambas in the north. In his notes, Deacon says there is a very large number of different designs in those areas of Malekula inhabited by the people in the centre of the island whose women-folk wear mat-skirts [*Malekula*, Map II, p. 11], and in those places in which they occur in the area where women wear fringe-skirts they appear to have been borrowed from the former people.

Very similar designs drawn in the same way were also collected by Deacon from Omba and a few, very much in the Malekulan style, from Ambrim. Since Deacon's death designs of the same type were recorded from Raga by Dr. R. Firth, which will be described later.

There is a very great variety of these geometrical drawings; they all have distinctive names, some of which are connected with the religious beliefs, mythology, and ritual life of the people, while others again are apparently secular. As instances of those belonging to the first category we may note "The Mound of Ghosts" (*Naavva Nitemah*) (Fig. 55), and "The basket for carrying the skull [to the charnel place]" (*Netang resughun nimbatn nitemakran*) (Fig. 53) from Lambumbu; "The Stone of the Ambat" (*Nevet Tambat*) (Fig. 65) and "The Stone of Nevinbumbaau" (*Nevet nin Nevinbumbaau*) (Fig. 66) from Seniang, and the drawing from Lagalag which represents Hambut trying to sharpen a stone adze by the sea (Fig. 70). Ambat was the eldest of a group of five brothers (called collectively *Ambat*) who are the important mythological culture heroes of Seniang. In other districts of Malekula they appear as Kabat in Mewun, Hambat in Lambumbu and Hambut in Lagalag. They are almost without doubt the same as Qat of the Banks Islands. Nevinbumbaau is a figure who appears as a female ogress in the mythology of the *Ambat* brothers, and is also connected with that of the three important secret societies of Seniang, the *Nimangki*, the *Nalawan* and the *Nevinbur*. A few of the geometrical drawings are called after objects directly associated with these societies. The great majority, however, are representations of birds, animals, fishes and plants, while one or two are objects of daily use such as a conch trumpet and a drinking cup. A few have stories attached to them, as for instance, the design known as "The Heart of Mar Mbong Lamp" (*Navanevis Mar Mbong Lamp*) (Fig. 44).

Despite the fact that the subject-matter of some of these drawings is religious, or at least mythological, they have not any known religious or magical quality. The only exceptions to this statement being that figure called *Nahal*, knowledge of which is, as we have seen, a prerequisite to entrance into the land of the dead, and another unrecorded design on which it is said a certain form of oath is sworn. It is true that only men execute these drawings, which might seem to suggest that they have a certain ritual importance, but they are not secret since women and children may freely watch the artist at work.

The art of drawing these designs is handed down from generation to generation, and it requires considerable skill and practice. Not only are there very many designs to memorize—some of the older men executed twenty to thirty drawings one after the other—but many of them are extraordinarily complicated.

A rectangular area is made level and smooth on the sand, or ashes are spread over the surface of the smoothed earth. A framework is then drawn, around which the design is traced. This framework may consist of a number of lines running at right angles to each other, thus

producing a number of squares or oblongs, or the rectangles may be indicated by a dot or cross at their angles ; or else a number of dots are arranged symmetrically.

Generally this framework is used only as a guide, and forms no intrinsic part of the design, but where dots alone are used, as for instance in the simple drawing of the serpent coiled around the *nevilala* pigeons (Fig. 32), these are frequently essential to the completed picture.

Having finished his preparations, the artist proceeds with his main task. With this forefinger he traces around the framework curves, circles, and ellipses. In theory the whole should be done in a single, continuous line which ends where it began ; the finger should never be lifted from the ground, nor should any part of the line be traversed twice. In a very great many of the drawings this is actually achieved ; two examples, one built upon a simple cruciform framework, the other on a framework of dots, may be cited : “ Breadfruit ” (Fig. 7) from Seniang, and the Lagalag design which represents Hambut sharpening an adze by the sea-shore (Fig. 70). Other drawings which also conform to the rule are Figs. 1, 5, 9, 11, 14, 15, 21, 23, 25, 26, 39, 41–43, 47, 49, 51, 52, 55, 57, 59, 61–66, 72–5, 77–8, 79–84, 86, 88–9. In some of these two separate parts of the line may almost or completely merge in one or two places, as for instance in *Navül* (Fig. 39) where strokes 8 and 2 approach 5, and strokes 12 and 18 touch 15, but these strokes all have their distinct courses ; the finger never truly traverses the same route twice. There are, indeed, only a few diagrams in which this last is done, and it seems that usually the reason for doing so is to avoid making a break in the line. To take an instance : in *Nivughön naai möröh* (Fig. 58) the two outermost lines, those enclosing the flower as it were, have to all appearances free ends, but as will be seen on examining the numbering of the strokes, lineal continuity is preserved by retracing the finger along a part of the line which has already been drawn. The same device can be seen in Fig. 53. These two figures may be contrasted with the design called *Nimughump* (Fig. 33) in which the lines at the head and tail (strokes 2, 14, 28 and 40) are really broken off. It is, in fact, usual to find that where a design is built up of more than one line, this is due to the practice of using single strokes to represent the extremities of an animal. Examples of this are to be found in the tail feathers of Fig. 13, in the arms and legs of Fig. 45, in the legs and beak of Fig. 12, and in the legs of Figs. 34 and 46. Even where the limbs are not indicated thus, it is sometimes necessary to break the continuity of a line for the purpose of adding some portion of an animal’s anatomy or some characteristic of a plant. Thus, in Fig. 19, in order to add the lower right-hand flipper of the turtle, the first line breaks off after stroke 21, and a new line is begun with stroke 22.

In a few designs all pretence at continuity of line is abandoned, the figure being rather composed of a number of symmetrically-arranged lines. Good examples of this are to be seen in Figs. 8, 28, and 85. Specially interesting perhaps are the three designs called *Navanevüs*, *Ninduwi*, and *Hambut hareh navu* (Figs. 44, 24, and 69). In the first, after the rectangular framework has been prepared, the four central circles are described separately and then the remainder of the pattern is filled in by a continuous line. The construction of *Ninduwi* (Fig. 24) is even more complex, for it falls into three distinct parts in addition to the framework—the cross marked in the drawing A, B, C, D. Around the upper part of this one line is traced, indicated by the strokes 1–11 ; then the artist breaks off and draws the straight lines numbered

12–15, which serve really as a framework for the lower part of the picture ; finally, the whole is completed by another continuous line, the strokes of which are numbered 16–43, which ends where it began according to rule. In *Hambut hareh navu* (Fig. 69) the two parts of the figure are very distinct. The framework consists of four vertical lines about each one of which another line is drawn so as to form three loops ; these are then all united by a single line which is interlaced between them, the two ends meeting in a point.

Apart from such composite designs, it is not uncommon for additional strokes to be made, not to complete the pattern but to give greater verisimilitude to the picture. This is particularly true of those which represent, or are based upon, plants and animals. Thus, in Fig. 34, the eyes, mouth, claws and tail of the rat are inserted ; likewise the claws are added in Fig. 35, the toes and fingers in Figs. 45 and 46, the eyes in Fig. 60, and the marks on the turtle carapace in Figs. 17 and 18. Further, to give the effect of substance to a few of the more open figures, the artist sometimes draws three or more parallel wavy lines, using his first three fingers instead of the index alone. Examples of this occur in the picture of the “ Three Ghosts Asleep ” (Fig. 54), in the designs entitled *Nevi Wurwur* (Fig. 50), *Nimbrüs* (Fig. 10), *Noovwil* (Fig. 4), and some others.

There are native technical terms for the various loops, curves and circles, which Deacon himself used when recording the designs, but, unfortunately, only a very few of these have been preserved, and only in the dialect of Seniang. In building the framework a vertical line is called *naai nen* ; a horizontal line is *naai nen matur* ; the square or rectangle formed by the intersection of two vertical and two horizontal lines is termed *nemavul* (see Fig. I).

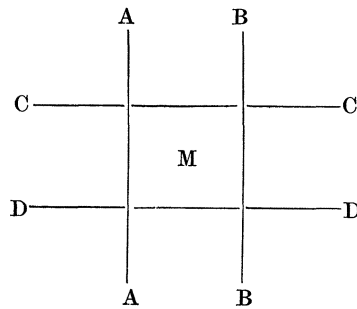
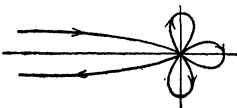
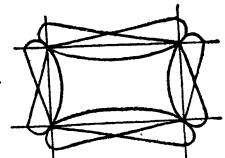


FIG. I.—A A ; B B= TWO *Naai Nen* ; C C ; D D= TWO *Naai Nen Matur* ; M= ONE *Nemavul*.

A very common loop employed in the drawing is . This is called *rom*

walens ; another loop-combination, known as *runggu niar*, runs thus :—



Both these may be frequently observed in the designs reproduced in the succeeding pages. Further, the following technical terms are of interest :—

resumbwatan = they join up.

suon = to end at the point from which the line was begun.

santuan = (the) side.

nemisivan = the space between, the interstice.

mapmap = (the) plane.

In their general design these geometrical figures show the most remarkable symmetry and in their execution truly ingenious skill—evidence of considerable accuracy of eye and hand on the part of the natives. There are in the field note-books one or two examples which in these respects do not fall much short of the reproductions given below, despite the fact that the media—pencil and paper—were ones to which the draughtsman was unaccustomed. *Nul Sagavul* (Fig. 40) is, indeed, a tracing of such a drawing, while the photographs reproduced in Pl. XIII, Figs. 1 and 2 (Figs. 12 and 21) show considerable success with the still more difficult technique of drawing in chalk on a blackboard. Three figures drawn on the ground have also been photographed (Pl. XIII, Figs. 3–5), but it appears that for these a stick or some other pointed object has been used instead of the finger.¹

Apart from the technical skill displayed it will be generally acknowledged that these designs show considerable æsthetic sensibility. *Nivunggoum* (Fig. 13), *Nindanggen* (Fig. 1), *Nivugön naai möröh* (Fig. 58), *Nimbulundr* (Fig. 41) and *Nooit treverep* (Fig. 23), to mention only a few, are remarkable for their beauty no less than for their intricacy. Besides being pleasing in form, these figures are also representations of natural or mythological objects, and as such are peculiarly interesting, for we can see what characters in his models seemed the most significant to the artist, and with what success he seized upon them and wove them into a pattern. It is true that the significance of some of the drawings, particularly those of a ritual nature, is not apparent, as for instance in “The Stone of the Ambat,” but in others the artistic truth of the work cannot fail to attract attention. Figs. 12, 15 and 17–19 speak for themselves ; so also do Figs. 34, 42–43 and 45, while in Fig. 35 the nature and spirit of a rat are expressed remarkably in a rather “impressionistic” manner.

Even a cursory glance at the reproductions given here will show that there are a number of different styles of drawing. Unfortunately, the data concerning the source of many examples are so scanty that it is not possible to discover how far these differences are local variations. In general the evidence seems to suggest that, within the island of Malekula at least, locality influences the style very little. The most common form is undoubtedly that in which a framework of horizontal and vertical lines is used as a base and a single line is drawn in circles and ellipses around it as described above, straight lines being only used in passing from one corner of a square to another. A close analysis of the figures executed in this manner shows that there are definite, recognized ways of beginning and ending and certain commonly used strokes and combinations of strokes, a detailed study of which is not possible here. In a few

¹ See footnote 2, p. 138.

drawings curvilinear *motifs* are almost abandoned, and we get instead a type of design which resembles a simple trellis-work. “The Mouth of the *Amel*” (Fig. 63), “The Door of the Kabat’s House” (Fig. 68), and *Nalul Mbal* (Fig. 81) are examples of this. Occasionally we find as a variant of this general style, that the work appears to be done in double lines. An inconspicuous instance of this is seen in Fig. 79, in which the central circle and the outer curves are formed by two lines running more or less parallel to each other. Two very much more pronounced examples are Fig. 85 and 86. The structure of the framework and the type of loops employed in the design are the same as in the single-line figures. There are, however, some drawings done with parallel lines whose whole character is distinct, as, for instance, *Dimbuk Temes* (Fig. 67) and the unnamed design Fig. 87. It is interesting to notice that certainly the former, and probably the latter also, comes from Mewun, and it is possible that here we have an instance of a local style. The distinct character of these two specimens is further emphasized when we examine the nature of these double lines more carefully. If attention is paid to the numbering of the strokes and the direction in which these are drawn it will be observed that they move in opposite directions, that, in fact, the second is retracing

the route of the first, thus:—. Turning now to the other figures referred

to above, for instance to Fig. 86, we find that almost invariably the parallel lines are moving in the same direction, and that, far from being made up of successive strokes—as they are in Fig. 67—they are made apparently independently of each other. Thus strokes 1 and 14, 2 and 15, 29 and 42, 38 and 51, 36 and 47 are parallel and pointing the same way.

A second group of drawings comprises those in which the framework is made up of a number of symmetrically arranged dots or circles. This produces a very different effect from those described above, though the method of drawing the figures is in other respects not dissimilar. Very good examples of this style of work are to be seen in Figs. 42–43, and 51, while in Figs. 10, 32, 70–1 and 91 we find a very much simplified type, though in the main carried out along the same lines. *Nevi Wurwur* (Fig. 50), despite its angularity, belongs to this category also. Double lines are sometimes used, though probably not very commonly, for *Nimbe’ei* (Fig. 57) is the only example recorded. Unfortunately, in this drawing the strokes are not numbered, so that we cannot tell whether they are of the Mewun type or not. As in the first big group of figures, so in this second, we find that curvilinear *motifs* sometimes give place to those which are primarily rectilinear. Some resemble very much the trellis-work patterns already described, as for instance *Neveses* (Fig. 89) and the Ambrim design (Fig. 90), but some there are which form a small group to themselves. Their salient characters, though difficult to describe in words, are none the less distinctive, and can be seen in Figs. 47 and 48, and, in a somewhat aberrant form, in the amusing drawing of “Three Ghosts Asleep” (Fig. 54). The resemblance between the first two is especially interesting, for Fig. 47 is almost without doubt an Ambrim figure, and Fig. 48, although according to one note it comes from Lagalag, is an Ambrim subject. It may be then, that here again is an instance of a distinctive style belonging to a distinct locality. The design entitled “The Wild Cabbage” (Fig. 11) may probably be regarded as

belonging to this general type also, though it has features in which it resembles more nearly the trellis-work figures.

A rather unusual decorative feature is a design like a figure of eight, which is evidently a variant of the dots or circles referred to above. It is present in Figs. 6, 67, 87 and 90. The first of these drawings probably comes from Lambumbu, the two next from Mewun, while the last belongs to the Ambrim group. For this reason we cannot attribute this *motif* to any one local style.

Two drawings which differ very considerably from any of those analysed above are the ones entitled *Nimahal raan ran Niviemp* (Fig. 29) and *Métsun* (Fig. 30) from Seniang and Uri Island, respectively. Both retain a certain geometric form, but the rendering is much more naturalistic than anything examined hitherto. This is effected by abandoning wholly any pretence at limiting the number of unconnected lines; scales, eyes and fins being added freely. With the Uri example we may compare "The Flying Fish" (Fig. 31) which comes perhaps from Lagalag, but in this figure the design is less near to nature than in the other two.

Besides those already mentioned there are a number of drawings which do not belong wholly to any one of the categories outlined above. One of the most unusual of these is "The Hawk" (Fig. 16), which is rather doubtfully attributed to Seniang. This angular style resembles the work from Omba rather than any from Malekula or Ambrim, though it differs from this also in that it is not composed of a single continuous line.

Altogether seven designs have been preserved which are undoubtedly of Omban origin. Two of these, Figs. 72 and 73, are similar to those already described from Malekula, but the other five are entirely different in conception and recall a maze rather than a work of art. With one exception they are woven around or within a frame, and this is generally definitely angular in form. A single line is wound round and round, either working from the outside inwards (e.g. Figs. 75, 76 (a), 77 and 78) or in the contrary direction (Fig. 74). "A Fowl's Breast-Bone" (Fig. 76) is particularly interesting for the way in which it is built up in three stages.

There is grave doubt as to the districts from which many of the Malekulan drawings come. In some instances there is no clue at all; in others the clues are such as to make localization only a probability; complete certainty as to source is very rare. Thus several of the figures which are stated below to have come from Seniang may belong to neighbouring districts in the south-west, or even to Mewun; some of those attributed to Lambumbu should perhaps be labelled Lagalag or Laravat. Finally, there is a group which includes drawings which were almost certainly gathered from men of diverse regions while Deacon was on the east coast, probably at a station at Bushman's Bay. These have been marked "(?) Lagalag." Owing to our ignorance on this matter of sources, it has seemed best to arrange the following reproductions according to their subject-matter, beginning with those based on secular *motifs*—plants, birds, fish, land and sea animals, and finally human beings—and then passing to those of a ritual interest, those which concern themselves with ghosts, ceremonies and the *Ambat-Kabat-Hambut* mythology. A few drawings have been added at the end, which are interesting from the stylistic point of view, but which have come to us unnamed or with a name which is not translated.

The Omban drawings, because of their distinctive style, we have set apart in a fourth group.¹

A LIST OF THE GEOMETRICAL DRAWINGS FROM MALEKULA AND NEIGHBOURING ISLANDS.² (See pp. 148–175.)

Fig.

1. *Nindanggen* : A variety of yam. From Seniang or Mewun.
2. *Nimbingge* : A variety of yam. From Mewun.
3. *Niluhluh* : A variety of yam. From Seniang. (See Pl. XIII. Fig. 3.)
4. *Noovvil* : The meaning of this word is not recorded, but the four ellipses in the centre are said to represent bananas of the variety known as *nunggut morot*, which men alone may eat. There is no record as to the order in which the strokes are drawn, nor is it certain whether the bananas should be represented by single or double lines. From Seniang.
5. *Nembrü-ia* : The taro. The two outer triangles pointing downwards are two new sprouts (*niselen*) ; the central one is the old and rotten taro root, which was planted, from which the new plants are growing. From Seniang.
6. *Nimbip* : A variety of tuber. The figure represents two of these tubers planted in the centre, and on the circumference, six tubers which have sprouted from them. From (?) Lambumbu.
7. *Nimbetep* : The breadfruit. From Seniang almost certainly.
8. *Nohoran nimumang* : “The Root of the *Nimumang* Tree.” In this figure the framework of rectangles is first drawn and then the diagonals added. After this the parabolic loops 1–2, 3–4, 5–6, are drawn and then the serpentine line moving first from left to right, and then from right to left (strokes 7–14 and then to 21), so as to form the four upper ellipses. Then a new line is begun half a rectangle further down (stroke 22) and in the same way three more ellipses are made, overlapping the ones above. This is continued making alternate lines of four and three ellipses until the framework is full. To the lower border three more parabolic loops are added, to match those of the upper border, and the figure is complete. From Seniang.
9. *Levwaa* : “The Banana Stump.” The drawing shows the upper half of the figure. The lower half is constructed in an identical way, but upside down. From Ambrim.
10. *Nimbrüs* : A certain kind of fruit. The wavy lines are made by using three fingers held parallel. From Seniang probably.
11. *Naai Nimbulughlugh* : Wild Cabbage. Probably from Lambumbu.
12. *Nooimb* : This is a kind of bird, representations of which are used at entrance to *Nalawan Numbou Nemen* [p. 395]. From Seniang. (See Pl. XIII, Fig. 1.)
13. *Niwungoun* : A bronze and green pigeon. From Seniang.
14. *Nimungun mbal ies ies* : “The Nest of the *mbal ies ies* bird.” The ellipses in the centre of the figure are the eggs of the bird ; the pointed projections along the right-hand border are its tail feathers. From Lambumbu or Lagalag.

¹ Altogether Deacon collected one hundred and eighteen different geometrical drawings. From considerations of space and expense it was necessary to omit some of these from the following pages. Those which have been left out are for the most part drawings which are without name or locality and which have no particular stylistic interest. All the original drawings are, however, preserved, and will be kept at the offices of the Royal Anthropological Institute. C. H. W.

² The drawings here published are copies of the originals, and have been made by Mr. C. O. Waterhouse, of the British Museum. In copying, minor irregularities have been eliminated. In a few cases lines are not shown to be continuous, where they should be ; for example, in Fig. 59, line 73 is made continuous with 78, and 77 with 74, but in such cases there is no difficulty in following the correct sequence. The relation of the copies to the originals may be judged by comparing the figures in black and white with the corresponding numbers in Pl. XIII. A black spot has been inserted in some of the figures to indicate the starting point. In some cases it is possible to get the same result by a different course of the line ; thus in two drawings made by Deacon the direction changes in Fig. 26, after line 15 and in Fig. 41 after line 19.

Fig.

15. *Wì man bwetewàsee* : This is a very small black bird with a red head. From Ambrim.
16. *Nambal* : The hawk. Perhaps from Seniang.
- 17 and 18. *Nambwa wanamul* and *nambwa likan* : *Nambwa* means "the turtle." The meaning of the other two words is not recorded, though it would seem probable that they indicate different kinds of turtle. These two figures are very nearly identical, but close observation will show differences in the treatment of the head and tail, and, though this may not be significant, in the markings on the carapace. From Seniang.
19. *Nambwa* : "The turtle." From Lambumbu.
20. *Hi* : The turtle. From Ambrim.
21. *Nimbuhmbuh* : A certain kind of fish. From Seniang. (See Pl. XIII, Fig. 2.) (This drawing should be inverted, as shown in Pl. XIII, Fig. 2.)
22. Two *nimbuhmbuh* fishes side by side, one facing north, the other facing south. The triangular form of the fishes' heads in this figure is unusual. Probably from Seniang.
23. *Nooit Treverep* : The squid or cuttle-fish. The two horizontal loops forming the head represent the eyes of the creature. This figure was found in both Seniang and Lambumbu.
24. *Ninduwi* : The crab. The lines marked A, B, C, D, are the framework, the rest of the figure is built up in three parts : strokes 1-11, 12-15, 16-39. From Seniang.
25. *Nesere Vyögh* : A variety of shell-fish. From Lambumbu or Lagalag.
26. *Netundong* : The oyster. It is represented as opened. From Seniang.
27. *Nendavül* : The pearly nautilus. From Lambumbu.
28. *Nimbuas tliivelip* : A certain variety of small shell. Probably from Seniang. (See Pl. XIII, Fig. 4, which is evidently the same drawing, but with doubled lines.)
29. *Nimahal raan ran nivieimp* : *Nimahal* is a variety of salt-water fish ; the meaning of *nivieimp* is unrecorded. This figure is an example of the "realistic" style of geometrical drawing. From Seniang.
30. *Mètsun* : A variety of fish (*Caranx*). From Uri Island (East coast, Malekula).
31. *Nivianggare* : A flying fish. From somewhere on the east coast of Malekula, perhaps Lagalag.
32. *Nömwat* : The snake. It is coiled around the bodies of five *nevilala* pigeons, represented by the five dots. From Lambumbu or Lagalag.
33. *Nimughump* : A species of tree-lizard. From Lambumbu or Lagalag.
34. *Nilambrut* : The rat. From Seniang.
35. *Nilambüt* : The rat. It is interesting to compare this with the preceding figure. From Lambumbu.
36. *Makon ga vetei tavang itera* : "Rat eats breadfruit half remains." From Ambrim. The drawing of the breadfruit, *vetei*, is completed by stroke 72. In stroke 73, passing again along the original stroke 1, the rat, *makon*, begins to eat off the lower half of the breadfruit. He continues (74-78) Finally, with the stroke 80, he has eaten off the whole of the lower half of the fruit, enclosed by the lines 73, 74, 66, 78, 77. The whole of this enclosed portion is then rubbed out with the hand, leaving only that part of the figure enclosed by the lines 73-80 and the stalk, 28-32, *i.e.* what was left by the rat.
37. *Suwö tavuka* : "Rat's track." Note that line 97 is added, not as a necessary part of the design, but to complete the figure by ending it where it began. From Ambrim.
38. *Nimbatin Nimbuañ* : The pig's head. The framework of diamonds and the circle at the apex are drawn first ; the rest of the figure is drawn in a single continuous line. From Seniang.
39. *Navül* : The Moon. The framework is indicated in this reproduction. The design inside each crescent is said to represent a face ; while the two sides of the figure are supposed to be either the waxing and waning moon, or, according to some men, the light and the dark halves of the moon. From Lambumbu.
40. *Nul Sagavul* : The Pleiades. This is an actual tracing from a native drawing and is a good example of the accuracy of hand and eye possessed by these people. There are supposed to be ten stars (*sagavul* = 10). Each apex represents two stars (as numbered by the informant), indicated it seems by the two lines converging to form the point. Probably from East Malekula, perhaps from Lagalag. Drawn by the same man who drew Figs. 83, 84 and 91.

Fig.

41. *Nimbulundr* : A leaf-cup used for drinking. From Seniang.
42. *Nitavu* : The conch. This figure is like Fig. 40, save for the addition of the loop at the bottom. From the same source as Fig. 40.
43. *Nitavu* : Two conches. A single line is used for the drawing of both conches. It will be noticed that though in the same style, these differ from both Figs. 40 and 41. Probably from the same locality as the two previous figures.
44. *Navanevüs Mar Mbong Lamp* : *Navanevüs* means the heart ; *Mar Mbong Lamp* is the owner of the heart. The framework of squares is first constructed with the central vertical line, which is longer than the others. The four circles around the squares are then drawn. The rest of the figure is built up by one continuous line. The extension at the top is the "throat" of the heart—the pipe leading into it. The shape of the complete figure, and the four-fold partitioning of the central part emphasized by the four separate circles, are remarkable and suggestive. The story of the figure is as follows : *Mar Mbong Lamp* of *Ranmbwengk* village was married to two women. Now it happened that he quarrelled with his wives' brothers, and a great battle took place between him and them. During this battle he was very sorely wounded ; arrows stuck into him all over his body and he was near to death. He therefore betook himself to his sacred place, and there hung his heart upon a tree, leaving some arrows sticking in it. Having done this, his strength was restored. He went forth once more to fight and succeeded in killing many of his wives' brothers. This he continued to do for many days, returning in the evening to the sacred place, where he crept into his heart, and thereby kept himself alive. His two wives were distressed at the slaughter, and they took counsel together, saying : "It is bad that all our brothers should die. Let us go to the sacred place and see what it is that he keeps there, so that we may steal it." So they went to the sacred place, saw where the heart was hanging, and took it away. That evening *Mar Mbong Lamp*, pierced with many wounds, went to his sacred place and found that his heart was gone. Being unable to creep into it, he could not recover from the wounds, and so he died.¹ From *Seniang*. The same figure is found in *Lambumbu* under the name *Nesnen* (= the intestine), but no record has been preserved of any legend concerning it in this district.
45. *Netömuwar* : "Adultery." From *Lambumbu* or *Lagalag*.
46. *Pwiwtesän bökëli* : The meaning of these words is not known, but the figure clearly represents a man or spirit, for we are told that the loop made by stroke 3 is his head, and that the space just above it represents a taro leaf, which he wears because he is bald. The small side projections made by strokes 35 and 36 and strokes 39 and 40 are conches, which he is holding in his hands. From *Ambrim*.
47. *Mwe'er* : This is a word used for a dwarf man or woman. Presumably the figure indicates six of these beings. From *Ambrim*.
48. *Be Nivaal* : The Fight. The figure represents a battle between some men of *Ambrim* and some men of *Raga*—the former being the upper, the latter the lower row. The space² between the two rows is the road separating the forces. The "blobs" at the sides are supposed to be the chiefs, the others are the ordinary rank and file. The origin of this figure is not certain ; one rough note attributes it to *Lagalag*, but if this is correct it is strange that the subject should concern people of other islands. On the other hand, the style of drawing is clearly very much like that of Fig. 46, which came from *Ambrim*. The word *nivaal* means "war" in the dialects both of *Seniang* and *Lambumbu*.

¹ It must be noted in connection with this story that it is a very grave offence for a man to quarrel with his wife's brothers. They are his *mar limbu* ("sacred man"), whom he is expected to treat with great deference and towards whom he owes an obligation of helpfulness.—C. H. W. [p. 87].

² In many parts of Melanesia war is carried on in a highly regularized manner, and often the contending forces line up opposite each other, separated by a short stretch of open ground, and harangue each other before beginning to fight (*v.* C. H. Wedgwood, "Warfare in Melanesia," *Oceania*, vol. i). It seems possible that this figure refers to some such type of war as was carried on between the people of *Ambrim* and *South Ra a.*—C. H. W.

Fig.

49. *Nivungön Nilonggolong* : The meaning of these words is not recorded, but it is said, in explanation of the drawing, that two *temah* (ghosts) are supposed to reside in this flower, and may be seen facing each other. Probably from Lambumbu.
50. *Nevi wurwur* : This is the name apparently of a certain ghost (*temes*) whom this drawing represents. It seems that the figures at the top and bottom and at each side are faces (*noon ives*). From Seniang.
51. *Nevet Hor Iambi* : This is a geometrical figure through which, it is said, a ghost of Lambumbu must pass on its way to the land of the dead. It corresponds thus to *Nahal*, "The Path" of the people of Seniang (cf. Fig. 52 and p. 130). Another name for this design is *Nevat kor tinivinbumbew*. *Nevat* or *nevat* means "the stone," presumably that which according to the mythology of Lambumbu marks the entrance to the road leading to Iambi, the land of the dead. The meaning of *tinivinbumbew* is not recorded, but it is possible that the first part of this word is the same as the Seniang *tinivün*, meaning "wife." More probably, perhaps, *nivinbumbew* is the same as the Seniang ogress *Nevinbumbaa*, *ti* meaning "of." This drawing may then be compared with Fig. 66, from Seniang, which is called "The Stone of Nevinbumbaa" [pp. 555, 580].
52. *Nahal* : "The Path" or *Lisevsep*. This design is called *Nahal* in Seniang, and is the one which, as recounted above (see p. 130) must be completed by a ghost on its way to the land of the dead. Among the Big Nambas this same figure is known as *Lisevsep*, which is the name of the female ghost who is said by them to guard the entrance to the land of the dead [p. 585].
53. *Netang resughun nimbatn nitamah ran* : "The basket for carrying the head of the ghost [i.e. the skull]." In Lambumbu the skulls of the dead are preserved and at a certain festival are solemnly carried in a basket to the charnel place. From Lambumbu [p. 564].
54. "Three Ghosts Sleeping." The ghost in the centre is a man ; those on either side are women. From Seniang.
55. *Naavva Nitamah* : "The mound of ghosts." This is a good example of one of the more complicated figures drawn in an uninterrupted line. An analysis of this drawing will reveal the variety of different looping designs used, and the symmetry and order in which they are executed. From Lambumbu.
56. *Nimbat temes ikoh evün niriviu* : *Nimbat temes* means "the head of the ghost" ; *ikoh* = "it abides," and *neriviu* may possibly be an alternative spelling for *neriviuw* (or *niriviu*), the name of the umbrella palm ; *evün* = "under." From Seniang.
57. *Nimbe'ei* : This is the name of two distinct secret societies in Seniang, one of which inflicts a peculiar form of torture and death on its victims [p. 476], while the other is concerned with a certain image called *temes sumpsump* [p. 475]. Whether this figure bears any reference to either of these is not stated. The same drawing exists, it seems, in Lambumbu under the name *nimbaghi*, which is that of the women's initiation rites in this district [p. 488]. From Seniang.
58. *Nivungön naai möröh* : This is the flower of one of the trees which is sacred to the *Naai Möröh* society of the *Nimangki Tlel* of Lambumbu [p. 436]. In one of the note-books this same design is represented in a reduplicated form so that the two "flowers" hang down side by side, joined together by three \wedge -shaped lines reaching from the starting-point in this diagram to the corresponding point on the second "flower." Unfortunately the details are not clear. This doubled version of the figure is entitled *naabugul naai möröh*. From Lambumbu.
59. *Nöhoran Namdöng* : The root of the *namdöng* tree. From Lambumbu.
60. *Nitangian Uripiv* : "The Mourning of Uripiv." The dead man's head is clearly seen near the middle of the figure. He is prepared for burial, and round him sit six mourners, two on either side and one at the head and foot, wailing for him. This drawing was probably collected in Lagalag, but clearly its home is to be sought in the island of Uripiv, which lies off the east coast of this district.

FIG.

61. *Luan* : A secret society to which belong the bull-roarer and other sound-producing instruments. It is recognized by the people as being identical with the *Ruan* of the east coast of Malekula, and is said to have been introduced thence into Ambrim. The *Ruan* is equated by the natives with the *Nelian* of Uerik, which in turn is said to be the same as the *Nalawan* of Mewun, South-west Malekula [p. 434]. From Ambrim. First draw the central O, then the smaller ones in four-fold symmetry, and finally the continuous line 1-17 round them.
62. *Rom* : The name of a ceremony and also of certain masks worn on this occasion ; they are kept in the club-house. Deacon is of the opinion that the *Rom* is connected with the *Luan*. From Ambrim.
63. *Nimbongon Naamel* : "The Mouth of the *Amel*," that is, the door of the men's club-house. From Seniang.
64. *Niul rangan nduop* : "The Writing on the *nduop* tree." The significance of this title is not clear. The *nduop* tree is a plant used in magic, and the house of the novices in the society *Naai Möröh* was called the "hole in the *nduop* tree," it is possible therefore that the figure bears some relation to the rites of this society [p. 436 ff.]. From Lambumbu.
65. *Nevet Tambat* : "The Stone of *Ambat*." Two other names have also been recorded for this figure : *Nevet tambat inggalang gal len naiew* " (*naiew* = the pudding) and "*Nevet tambat itutu ran naiew*." These probably refer to a story of the *Ambat* brothers in which the mythical personage *Nevinbumbaa* attempts to kill and eat them. From Seniang [p. 627].
66. *Nevet nin Nevinbumbaa* : "The stone of *Nevinbumbaa*." This is the stone with which this personage covered her oven, as recounted in the story mentioned above. From Seniang [p. 627, f.n. ; p. 635].
67. *Dimbuk Temes* : This is a flower head-dress worn in the funeral ritual of the *Nalawan* ceremonies. It is said to have been first made by *Kabat*, who is equivalent to *Ambat* of Seniang. From Mewun.
68. *Nimbünüs ana Kabat* : "The door of the house of *Kabat*." This may refer to the sacred house which is specially built for an important human fertility rite and which is particularly associated with *Kabat*, or to the house of this *Kabat*, in which he is supposed to have lived during his lifetime. From Mewun.
69. *Hambat hareh navu* : The meaning of this title is not recorded, but clearly the figure has to do with some part of the mythology or ritual connected with *Hambat*, which is the *Lambumbu* name for the being who appears as *Ambat* in Seniang. From *Lambumbu*.
70. *Hambut reserese neteli ndes ne vale irip vale reserese ituen* : This figure represents *Hambut* trying to sharpen a stone adze by the sea and being driven back in successive stages by the incoming tide. From *Lagalag*.
71. This drawing is almost identical with Fig. 70, but differs from it chiefly in that it is not composed of one continuous line. Probably from *Lagalag* or *Lambumbu*.

GEOMETRICAL DRAWINGS FROM OMBA.

72. *Navel* : This is a hard nut eaten by the natives.
73. A drop of water falling on a stone.
74. *Wil Tambaghoro* : *Tambaghoro* is a plaited coconut mat. The framework of circles is indicated by being marked in heavier lines ; this is for purposes of clarity only, in reality the lines are all of equal thickness, so that in the completed figure the framework cannot be distinguished. A marks the beginning, B the end of the continuous line.
75. *Serian Tarong* : The nest of the *tarong* pigeon. There is no framework ; A marks the beginning, B the end of the line.
76. *Mambog Toa* : "A fowl's breast-bone." This drawing is done in three stages : the first (*a*), as shown, is built up of a single continuous line (of which A is the beginning and B the end), traced inside the framework, which consists of a crossed circle ; in the second stage (*b*) the quadrants are erased, and crosses are added to the corners. A single line, beginning at A, ending at B, is now wound round and round these crosses until the figure is complete (*c*).

Fig.

77. *Mambog Gwèmba* : “A pigeon’s Breast.” The beginning and ending of the line are again marked by A and B. The framework is indicated by heavier type ; in reality there should be no such distinction.
78. Nest of the *Ramè* bird : This is a black bird with a hooked red bill, which burrows in the ground. The lozenge in the centre of the figure represents the nest. For this drawing the framework is a simple rectangle with the diagonals marked. A and B show the beginning and end of the line.
- The following are a group of figures, arranged for the most part according to the style in which they are executed, of which no names have been recorded, or whose names are untranslated.
79. *Naiew walong* : (*naiew* = the pudding ; *walong* = (?) depart). This is the same as a figure called *Natung Navögh*, which probably comes from Mewun. From Seniang.
80. *Nivüngön Nimbulu* : *Nivüngön* is the Lambumbu word for “the flowers.” From Lambumbu.
81. *Nalul Mbal* : From Lambumbu.
82. Unnamed. There is no indication as to what this represents save a note, which states that the two projecting “horns” are said to be “like paddles.” From Seniang.
- 83 and 84. These two figures are both called *Wul’wul’ Nitimbu*, being apparently different versions of the same theme. The title has been translated “Mark of Grandmother,” but no further explanation is given. They were drawn by the same man who drew Fig. 40.
85. *Nemburut* : This figure is interesting for the use of double lines, and the fact that each quarter is worked separately. The order in which they are done is indicated by the lettering. Probably from Lambumbu.
86. *Mbat Ari* : From Seniang or Mewun.
87. Unnamed : Probably from Mewun, but perhaps from Seniang.
88. *Ninsam rara* : From Seniang.
89. *Neveses* : The letter A marks the beginning of the line. From Seniang or perhaps Mewun.
90. *Tnyin temér vaa* : From Ambrim.
91. *Niul rangen duov* : Drawn by the same man who drew Figs. 40, 83 and 84. It is interesting to notice that part of this design resembles that drawn on the “body” of the flying fish (Fig. 31), which may perhaps be the work of the same man.

C. H. W.

Mr. J. W. Layard has sent to me seven geometrical drawings which he collected in Malekula in 1915, two of which are the same as Deacon’s Figs. 37 and 48, but with different names, and the remainder are analogous to other drawings here recorded.

A.C.H.

THE GEOMETRICAL DESIGNS OF RAGA DISTRICT, NORTH PENTECOST.

By A. C. HADDON.

Miss M. Hardacre, a former missionary in Raga district, North Pentecost, informs me that Raga is divided into a northern and a southern region. The northern people are much more numerous and extend over a larger part of the island, and even they are not quite homogeneous. Steep Cliff Bay is nearly half-way down the western coast, locally it is termed Qatnapi, but the northerners call it Qatuavenua. The Mission people speak of that area as Central Raga, between which and the north are very considerable differences in the language. For example : water, *wai*, North Raga, *silig*, Central Raga ; pawpaw, *uhi*, North Raga, *quarus*, Central Raga ; though she thinks the construction of the languages is similar. These two groups do not intermarry very much.

In North Raga the women are much more active and do more garden work. In Central Raga there are some streams and a certain amount of irrigation for the growing of taro, but in the north end of the island they are very short of water. The soil is so porous that, except for a tiny trickle in one part, there are no streams, though brackish water may at any time be obtained by digging in the sand on the beach. The two groups have different methods of planting yams. The women of Central Raga specialize in weaving, and even the men have done some.

North and Central Pentecost are usually termed North Pentecost, the natives of which are different in their social life and in other matters from those of South Pentecost. Miss Hardacre's colleagues have not had much intercourse with the southerners; she knows they do not weave, but cannot say whether they draw geometrical designs.

Dr. Raymond Firth gives the following information which he obtained from Judah Butu of Anarasi village, Raga (*Man*, vol. xxx, April, 1930, No. 46): "A mixed crowd of people sit down on the beach in the evening; they like a moonlight night. They divide into two parties; someone from the first tells a tale, then a person from the other party follows suit, and this alternate recital continues throughout the evening. Some tales have picture-drawings attached to them (see Figs. 1 to 4), others have not. The one who tells the story makes the drawing. It is done with the finger in the ashes or the sand. Only a few experts know how to do these; tales and drawings are traditional, usually handed down in families from father to son, but some are obtained from other people." The diagrams given by Firth are carelessly drawn; they represent (1) *Bwat gaviga burabura*, (2) *ruerue*, (3) *avua*, (4) *tum revrevo*.

During 1930 I was in correspondence with Miss M. Hardacre with regard to canoes, so naturally I asked her about these drawings. She very kindly gave me what information she had and lent me some thirty pencil drawings by natives, many of which were rather indistinct, but I have been able to make out how some of them were drawn.

Miss Hardacre says that so far as she can find out, "the geometrical designs are at the present time drawn only as a pastime, chiefly by the young people when sitting about with nothing particular to do. They are traced with the finger in a nice moist patch of sand, well smoothed over, or in the dust, and are drawn on the framework without removing the finger from the ground. They often try various methods

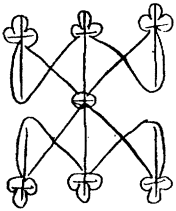


FIG. 1.

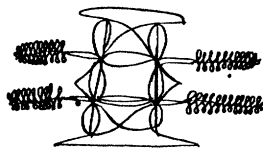


FIG. 2.



FIG. 3.

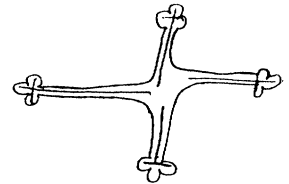


FIG. 4.

before succeeding. With some of them stories are connected. The stories are often about Tagaro. One of the drawings is called "The Vessel used in making Tagaro's kava," but many of them represent birds, insects, and trees. One rather curious one, *ue tabagoro*, of which I have a very imperfect design, is drawn when a person is going to make a solemn promise that he will forego some particular thing. The drawing is completed and then a certain part of it rubbed out, while the person who has drawn it says, "I will not eat meat," "I will not marry," but he does not seem to be taken very seriously—more as a game—mock solemnity—though I suppose in the past it was a very serious matter. The word for tracing the design with the finger is *uli* and the drawing is called *ulivili*. *Uli* is also "to smear."

Fortunately duplicates of Dr. Firth's four drawings were included among those lent to me by Miss Hardacre; the following explanations were given to me by her.

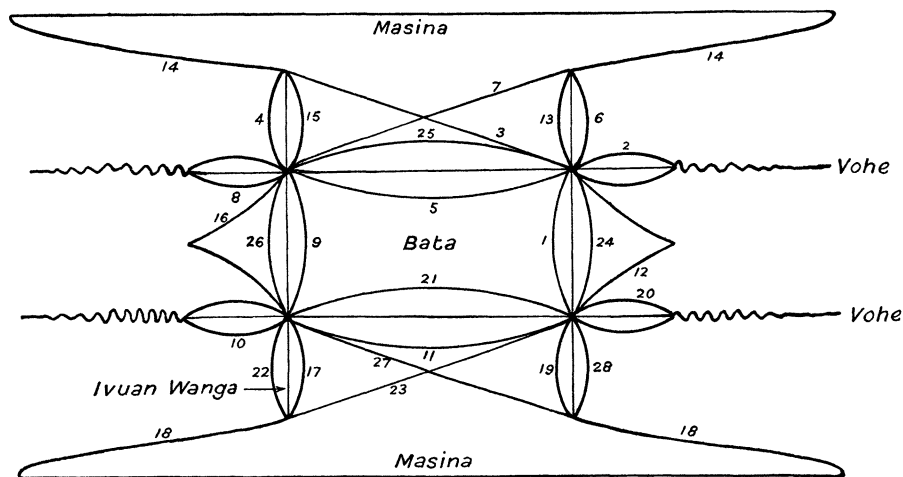
"Fig. 1.—*Bwat gaviga burabura*." *Bwat* is a lately adopted spelling in Raga for what was formerly termed *gat*, and is the word meaning "source," "beginning," or "head." Here it means "trunk": *quat*, trunk; *gaviga*, the rose-apple tree; *burabura*, swollen or enlarged. [The story connected with this drawing is given by Firth. It is perhaps worth noting that, according to one belief in Maewo (Aurora), there is a *vui* named Gaviga, the chief of Banoi, the underground world; he tries to stab the ghost who seeks to enter Banoi through an opening at the north end of the island.—Codrington, *The Melanesians*, 1891, pp. 169, 280.]

"Fig. 2.—*Ruerue*." This is of peculiar interest as it is described by the native artist who drew it for Miss Hardacre as *Wanga gairua ram bauhi bultaini-a*, "canoe two they tie together-it" (or them; the singular is sometimes used for plural in inanimate things). The two essential parts are named *masin wanga*; *masina* or *masin wanga* is the hull of any canoe. The root word is *masi*, "true" or "real," or the essential or real part of it, thus the real part of the canoe is the hull; *n* or *na* is the third person singular possessive pronoun.

suffixed, *n* when followed by a noun, *na* when not—for example, *ihan atatu*, “name of a man,” *ihana*, “his name.” The poles connecting the two hulls = *ivuan wanga*. The platform = *bata*, a term also used for a raised native bedstead, or for a platform for yams, etc. Paddles = *vohe*.

This is the only valid record of the occurrence of double canoes in the New Hebrides. H. le Chartier (*La Nouvelle-Calédonie et les Nouvelles-Hebrides*, Paris, 1885, p. 230) refers to a double canoe at Ambrim, but the illustration he gives is strangely like Lambert’s plate of the double canoe of the Isle of Pines. Le Chartier is very unreliable, and Speiser (*Ethnographische Materialien*, etc., Berlin, 1923, p. 252) rightly discredits him and adds that such craft are totally absent from the New Hebrides.

There can be no doubt that the memory of double canoes persists at Raga. It is not yet possible to say whether they were used there at no very distant date or whether the drawing is a traditional one handed down from a long time back when the ancestors of the present population (or at all events one element of them) sailed in such vessels. In the not very far distant Santa Cruz group, Quiros saw double canoes in 1606,



Ruerue: DOUBLE CANOE. (FROM A NATIVE DRAWING SENT BY MISS M. HARDACRE). (= FIRTH'S FIG. 2.)

and round about 1600 A.D. there appear to have been double canoes in the southern “Polynesian” (or more correctly, perhaps, Micronesian) Islands of the Solomons, which were used by people who were said to have usually a white skin and “red” hair. At that time there was a great deal of voyaging by the natives.

“Fig. 3.—*Avua*.” Turtle. Miss Hardacre never heard a story about this one.

“Fig. 4.—*Tum revrevo*.” Another name for this is *tum rara*. *Tumu* or *tum* is a hollow place where water is caught, as a natural hollow in the branches or trunk of a tree, or in a stone. A man climbs the tree to seek for water. He went to all the hollows in the branches and found none, then in the centre he found some.

Besides those mentioned by Miss Hardacre, other Raga drawings are :

Vatangele. The people of North Raga say that when a man dies his spirit goes to *Vatangele* in South Raga and jumps into the sea.

Borogai is a bird that frightens *Tagaro*'s wife, about which there is a story.

Ram quathunas alun garon ranute. This was translated as “Ten *Tagaros* resting, using the roots of the banyan as head-rests.” Codrington says: “In *Araga*, *Whitsuntide* Island [Pentecost], *Tagaro* has ten brothers, beside *Suge*, who accompanies and thwarts him” (p. 169). “In the *Banks* Islands, *Qat* had eleven brothers all called *Tangaro*.” The names of the last nine are made up of the names of the leaves of trees and plants . . . added to *Tangaro*, which is no doubt the same with the *Tagaro* of the New Hebrides and the *Tangaroa* of the Polynesians” (p. 156). This leads one to wonder whether there is any connection between the *Qat gaviga* of Firth's story and one of the *Tagaro*; the original story may have become modified in course of time.

Qatgarabihu. A tree.

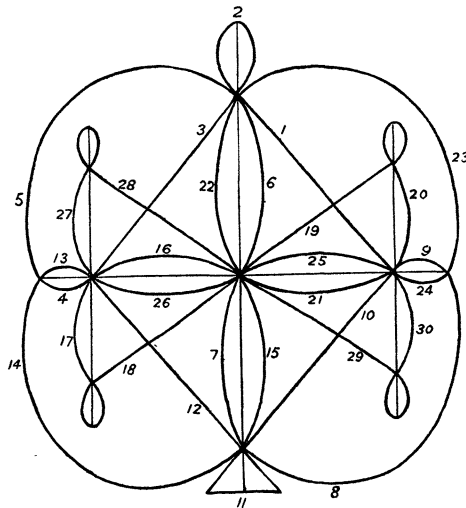
Four garden plots; two men dig, working day and night till they were finished.

A man told his wife to go and dig yams at four outlying parts (of the spreading tubers). They were very hard to dig up; he went and dug at the centre and the whole mass came up easily.

Four flying-foxes eating one bread-fruit.

Seven young kingfishers on a white ants' mound.

Miss Hardacre sent me the following story, but there was no accompanying drawing: "A man shot pieces of coarse grass, *Vutugera*, up into the sky and they formed a ladder. The Vingaga came down to earth on it. They took off their wings to bathe at Batarigi. The people there hid one wing of one of these, so he himself discarded the other and lived here as a man." Codrington gives this tale in a more authentic form from the neighbouring island of Omba (Leper's Island): "It was Tagaro also (but Qatu in the Maewo story) who married the winged woman—a Banewonowono or Vinmara, Web-wing or Dove-skin—from heaven" (*loc. cit.*, p. 172). Tagaro also shot an arrow made of an *ere*, a flowering reed, into the sky and by it he and his mother climbed to heaven (*loc. cit.*, p. 169).



Avua: TURTLE. (FROM A NATIVE DRAWING SENT BY MISS M. HARDACRE.) (= FIRTH'S FIG. 3.)

The geometrical designs of Raga are perfectly comparable with those of Malekula, Omba, and Ambrim. It is not feasible to reproduce any of them here, with the exception of those recorded by Dr. Firth, but it is to be hoped that the missionaries at Raga will collect all they can and with adequate information for future publication. It is obvious that this would prove to be an investigation as interesting as it is important.

In the islands where they are at present known to occur, the geometrical designs do not characterize any one of the older cultures. Thus in Omba, Raga (North Pentecost), and in most of Malekula, the women wear mat-skirts, but fringed-skirts are worn in Ambrim and in West-Central Malekula, but in the latter area the designs are not indigenous. In Omba, and Raga, there is matrilineal descent and the dual organization is very general, and marriage with the widow of a maternal uncle is very prevalent. Incision is absent; there are no upright gongs, and irrigation is practised.

In Southern Pentecost, Ambrim, and Malekula there is patrilineal descent with local exogamy, but no dual organization (though in North Ambrim descent is in both lines and there is a dual organization with a 6-class system—these two latter also occur in South Ambrim—and in South-West Pentecost the patriliney is combined with a matrilineal dual organization). Incision is practised and a penis-sheath worn. There are upright gongs.

Deacon, from whose book these distributions are taken, recognizes a succession of three cultures (p. 705) and considers that another distinct culture must have spread throughout the area of the Northern and North-

Central New Hebrides, which among other features, such as secret societies, and the bullroarer, the cult of ghosts, exhumation, the cult of the skull, effigies in South Malekula, and stone-work, was characterized by the *Ambat-Qat* mythology (pp. 709–711), and to these may probably be added the making of geometrical designs.

According to Deacon (pp. 617, 628) the *Ambat* are the culture-heroes of South Malekula, a superior people who were the first “men,” they are affirmed to have been white men (as Layard was also informed, p. 214)¹ with narrow noses, and they were not cannibals. The term *Ambat* is used both in a singular and plural sense. They were five brothers, of whom in mythology the eldest was marked out by his wisdom, foresight, inventiveness and dignity of character, while the youngest was cunning and unscrupulous, and tried to outwit his eldest brother, but in Mewun district the youngest *Kabat* was the cleverest and strongest. They made life and men, and caused women, pigs, and fowls to be fruitful.

Deacon has a good deal to say about the *Ambat* of South-West district of Malekula, who are known as *Kabat* in the Mewun district, as *Hambat* in Lambumbu, and as *Hambut* in Lagalag. In his notes he says, “there is an almost certain identity of *Ambat-Kabat* with *Qat* of the Northern New Hebrides. The [verbal] transformation is entirely in accord with the rules governing phonetic change, and the general character of the two is reasonably similar.”

The relation between *Qat* and *Tagaro* is somewhat obscure and at times they appear to be indistinguishable. It is generally recognized that the *Tangaroa* of Polynesia is the same as the *Tagaro* of the New Hebrides; referring to the former Layard says: “I have no mention here [Malekula] of any connection of the *Ambat* with this god or culture-hero, but he is well known in the Small Islands [off the north-east coast of Malekula] under the name of *Tahar*” (p. 219), and he is known as *Taga* in North Malekula. Layard says (p. 209), “The island of *Maewo* (*Aurora*), which is looked on as the land of *Tahar* (*Tagaro*), who is identified with the sun and moon.” Deacon in his notes says: the mythology centring round *Tagaro* is chiefly developed in *Maewo*, North Pentecost, *Oba*. *Tagaro* occurs generally in *Santo*, but is absent from *Ambrim* and from *Malekula* with the exceptions just noted.

It is worth noting that according to the Manganian legend *Tangaroa* had sandy hair, and in after ages all fair-haired children were considered to belong to *Tangaroa*, whose home is in the sky. Layard refers (p. 218) to the Maori tradition of the *Pakehakeha* or *Patu-pai-arehe*, a people of white complexion who lived on the sea and worked only at night.

In his letters to me, Deacon expressed his delight in the discovery of the geometrical designs in Malekula and the neighbouring islands. He spent a considerable amount of time in collecting and analysing these designs, doubtless because their intricacy and their often beautiful forms appealed to his artistic sense, but also because they had a psychological value and an obvious connection with the social and religious life of the people. He realized that these designs were not merely something new to ethnology, but that probably they were related to the *Ambat-Qat* culture, a culture in which he was greatly interested, and it was his intention to investigate its spread into and through Melanesia.

¹ J. W. Layard, “Degree-taking Rites in South West Bay, Malekula,” *Journ. Roy. Anthropol. Inst.*, vol. lviii, 1928, pp. 139–223.

A descriptive list of the figures 1 to 91 is given on pages 138 to 143.

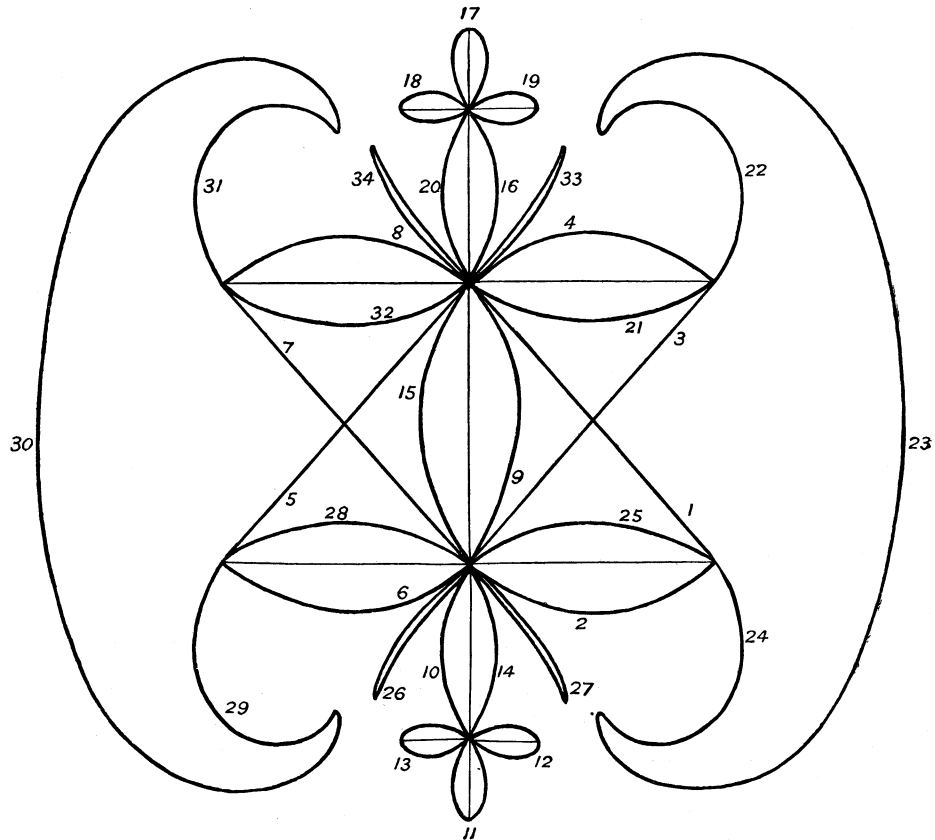


FIG. 1.

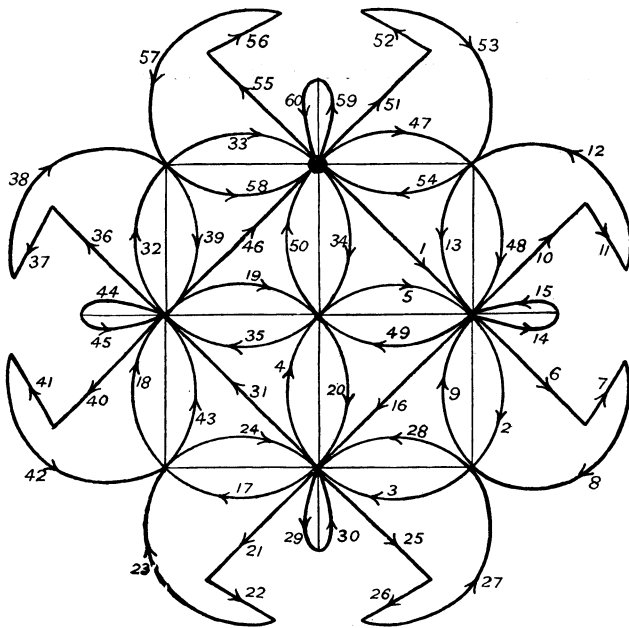


FIG. 2.

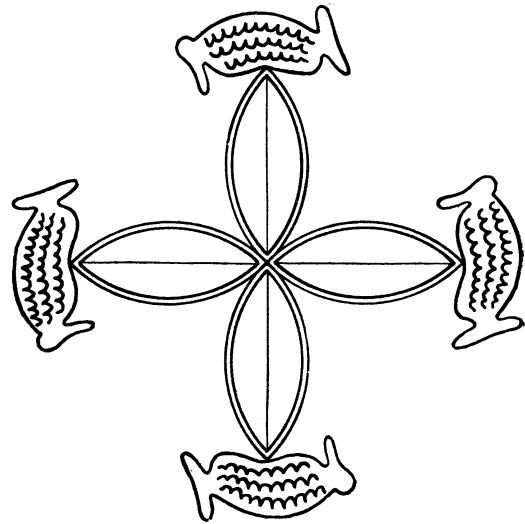


FIG. 4.

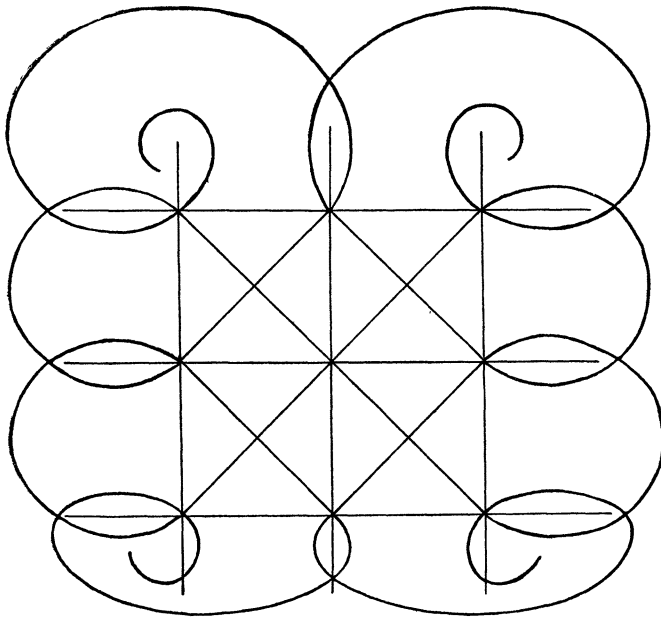


FIG. 3.—(= PL. XIII, FIG. 3.)

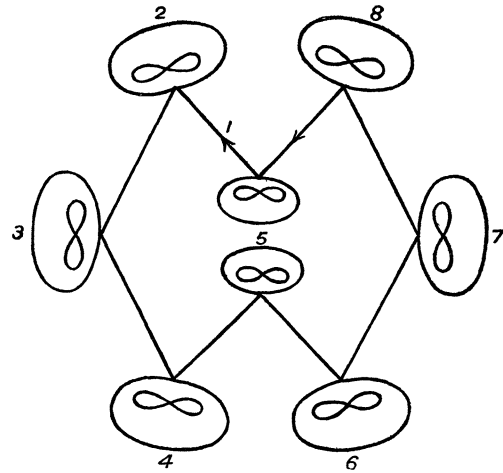


FIG. 6.

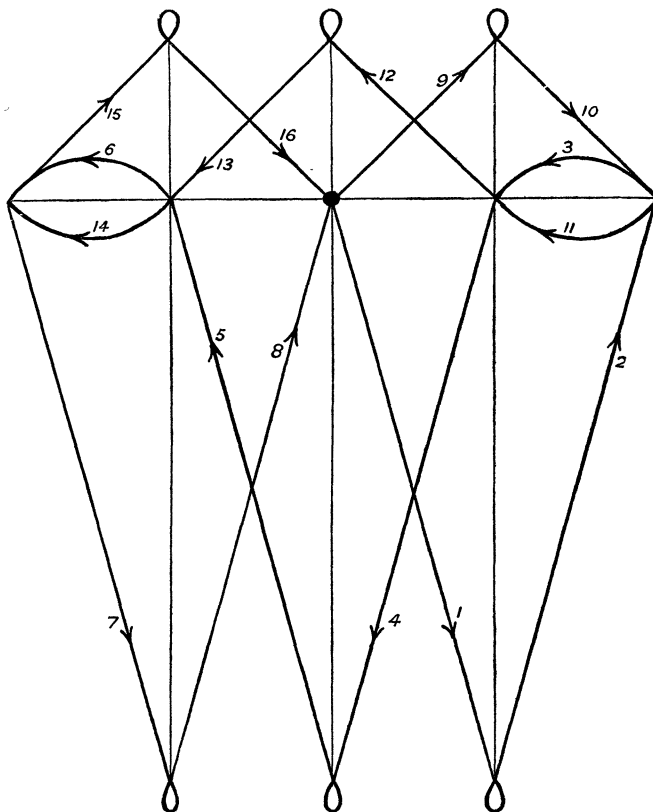


FIG. 5.

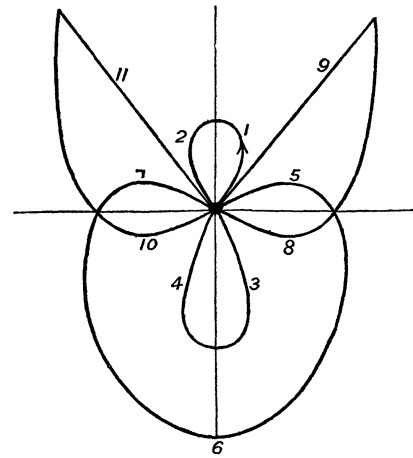


FIG. 7.

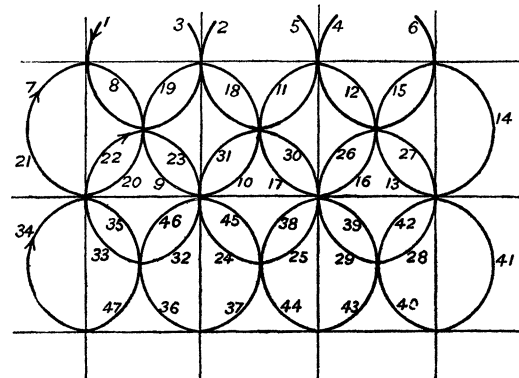


FIG. 8.

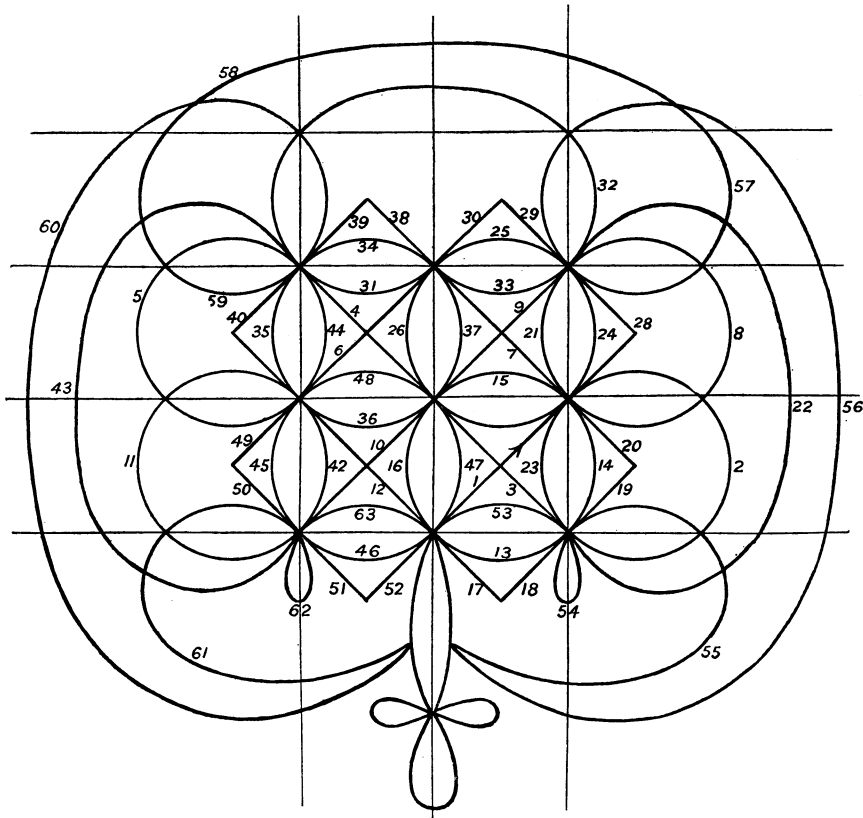


FIG. 9.

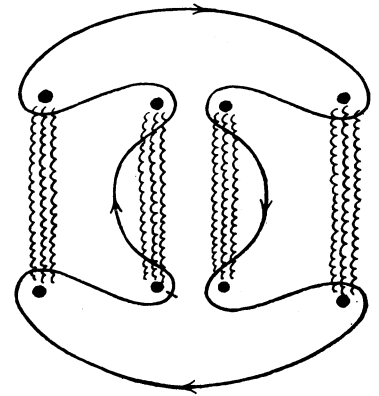


FIG. 10.

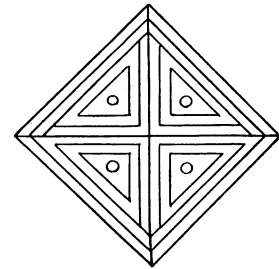


FIG. 16.

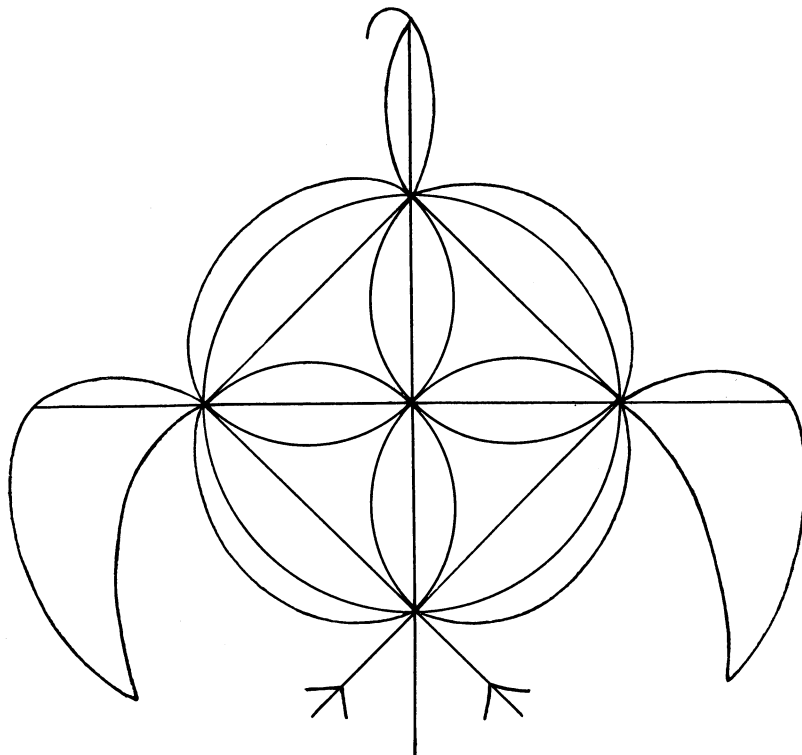


FIG. 12.—(= PL. XIII, FIG. 1.)

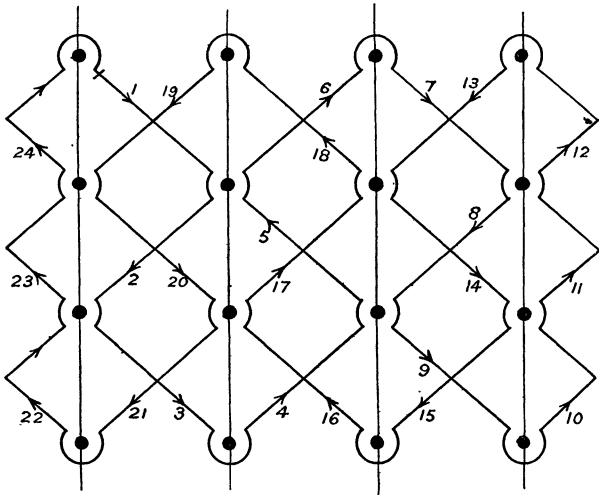


FIG. 11.

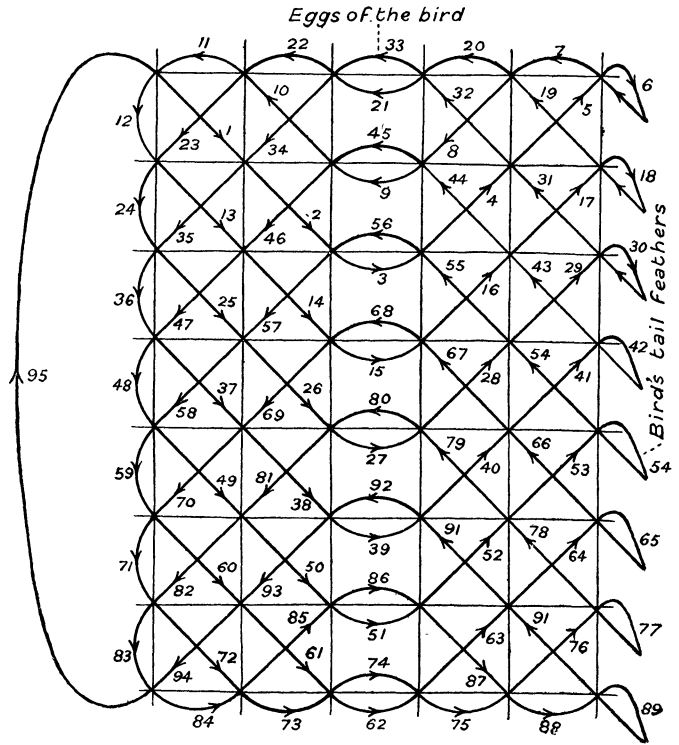


FIG. 14.

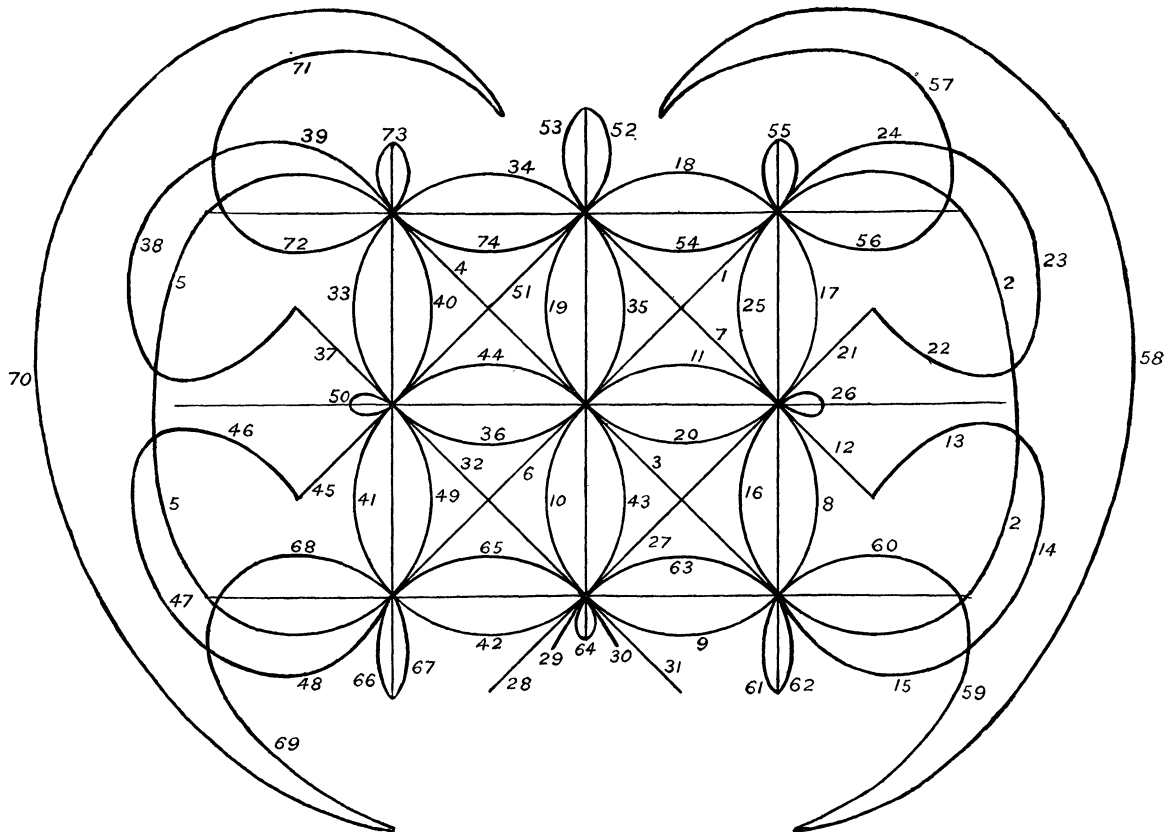


FIG. 13.

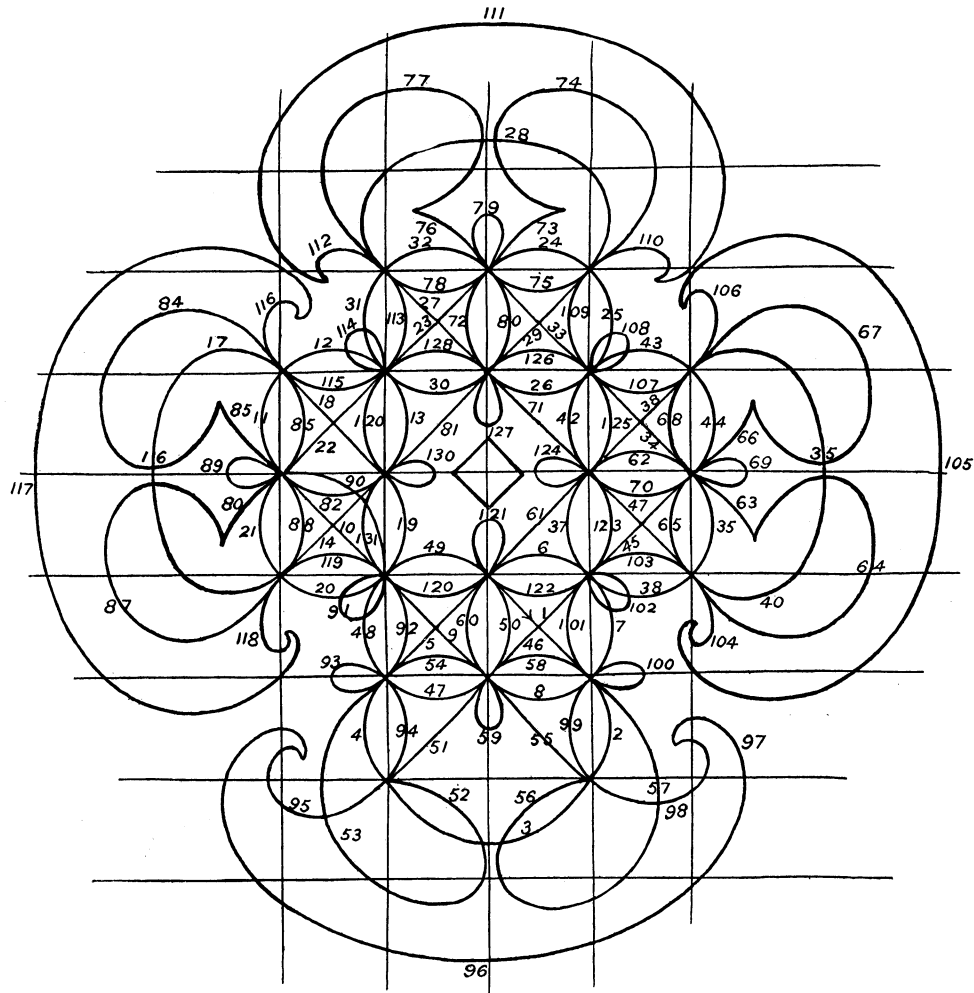


FIG. 15.

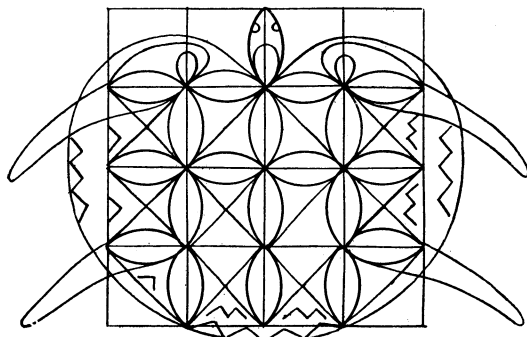


FIG. 17.

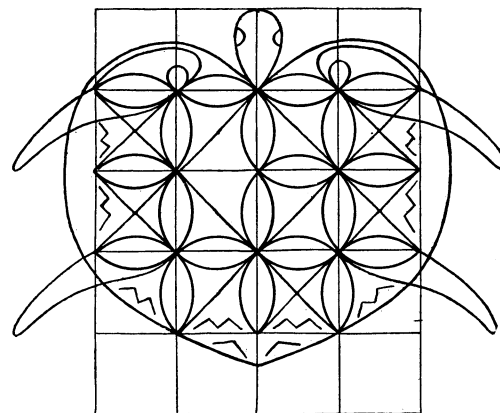


FIG. 18.

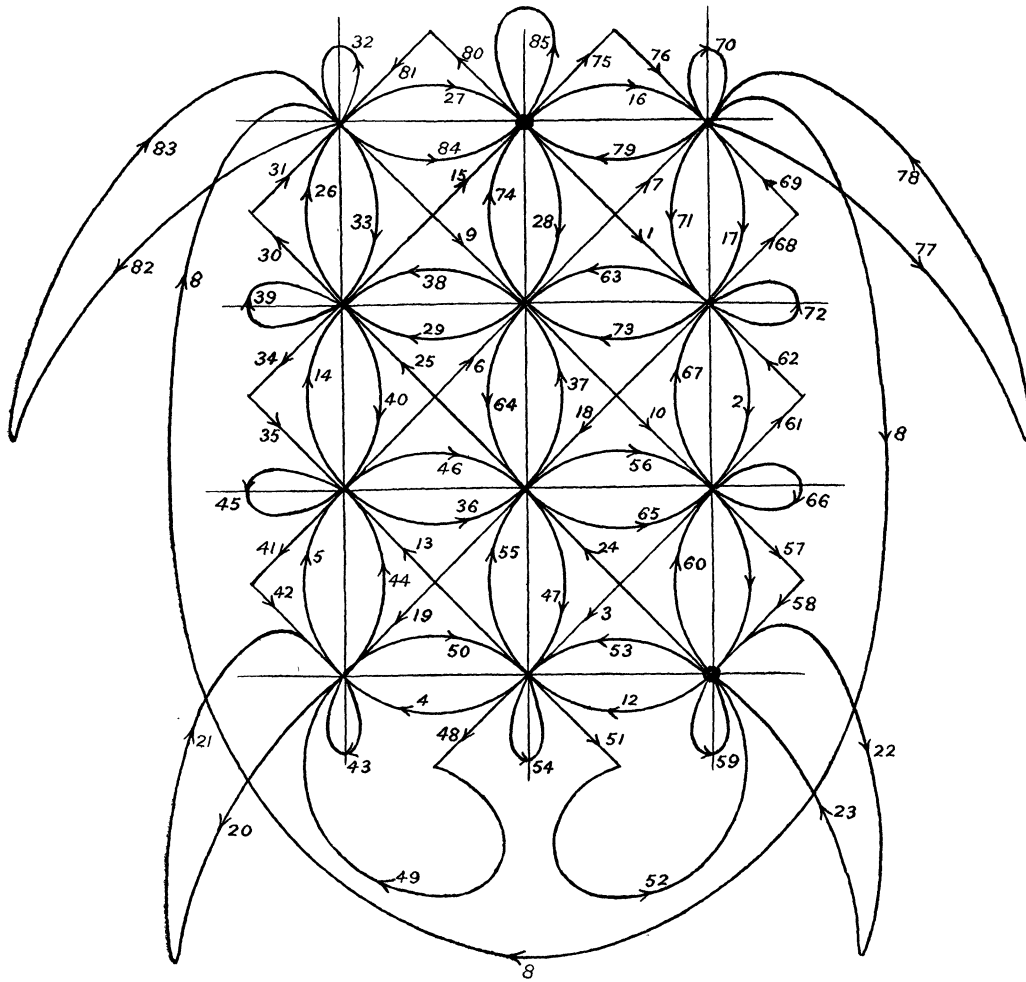


FIG. 19.

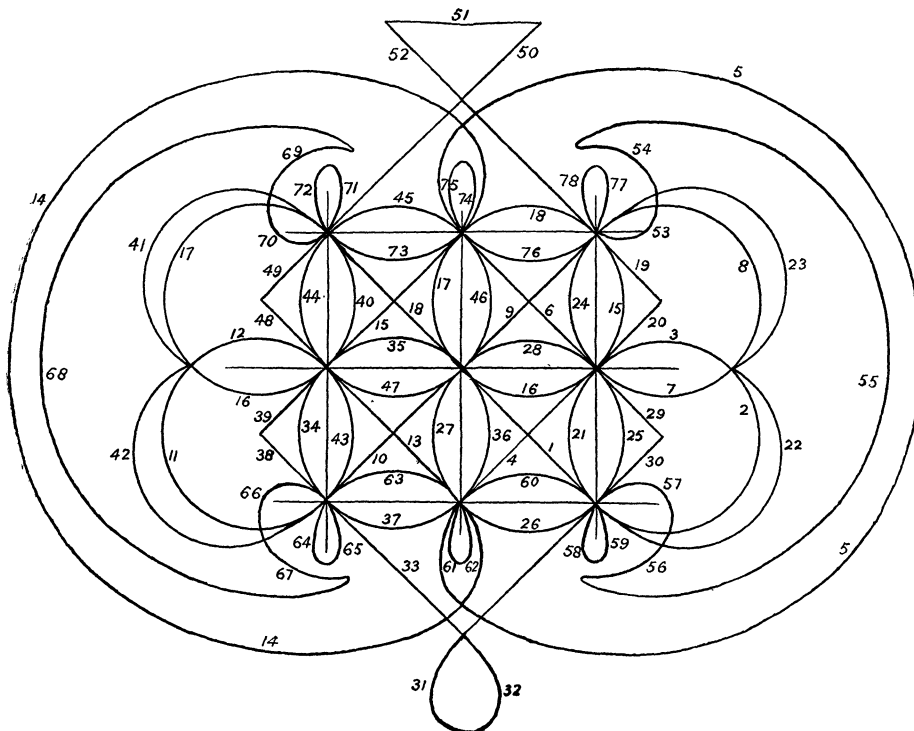


FIG. 21.—(= PL. XIII, FIG 2.)

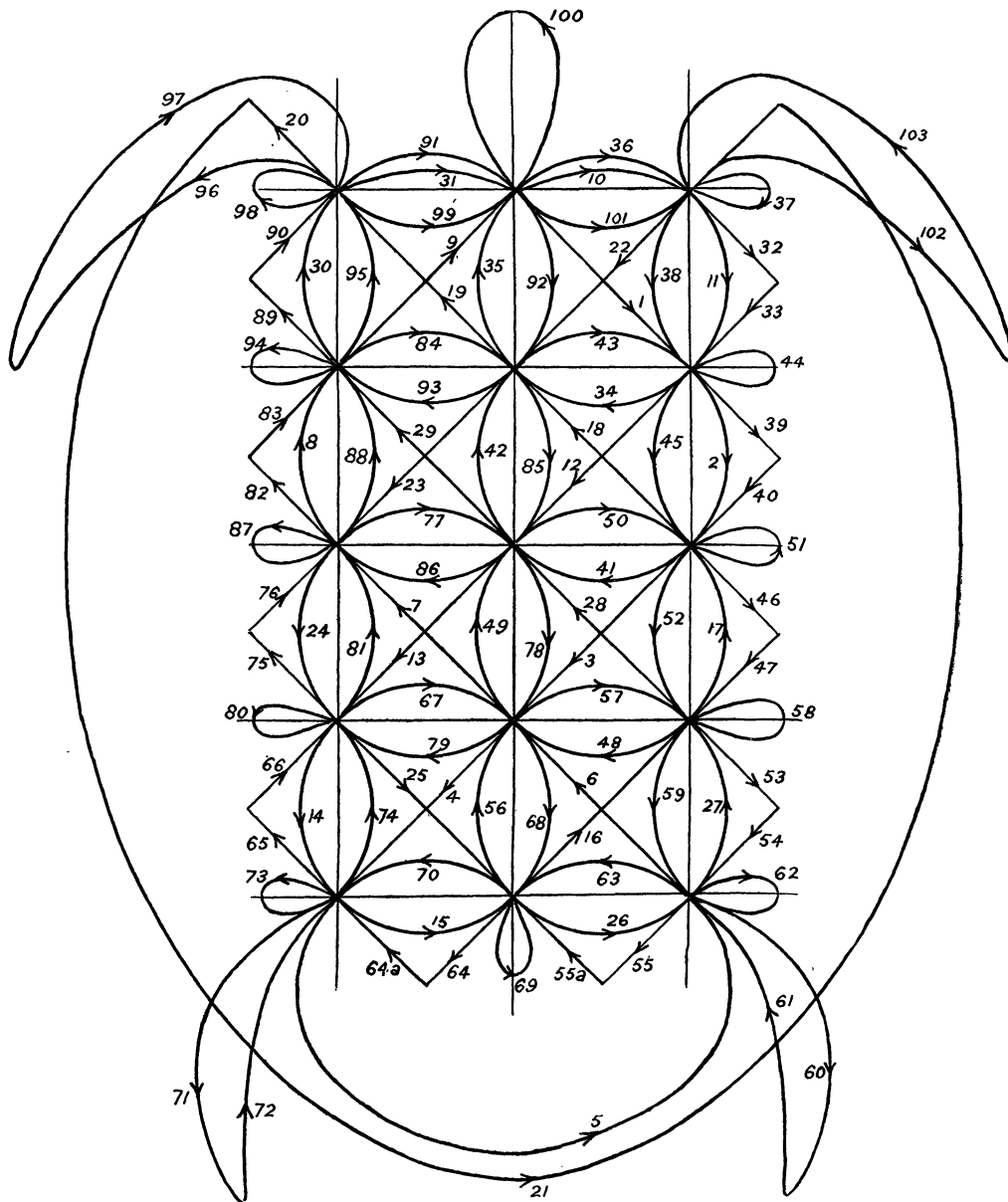


FIG. 20.

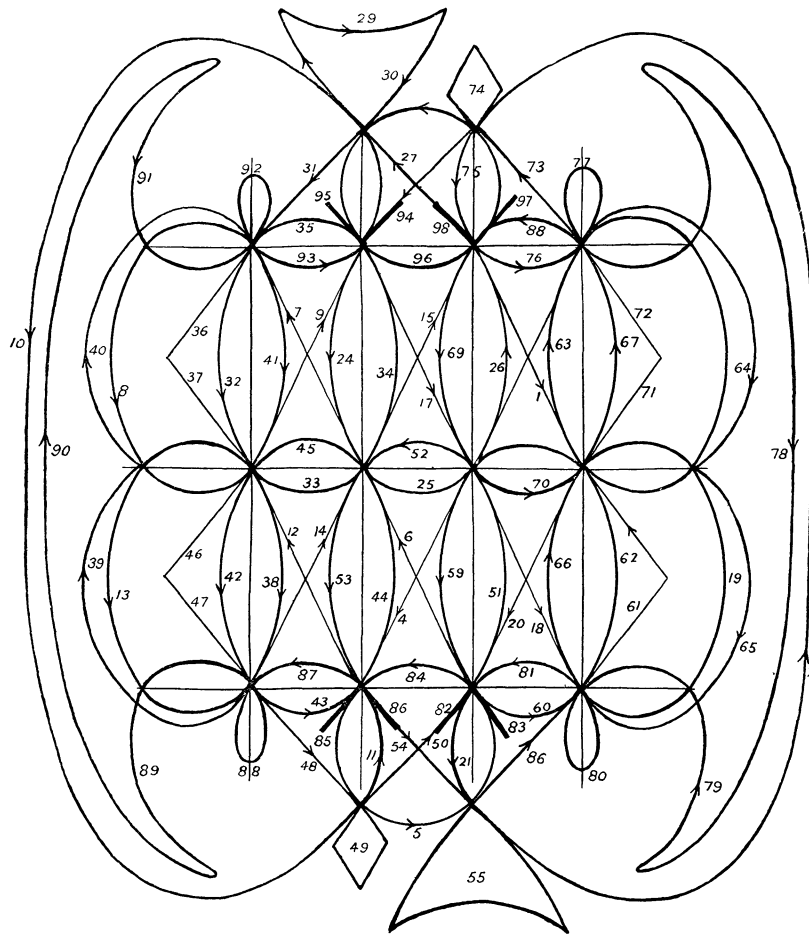


FIG. 22.

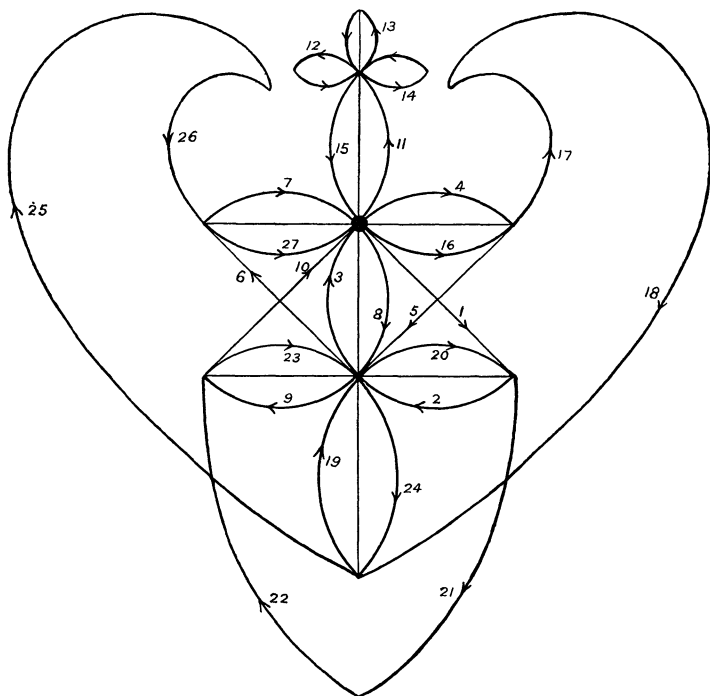


FIG. 23.

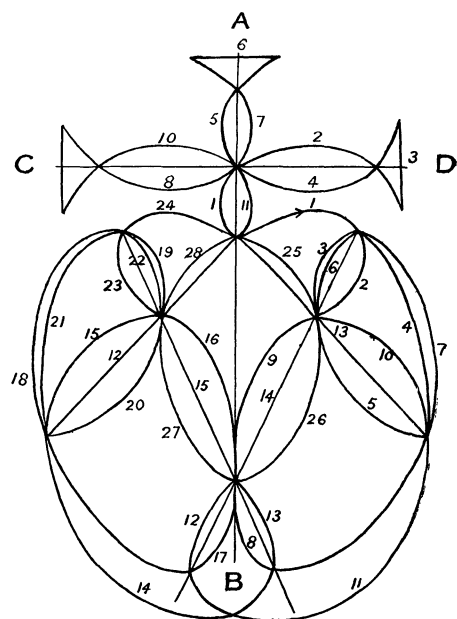


FIG. 24.

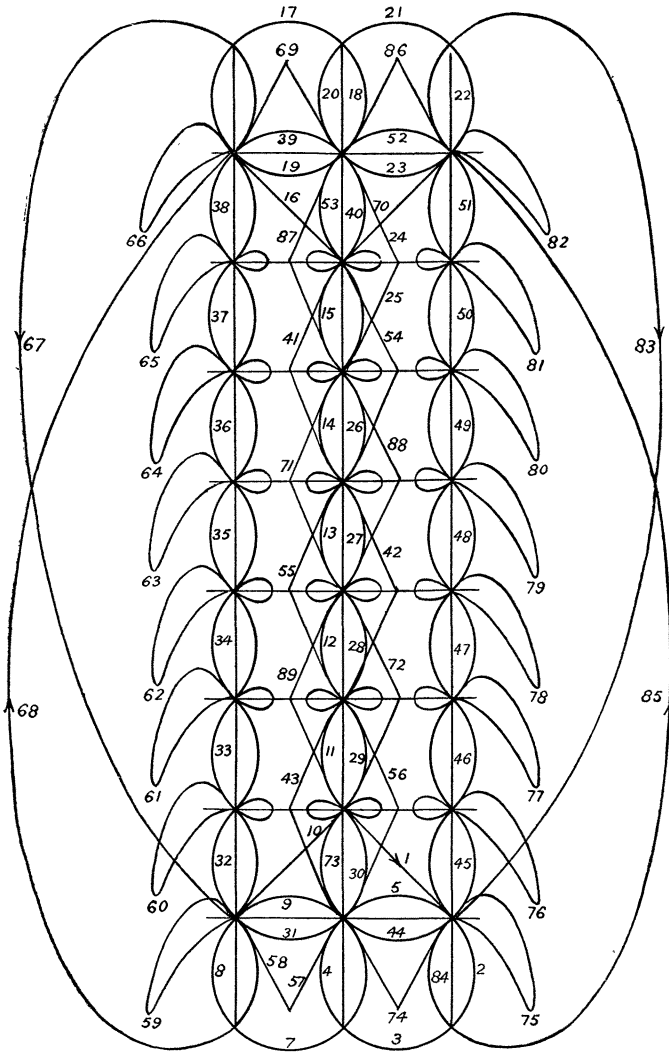


FIG. 25.

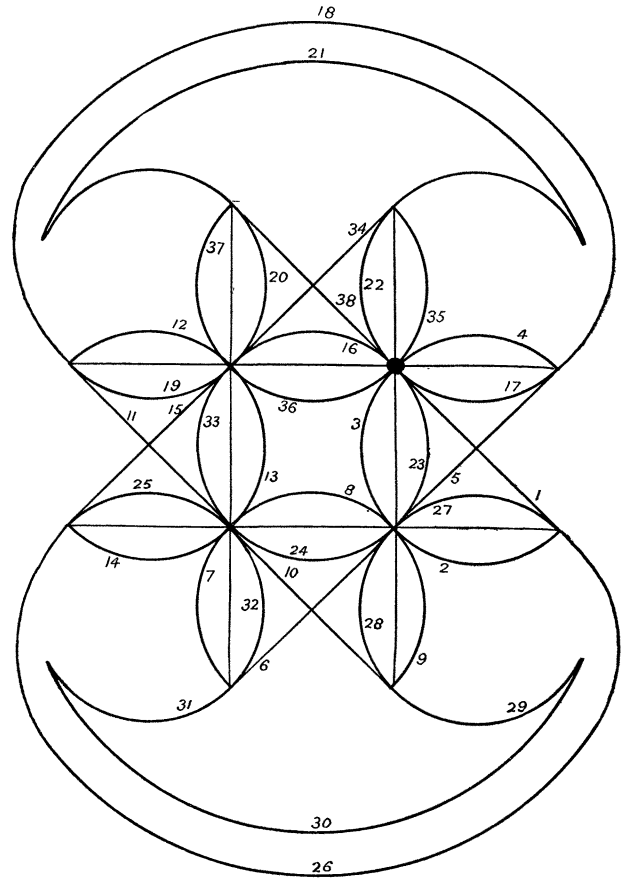


FIG. 26.

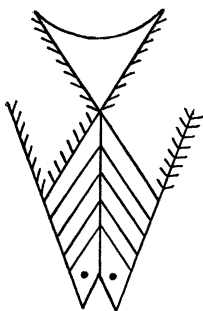


FIG. 30.

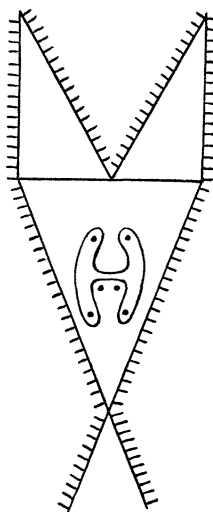


FIG. 31.

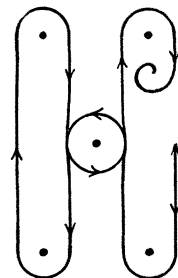


FIG. 32.

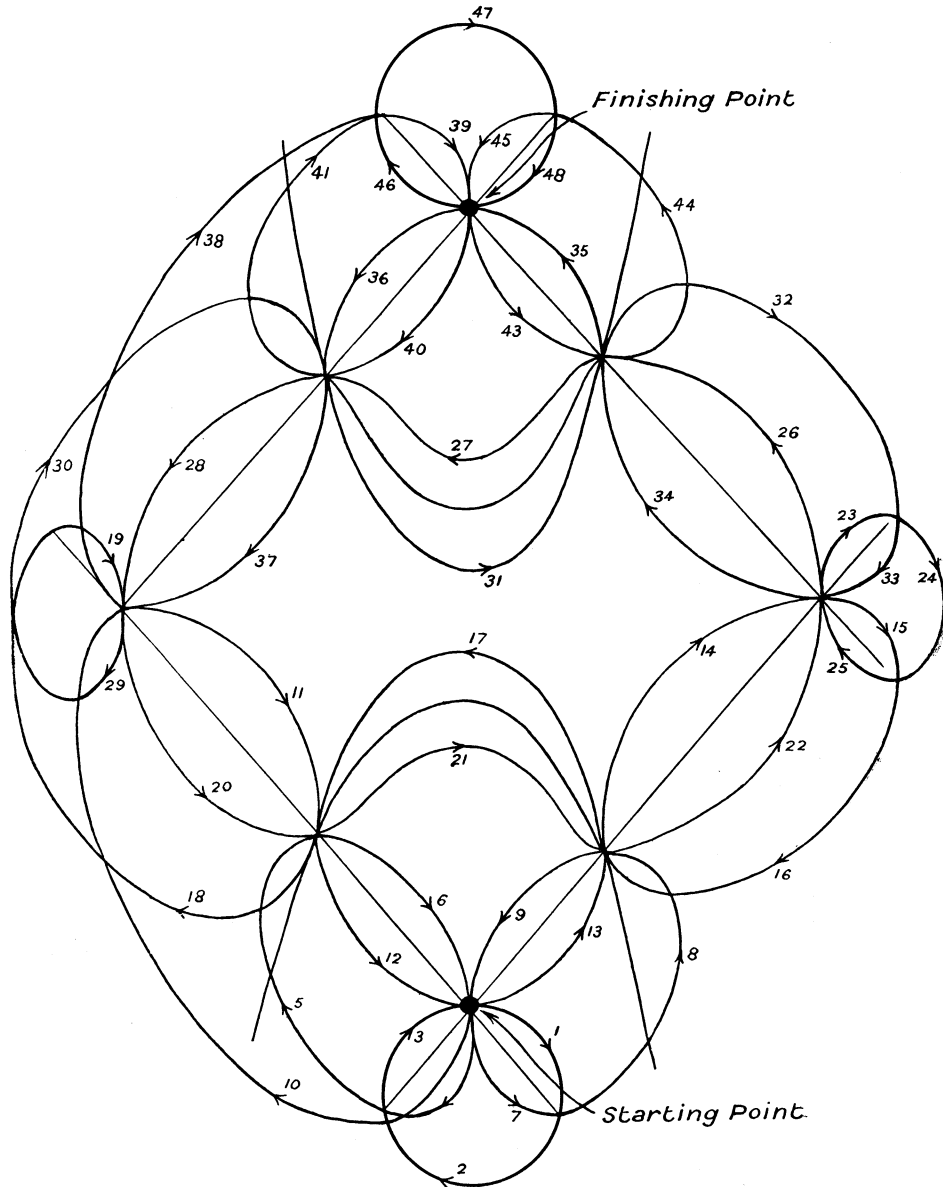


FIG. 27.

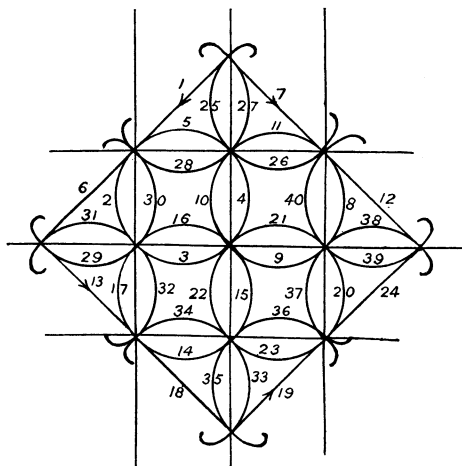


FIG. 28.—(cf. PL. XIII, FIG. 4.)

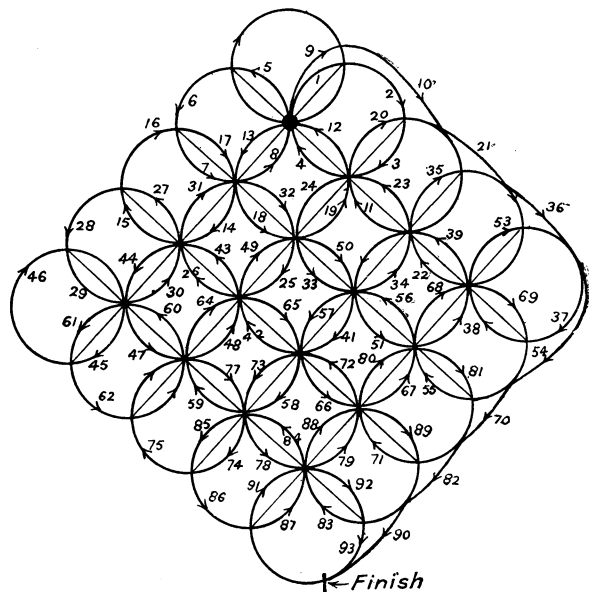


FIG. 38.

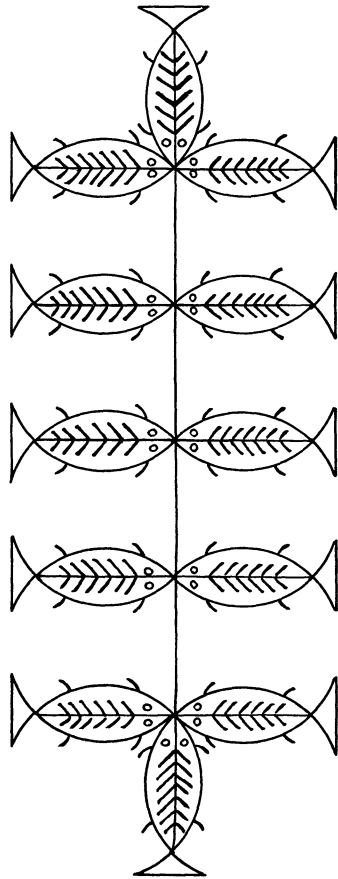


FIG. 29.

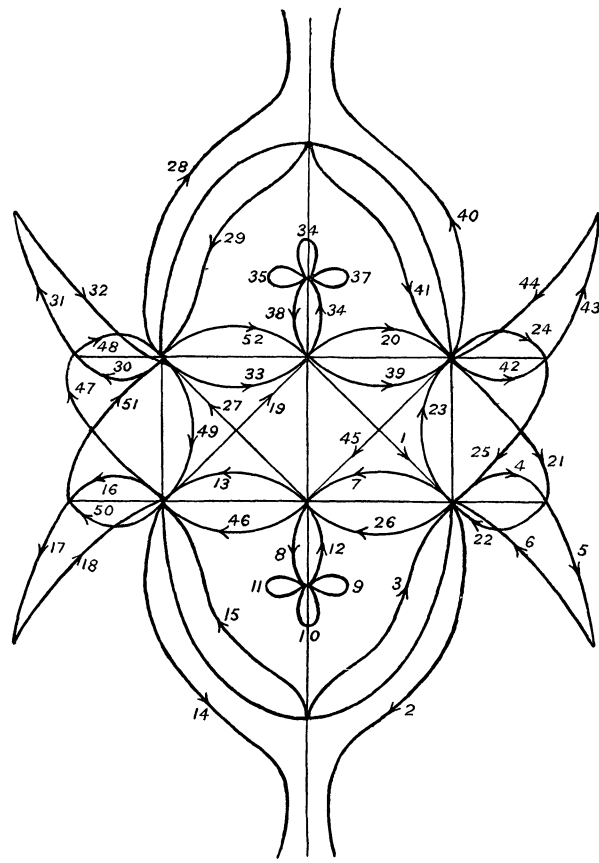


FIG. 33.

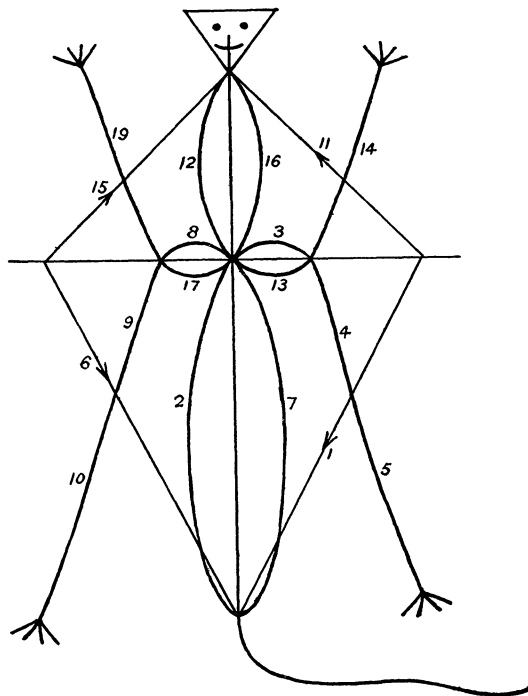


FIG. 34.

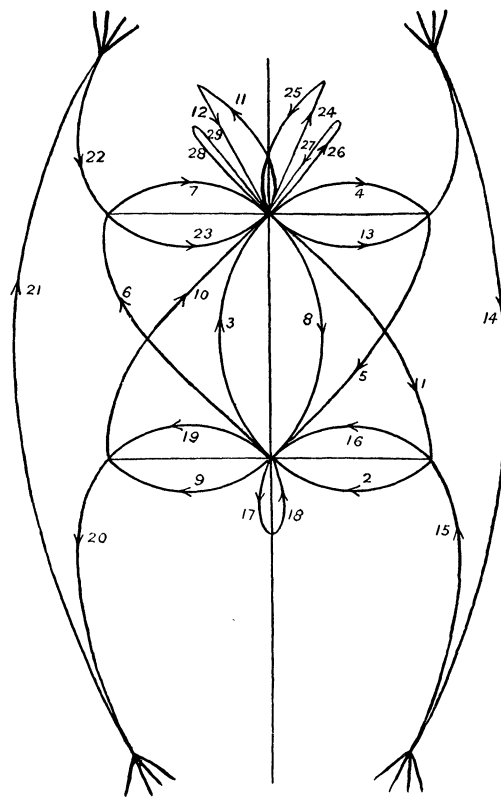


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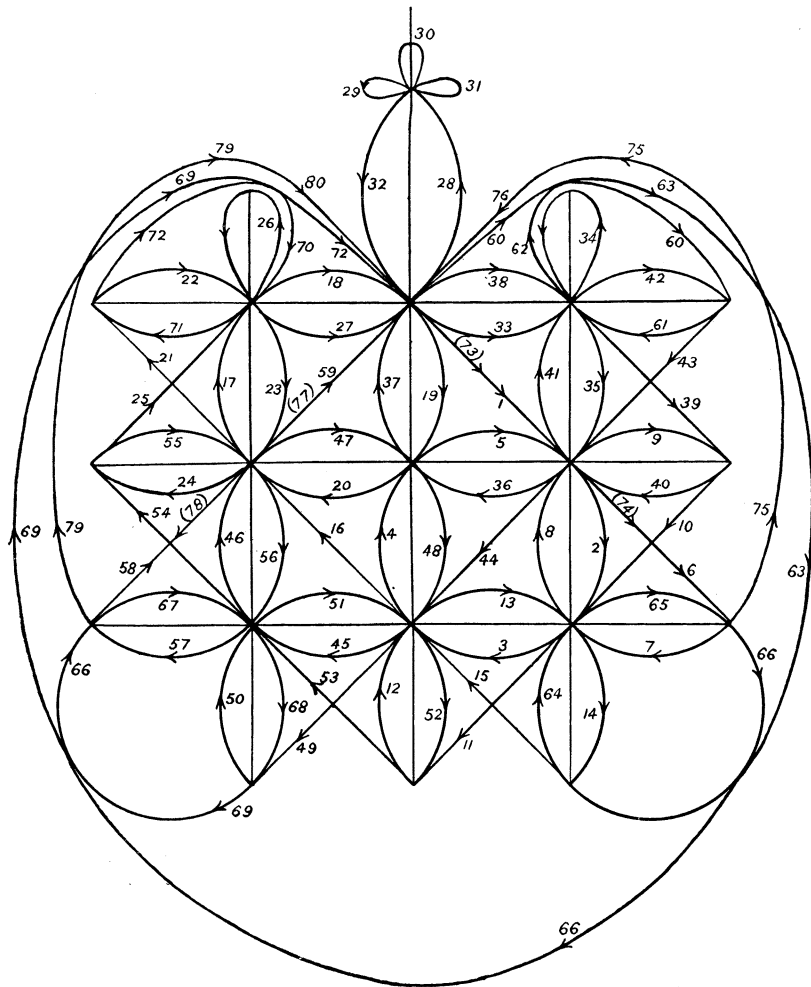


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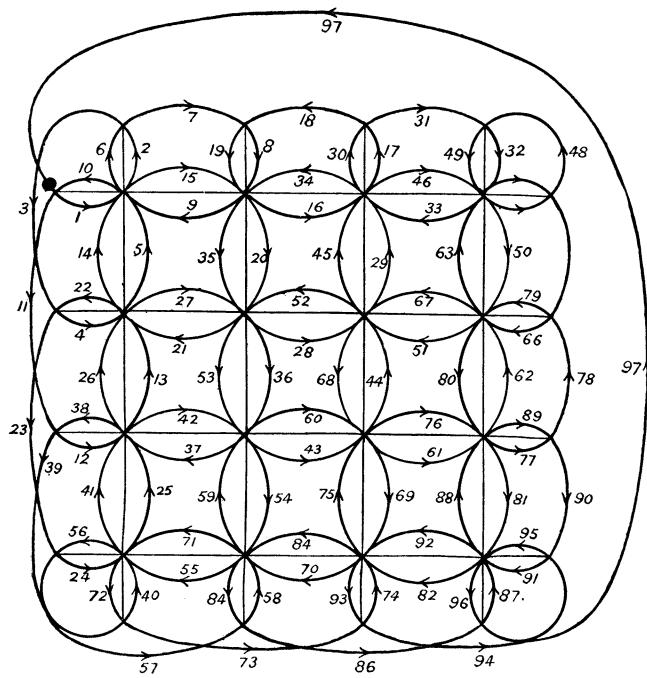


FIG. 37

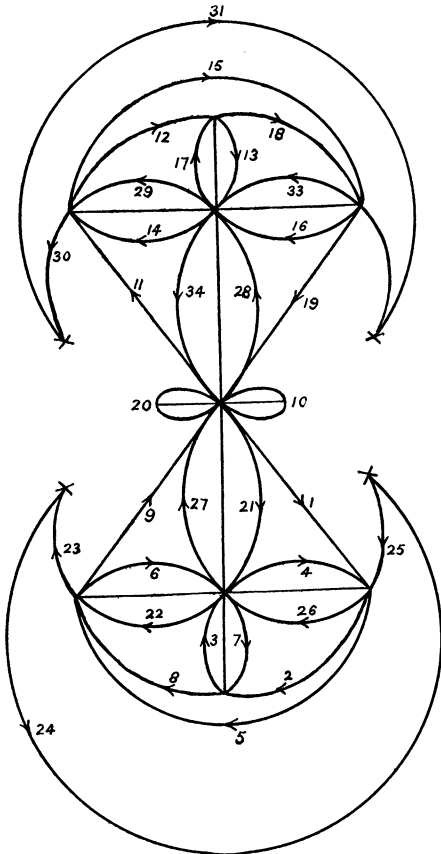


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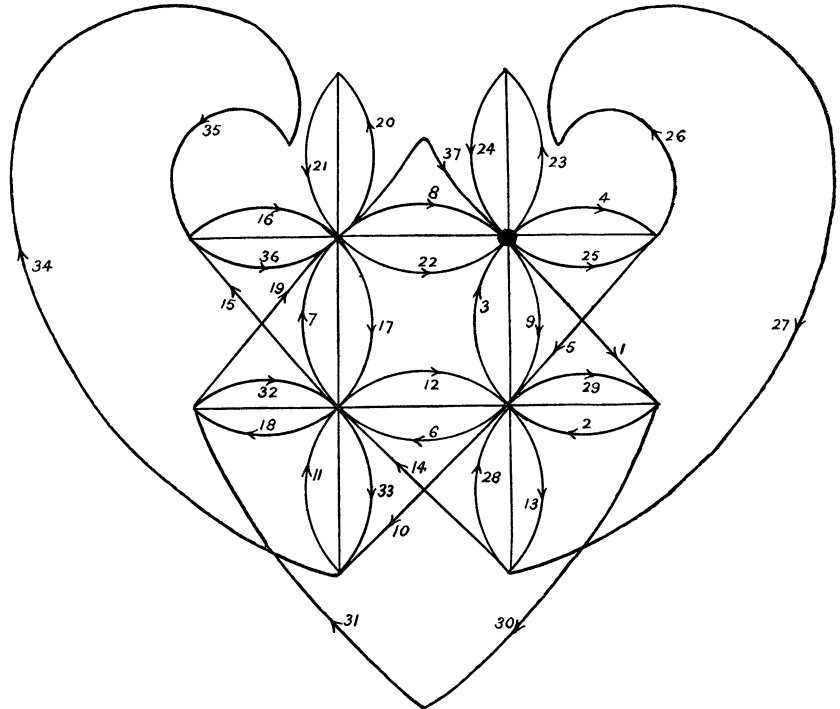


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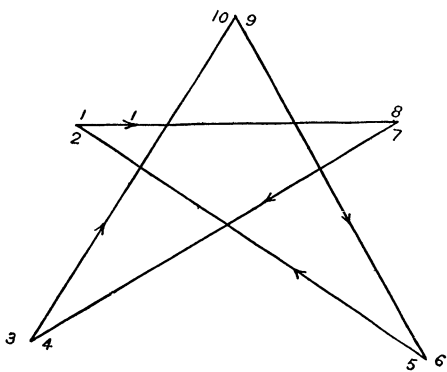


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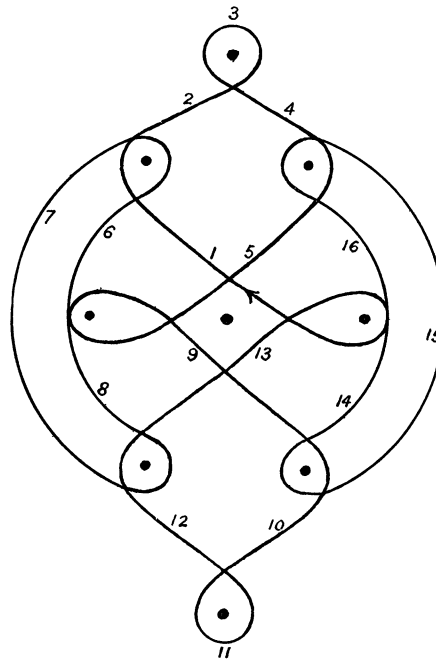


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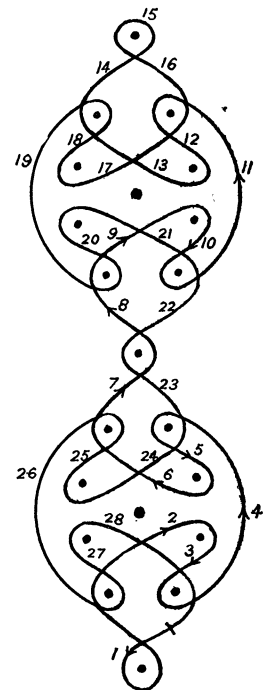


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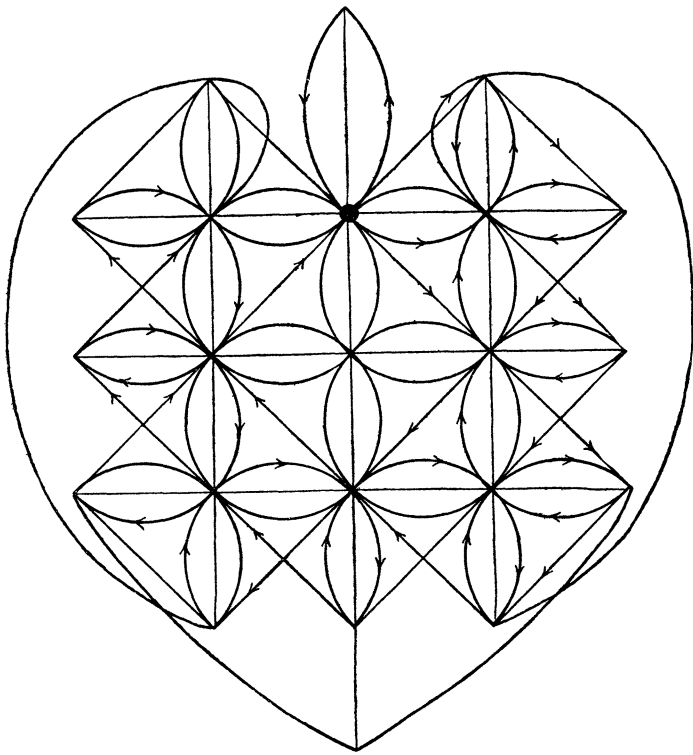


FIG. 44.

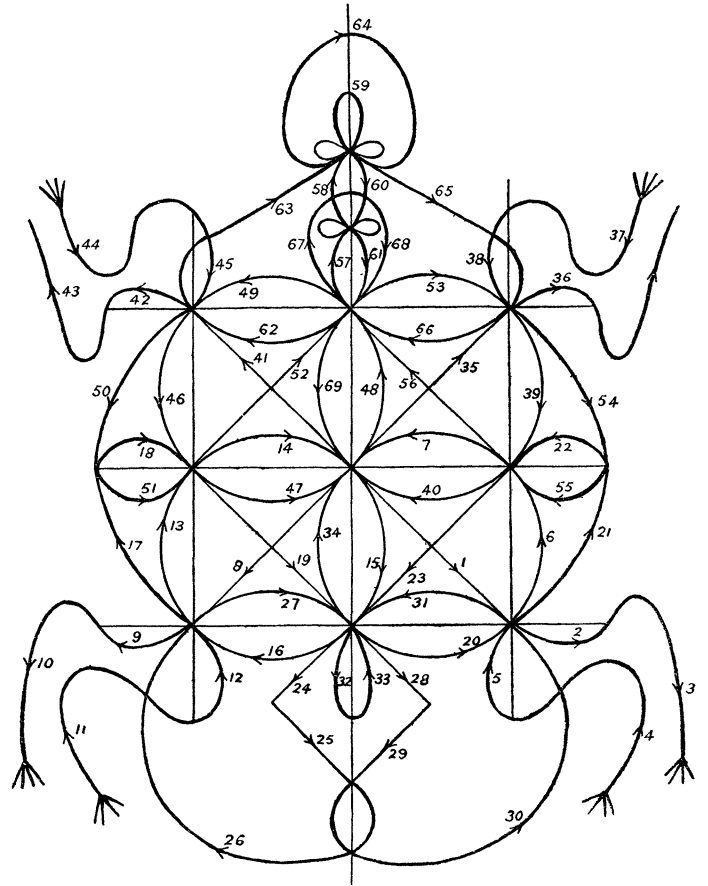


FIG. 45.

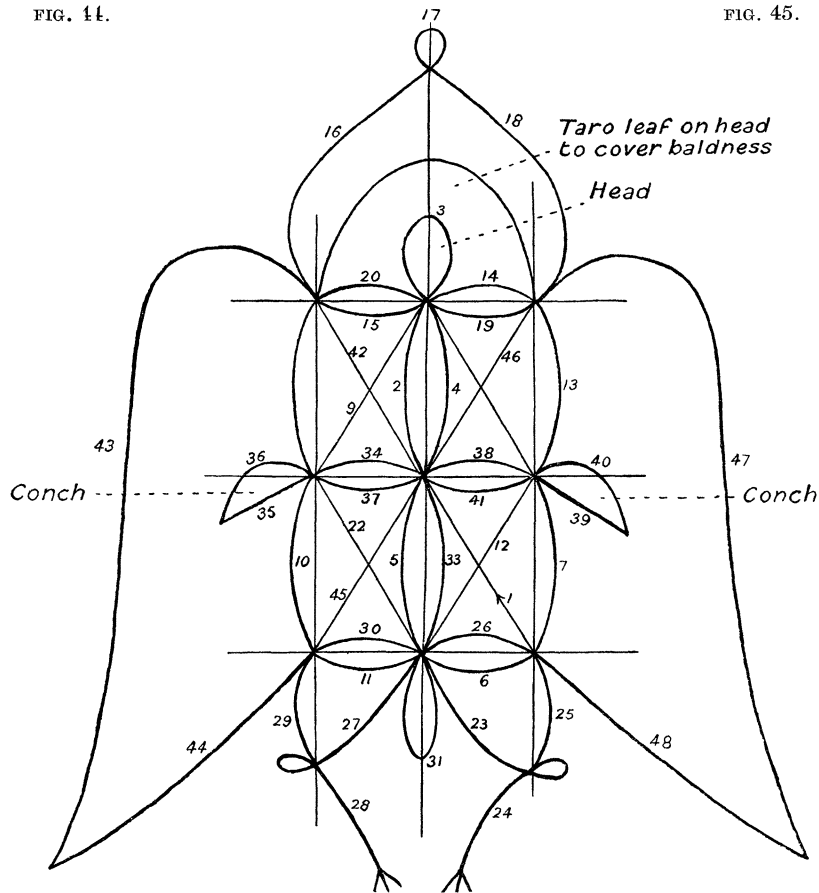


FIG. 46.

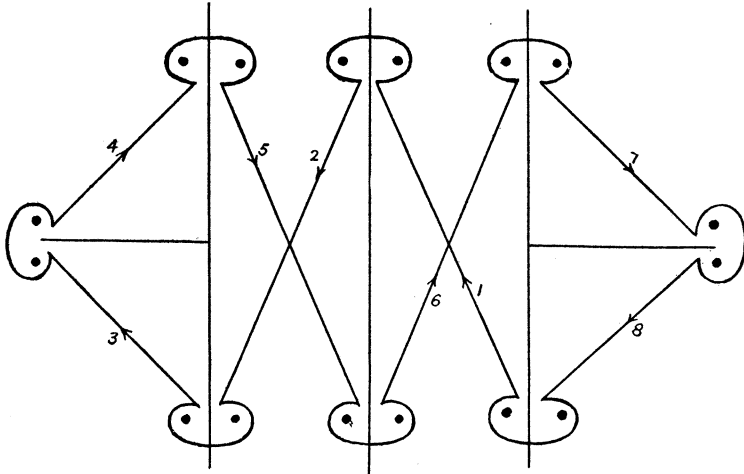
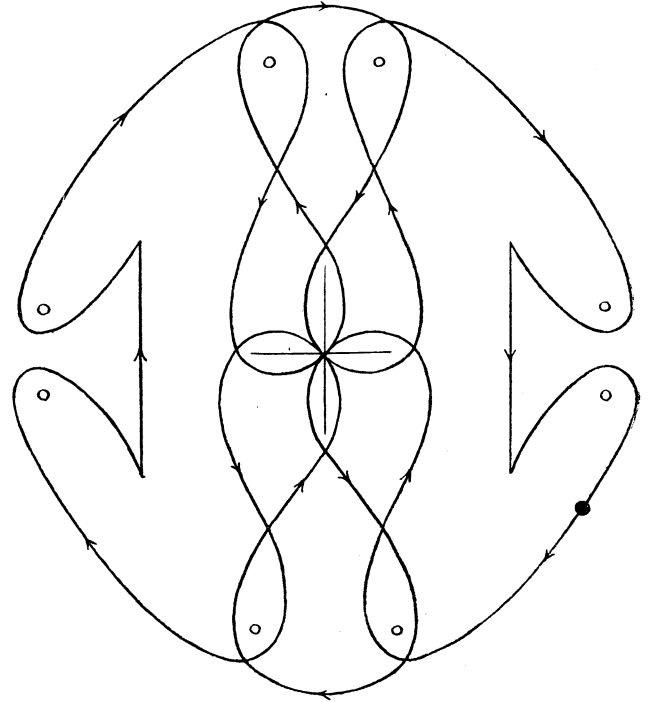


FIG. 47.



Road along which the Ghosts pass along to lambi

FIG. 51.

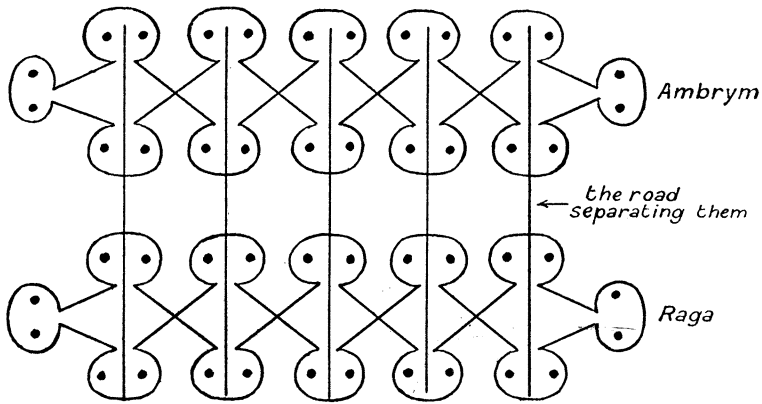


FIG. 48.

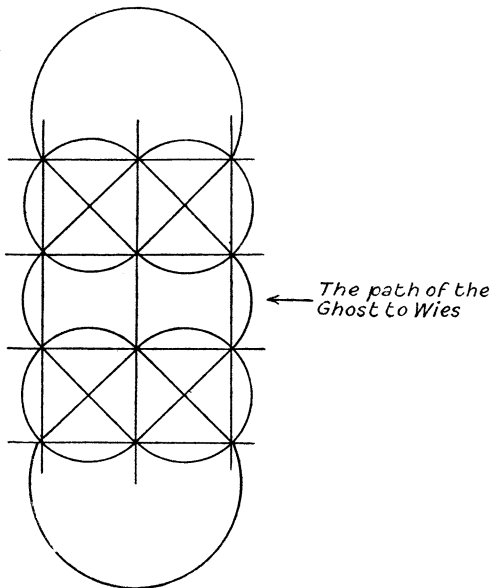


FIG. 52.

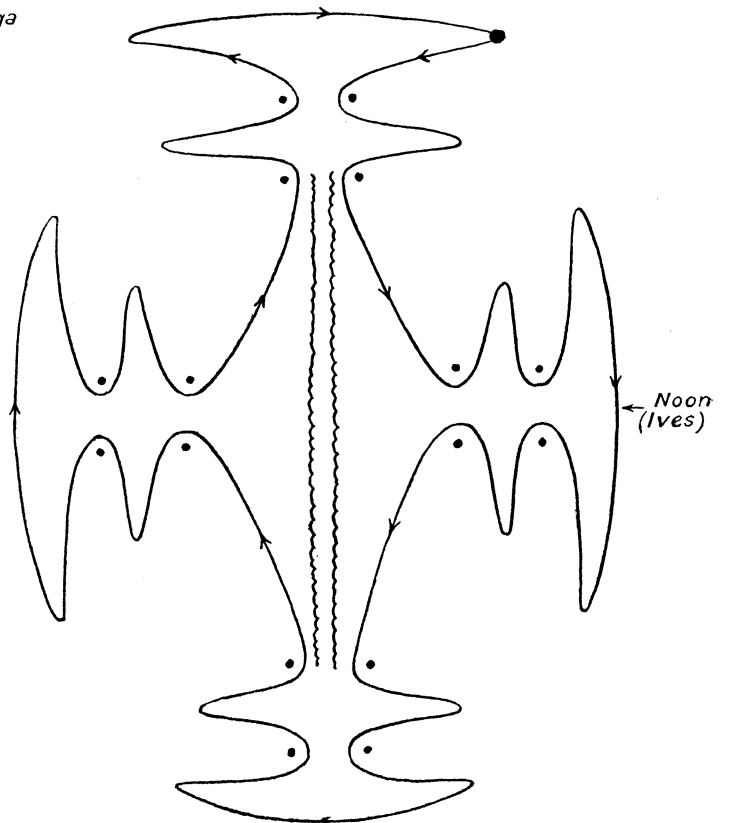


FIG. 50.

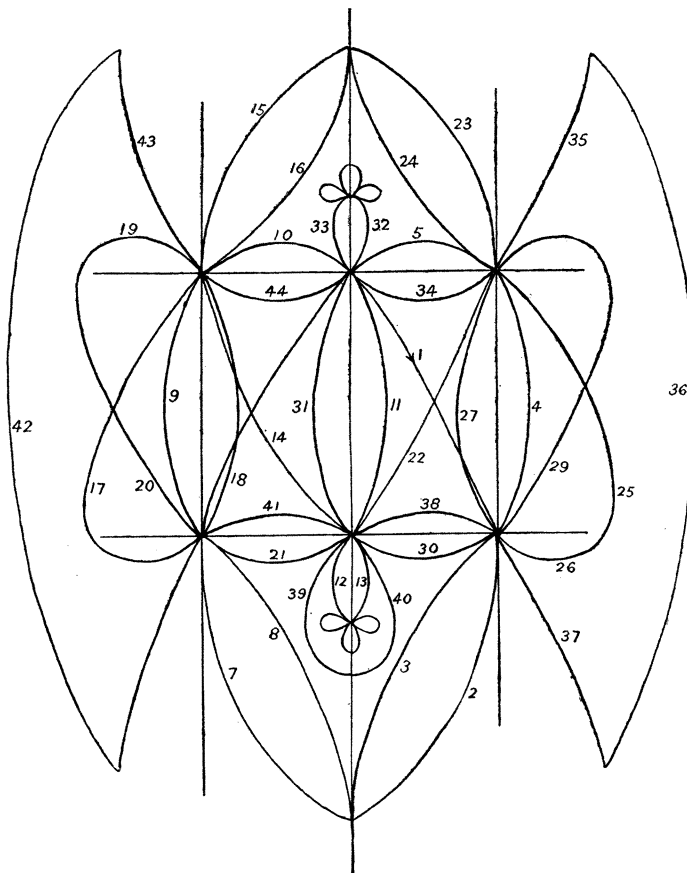


FIG. 49.

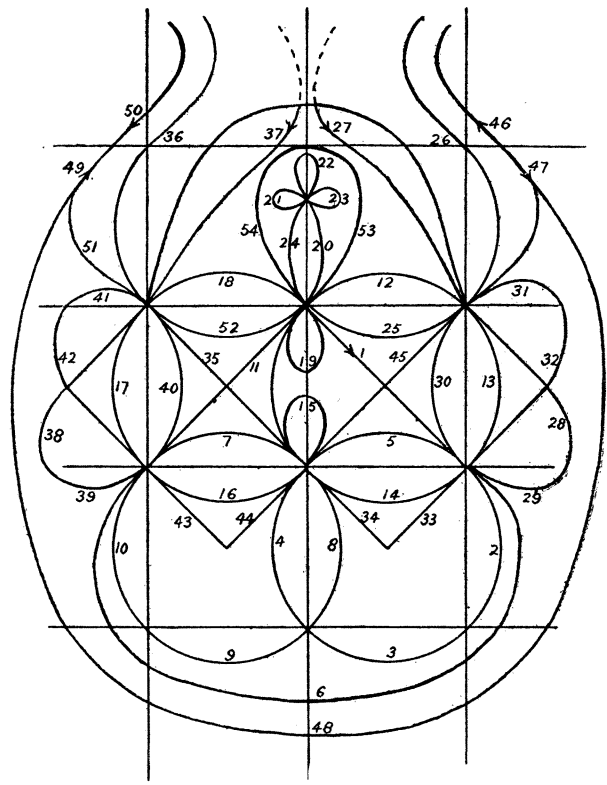


FIG. 53.

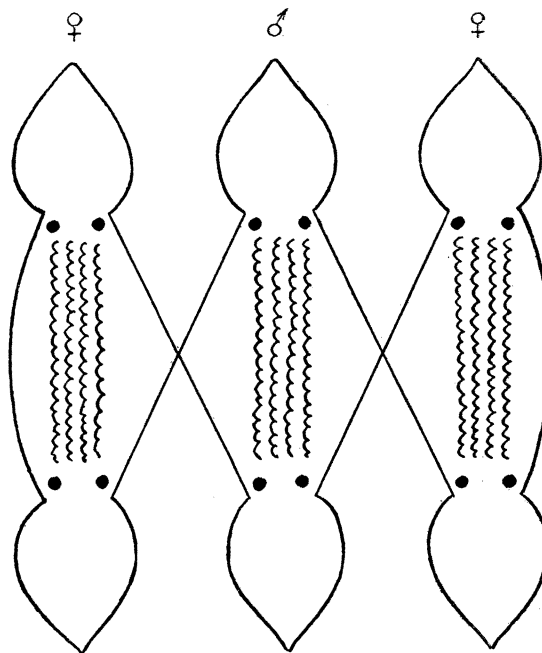


FIG. 54.

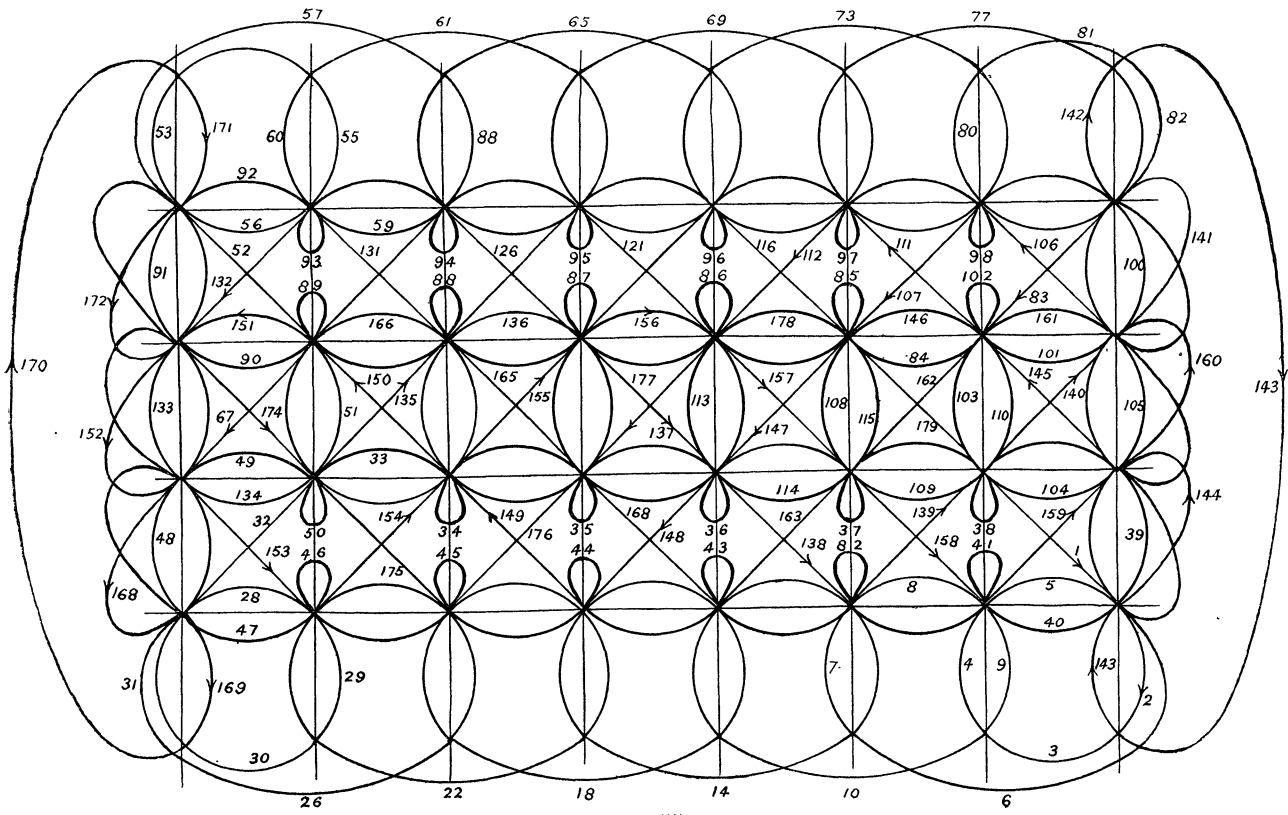


FIG. 55.

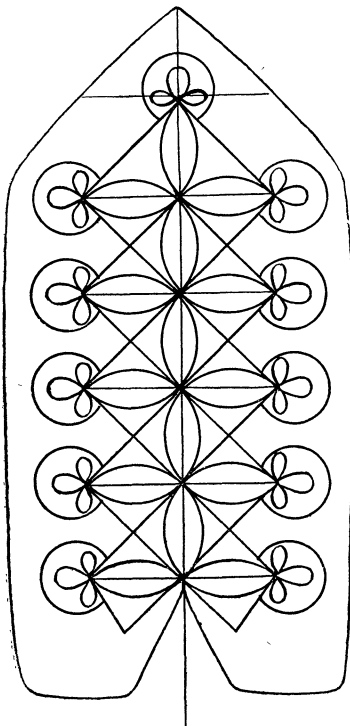


FIG. 56.

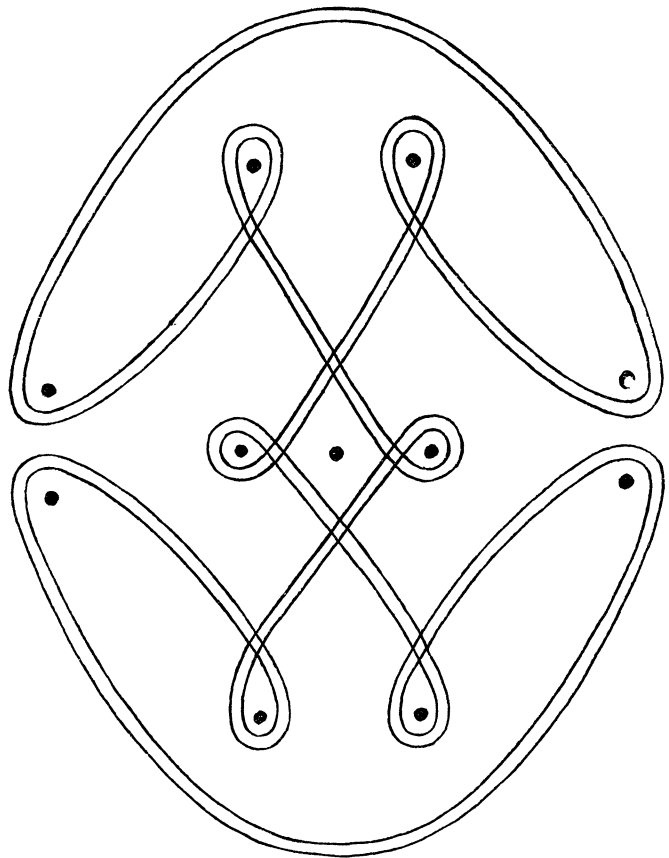


FIG. 57

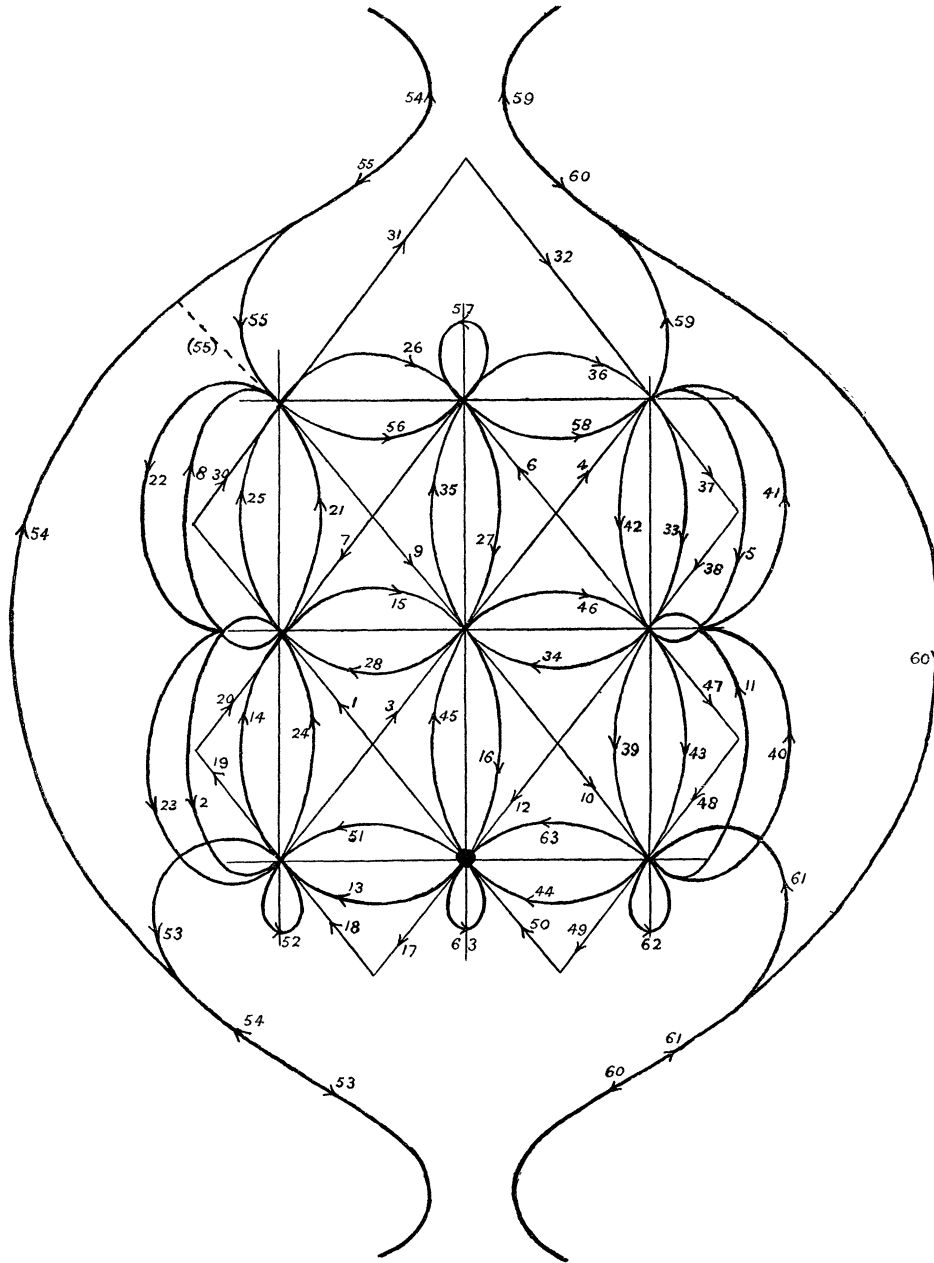


FIG. 58.

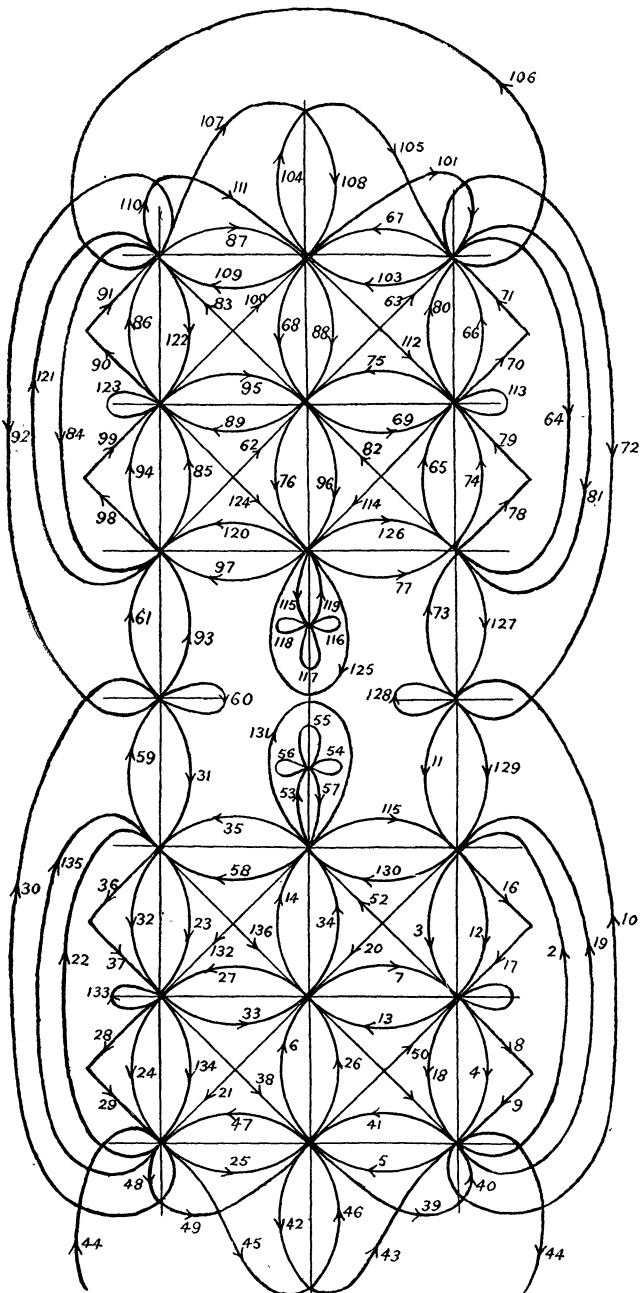


FIG. 59.

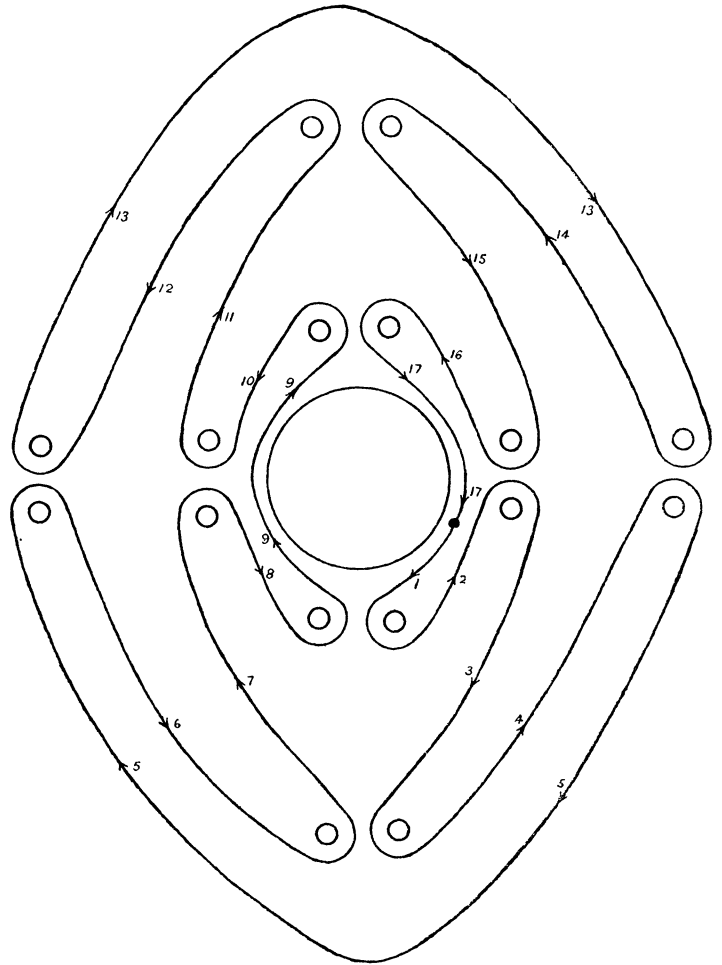


FIG. 61.

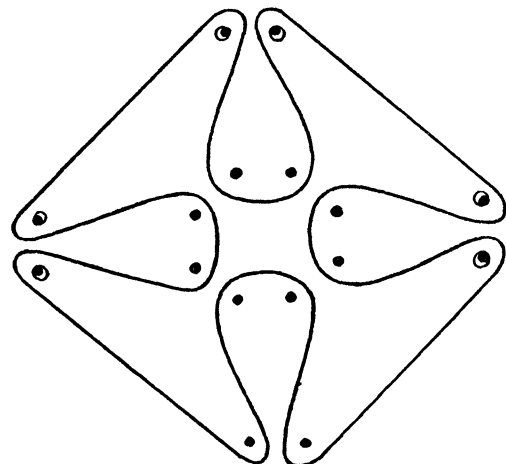


FIG. 64.

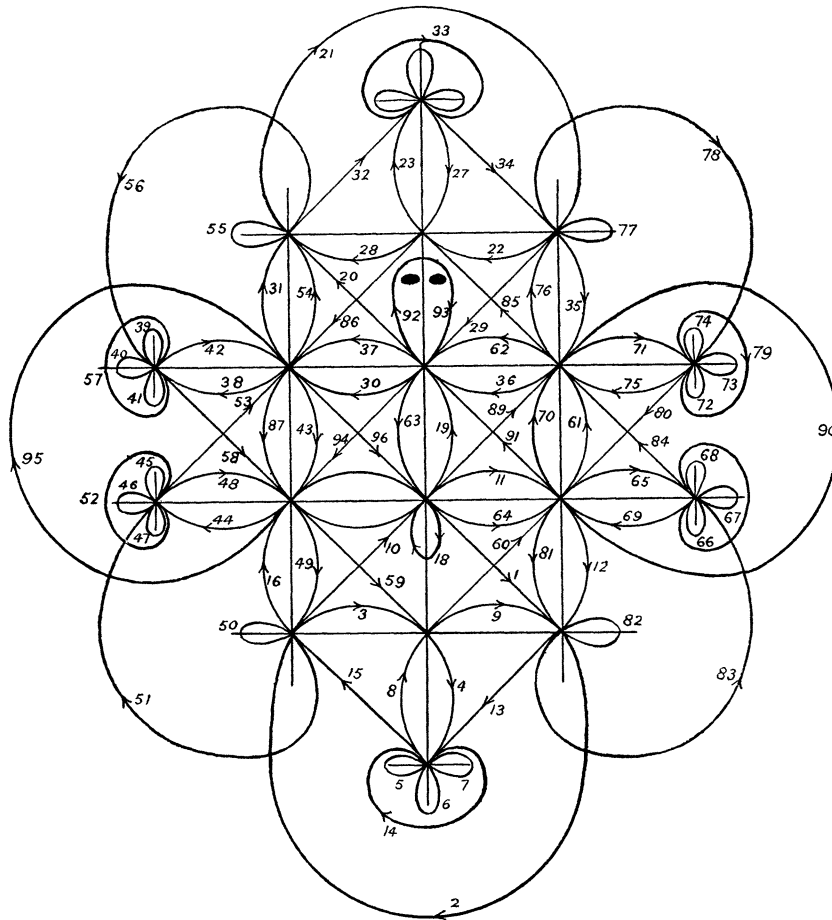


FIG. 60.

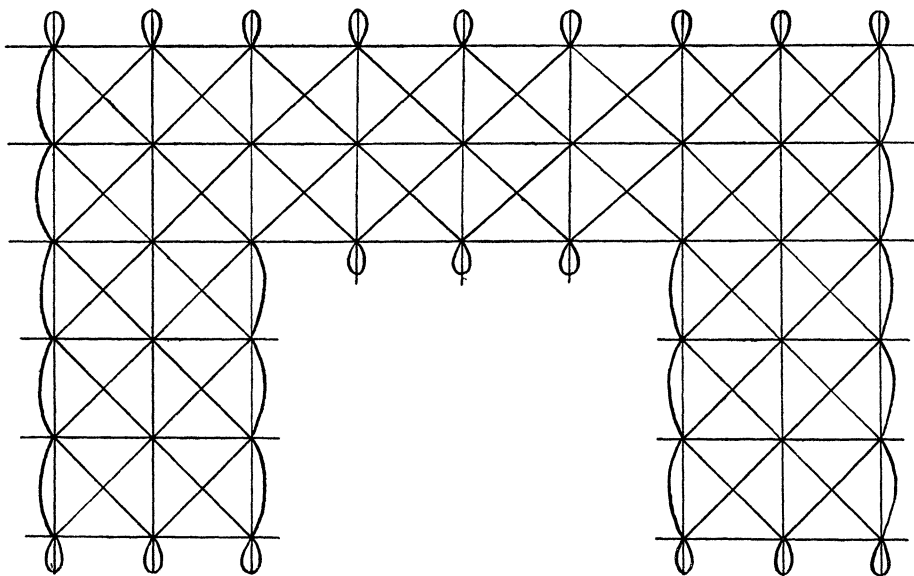


FIG. 63.

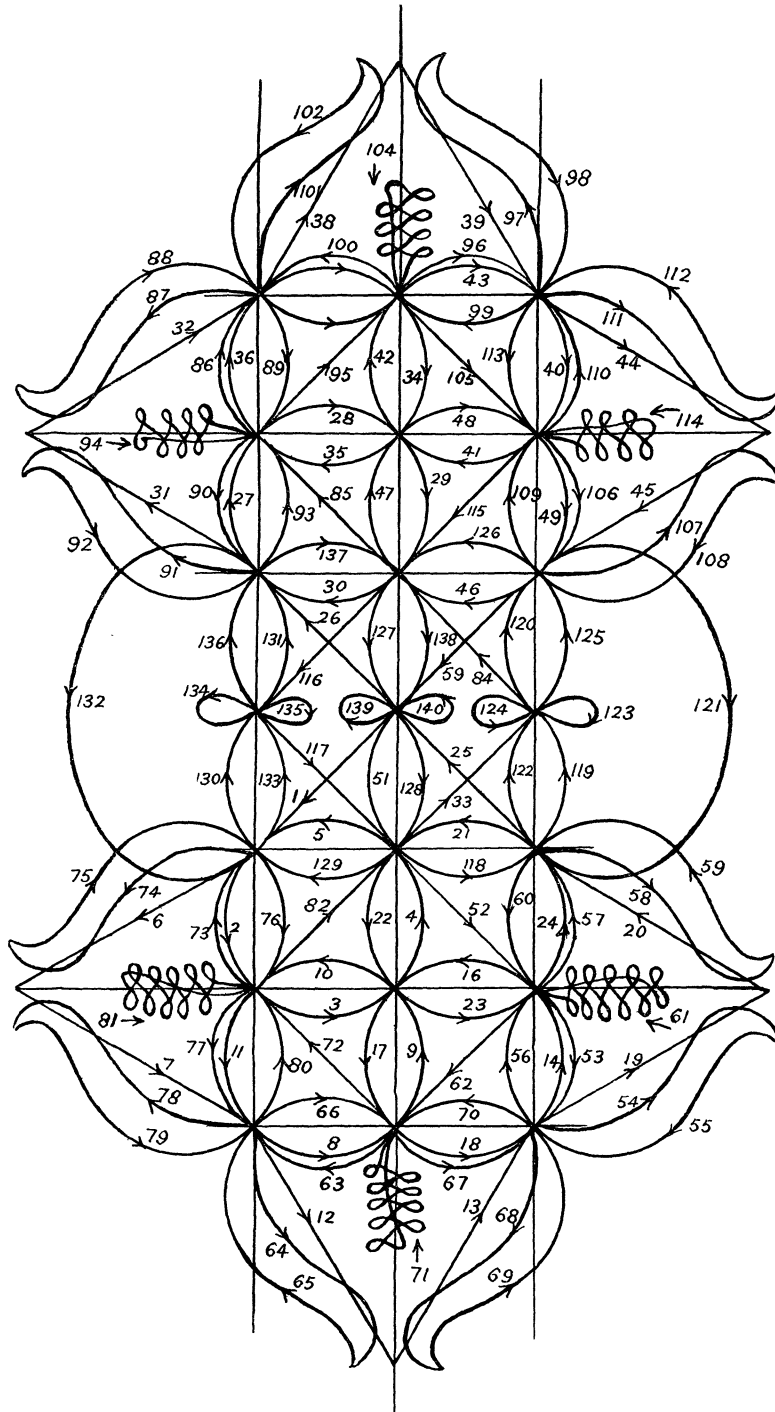


FIG 62.

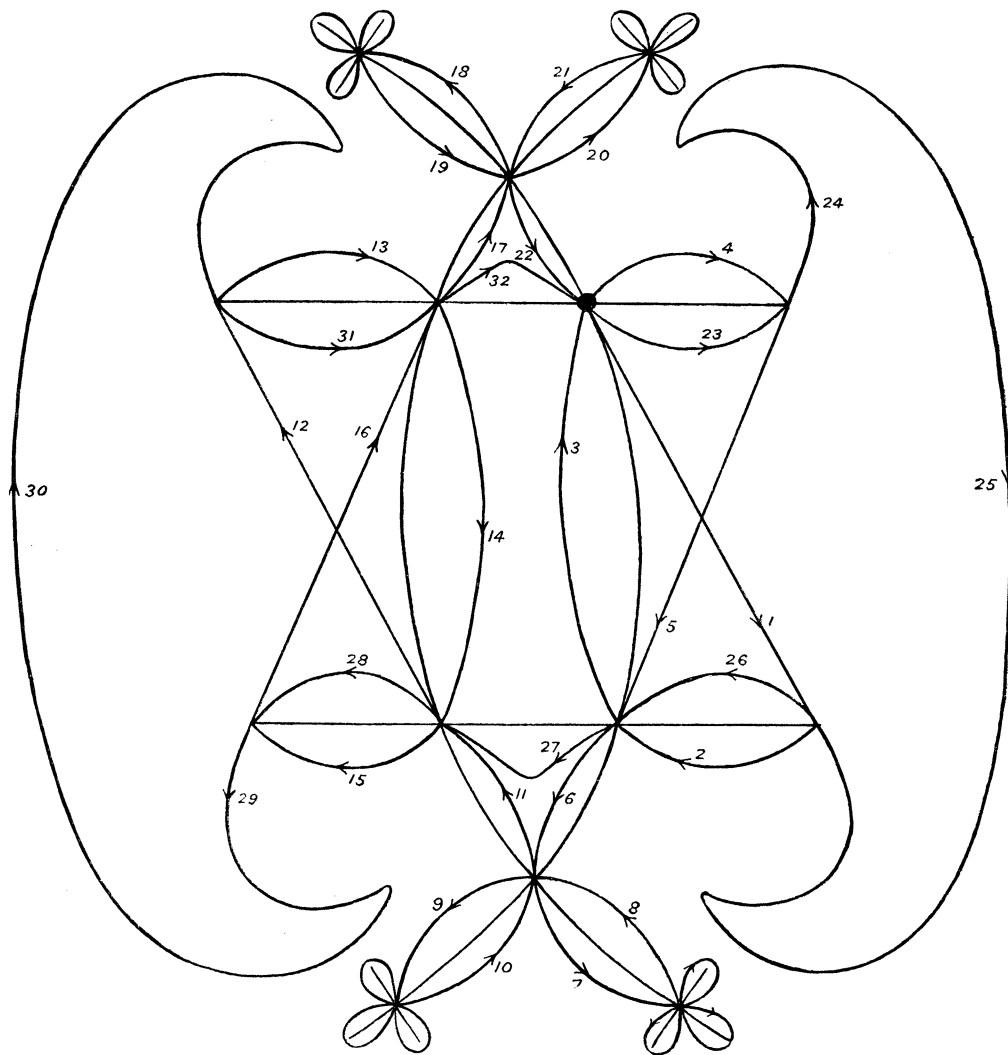


FIG. 65.

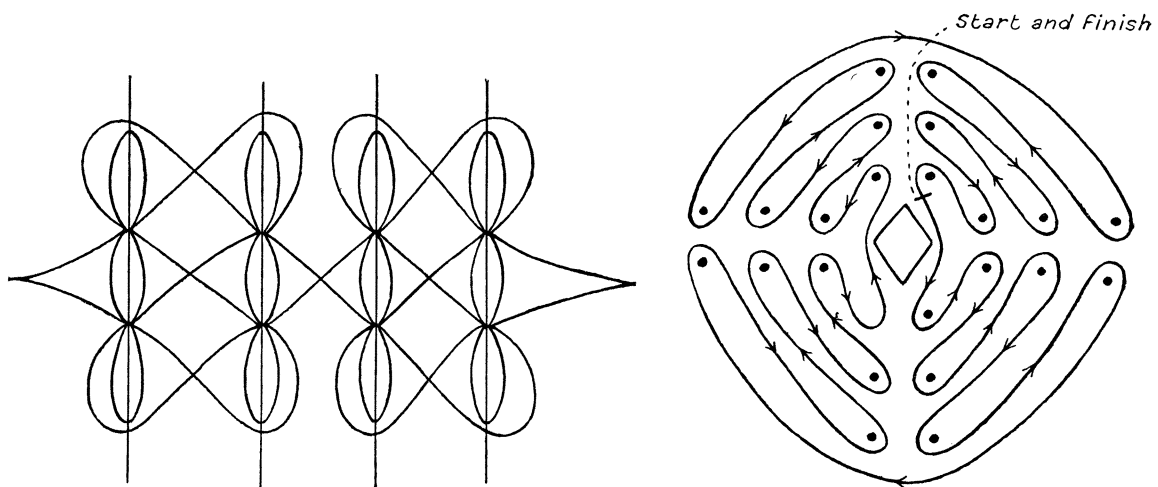


FIG. 69.

FIG. 70.

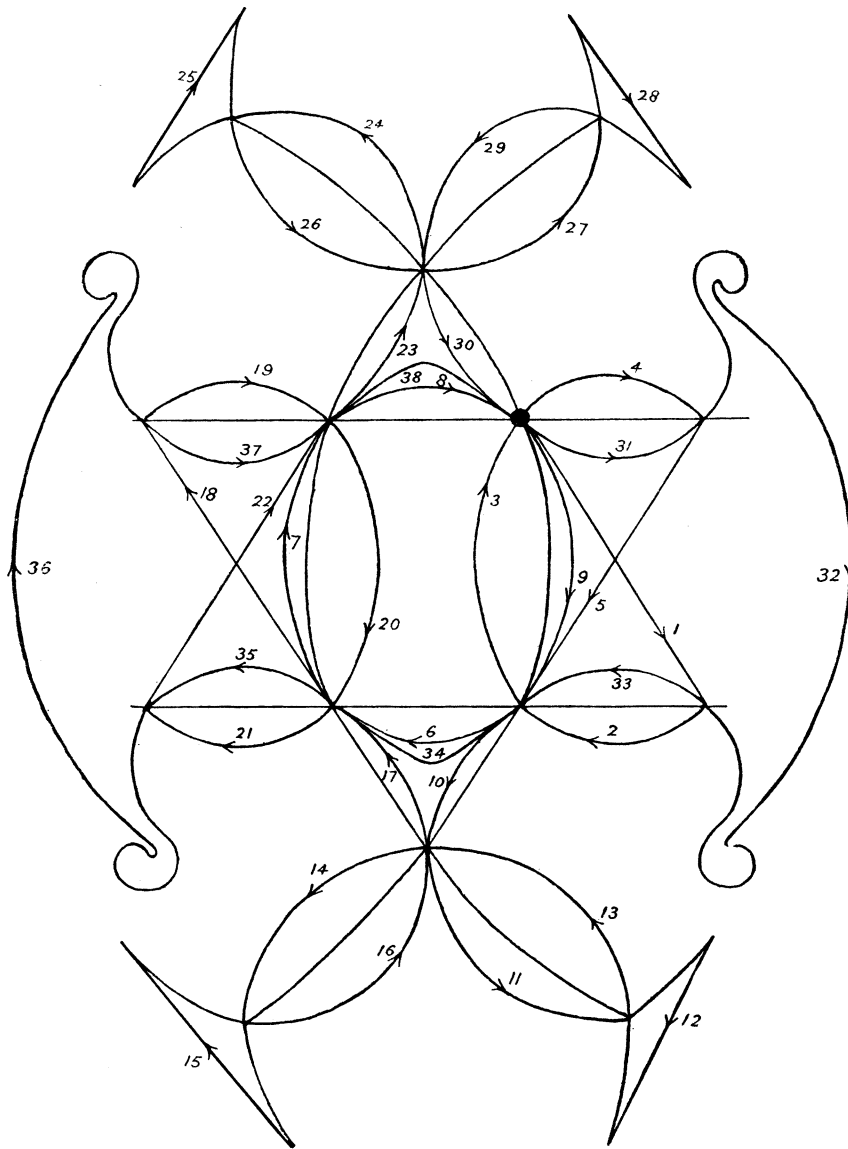


FIG. 66.

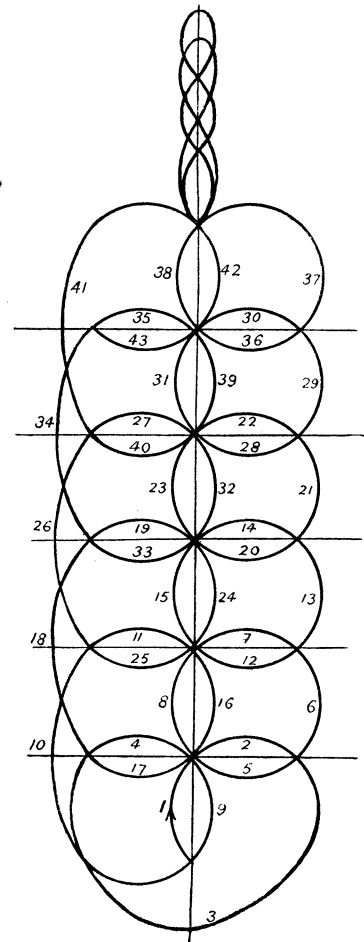


FIG. 72.

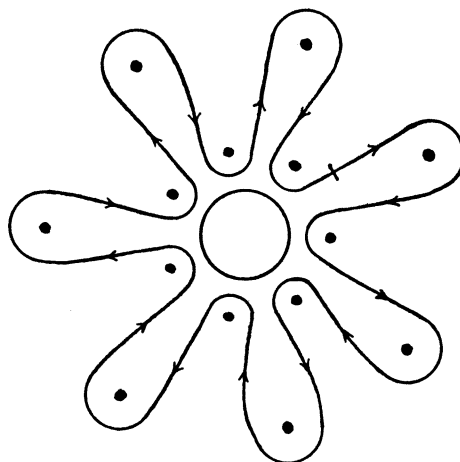


FIG. 73.

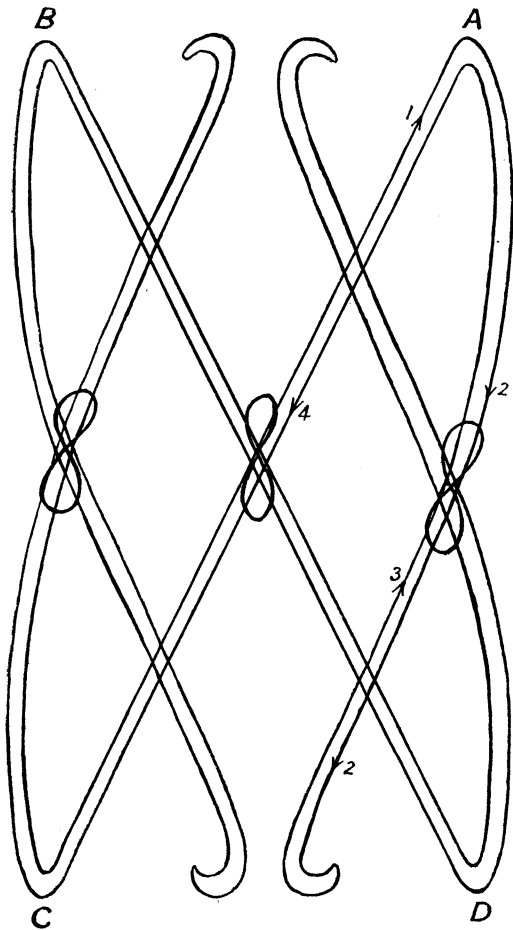


FIG. 67.

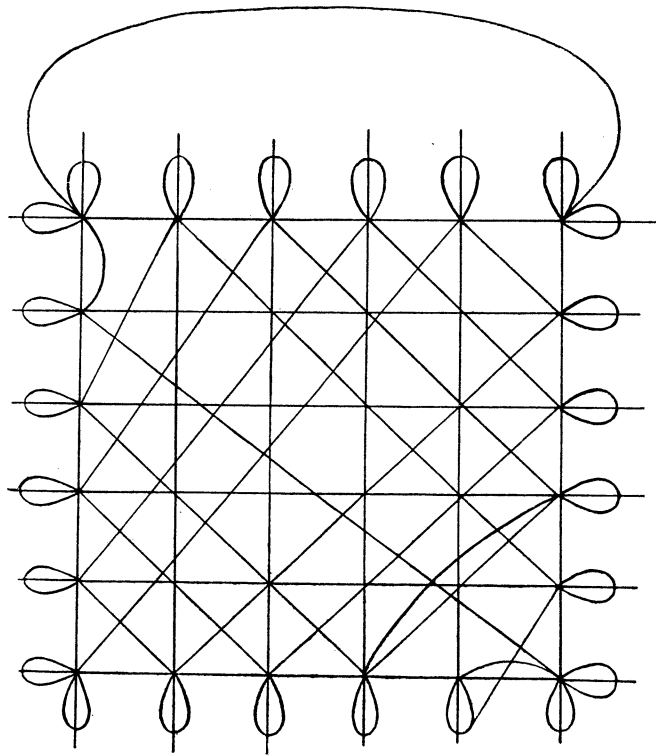


FIG. 68.

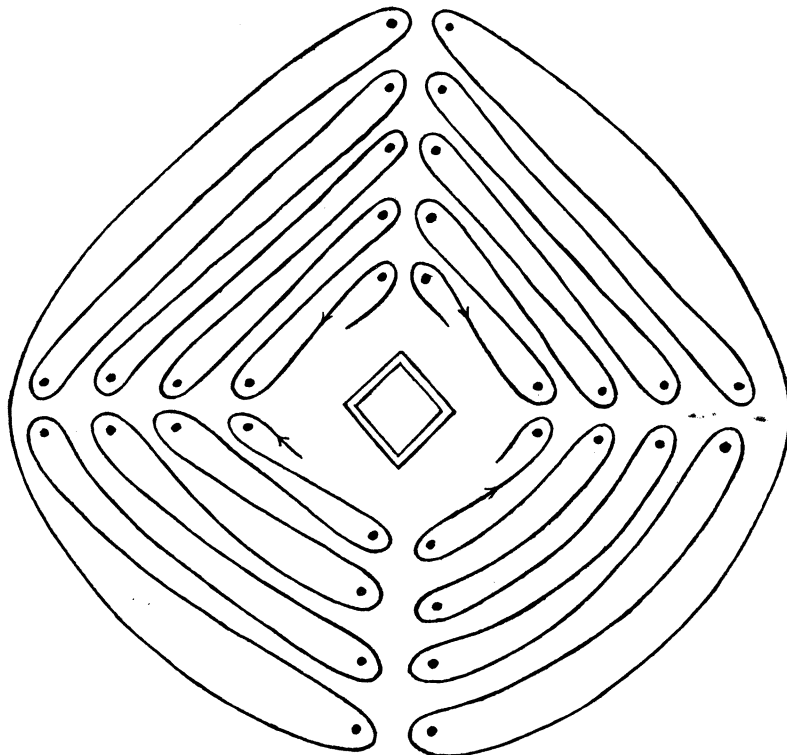


FIG. 71.

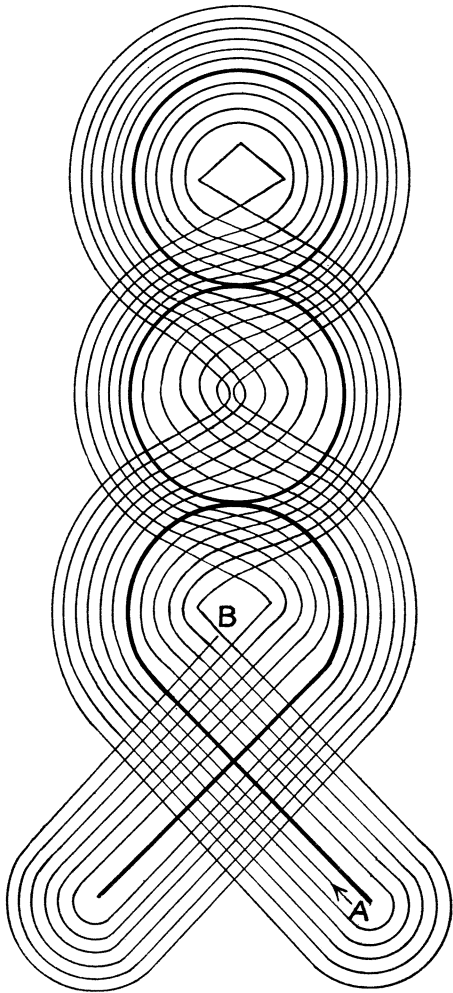
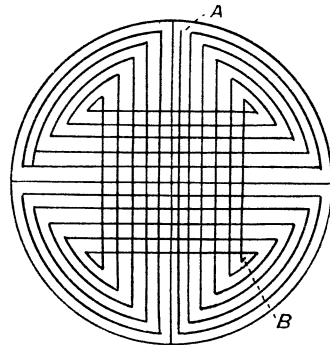
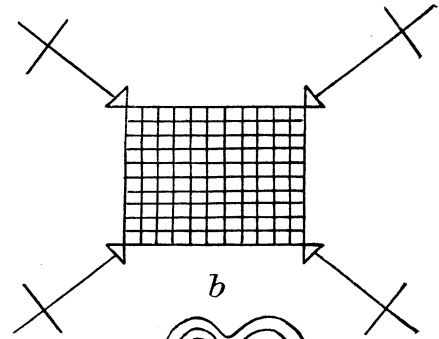


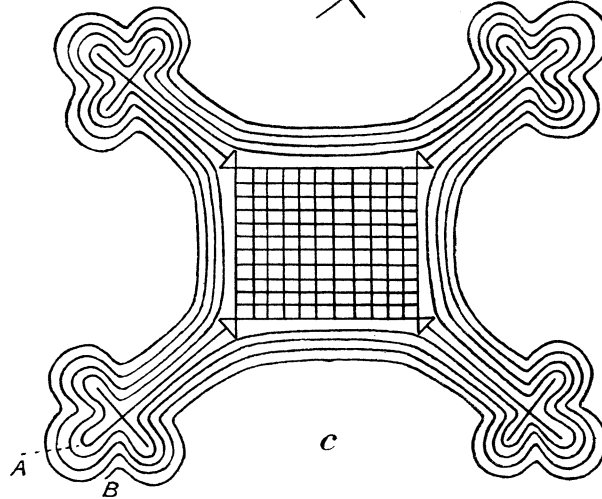
FIG. 74.



a



b



c

FIG. 76.

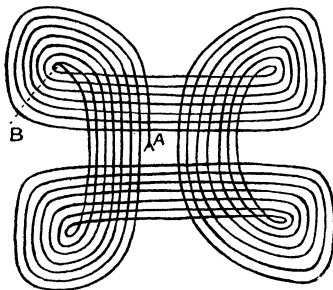


FIG. 75.

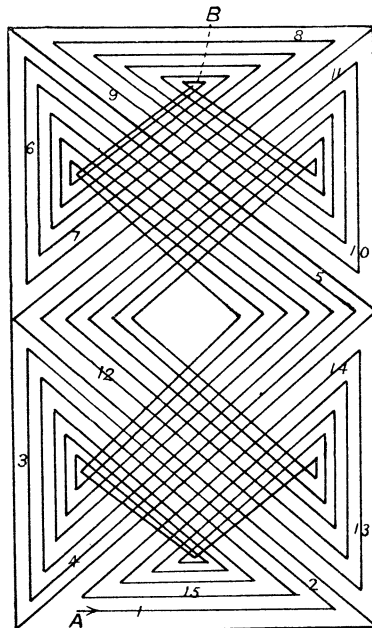


FIG. 77.

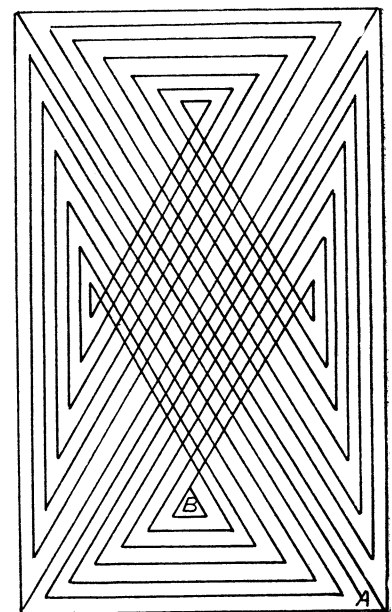


FIG. 78.

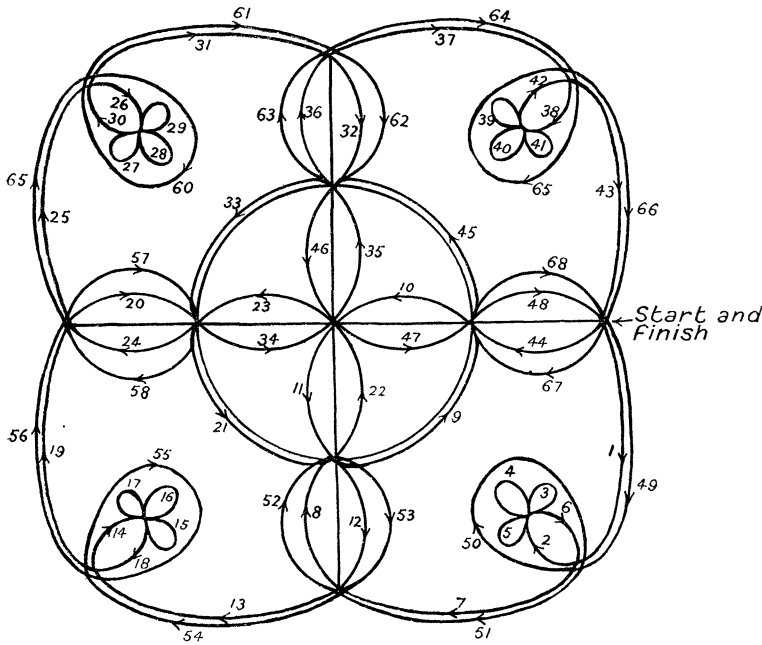


FIG. 79.

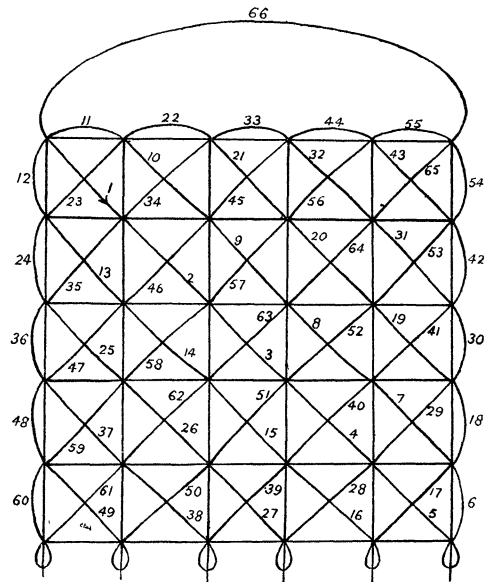


FIG. 81.

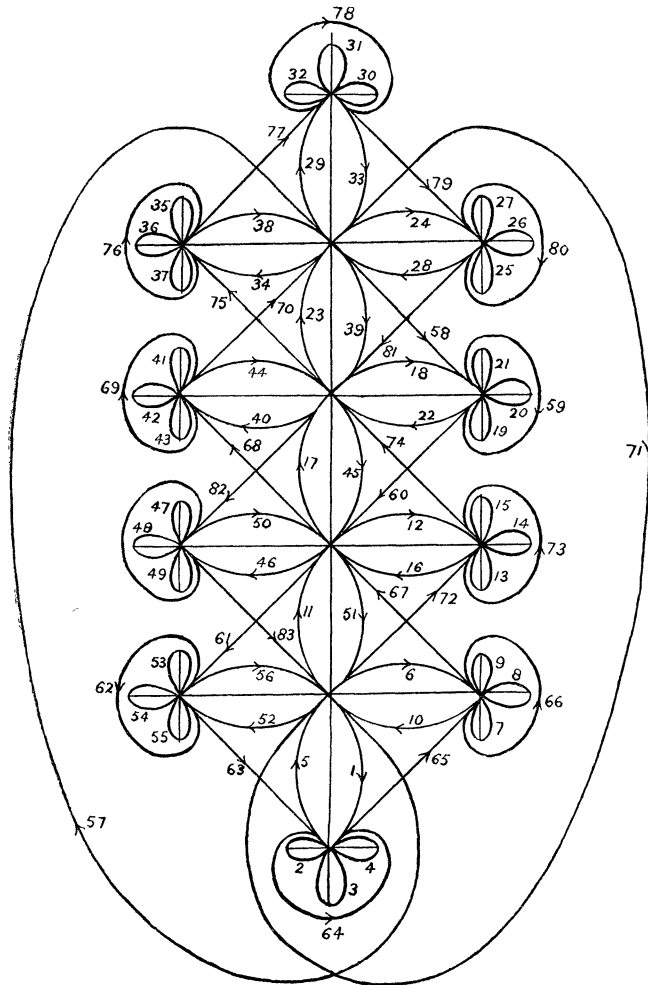


FIG. 80.

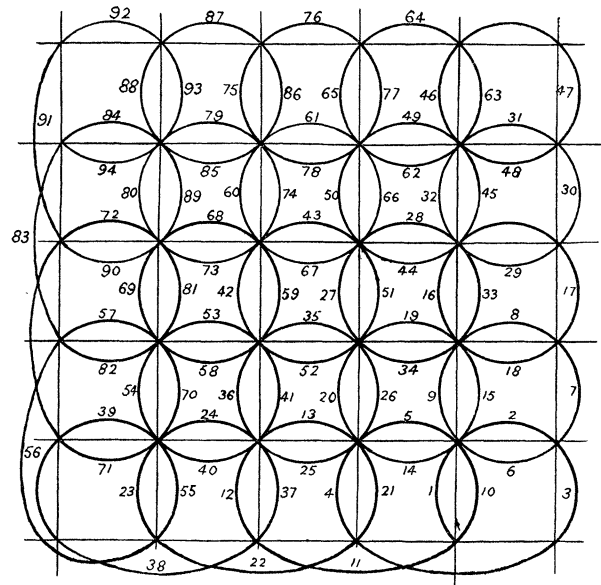


FIG. 83.

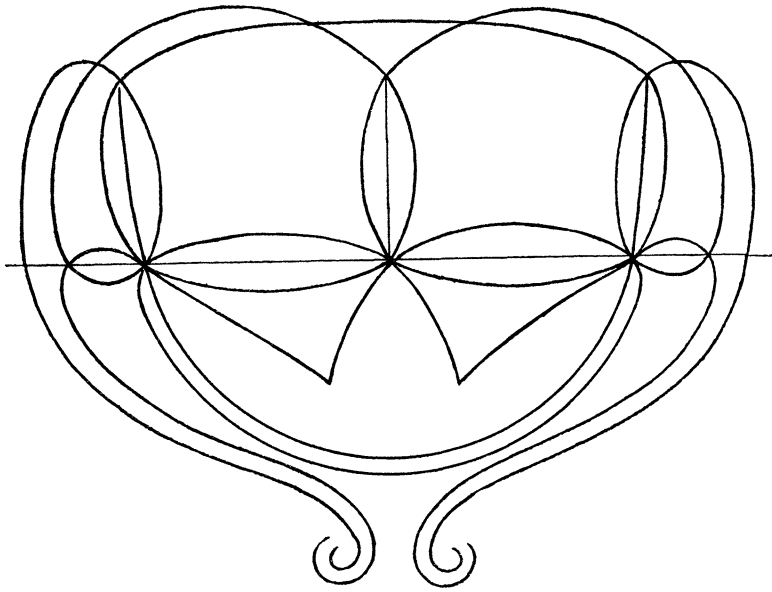


FIG. 82.

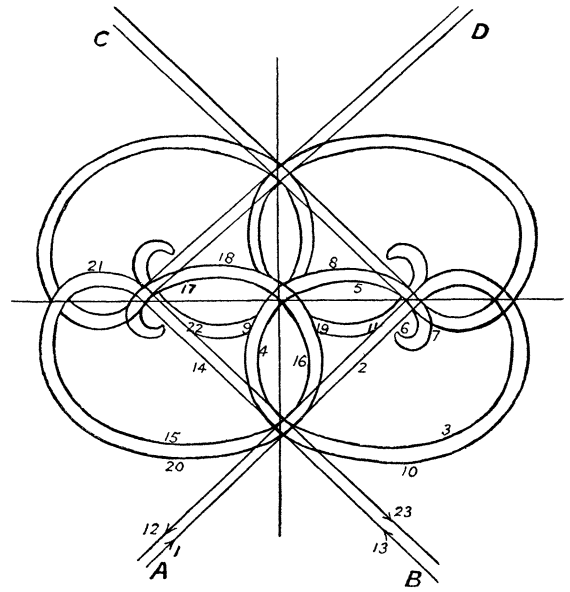


FIG. 85.

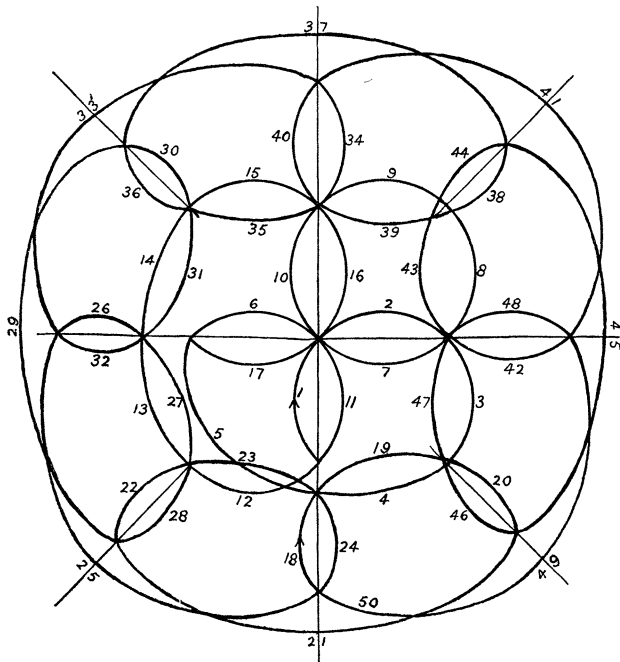


FIG. 84.

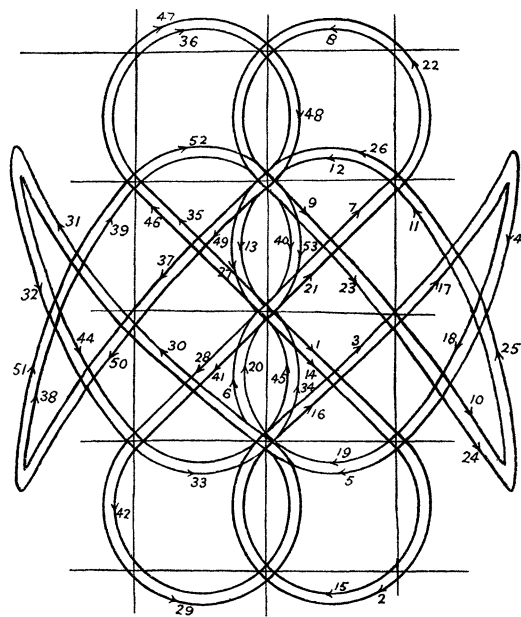


FIG. 86.

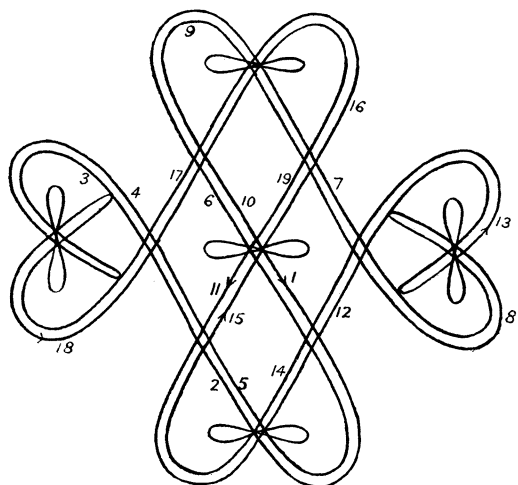


FIG. 87.

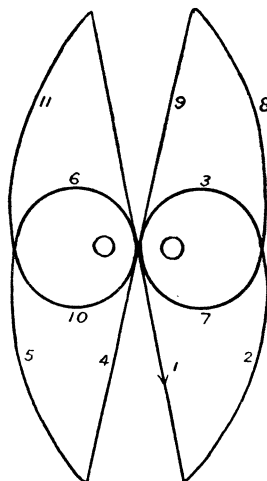


FIG. 88.

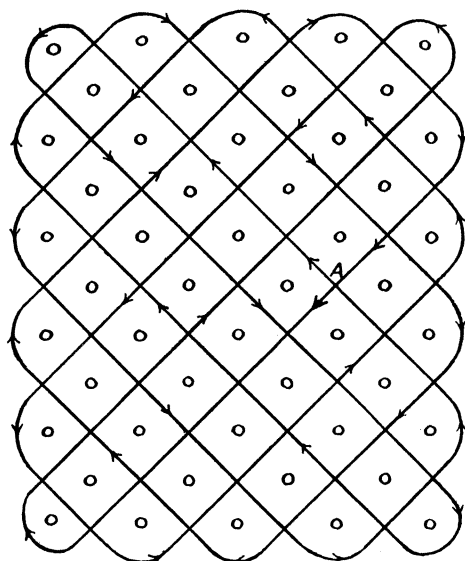


FIG. 89.

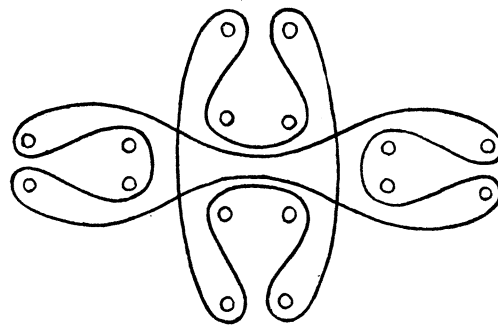


FIG. 91.

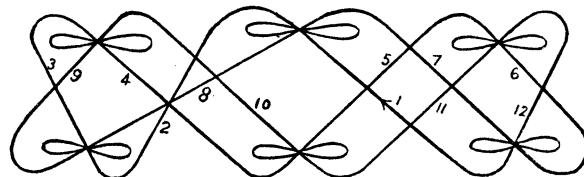


FIG. 90.

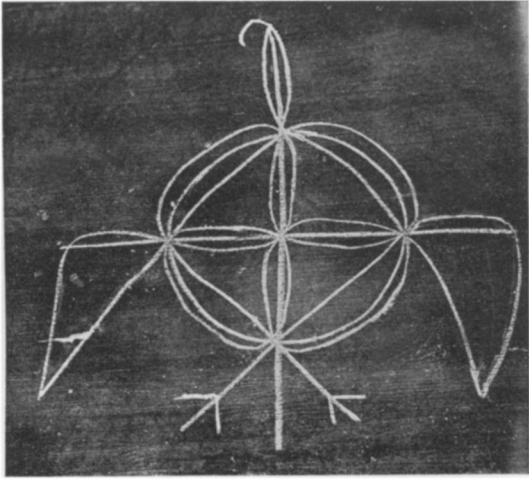


FIG. 1.—(=TEXT-FIG. 12).

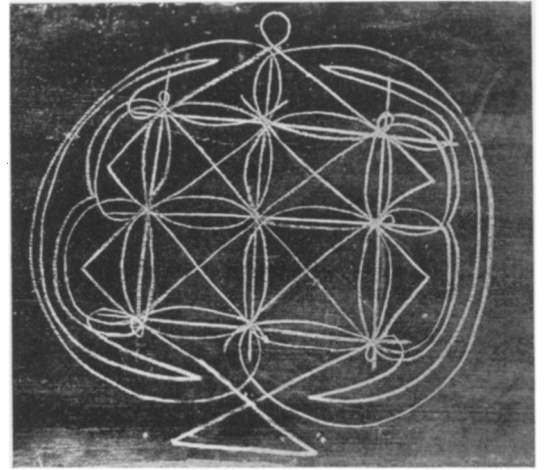


FIG. 2.—(=TEXT-FIG. 21).

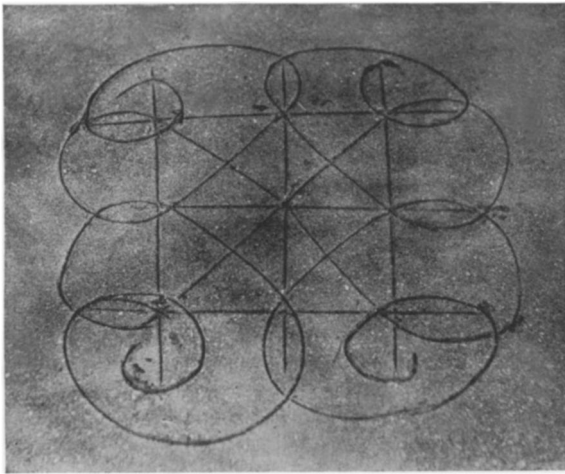


FIG. 3.—(=TEXT-FIG. 3).

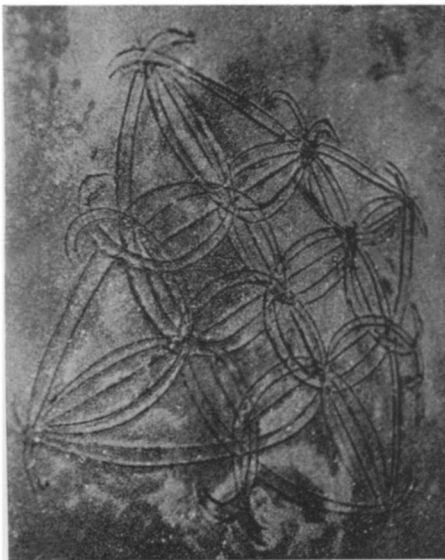


FIG. 4.—(cf. TEXT-FIG. 28).

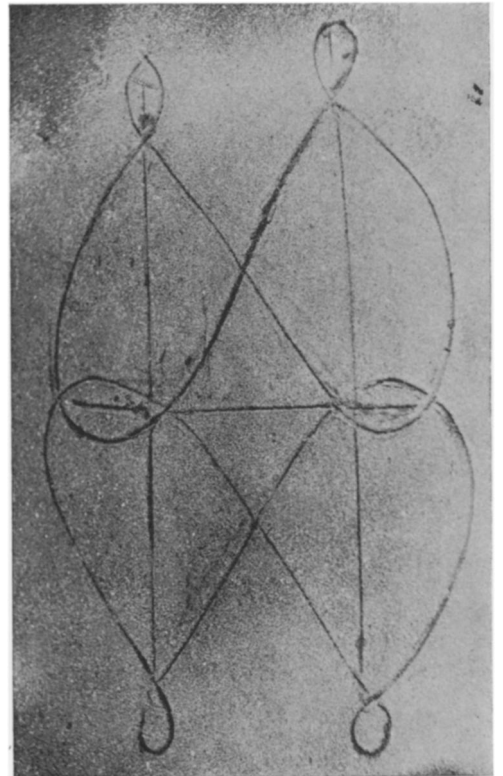


FIG. 5.

GEOMETRICAL DRAWINGS FROM MALEKULA.