

COUNCIL FOR NATIONAL ACADEMIC AWARDS

AN ANALYSIS OF INDIGENOUS
SUDANESE GRAPHIC IMAGERY
AND IMPLICATIONS FOR
CURRICULUM DEVELOPMENT
IN ART EDUCATION

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ABSTRACT

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AN ANALYSIS OF INDIGENOUS SUDANESE GRAPHIC IMAGERY AND IMPLICATIONS FOR CURRICULUM DEVELOPMENT IN ART EDUCATION

The general aim for this research was that of establishing a basis for curriculum planning and reform in Art Education in general and Graphic Design in particular in the Sudan which reflected the nation's indigenous cultural heritage.

Surveys and analysis of a) surface designs on indigenous Sudanese artifacts and b) visual imagery in the work of graphic design students at Khartoum college were conducted with a view to finding increasing general knowledge and understanding of Sudanese artistic heritage and cultural identity.

The survey of indigenous imagery on containers and ornaments found in museums and private collections focused on the documentation and classification of representations, motifs and patterns. The analysis resulted in the researcher developing a taxonomy and categorizing them stylistically into two major regional groups.

The analysis and classification of representations, motifs and patterns in students' graphic design work produced between 1968 and 1988 showed evidence of growing cultural awareness and more utilization of multi-regional imagery

As a consequence of the surveys having been carried out, a computer program and visual aids were developed from the working taxonomy sheets. Also, a new programme of study for the Foundation and Graphic Design students at Khartoum College of Art was devised which included anthropological curriculum content.

AUTHOR DECLARATIONS

1. During the period of registered study in which this dissertation was prepared the author has not been registered for any other academic award or qualification.
2. The material included in this dissertation has not been submitted wholly or in part for any academic award or qualification other than that for which it is now submitted.
3. The programme of advanced study of which this dissertation is part consisted of:
 - 3.1 A Research Design and Methods course
 - 3.2 Participation in Research Colloquia
 - 3.3 Supervised tutorialsAll the above were held at the Centre for Postgraduate Teacher Education, Leicester Polytechnic.
 - 3.4 Attendance at relevant research conferences.

T.M.Elatta.

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INTRODUCTION AND STATEMENT OF THE RESEARCH PROBLEM

The Sudan is and always has been extremely diverse culturally. While it has been influenced by modern European educational and industrial developments, both ancient Islamic and African cultural traditions and customs play a significant part in contemporary Sudanese social, political and educational life. On the one hand the Islamic faith is a way-of-life that guides large numbers of people socially and politically (Brown and Hiskett, 1975) and even though educational planning and curricula are modelled on Western European educational systems, teaching materials and references they have a very strong Islamic base. On the other hand, Sudanese tribal activities reflect ancient African influences on the way of life within their local communities.

The North and South of modern Sudan are divided culturally and geographically. Within these divisions there are many regional variations. The peoples of Northern Sudan all share the Islamic faith and are influenced by the way of life of neighbouring Arab countries but their beliefs,

material culture, social organization and education differ considerably in the various provinces and local regions. Southern Sudan, which is at war with the North, is set apart from it politically, economically and socially.

Students enrolling at Khartoum college have grown up and attended primary schools in different provinces and local regions and are accustomed to their indigenous material cultures and social customs. The majority have attended secondary schools in towns and cities because there are not enough students eligible for secondary education to justify building schools in remote villages; and, also, because of poor financial resources and difficulties associated with transporting teachers and equipment to rural areas.

Students from every province and local region come to Khartoum to undertake higher education. For some, it is the very first time they have ever travelled outside their locality. Fifty such students are accepted annually to study art and design at Khartoum College. They have very limited art and design experience. The common

denominator is their Western European art and design education at secondary school. Their art instruction emphasises drawing and picture-making which is not indigenous to the Sudan. All the art and design curriculum models, ideas, conceptions, traditions, techniques, art forms and materials in secondary education in the Sudan are imported from Western Europe.

The Dean and Academic Committee of the College are responsible for implementing objectives for the whole of art and design education throughout the Sudan. In 1982 they identified a need to formulate specially Sudanese curricular aims, content and methods in teaching and to encourage the development of a distinctively Sudanese graphic design style.

The objectives of the College now state that all students whatever their province or region of origin are to be trained in such a way that it deepens their cultural awareness of Sudanese art forms as a whole (Abdel Hai, 1982). They are to be prepared to contribute to and continue efforts carried out by those artists and designers who

are already involved in developing and producing contemporary Sudanese art forms. Such a preparation is dependent on visual and verbal teaching materials such as slides, books and films about Sudanese material culture and also on scientific research on which to base art and design curriculum aims, methods and objectives. But because of the absence of such data, it is impossible for staff at the college to determine what, if any, the indigenous art styles and imagery characteristic of the various provinces and local regions are.

Contemporary theorists of modern African education (Fafunwa, 1967, Makulu, 1971, Centre for the Study of Education in Changing Societies, 1969 and UNESCO, 1961-68-77) have stated that effective education in developing countries depends on knowledge, understanding and the utilization of the traditional cultural materials of the persons to be educated. They have claimed that curricula should be in harmony with local environments, so as to reflect the needs of the societies in which they operate.

Present curricula in Sudan, as in most African states, have been transplanted from Western Europe and have not been subjected to any further analytical investigation or in depth research. In aims, content and methods curricula are non-Sudanese. Very little is known as yet about the interaction between contemporary and traditional art forms in the Sudan or in other developing African nations. Detailed information concerning cultural influences affecting the nature of contemporary art and design in African nations and about the effects of this contemporary art and design on more traditional art forms is lacking. Most African universities today suffer from a lack of data and research that could help educationalists to Africanize their curricula. All the recent UNESCO conferences concerning African education (1961-68-77), have recommended that curricula should be African and that research and teaching of indigenous African studies should be encouraged. They recommended that all new teaching materials and textbooks should be written by Africans, should be based on extensive research by Africans, and reformulated to take

account of the African environment and cultural heritage.

Education represents a considerable financial burden for modern African states and the difficulties facing art and design educators in the Sudan are similar to those in the majority of African nations. At the time this study was conducted the problem of achieving the new curricula objectives for Khartoum college of art was great. The existing art and design curriculum was modelled on curricula in Western European institutions. The resources, teaching methods and practices were exclusively European. The written materials that supported the college curriculum and teaching had been imported from Western Europe. All visual aids used as the basis for teaching were drawn from European studies and research. They made no reference whatsoever to the work of Sudanese or African artists, researchers or educators. Another reason for the absence of Sudanese and African aims, content and methods in the curriculum was the poor participation of African and Sudanese art historians in planning and reforming art and

design curricula.

In an effort to build a body of knowledge about traditions of visual imagery and of written information on authentically Sudanese art styles and forms on which to base curriculum reform, this researcher decided to conduct a survey and analysis of: a) surface designs on indigenous Sudanese artifacts and b) visual imagery in the work of graphic design students at Khartoum college. The decision to undertake the survey was made with a view to finding increasing general knowledge and understanding of: a) Sudanese artistic heritage and cultural-identity with reference to surface designs on indigenous Sudanese artifacts and b) the nature of contemporary graphic design students' work in the Sudan.

The research is reported in this dissertation as follows. Chapter one provides readers with a brief geographical and historical background of the Sudan. In chapter two issues and problems of African art education are explored with particular reference to the situation in the

Sudan. Chapter three focusses on the design of the research and identifies the tools developed for the research. Chapter four reports on interviews carried out for the purposes of identifying geographical/cultural regions of the Sudan and selecting a sample of artifacts for study. Chapter five reports on the classification of surface designs carried out with a selected sample of artifacts. A survey of contemporary Sudanese graphic design students' work is reported in chapter six. The last chapter deals with the educational applications and outcomes of the research as a whole and includes conclusions and recommendations regarding curriculum planning for Khartoum College of Art.

CHAPTER 1

THE SUDAN: ART, CULTURAL DIVERSITY AND ENVIRONMENT

This chapter provides readers with a brief account of the Sudan's geographical location and history. Particular attention is paid to cultural diversity and to the way in which historical and environmental factors combine to influence the peoples' artistic heritage and way of life.

1.1.0 GEOGRAPHICAL LOCATION

The Sudan is Africa's largest nation. Its position and longitudinal extension constitutes a geographical link between the Arab and the black African worlds. It shares its borders with six African and three Arab countries; Egypt to the north; Libya, Chad and Central Africa to the west; Zaire, Uganda and Kenya to the south; Ethiopia and Saudi Arabia (across the Red Sea) to the east.

The line which occurs approximately along latitude 12 N divides the Sudan in half geographically and culturally (Church, 1977). The following twelve provinces: Northern, Nile, Red

Sea, Kassala, El Gazira, Northern and Southern Kordofan, Northern and Southern Darfur, White Nile, Blue Nile and Khartoum are situated north of latitude 12 N. Upper Nile, Junglei, Eastern and Western Equatoria, Bahr El Gazal and El Buheyrat lie to the south of latitude 12 N (Figure 1).

1.2.0 THE PEOPLE

The people to the north of this divide are largely of mixed negroid-white descent and Muslims, influenced by an Arab way-of-life. They include the Bija of the Red Sea Hills, the northern Nile Nubians who have more Negro blood, the Arabs of the central Rainlands, and the Nuba of the hill masses. In total, they constitute about three quarters of the population of the Sudan (Church, 1977).

The peoples of the South are Africans in terms of their material culture and social organization (Mansfield, 1976). They include the Nilotes of the Upper Nile; Dinka, Shilluk and Nuer, Nilo Hamites of the far South, and the Sudanic, Azandi, Moru and Madi tribes, West of the Nile.

1.3.0 LANGUAGES

Arabic is the official language in political, social and educational use in Northern Sudan; but English is generally used in communication in Southern Sudan where it is the official language.

Arabic is spoken over a very large area of the North and is a symbol of its cultural unity. It has a recognizable character which distinguishes it from Egyptian or any other Arabic dialect and includes many classical Arabic words. There are, however, a large number of sub-dialects which differ considerably from each other (Trimingham, 1965).

The three main sub-dialects are: a) Northern: spoken in the Northern and Nile provinces, b) Central (Omdurman): spoken in Khartoum and in the Eastern part of the Blue Nile province and c) Western: spoken in Kordofan, Darfur and the White Nile provinces. The Omdurman dialect is becoming increasingly a recognizable standard form for Sudani Arabic. It is widely used in communication between speakers in urban areas all over the North and South.

Today there are many languages other than Arabic spoken in the Sudan. For example, Nubian in the Northern province and 'Hadendiwa' in the Red Sea province. Many dialects of the Sudanic family of languages are practiced in the South. Although some Arabic is found here, its influence on the Sudanic family of languages is very slight (Trimingham, 1965).

1.4.0 CLIMATE AND ENVIRONMENT

Geographically the Sudan consists of a vast plain through which the River Nile flows northwards. It is bounded by a desert on the northern side. The landscape is broken by low sandstone hills in the Centre. In the East the Red Sea Hills run south of Egypt into Eritrea. The Nuba Mountains are situated in South West Sudan and in the far West stands Jebel Marra. The South East is the home of the Angassana Mountains. The Amatongs Mountains south of the divide include the Sudan's highest peak, Mountain Kinyatti (Henderson, 1965).

The Libyan and Nubian deserts are bounded to the south by a Sub-Sahara region followed by a

Savannah region. Far South there is an equatorial region with thick forests, swamps, dense tropical grass and heavy rains.

1.5.0 HISTORY

Jackson (1955), Henderson (1965), Theobald (1965), Holt (1979), Santi and Hill (1980) and Daly (1983), are all agreed that Sudan's history can be divided into two major periods. The first covers ancient history up to the Fifteenth Century. The Sixteenth Century marks the beginning of the second period which continues to the present time.

1.5.1 Ancient history

The Sudan was a Nubian nation before the northern invasion by ancient Egyptians (1500 B.C.), the Eastern Islamic infiltration and the southern western African migration. Gillon (1984) stated that from 7000 to 6000 B.C., the Nubian civilisation had its own national identity, beliefs, social life and cultural traditions. The Nubians occupied the area between Aswan in the far Northern Sudan and Khartoum as early as 7000 B.C., and had organised societies and a

culture of their own (Shinnie, 1967). The Nubian culture was powerful and expanded its influence to central West Africa. In about 725 B.C. the Nubians conquered Egypt to become the twenty fifth Dynasty, but when they were pushed out of Egypt they settled at Meroe in central Sudan. Laude (1971) showed that there was convincing evidence that from the sixth century to the third century B.C. Meroe established itself as a very important African artistic centre.

1.5.2 Modern history

The historical periods from the sixteenth century, can be divided into five distinct periods as follows: a) The Funj Kingdom, b) Turko-Egyptian, c) The Mahadia, d) The Anglo-Egyptian Condominium and e) Independent Republic of the Sudan.

a) The Funj Kingdom

In the sixteenth century the Funj Kingdom was founded around Sennar in Central Sudan and set the pattern for Islamic life in the Sudan. The end of the Funj Kingdom, at the close of the eighteenth century, gave birth to the Darfur

Sultans' Kingdom in Western Sudan.

(Henderson, 1965).

b) Turko-Egyptian

The Turko-Egyptian invasion was led by Muhammad Ali Pasha, ruler of Egypt, in 1821 seeking gold and soldiers. Later, under European pressure against slavery, the Egyptian ruler appointed General Gordon to the post of Governor General of the Sudan in 1877.

c) The Mahadia

In 1880, El Mahadi's insurrection began in Western Sudan with a powerful Islamic reform movement and moved rapidly eastwards to the capital Khartoum. In 1885, the Mahadists entered Khartoum, thus marking the beginning of the Mahadi State which lasted up to 1898.

d) The Anglo-Egyptian Condominium

The Egyptian army under Kitchener's leadership advanced southwards along the Nile in 1897. A year later Kitchener defeated the Mahadists, thus marking the end of the Mahadi State and the passing of the Sudan into British and Egyptian

hands.

e) Independent Republic of the Sudan

For nearly sixty years the Sudanese people struggled for independence. Finally, on the first day of the year 1956, the British and Egyptian armies and officials left the newly independent Sudan. This was the beginning of the sixth period of Sudan's modern history in which, up to the present day, three parliamentary governments and another three military regimes have ruled over the Sudan.

1.6.0 CULTURAL HERITAGE, DIVERSITY AND IDENTITY

Abdel Hai (1982), a contemporary Sudanese writer, has described the Sudan as a melting-pot for Middle East, Mediterranean and African cultures. In 1982 he wrote that its contact with these cultures is one of the most important factors of its new cultural identity.

As the history of the Sudan reveals the Sudanese people have been exposed to two-fold cross-cultural interaction since 7000 B.C. Different Sudanese tribes are and always have

been in daily contact with each other, sharing each others' lands, resources and trading activities. They are, and always have been exposed to peoples and customs of other nations such as Egypt, the Arab World, neighbouring African countries and Western Europeans. This cross-cultural interaction with other peoples, including Western Europeans and people who are of the Islamic faith, has influenced Sudanese peoples' social, political and educational life. Contacts with the Arabs has been of particular importance in introducing them to their present way-of-life, system of education, laws and customs (Brown and Hiskett, 1975).

The Sudan has been and still is open to many different social, linguistic and cultural influences. But, Best and Blij (1977) have stated that it is important to recognize that although it has played a role in East-West contact between African and Arab countries, it incorporates an area in which north-south diversification is greater than that of East to West. (According to Meauze (1968), Nubia was an important centre of trade with the southern regions and was for a

great many years a two-way channel connecting Northern Africa - Egypt and Libya - with the negro people and their empires.) Within the interior, the everyday movement of many tribes to and fro, seeking water, pasture and essential life needs and materials has affected and is still affecting the cross-cultural interaction of peoples who live on the move. Local markets are the common meeting places for nomads who bring with them their belongings, traditions, artifacts and domestic items. These markets reflect the nomads' cultural identities, behaviour, tribal customs and beliefs. Faris (1972), has described the art traditions in these Sudanese tribal societies (referring to Nuba) as 'primitive' and as constituting a practical instrument for the important business of daily living.

1.7.0 CULTURAL IDENTITY AND ARTISTIC HERITAGE

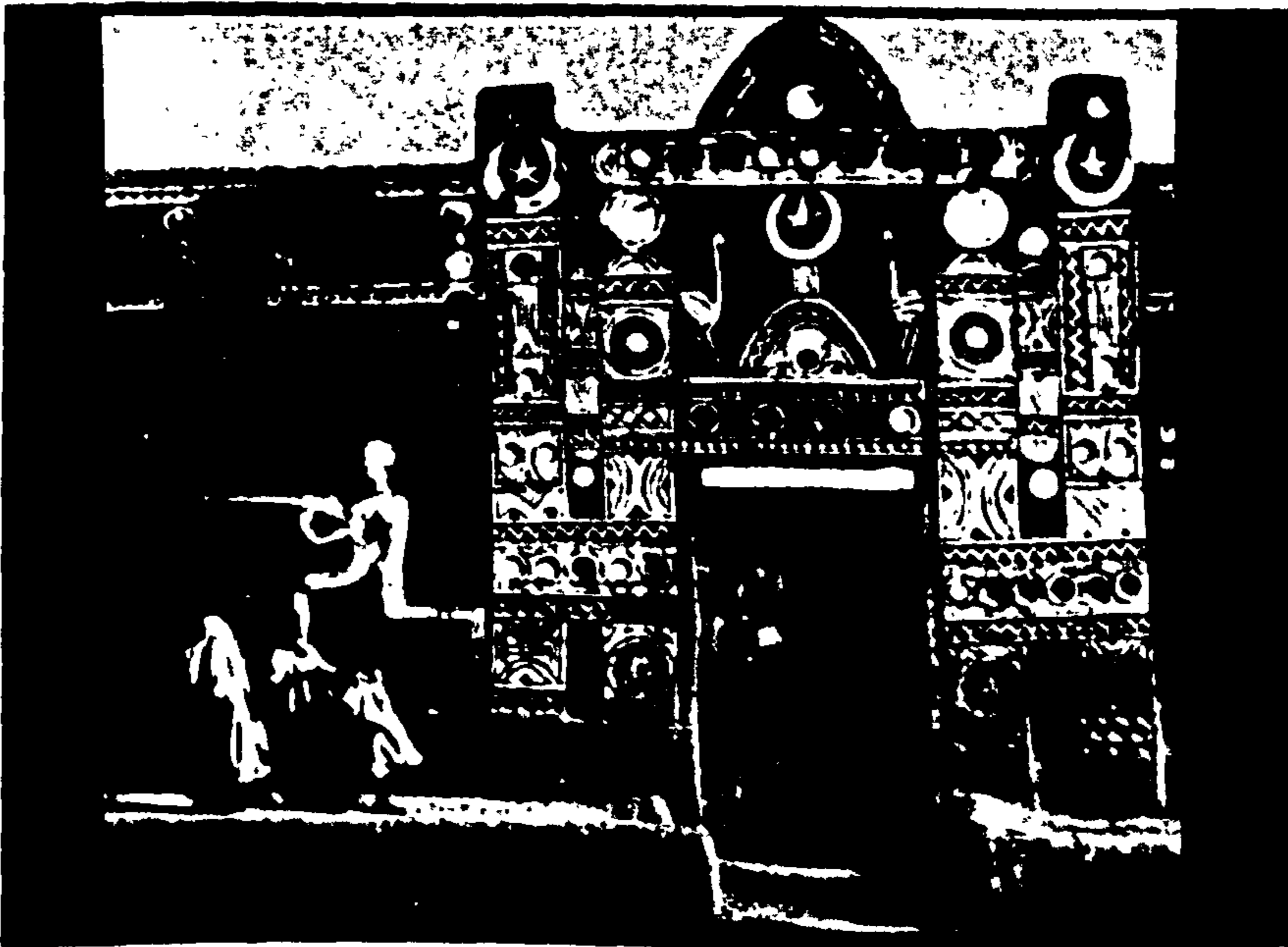
In line with, and as a consequence of the cultural exchanges mentioned previously, different provinces of the Sudan are generally known today to have distinctive cultural identities which are reflected in their material culture such as in their architecture,

handicrafts and other traditional art forms.

a) The Northern province stands for the ancient Nubian kingdom. The Nubians occupy lands in the far Northern Sudan and in Southern Egypt. According to Wenzel (1972), their house decoration reflects Islamic cultural influences as well as those of ancient pre-Islamic traditions which are Egyptian and ancient Nubian (Figure 2).

FIGURE 2

NUBIAN HOUSE DECORATION



b) In the Red Sea province the Islamic influence on people is very strong. It is reflected in the design of, for example, their costumes and ancient architecture. The ancient architecture of Suakin city is a particularly good example. It has floral motifs, arches, calligraphic patterns and decorative designs which are obviously Islamic in style and origin (Figure 3).

FIGURE 3

WALL DECORATION, SUAKIN

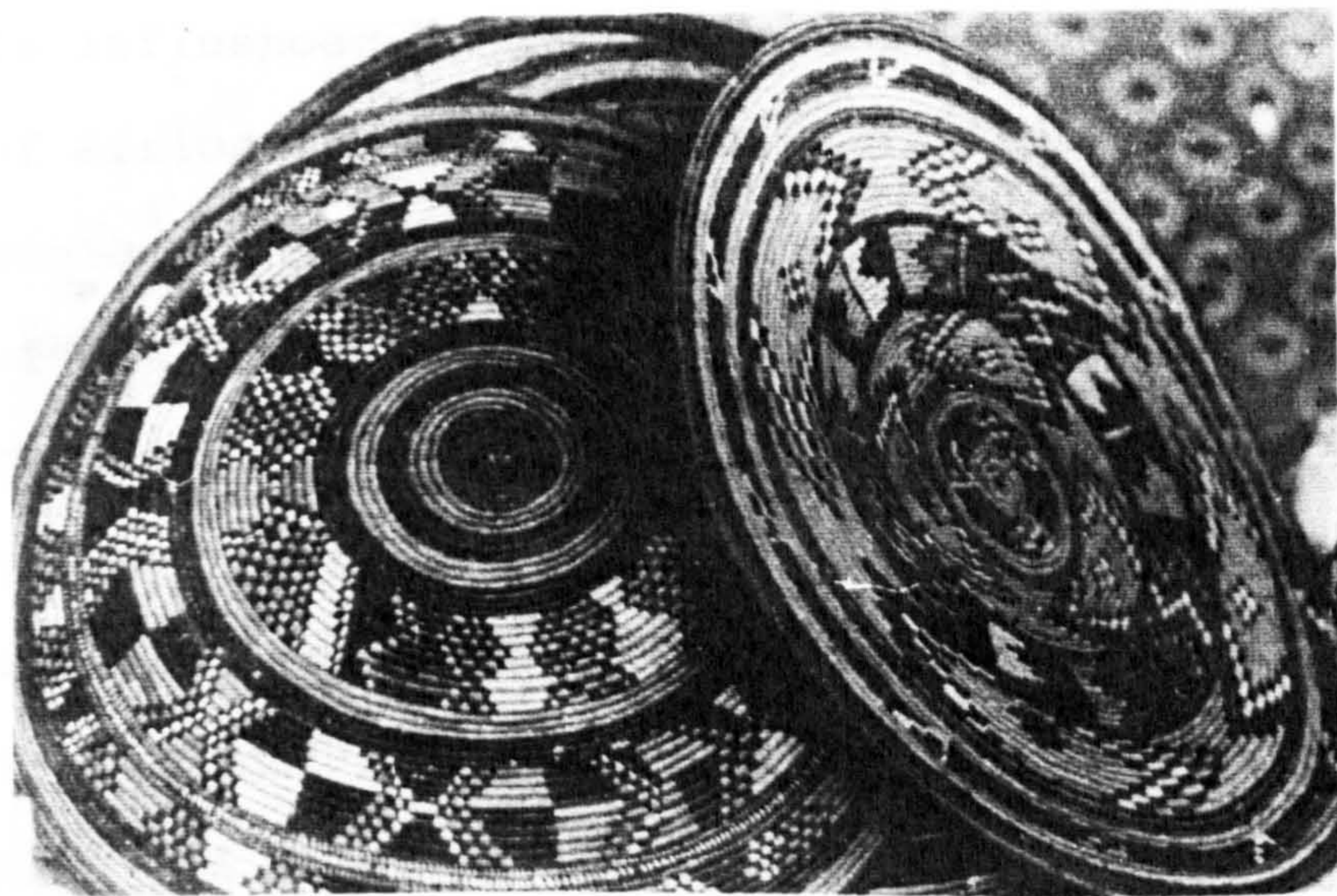


c) Jebel Marra, in Darfur province, is relatively unexplored. The indigenous peoples' way of life there is of great interest to contemporary

artists and students of art elsewhere in the country with reference to their unique social activities, folklore performances and handicrafts which utilise local materials, patterns and motifs. An example of their skill in handicrafts is shown in Figure 4.

FIGURE 4

FOOD-TRAY, JEBEL MARRA



d) Angassana Mountains is one of the most underdeveloped areas in the Blue Nile province. The people live far away from developing cities,

towns and villages. Their only contact with people outside their tribal group is at the markets where they go for trading purposes, as well as for national and tribal celebrations. Socially, their way of life provides an exciting and enriching experience for art students, artists and tourists who now come to study it from the capital and other industrialised parts of the country.

e) The way of life in Southern Kordofan province is influenced by African cultures. The people are of African origin and are Christians, but their contact with Islamic missionaries has had some effect on their way of living also. Their social customs, artifacts, folklore and handicrafts reflect aspects of both African and Islamic artistic traditions. For example, the Nuba had a traditional personal art of body painting (Figure 5), and Muslim tribes produce floral and geometrical patterns on their artifacts and domestic objects.

f) In the Southern Sudan, the people are mostly black Africans and of Christian faith. They live

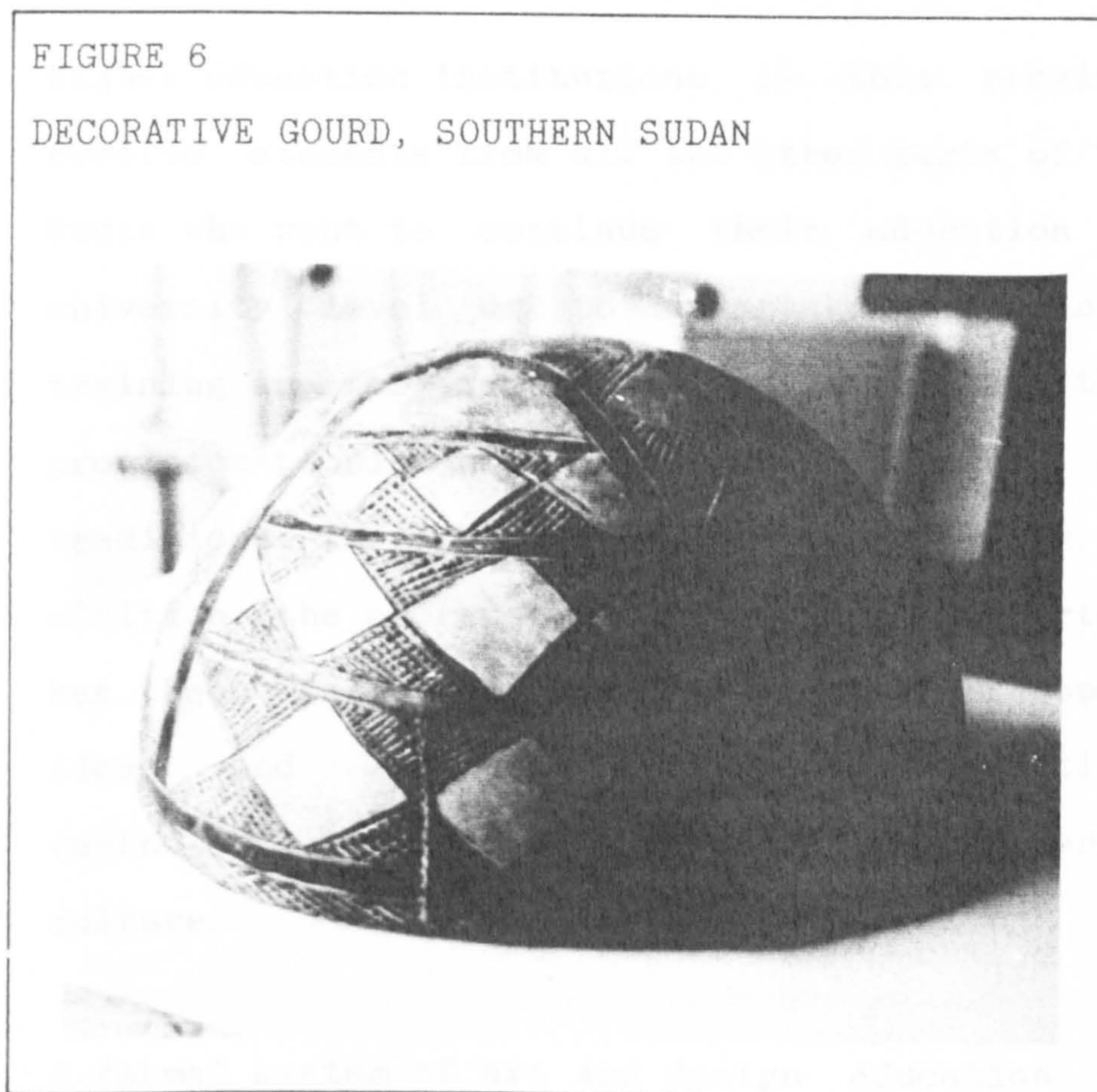
in direct daily contact with people from black African neighbouring countries. This two-way contact is exemplified by the fact that, on the one hand, refugees from other countries in Africa have come to live in the Sudan and, on the other, Southern Sudanese peoples have fled from the civil war into Zaire, Uganda and Ethiopia. Trading excursions frequently take place between peoples of the Southern Sudan and those of black African countries.

FIGURE 5

BODY PAINTING, NUBA MOUNTAINS



Southern Sudanese peoples' social life, customs, behaviour and their domestic objects, artifacts and decorative designs are completely different from those of Northern Sudan. An example of their decorative designs illustrated on gourd is shown in Figure 6.



g) Khartoum province is the seat of modern government and houses all its administrative departments. This province has been greatly

favoured by the Government in terms of resourcing. It receives the most attention in terms of financial backing for advanced systems of education and industry. The two old and three relatively new Universities in the Sudan and the single Polytechnic are located in Khartoum.

Higher education institutions in this province receive students from all the other parts of the Sudan who want to continue their education to university level or to undertake professional training in, for example, art and design. In this province people of different cultures and traditions from different provinces mingle. In addition, the everyday way of life in Khartoum has been influenced greatly by Western European ideas and attitudes towards education, technology, commerce, politics and material culture.

A formal system of art and design education was introduced when the British established a printing press in the early nineteen thirties. This was done so that they could print government reports, laws and regulations (Holt, 1961). The

need for educational books led to the establishment of a publications bureau in 1946 to produce textbooks, general reading books and magazines for use in elementary and intermediate schools. There were no Sudanese graphic designers at that time, so, a number of Sudanese elementary teachers talented in drawing and calligraphy were chosen by the British to illustrate books, teaching aids and materials (Greenlaw, 1978). They later became the first students at the new School of Design and the first official graphic designers and illustrators. These early graphic designers were very much influenced by the work of English illustrators.

1.8.0 Summary

The most generally accepted explanations for this cultural diversity both in every-day life and in the arts can be summarised historically as follows: Firstly, the ancient Egyptian invasion from the north in 1500 B.C. to seek gold, crops, slaves and labour, and in modern history when Muhammad Ali Pasha, ruler of Egypt conquered the Sudan in 1821. Secondly, the spread of Islam, in the seventh and eighth centuries, from the Red

Sea in Eastern Sudan and from Egypt. Thirdly, the expanded African traditional trade activities from the Southern, South Eastern and South Western neighbouring countries. Fourthly, in the seventh and eighth centuries, the Islamic faith was introduced by peoples through and from the Savanna belt and the Northern Sudan. The movement of pilgrims from Nigeria, Chad and Central Africa travelling across the Sudan on their way to Mecca, then as now, opened up the Sudan's western borders. Usually most of these pilgrims stayed on their way back and work on cotton fields in central Sudan. And, finally, the cultural, political and educational contact created with Egypt by previous governments since the beginning of the twentieth century.

The British established a formal education system in early twentieth century. Since that time, Western European influences have dominated modern Sudanese education theory and practice and professional training in art and design.

The next chapter reports on issues and problems of African art education with particular

reference to the situation in the Sudan.

CHAPTER 2

ART AND DESIGN EDUCATION IN THE SUDAN

2.1.0 EDUCATION IN MODERN AFRICA

General education including art and design in the Sudan was always and still is very much influenced by policies and trends of education introduced into Africa by Westerners. Everything that has taken place in African education as a result of the introduction of Western educational policies has also taken place in the Sudan.

Throughout colonial Africa general education, including art, is of two different kinds: i) informal and traditional and ii) formal and modern-Western. Traditional or customary modes of learning were practiced informally a long time before colonization. Modern-Western educational systems were introduced relatively recently and have been practiced from the colonial era only.

2.1.1 Traditional-customary Education

Long before Portugese missionaries introduced a formal style of education into West Africa in the fifteenth century, African societies practised a sort of traditional or customary education aimed

at adapting and teaching new generations to control and use their physical environment. A report by the Centre for the Study of Education in Changing Societies (1969) and Brown and Hiskell (1975) have described the elders together with their religious and traditional institutions as functioning as models of behavior and learning and as the main agencies of education in the majority of the indigenous societies of Tropical Africa. Kimball (1974) has claimed that indigenous forms of education bring to all peoples an understanding of their relation to nature to each other and to other cultures. It is important to note that African traditional or customary education came in contact with Arabs who penetrated Africa from the North and East a long time before Islam (Beshir, 1969). As Fafunwa (1982) has pointed out the influence of Islamic religion on African indigenous education is considerable and established firm roots long before Western intervention.

Although customary education in different tribal groups was and is marked by limited specialized training, it always preserved the cultural

heritage of the family and the tribe. It also explained and emphasized to new members the importance of understanding the inherited values of their communities' past (Datta,1984). Traditional or customary education was and still is a part of the community's natural social order of life. Depending on the particular needs of the society customary education prepares younger generations to carry out their various roles in the society.

2.1.2 Traditional Training in Art and Design

In traditional African societies art and design training takes the form of apprenticeship by parents and elders (Talabi, 1979). This process was and still is a natural part of traditional or customary education in a society as a whole. African art has been described as one of the most powerful and vigorous art traditions of the world (Graburn, 1976). It is considered by many anthropologists and educational researchers (e.g. Mount, 1973 and Nyarkoh, 1984) to be one of the most important elements of African culture in that it reflects and expresses fundamental aspects of the African way of life. The art

educators McFee and Degge (1980) have pointed out that in any given society artists use the visual qualities selected by their group and express its most valid emotions. Their products, according to anthropologists such as Guiraud (1975), are always representations both of nature and of a society. Durden (1968) and Layton (1981) both state clearly that the impact of traditional art on life in these tribal societies is great. The two main functions of this traditional art according to Graburn (1976), were and are:

- a) To maintain the social structure and ethnic identity.
- b) To present an ethnic image to the outside world.

2.1.3 Modern-Western Education

In contrast, modern-Western education in Africa was and still is structured according to European forms and conventions. It was and is planned to operate at different levels for different age groups and incorporates a structural system of entry qualifications and final examinations.

Scholars of modern African education (such as

Cowan, 1965, Beshir, 1969, Brown and Hiskell, 1975, Makulu, 1971, Datta, 1984, Grossert, 1984, Nyarkoh, 1984 and Bary, 1986) have credited the foundation of present day African educational systems to nineteenth century missionaries aided by their colonial governments. They have claimed, also, that while these systems were established in Christian Africa they were not welcomed in areas where Islam was dominant (Cowan, 1965). The colonial governments' educational objectives in the early stages were to spread European civilization (Makulu, 1971).

In the majority of African countries Christian missionary education was subsequently supplemented after a hesitant start by colonial governments (Bary et al, 1986). This was followed by increasing government financial support and then a complete take-over and administrative organisation of schooling. After independence each national government was determined to change the colonial education for a relevant African system (Salia-Bao, 1987). But there were variations from country to country and the situation differed depending on the nature of the

colonial regime. According to Thompson (1981), formal Western education played an important role because schools were responsible for recruiting and preparing the new leadership ready for the transfer of power from colonial regimes.

2.1.4 Formal Art and Design Education

According to Mount (1973), because of the continental diversity and different colonial situations in African countries formal art education was introduced into them in three different ways. These were: i) through experimental art and design training courses, ii) through the foundation of art schools and teacher colleges iii) by means of summer workshops.

Experimental Art and Design Training Courses

This approach was first introduced by French art educators in Zaire in 1943. They encouraged African art students to paint freely and explore modern art materials in schools but did not teach them any Western techniques. Students of art were encouraged to experiment in wood-carving, printed fabrics and book-illustration. This approach was introduced in Congo in 1951 and in Dakar in 1957.

The Foundation of Art Schools

A national system of art and design instruction was introduced through the establishment of an Art School by the British in Uganda as early as 1937. This was followed in 1946 by a second School of Fine and Applied Art in the Sudan. Twenty-two years later a School of Fine Arts was founded in Ethiopia. Several artists from Tanzania and Kenya chose to attend the School of Fine Arts in neighbouring Uganda because there were no art schools in their own countries.

Formal training of art teachers was introduced and run in West Africa by the British in Ghana in 1927. In 1937 they founded the first School of Arts and Crafts in West Africa and a second College of Art in Northern Nigeria in 1953 followed, in 1955, by Yaba Art Department in Lagos where students were accepted on the basis of artistic ability alone. Some of these students lacked a secondary school diploma. In 1966 a School of Art was founded in the Ivory Coast.

All the art schools in English-speaking Africa,

with the exception of Yaba Art Department, accepted students on the basis of a combination of academic qualifications and artistic ability. After independence they were affiliated with English art schools which required them to meet English assessment standards. Mount (1973) noted that this was ensured by sending English external examiners to Africa to test students and monitor courses.

Summer Workshops

Summer workshops were run by the British art educators in the early 1960s. The aim of the workshops was to introduce a different form of art instruction from that practised in the art schools, in cultural centres and clubs. The workshops took the form of very short courses for primary and secondary school art teachers and later primary school drop-outs. They worked with found materials, for example, wire, bits of paper and glass. Permanent gallery workshop school was instigated in Rhodesia in 1960 by the Rhodesian National Gallery. They were followed by the first Summer workshops in Nigeria in 1961 and in Oshogbo in 1963 (Mount, 1973).

2.1.5 Problems and Issues in African Art and Design Education

According to Bary (1986), different African societies have developed systems of indigenous education to transmit their particular art forms of knowledge and skills. These forms of art education are remarkably similar throughout Africa still exist today and can be seen to have influenced each other. Indigenous education, of which art education is a part, starts at the time of birth and ends with death. It is practiced both formally and informally. Formal, indigenous education is apprenticeship provided by community specialists, parents and the extended family (Salia-Bao, 1987).

Traditional education has always involved the teaching of the arts and, according to Nyarkoh (1984), they play a major part in the enculturation of the African child into society. Traditional African and imported Islamic educational systems are similar in many aspects. They offered free education to all members of the community regardless of age or status. Both

systems were linked socially and religiously to the beliefs of the societies.

Researchers such as Cowan (1965), Brown and Hiskell (1975), Makulu (1971,78), Datta (1984), Grossert (1984) and Nyarkoh (1984) have pointed out that modern-Western education in Africa has failed both to emphasize arts in school programmes and to recognize their vital role in African culture. Little attention was given in colonial times to indigenous types of education and some researchers have described the neglect of 'Africanness' during the colonial era as a form of cultural imperialism. Fafunwa, for example, has claimed that the colonial educational process was intended to 'kill the soul of African education' (Fafunwa,1967,p,75).

Today indigenous art and design training is still practised in African societies. Products of these societies reflect their artistic heritage and culture. Representations, motifs and patterns found on their artifacts are the subject of studies and analysed by anthropologists and art educators.

The major problems facing educators working in art and design education in African societies today according to Nyarkoh (1984) and Omabegho (1984) are:

- i) a shortage of qualified art teachers,
- ii) lack of proper supervision and direction in schools,
- iii) insufficient teaching materials,
- iv) outmoded curricula,
- v) inadequate research into African studies and textbooks on art education, and
- vi) insufficient budgets.

2.2.0 KHARTOUM COLLEGE OF FINE AND APPLIED ART

2.2.1 Brief History

Teacher art education was first introduced in the Sudan by Greenlaw, a British artist in 1936 when he was appointed handwork officer at Bakht er Ruda Teacher Training College. He encouraged painting and drawing amongst teachers (Griffiths, 1953). In 1943, Greenlaw moved to Khartoum to illustrate and produce educational books and

established a publication bureau in 1946 (Elatta, 1978). For the growing demand for illustrators, designers, calligraphers and art teachers, Greenlaw established the School of Design within Gordon Memorial College (now, Khartoum University) in 1946 (Griffiths, 1953). In 1951 it became the School of Fine and Applied Art and, finally, in 1971 the College of Fine and Applied Art. The first courses were Drawing, Painting, Calligraphy, Illustration, Printing and Pottery. In 1951 when the school was transferred to the Khartoum Technical Institute (now, Khartoum Polytechnic) the College of Fine and Applied Art was one of the three main colleges. Possible subjects of study were Graphics, Textiles, Sculpture and History of Art. In the early 1970's a department of Industrial Design was added.

At the present time, in 1987, the period when this research began, the College of Fine and Applied Art is still expanding. An offset printing press has been imported to enable the Printing Department link what had previously been a theoretical course only to practical application. Psychology, philosophy and art

history has recently been introduced to all students.

2.2.2 Artists and Designers' Role in Contemporary Sudanese Society

Graduates of the College are employed as practicing artists and designers in many aspects of contemporary life in the urban Sudan. Graphic Designers, Printers and Calligraphers trained at the College are leading practitioners in the fields of general printing, publishing and packaging design. The Ceramic and Industrial Designers' role in light industry is well established. The Textile industry is dependent on College trained Textile Designers' for fabric designs. The Textile Designers are preparing and producing work to highly professional industrialised standards. The majority of Painters and Sculptors teach art in general education.

2.2.3 College objectives

The objectives for Art and Design Education in the Sudan as stated by the College Committee included in the College of Fine and Applied Art

prospectus in 1975 are :

- a) To prepare and train specialists in the field of art and design in such a way that they will be able to make a professional contribution, as designers, teachers and visual artists, to Sudanese modern society (This is considered to be one of the most important objectives of the college).
- b) To research the cultural heritage and popular arts of the Sudan and to compare their similarities and differences with those of neighbouring countries.
- c) To encourage and promote the application of Sudanese traditional art forms and aesthetic values in contemporary art and design forms.
- d) To increase the general public's awareness and appreciation of contemporary Sudanese art and design forms.

To enable these objectives to be achieved the College has established close links with industry and other neighbouring educational institutions.

2.2.4 College Staff

The first group of students graduated from the College of Fine and Applied Art in the early 1950s under the supervision of European members of staff. Many of them subsequently became lecturers at the College. They worked under European supervision at the beginning of their teaching careers.

The minimum qualification to teach at the College is an upper second class BA degree. A 1 teaching or industrial experience is considered an important qualification also. Twenty seven staff members out of a total of thirty six have been trained at post-graduate level in Western European art institutions and as a consequence Western European influences on their art and design educational practice is strong.

2.2.5 Curriculum Structure

The College curriculum is planned, revised and carried out by College staff. Staff update curricula regularly. The intention is that revision should be continuously carried out in the light of new techniques or equipment.

Departmental contact with appropriate industries and educational institutions influences curriculum planning also. Visiting lecturers' and external examiners' comments and suggestions are studied carefully and adopted if they are judged appropriate and if they do not conflict with the overall policy of the College. The procedure is that suggested revisions should be presented to the College Staff Committee for discussion and approval. Although curriculum development is considered a departmental matter changes have to be validated at College Committee level.

2.2.6 Specialist Art and Design Subjects

The curriculum of the College as a whole is divided into subjects studied within different College Departments. General studies for all students are organised and taught in the General Studies Department.

Specialist subjects feature tutorials and practical work related to particular art or design subjects.

Drawing, General Studies and Field Trips are

compulsory and must be attended by all students throughout their entire course. In Drawing, students study the human figure, draw objects and still life and are taught theories of perspective, form, light and shade. General Studies includes History of Art, Psychology, Philosophy, Aesthetics and Research Methodologies. All these feature Western European techniques, ideas and teaching materials. History of Art deals with Western European painters, sculptors, periods and schools exclusively. Sudanese, African and Islamic arts are not included in the General Studies curriculum.

2.2.7 Students

Students joining the College of Fine and Applied Art in Khartoum come from all the provinces of the Sudan although there are very few from the South. The staff have observed that the imagery in the students' work from different regions appears to be influenced by the African traditions that predominate in West Africa and parts of the Sudan and the Islamic art forms which predominate in the North and East of the Sudan.

2.2.8 Students' Previous Experience of Art and Design Education

General Education in the Sudan is of twelve years duration and begins at age seven. The first six years are spent in elementary schools. Pupils are then transferred to intermediate schools for three years, after which they proceed to secondary education. After completion of three years of secondary education students are entered for the Sudan General Certificate of Education which is assessed locally. It is of an 'O' level standard and is a required qualification for entrance to university level education.

In elementary and intermediate education art is not included in the curriculum. Pupils are asked to draw illustrations for Biology, Science, History and Geography lessons. Most pupils usually trace these illustrations from textbooks into their notebooks. Some of the luckier pupils who have been to nursery schools and kindergartens before attending elementary education have some painting and drawing experience.

During secondary education art is an optional subject taken by three kinds of students. First, those who are considering taking further art training in higher education. Second, those who take it as one of a number of subjects for their final General Certificate of Education examinations. Third, those who are good at art but not interested in further art training. They go on to study science subjects, medicine, or architecture in higher education.

The art teachers' role in secondary schools is to prepare students to pursue careers in art and design and for their final General Certificate of Education examinations. The examinations assess students' abilities in drawing objects and plants and painting imaginative compositions. Interested students, together with their teachers, sometimes take part in arts-related school and local community activities such as folk-lore celebrations, theatre and exhibitions. Art teachers are free to choose the objects, plants and painting and drawing subjects from the local environment, and in this way some manage to introduce students to local art forms.

2.2.9 College Policy on "Africanization"

Developing Awareness of Sudanese Indigenous Heritage

It is College policy that art and design students with only a limited knowledge of the art forms of their locality should learn about the art forms of other provinces with a view to this broadening their artistic understanding. The development of students' awareness of cultural diversity in the Sudan is encouraged. This learning process takes place within the college curriculum in four ways:

Firstly, at a general level, a basic picture-making course is designed within the foundation year with the aim of increasing students' awareness of differences between the art forms, artifacts and material culture of their home environments. Students introduce each other to the traditional art forms and design motifs from their localities. They are directed to utilise these as a source of inspiration for contemporary art and design.

Secondly, students make frequent visits to the

national museum which is located in the capital Khartoum, within easy reach of the College. These visits are conducted and supervised by members of staff. Another useful source of information and inspiration is the Ethnographic Museum.

Thirdly, the students are encouraged to visit the capital's traditional handicraft markets which act as continuous changing exhibitions of indigenous art forms.

Fourthly, another learning process with regard to cultural awareness takes place during five field trips. These trips are considered an essential part of the College curriculum. They take place once every academic year and each student must undertake at least four trips, and attend and engage in fieldwork.

Field Trips

Field trips last for a period of three to four weeks. They are designed to give students an opportunity to study the material culture of

different provinces in depth. Students live with the local people, participate in their social life and watch them make artifacts. Local crafts, techniques, design forms, representations, patterns and motifs are studied. Research into design forms, techniques, materials and folk-lore is conducted. The College's Academic Board has conducted a study of different provinces with a view to students gaining the maximum possible educational knowledge and experience from field trips. The programme includes visits to the Red Sea, Darfur, Northern, Kordofan and the Blue Nile provinces. No visits to the Southern provinces of the Sudan have been possible however for economic, security and political reasons.

The staff consider that each of the five provinces selected to have a distinctive cultural identity. While the students are researching the provinces' visual arts, folk-lore and material culture the accompanying members of staff are expected to collect samples of artifacts for the College collection. This collection is used as a resource for students and others unable to carry out visits in person.

2.3.0 CURRICULUM IN THE DEPARTMENT OF GRAPHIC DESIGN

A British graphic designer, van der Lem (1984), has defined the discipline of graphic design as

i) the techniques of production and design involved in printing and publishing and ii) design and decoration that involves typographic elements; the production of pictures, diagrams, etc. in association with text. (Van der Lem, 1984, p. 19).

The Council for National Academic Awards (CNAA) directory (1986/87) definition of Graphic Design is:

Graphic design is mainly concerned with visual communication, particularly the techniques and disciplines that have to do with design and print. (CNAA, 1986/87, p. 54).

It is generally agreed that graphic design is a rich and extremely complex subject and that its forms play a significant part in literacy, political, social and educational campaigns worldwide. Graphic design as a specialist discipline supplies information to the mass-media in the contemporary world. Graphic designers are responsible for coding information and ideas in an attractive way. As Aynsley (1987) has pointed

out, the intention of graphic designers is, most often, to render a message widely accessible in a systematic way and in public language. They make decisions which determine the visual appearance of objects and, in modern industrialised societies, almost every aspect of every day life passes through a graphic designer's hands or under his/her direction. McFee and Degge (1977,80) and Pattemore (1984), pointed out that the forms selected by designers in sorting and organizing visual information always depend on their cultural background and that of the people for whom they are designing.

Graphic design was introduced into Africa by Europeans in the nineteenth century, together with Western art education. It is a relatively new subject in African Colleges of Art. It is practised and produced by a small number of contemporary graphic designers. According to Jules-Rosette (1984) an exchange trade in traditional crafts including pottery, baskets, mats, cloth and wood carvings had been highly developed by the nineteenth century. However industrial change has made the movement towards

commercialism an important step for traditional African artists. Graphic design as defined by the CNAA previously has never been practised in traditional African societies.

In the Sudan it is in evidence in urban areas in response to industrial development and modernization. It is not practised by traditional Sudanese artists because environmental settings lack the necessary ingredients of industrialization. Bridging the gap between art in traditional and modern settings is however an important developmental task. This particular aim is spelt out in two of the College objectives stated in (2.2.3, p.42).

The Graphic Design Department at Khartoum College of Fine and Applied Art has five members of staff; an Associate Professor, two Senior Lecturers and two Demonstrators. They teach General Graphic Design, Illustration, Packaging Design and Photography. They were all undergraduate students at the College after which they undertook post-graduate training in the United Kingdom, the United States of America and

Germany respectively.

Their influence on the development of Graphic Design in the Sudan is nationwide. They act on a consultancy basis for the Government and for industry, printing and publishing. They run evening courses for personnel employed in those industries who have not had the opportunity to engage in formal art and design study. They conduct updating and refresher courses for graduates with managerial and business qualifications on both a part and full-time basis in Graphics, Calligraphy and Printing Departments.

Private commercial commissions of their own work are common, but public exhibitions of graphic design are rarely held in the Sudan. Instead, they submit work to national and international fine art exhibitions and competitions.

2.3.1 Graphic Design Students

The minimum qualifications required by students to compete for a place on the graphic design course are a sixty five per cent final score in

Foundation Course examinations at the College in both Basic Design and Drawing. Students who have successfully completed the foundation year and received the necessary entry qualifications are interviewed in person and their portfolios examined. The Department is only equipped to accept between eight and eleven students annually.

2.3.2 Programme of Study

The course duration is three years after the foundation year. In the first two years students study Book and Magazine Design and Illustration, Poster Design, Packaging Design and Technology, Emblem Design, Design Principles, Lettering and Calligraphy, Photography, Printing and Typography. Technical Drawing and Marketing are taken as supporting subjects.

During the second year students visit printing and publishing houses, design offices and packaging corporations to learn about the practical side of the profession. Arrangements are made for these industries to accommodate students working on their premises for about four

weeks. Students design and prepare art work for printing under the supervision of professional graphic designers. Working with professionals in a practical environment introduces students to the role of graphics in the daily life of modern Sudanese industrialized society. Industrial placements usually occur during Summer vacations.

Work in the final year is focused around the practical application of a complete graphic design project of the students' choice. They design all the graphics for an existing or an imaginary Governmental department or private firm of their choice. They begin by designing an emblem and a logo-type which is considered the most important element in the project as a whole. The finished project should demonstrate an understanding and practical application of all subjects studied throughout the course. In 1970 Guyatt, a British graphic designer and art educator who was external examiner suggested that more 'realistic' projects might be set at the advanced stages in which students were required to redesign existing items which were poorly designed e.g. packaging, posters, emblems,

illustrative material and leaflets. In 1982 this suggestion was adopted not only by the Graphic Design Department but also by all the specialist departments in the college. In the same year the Graphic Design Department announced a major change in its curriculum: i) graphic design students were directed to pay more attention to the design of artifacts and to the representations, motifs and patterns applied to their surfaces during their annual field trips and ii) they were required to utilise these representations, motifs and patterns in their book illustrations and poster designs. This directive was a response to the new College objective (c) on 'Africanization' mentioned on page 43.

In conclusion, issues and problems of African art education were explored in this chapter with particular reference to the situation in the Sudan. The next chapter focusses on the design of the research and identifies the tools developed for the surveys.

CHAPTER 3

DESIGN OF RESEARCH

3.1.0 Plan of Action

The general aim for the research as a whole was to establish a basis for curriculum planning and reform in Art Education in general and Graphic Design in particular which reflected the Sudanese nation's indigenous cultural heritage. The research approach that was adopted was emergent rather than preordinate (Rubin, 1982) in that the proposed design allowed for expansion, diversification and revision as time went on and there was no attempt to test a priori hypotheses (Stake, 1975). The plan of action developed for the purposes of achieving the research aim had the following components:

- a) Review of literature on African indigenous artifacts and their surface designs.
- b) Identification of cultural regions of the Sudan and their indigenous artifacts.
- c) Survey and analysis of surface design characteristics of indigenous artifacts from different cultural regions.

- d) Documentation of i) representations, ii) motifs and iii) patterns on a representative sample of artifacts from different cultural regions.
- e) Construction of a taxonomy of representations, motifs and patterns found in the surface designs.
- f) Classification of regional representations, motifs and patterns and comparison of regional art styles.
- g) Survey of contemporary graphic design work produced by students at Khartoum College between 1968 and 1988.
- h) Analysis of educational implications arising out of the research and application of findings to curriculum planning in art education.

Given that the research problem necessitated enquiry into both indigenous craft forms and the work of contemporary graphic design graduates, the research strategy was designed and implemented in two parts. Part A focused on the documentation and classification of surface designs on Sudanese artifacts. The content and

form of the research in part B emerged from the analysis of findings in part A. It took the form of a survey and analysis of representations, motifs and patterns in graphic design students' work located in the college archives.

The remainder of this chapter discusses i) the relevance of anthropology as a research base; ii) the relationship between art education and culture and iii) the use of interviews as a research tool in part A of the research. Following this, it reports the findings of a review of anthropological studies of surface design characteristics of indigenous artifacts which was carried out before the documentation and classification of artifacts took place.

3.2.0 Relevance of Anthropology as a Research Base

Anthropological theory and method was considered an appropriate research base for part A of this study because:

- a) The relationship between art and culture was central to the study as a whole,
- b) anthropologists had developed research

methods which they utilised as a means of treating and studying artifacts and
c) they had documented, classified and compared surface design characteristics of artifacts.

3.2.1 Relationship between Art and Culture

While the relationship between art and culture has only recently become a major interest of art educators such as (McFee ,1966, Beittel, Lewis, Stewart and Wilson, 1972, Alexander, 1981, Chalmers, 1981,82 and Ettinger, 1983,1987), it has always been a particular concern of anthropologists. Anthropologists such as Pattemore (1974) are interested in the way art reflects the quality of a people's life-style together with their beliefs, values and environments. They say that works of art provide a map of the society being studied (Fischer, 1971), and that they have the power to reflect the characteristics of a particular period in time (Mukaroviski, 1976). They say that art is a fundamental feature and an important part of the identity of any given culture. Beals (1977), for

example, suggested that it is both a product of culture and influenced by it.

It appears that one major reason anthropologists study art is because they are interested in culture change and cultural similarities and differences (Kaplan, 1971). The study of art styles and the effect of techniques upon art styles contributes to this. They study art also to assist them seek out, study and attempt to explain cultural patterns in human behavior. Anthropologists seek to develop theories concerning cultural patterns. In doing so they attempt to document and describe cultural traditions before they vanish, and to determine how they change, how they relate to each other, or how they are learned. They claimed that the objects people create and use are one of the key factors that help to explain cultural patterns (Edgerton, 1974).

Both anthropologists and archaeologists study the material culture of particular societies because it provides them with evidence from which they can trace a given societies' historical and

cultural diffusion. Art educators, on the other hand, study material culture because they need to know a great deal more about the function of art in culture as it transmits values and attitudes and to identify cultural meanings for the purposes of designing, implementing and evaluating curricula (McFee and Degge, 1980). It was this researcher's aim to study surface design characteristics of artifacts in order to establish regional art styles and to develop a working taxonomy. The intention was to utilise the findings about regional art styles and the taxonomy as a basis for curriculum planning and reform.

3.2.2 Selection of Interviews as a Research Tool

Fieldwork is a fundamental research tool anthropologists use to study any given society. It necessitates the researcher carrying out studies in natural settings. Anthropologists live within the society they are studying and compile data from in depth research. Their fieldwork reports include a considerable amount of information about the societies they are studying. One of their key research tools is the

interview. The research tool adopted for part A of this study was semi-structured interviews.

According to (Guba and Lincoln, 1985) semi-structured interviews are those in which the problem is defined and the questions are formulated by the researcher in advance. The interviewees are expected to answer in terms of the defined problem and a researcher's framework. Prior to formulating any interview questions for part A, this researcher consulted anthropologists in the United Kingdom about how to conduct interviews with material culture experts in the Sudan. The discussions assisted in establishing a framework by means of which appropriate questions could be formulated.

3.2.3 Previous Studies

Interviews were chosen as a research tool because at the time the research was carried out there was very little recorded information available about material culture or indigenous artifacts in the Sudan, although many such artifacts were still in use. Moreover the academic disciplines of art history, archaeology and anthropology were in

their infancy. Given this lack of recorded information about Sudanese material culture and of research into the surface design characteristics of indigenous artifacts it was recognised that the plan of action would necessitate relying on oral evidence. This would have to be obtained from the very few art educators and collectors who were located in the capital city; and also that the necessary information would have to be obtained through personal interviews. Since the work of recording and classifying Sudanese indigenous craft items had scarcely begun, collaboration with the educators was essential for the purposes of identifying, studying and documenting the few indigenous artifacts with surface designs which had already been collected and were housed in their private collections and museums.

3.3.0 Review of Research into Surface Designs

Prior to undertaking the interviews a review of anthropological research was conducted with the aim of establishing a basis for the observation and analysis of artifacts. The review identified a number of reports which focused on the surface

design of artifacts in African and other societies. These reports were useful in that i) they established that the starting point for studying an artifact was its physical body (Pearce, 1986), ii) they suggested ways and means of developing a taxonomy and iii) they identified key concepts and terms which could be utilised to distinguish surface design characteristics.

3.3.1 Surface Design Characteristics of African Artifacts

The identification, classification and interpretation of motifs was the concern of several studies. Glover's (1969) research into Adinkra textile patterns from Ghana, for example, concentrated on motifs and their symbolism.

Trowell (1960) found that artifacts of certain African tribes were decorated with patterns in which one or more motifs were repeated in a rhythmical manner. Or, if motifs were not repeated, they were in harmony with the decorated form. These patterns were often geometrical. When they included representational forms of humans,

animals or flowers these were drawn in what she called a decorative rather than a photographic manner.

The patterns were either carved, engraved, stamped, woven in the basic structure, embroidered or painted on the objects. Trowell's research (1960) focused on the fundamental possibilities and limitations technique imposed on applied design and included a description of selected pattern forms. Her study documented human and animal representations on artifacts made by tribal groups living in parts of the West Coast of Africa and geometrical patterns on artifacts from the Congo. Trowell claimed that these artifacts had been selected for study because certain motifs were more developed in particular geographical areas than others. She studied wall paintings, reed and palm mats, textile designs, basketry, beadwork, leather decoration, body painting, calabash patterns, wood carving and engraving, metal work and pottery design.

In this same study Trowell identified three

different kinds of African pattern forms. She named them a) textural, b) representational and c) geometrical. She noted that surface texture was obtained by applying small motifs over large areas or by alternating zones of plain and textured areas. Representational forms were not applied as decoration only but recorded a pictorial statement of an idea. Animal forms were often reduced to geometrical symbols through copying and stylization and were elongated, compressed or distorted to fit the shape of the area allotted to them. Geometrical patterns were built up from identical or contrasting motifs. Most of the motifs were borrowed from neighbouring groups and had localised names (Trowell, 1960).

Hodder (1982) studied African design motifs found on skin, dress, leather bags, ear-rings, necklaces, pots, milk containers and forehead bands of a range of African tribes. He used the term 'elementary units' to refer to motifs which were used to build up patterns. He also used the term 'zoned' borders to describe horizontal lines of decoration alternating with blank areas around

the edges of the artifacts. Also he used the term 'floating' designs when designs and motifs were placed haphazardly. Hodder also specified two categories in identifying African designs, a) 'simple' or b) 'pivoted'. His 'simple' category included either repetitive designs (AAAA), or alternative designs (ABAB). His 'pivoted' category was either balanced (ABA, ABA' and ABCBA) or unbalanced (ABAA and ABCAB). Hodder claimed that African craftsmen were not interested in attempting new designs and ideas. However if a potter in a community changed the details of his decoration in accordance with the requirements of a particular customer, all the remaining potters within the community tended to adopt new designs and motifs.

Vansina (1984) studied motifs on artifacts from African countries South of the Sahara. His findings were that not all the motifs 'made statements'. They were usually applied for decorative reasons only and the function of the decoration was to provide a frame to enclose or bound a space. He noted that motifs remained unchanged for very long periods of time and were

spread over large geographical areas. North African decorative art forms ignored volume and included arabesques, geometrical figures, stylized leaves and Arabic script. South of the Sahara decorative art expressed volume and solids and included the human figure, some animal representations and almost no plant motifs (Vansina, 1984).

Fischer (1971) studied the design elements of egalitarian and hierarchical societies in Africa and their meanings. His findings were that egalitarian societies produced designs which consisted of repeated simple elements arranged on artifacts in such a way that large amounts of space were left blank. Their designs were symmetrical and without enclosures. On the other hand, hierarchical societies produced designs which integrated a number of dissimilar elements and left very little empty space on the artifacts. Their designs were asymmetrical and enclosed. Fischer (1971) also interpreted the egalitarian and hierarchical societies' design styles and claimed that similarities in social conditions and relative order of development

played a major part in their art styles.

In her study of the art of Black Africa, Leuzinger (1972) stated that Black Africans restricted themselves to a relatively small range of forms and geometric patterns. She commented that it was very difficult to say whether or not their motifs symbolized anything. She stated that plant motifs were uncommon in African countries South of the Sahara; human motifs had undisputed priority and animal motifs were less frequent.

3.3.2 Surface Design Characteristics of non-African Artifacts

Enciso (1947) studied Ancient Mexican clay stamps and noted that the ancient Mexican decorative heritage served as an inspiration for modern artists. He divided ancient Mexican clay stamp motifs into four categories, i) geometric, ii) natural forms, iii) the human body and iv) artificial forms. Each category was sub-divided into elements, ie., circles, flowers, dogs, hands, etc. Anderson's (1979) study of traditional art focused on the sand story figures of the Walbiri of Central Australia. He claimed

that the colourful geometric patterns that decorated their pots and baskets did not mean anything, they were simply decorative, and said that the important search for and explanation of patterns is a job that has hardly begun.

In a study of Moche art of ancient Peru, Donnan (1976) photographed individual artifacts from all angles. The sample he studied included all the artifacts available in museums, private collections and published material in the country. He studied, documented and described the surface designs on more than 7000 artifacts. His method was first to collect all the available information concerning the artifacts, secondly, to categorize scenes depicted on artifacts and, thirdly, to develop sub-categories in accordance with their subject matter. Next he made fine line drawings of the surface designs from the photographs. Donnan's research concentrated on the size and scale of the designs, motifs, images and scenes depicted on the surface designs, perspective, depth of field and, finally, variations seen in the same design category. He also classified the very limited number of items

represented in Moche art.

Frankel (1978) studied the white painted pottery ware decoration of Cyprus in the Middle Bronze age. His study focused on the distribution of motifs and their presence/absence and their proportional occurrence on pots in eight geographical regions of Cyprus. He chose nine motifs, or sets of motifs, to determine distribution of decorative styles. Frankel's findings were that the presence/absence of motifs showed the neighbourhood influences, and the proportional occurrence showed commonly used motifs.

Korn (1978) researched visual systems in the paintings of the Abelam of Papua New Guinea. Her study included about five hundred panels of the interior chambers of large, pointed men's houses, documented in the form of photographs. Korn classified ninety-nine motifs and gave them numbers not names. Her findings were that the Abelam paintings included a small number of motifs and that there were relationships linking many pairs of different motifs. Their external

relationships were 'point-to-point', either inward or outward. Their internal relationships were 'side-to-side' in which case motifs were arranged inside the main large motifs.

The surface designs on the artifacts produced by the North-West Coast Indians were the focus of several studies. Holm (1967) described the motifs they produced using terms such as 'round-cornered rectangle' and 'ovoid'. Holm and Reid (1975) described the designs of Northwest Coast Indians as highly abstracted and representational. They used the terms 'ovoid' and 'U' shape in identifying Indian design elements and motifs. The same terminology was followed by Stewart (1979) in her study of motifs on North-West Coast Indian household and ceremonial items and contemporary silkscreen designs. She described the basic components of the design motifs of six ethnographically distinct groups. Another enquiry into the symbolic significance of design motifs in the American Indian societies was carried out by Spinden (1931). His concern was with the interpretation of the designs and their meanings to the Indians concerned. His findings were that

their graphic art was rich in both decorative quality and symbolism, and that most of their motifs had decorative names.

Navaho Indian sand paintings were studied by Armer (1931) and Newcombe (1931) who found that their motifs were highly stylistic and symbolic. Their approach to studying the Navaho Indian paintings, their applications and symbolic meaning was descriptive.

Kroeber (1902) studied and described the Arapaho Indian decorations on artifacts and identified distinctive elements such as lines, triangles and rectangles. He found that each of these elements had a variety of different meanings. Davidson (1971) found that the geometric motifs in the surface designs on the artifacts from Central Australia had many different meanings.

Sloan and LaFarge's (1970) research focused on the paintings, basketry, weaving, beadwork, pottery, jewelry and sculpture of American Indians. They described the motifs and designs on these artifacts and claimed that the common

factor in American Indian designs was the repetition of a few motifs in stripes, around a centre or against a plain or striped background.

3.4.0 Summary

The researcher consulted the academic discipline of anthropology for the design of research in Part A. This was because anthropological studies emphasised the relation between art and culture and because anthropologists were interested in the way art reflects a peoples' way of life, values, environment and cultural identity. Both the study of material culture and cross-cultural comparisons were central to the research in question and were fundamental anthropological concerns. The research tool selected to collect the data for part A was semi-structured interviews. Anthropologists, archaeologists, material culture and museum experts and art educators in the Sudan were identified as interviewees.

Classification and comparison of indigenous surface design characteristics and art styles on artifacts from different regions was an intended

outcome of this part of the research. Given that the identity of the cultural regions was unclear, it was recognised that the first interview task would be that of establishing and naming Sudanese cultural regions.

Previous anthropological studies into material culture and surface design characteristics of artifacts were consulted for the purposes of i) establishing a means of developing a taxonomy and ii) identifying key concepts and terms for classification. Enciso (1947), Trowell (1960), Sloan and LaFarge (1970), Donnan (1976), Frankel (1978), Korn (1978) and Hodder (1982), had documented, studied and categorized representations, motifs, patterns and designs on artifacts produced by African and non-African societies and tribes. Their studies were found to be appropriate and useful for the design of this research in that some of their classification terms were utilised in the design of the taxonomy.

It was recognised that interviews with educators, which were essential to this part of the enquiry,

would have to be carried out in the Sudan. It was anticipated that the study and documentation of surface designs on indigenous artifacts would be carried out at the same time as the interviews. Following this the researcher would return to the United Kingdom and classify and compare representations, motifs and patterns.

After the review of previous research literature had been completed the decision was taken that the observation, analysis and classification of surface designs on artifacts would focus on representations, motifs and patterns. This decision was taken because it was the researcher's intention to identify and name categories that had particular significance for the discipline of graphic design. The terms 'representations', 'motifs' and 'patterns' were selected because i) they appeared to be well established distinctive elements in the anthropological research literature and ii) in the researcher's view, the discipline of graphic design deals essentially with these art elements.

The following questions were prepared in advance

for the interviews:

- a) What are the distinctive characteristics of
 - i) representations, ii) motifs and iii) patterns on the indigenous artifacts found in the various regions of the Sudan?

- b) Which are the most dominant
 - i) representations, ii) motifs and iii) patterns in the surface designs in each region? And, how frequently do they appear?

- c) What are the similarities and differences between
 - i) representations, ii) motifs and iii) patterns in the surface designs from the various regions?

- d) Can generalizations be made about the distinctive characteristics of
 - i) representations, ii) motifs and iii) patterns in the surface designs on artifacts from the various regions?

The assumption underlying the design of this part of the research was that a survey and analysis of

Sudanese indigenous surface design characteristics could lead to generalizations about the distinctive characteristics of:

i) representations, ii) motifs, iii) patterns and iv) regional art styles. Also that a taxonomy might provide a visual data base which would be of use for i) art curriculum planning at Khartoum College and ii) museum studies.

The next chapter reports on the implementation of interviews carried out for the purposes of i) identifying cultural regions of the Sudan and their traditional craft forms and ii) selecting a sample of artifacts for study.

CHAPTER 4

IDENTIFICATION OF CULTURAL REGIONS AND SELECTION OF ARTIFACTS

This part of the research was carried out during a three month field-trip to the Sudan. It necessitated the researcher planning a programme of visits to higher education institutions in Khartoum for the purposes of i) interviewing acknowledged experts in the fields of Archaeology, Anthropology, Material Culture, Museum and Art Education and ii) locating and documenting representations, motifs and patterns on the surface designs of artifacts.

4.1.0 Data Sources for Indigenous Artifacts

The most important data sources for information about Sudanese cultural regions and indigenous crafts were found to be:

- a) The Institute of Afro-Asian Studies, Khartoum,
- b) The University of Khartoum's records and collections of artifacts especially those in the Department of Archaeology and Antiquities.
- c) Khartoum College of Art.

- d) The Sudanese Folklore Centre, Khartoum North.
- e) The Ethnographic Museum, Khartoum.
- f) The Sudan National Museum, Khartoum.

4.1.1 Authorities on Material Culture

The authorities interviewed at these institutions included:

- a) A material culture lecturer at the Institute of Afro-Asian Studies.
- b) A professor of Archaeology and Antiquities at the University of Khartoum.
- c) An anthropologist and a museum expert from the Sudanese Folklore Centre, the Sudan National and Ethnographic Museums respectively.
- d) A free lance folklore researcher and artifact collector who worked on a commission basis for the Sudanese Folklore Centre.
- e) An artifact collector who owned a private museum.
- f) Eleven senior art lecturers and leading

artists who were known to be interested in Sudanese indigenous arts and crafts with reference to surface design characteristics. They represented all the cultural regions of the Sudan.

4.1.2 Design of Interviews

The aim of the interviews were threefold. Firstly, to identify cultural regions; secondly, to identify a sample of indigenous artifacts from the different cultural regions and thirdly, to elicit information about their surface designs, materials and functions.

The interviews were conducted informally. Two sets of questions of a general and specific nature had been prepared to elicit the interviewees' responses to the main issues. The first set of general questions were directed to obtaining their opinions and ideas concerning the division of the Sudan into geographical, historical or cultural regions (The researcher's interest here was in establishing whether or not the Sudan could be divided into cultural regions and whether these cultural regions were the same

as the seven geographical regions identified by the Sudanese government in 1988. The collective opinion of all these experts was considered essential to the success of the investigation because their different academic viewpoints contribute to the broad spectrum of knowledge and ideas that are necessary for art education purposes and needs.

A second set of questions was designed specifically for experts in each of the previously mentioned areas. The material culture experts were asked firstly whether it was possible to classify Sudanese material culture regionally, and if so, how this should be done. Secondly, they were asked to supply information about the materials, techniques and surface design characteristics of indigenous crafts items. The archaeologist was asked to supply information about ancient cultural kingdoms, their crafts and artifacts and representations, motifs and patterns. Museum experts and anthropologists were asked to identify and verify the authenticity of Sudanese indigenous artifacts, their cultural origin, the materials

used in making them and their social function. The artists and art educators were asked to supply information about the surface design characteristics of artifacts in the different regions. The folklore-researchers and artifact collectors were asked to sort out the artifacts' historical origins, their surface design, the materials they were made of and whether or not they were still in use in the different cultural regions.

4.1.3 General Interview Questions

The following general questions which had been prepared in advance were presented to all the interviewees:

- a) Please name the different regions of the Sudan?
- b) Are the existing named geographical regions the same as cultural regions?
- c) Do you yourself distinguish regions according to geographical, historical or cultural factors, or a combination of all these?

A subsidiary question related to (c) was:

Dr. Broukamper, a German Ethnologist sponsored by the Sudan Government in 1988 to study the possibility of dividing the Sudan into cultural regions, divided the country as follows: Northern, Western, Eastern, Southern, Central, Nuba and Angassana Mountains. Do you agree? Also, Dr. Broukamper considered the Nuba and the Angassana tribes to have distinctive cultural characteristics. Do you agree?

- d) Do the regions you named have indigenous arts and crafts? If so, what are they?
- e) Do Sudanese arts and crafts differ from one region to another?
- f) Do they have any distinctive surface design characteristics (ie. with reference to representations, motifs and patterns?) If so, please identify what they are.

4.1.4 Specific Questions

The following questions were presented to specialist groups of experts:

Material culture experts' questions

- a) What are the most commonly produced indigenous crafts in each of the regions of the Sudan?
- b) Are they still in use?
- c) Do the materials and techniques vary from one region to another? If so, how?
- d) Do they exhibit any distinctive surface design characteristics?

Archaeologists' questions

- a) Name the most important ancient cultural kingdoms of the Sudan?
- b) Do they constitute a considered basis for dividing the Sudan into cultural regions and conducting research into indigenous crafts?
- c) What were the most commonly practiced indigenous crafts of each of these kingdoms?
- d) Did the indigenous crafts of these kingdoms exhibit distinctive graphic characteristics? If so, what were they?

Museum experts' questions

- a) Where do the artifacts in your collection come from?
- b) How can you be sure of their authenticity?
- c) Do the materials of the artifacts used for the same function in the Sudan differ from one region to another? If so, what influences the choice of materials?

Folklore-researchers' questions

- a) Do each of the regions you have identified have artifacts which exhibit distinctive surface design characteristics?
- b) What are these artifacts?
- c) Do the surface designs of the artifacts reflect any regional influences?
- d) Are there distinctive representations, motifs and patterns in the surface designs that are common to all or

several of the regions? If so, what are they?

Art educators' questions

- a) Do the artifacts of the areas you visit during your teaching have distinctive surface design characteristics? What are they? What are the artifacts on which they appear?
- b) Do these characteristics differ from one region to another?

4.1.5 Implementation of Interviews

Nine individual and group interviews were conducted. The first interview was with a material culture expert and lecturer in the Folklore Department at the Institute of Afro-Asian Studies. The first meeting took place in his office. The researcher explained the purpose of the meeting and discussed the research objectives. This first interview lasted about half an hour. Another appointment for a longer session was made. This interview lasted for a little over one hour. All the interview questions

outlined previously were asked and appropriate answers obtained.

The second interview was with the Professor of the Department of Archaeology and Antiquities in the University of Khartoum. Two meetings were conducted in his office. The first introductory meeting was short and only lasted half an hour. Its purpose was to supply the Professor with a general idea of the research problem. He showed great interest and suggested a longer meeting when specific questions could be tackled. An appointment was made to see him in his office a week later.

The interview took place as planned and the interviewee's answers were constructive and led to two further references being consulted. The researcher spent three hours in his office.

Following this the researcher visited the Sudan National Museum to talk to museum experts. The Director of the Museum and Antiquities Department was unavailable, so he was directed to a senior anthropologist working at the museum. The first

meeting took about half an hour and the prepared list of questions was presented.

The second meeting, three days later, took about an hour by which time all the prepared questions had been answered. At the end of the interview the researcher was introduced to the museum keeper who planned a programme of visits to all the museums. He wrote a letter to the Ethnographic Museum to obtain permission for the researcher to study artifacts. This procedure was helpful since, at the time, all the museums were closed for redisplay.

The fourth interview was conducted jointly with an anthropologist and two of the Ethnographic Museum experts. Dr. Broukamper's report was the subject of a long debate and their comments on it were collected. The prepared questions were discussed and answered.

The interviewees stressed a need for this kind of research which they thought would be of great help to them in documenting surface design of museum artifacts. They also claimed that such

studies were important for museum and art education and that drawings and documentation of surface design imagery prepared by this researcher should be maintained for museum studies and art education research and also for curriculum planning (Interview 4,1988,p20). An hour was spent with the interviewees in their office.

The anthropologist and the museum expert at the Folklore Centre were interviewed next in their offices. Three interviews were planned and carried out. Each took over three hours and the prepared list of questions was discussed. The interviews and documentation of artifacts took place simultaneously. The interviewees emphasized that photographic and illustrative records would be of great use to the Centre's archives and as part of their artifact documentation scheme which was currently in progress (Interview 5,1988,p23).

A freelance folklore-researcher and artifact collector was the sixth interviewee. He was interviewed twice. The first time in his office, during which the general outlines and purposes of

the research were discussed. This interview took about half an hour and led to another meeting. The second interview which lasted over three hours was held at his house. Questions, discussion and debate about traditional crafts and artifacts were exchanged. At the end of the interview some of the artifacts were observed and documented by means of drawing.

The seventh interview was with an actor and play director who collected artifacts in his spare time. His knowledge extended from the origins of artifacts and their function to the materials used in making them. Visits to his private museum were arranged on two evenings. The prepared questions were asked and artifacts were recorded. Each visit took a little over one hour.

Two lecturers at the College of Art were the respondents for the eighth interview. They were interviewed in the Dean's office at the College. The main topic discussed was the cultural influences affecting the students' work at the beginning of their college studies. Questions concerning College visits to the different

regions of the Sudan, surface design of artifacts and their effect on students' graphic imagery were posed to both interviewees. This interview took about one and a half hours.

Frequent informal meetings, discussions and consultations took place also at the College of Art. The interviewees were nine senior lecturers in the different departments of the College. These meetings varied in both length of time and numbers of questions asked.

4.1.6 Findings about Cultural Regions

All interviewees were asked whether or not they agreed with Dr. Broukamper's basis for dividing the Sudan into cultural regions. At first their answers revealed that they disagreed. The differences of opinion centred on the question of whether or not the named geographical regions were exactly the same as the cultural regions.

The experts readily agreed that the Sudan could be divided into two main cultural regions, Northern and Southern Sudan, in accordance with the people's origins, languages and beliefs. The

difficulties of drawing up a larger number of authentic cultural regions were attributed to the fact that many cultural groups actually occupy lands in-between geographical regions and, that some tribes have members in more than one geographical region.

The archaeologist emphasised the fact that ancient cultural kingdoms are of great importance in the study of Sudanese traditional arts. He said that these kingdoms had distinctive cultural characteristics which influenced their traditional arts. He wanted to classify cultural regions from this point of view (Interview 2, 1988, p12).

The Museum experts pointed out that their ethnographic map of the Sudan had been drawn up on a tribal basis and that no cultural borders had been identified. This was the correct view in their opinion but the new policy for the Ethnographic Museum stated that the map must be organised on a cultural basis. They had named the seven cultural regions identified by Dr. Broukamper in 1988 as Northern, Western, Eastern,

Southern and Central Sudanese regions together with the Nuba and the Angassana Mountain regions. These regional divisions were related to the distribution of the main tribes found in each part of the Sudan, and the Nuba and Angassana tribes had been singled out as having distinctive cultural characteristics. The report and Dr. Broukamper's findings had very recently been adopted by the Department of Museums and Antiquity.

The point of view of the experts from the College of Fine and Applied Art was that they were especially concerned with distinctive cultural and traditional art characteristics of the specific regions that the College had identified for the fieldwork visits of students. The aim of the visits was to introduce their students to the diversity of imagery found in the Sudan as a whole.

Following the initial round of interviews the researcher reported back to all the interviewees their collective points of view. Negotiate took place in an attempt to arrive at agreed

identification of named cultural regions. In the end they all agreed that Dr. Broukamper's seven cultural regions provided a valid basis for a comparative study of surface design on artifacts throughout the Sudan and that these regions had art traditions that exhibited distinctive historical and cultural characteristics. They agreed that the different tribes in the seven geographical/cultural regions named by Dr. Broukamper have a distinctive material culture and distinctive indigenous craft forms. While similar kinds of traditional artifacts are in common use all over the Sudan, their surface design characteristics differ in the various regions. The experts suggested that environment, education, modernisation and beliefs were the significant factors affecting the differences between surface designs in artifacts in these regions.

4.1.7 Findings about Sudanese Indigenous Crafts

The following information concerning indigenous craft forms was obtained during the field visit to the Sudan from the interviewees and a very limited amount of information available on this

topic in museums and libraries. The need to find out more about artifacts was for the purpose of selecting a representative sample for the study.

The majority of the peoples living in rural areas produce one or other of the following: a) pottery, b) weaving, c) house decoration, d) decorative gourds, e) wood carving, f) engraving, g) body painting, h) carpet making, i) basket making and j) costumes.

4.1.8 Pottery

Making and decorating pottery is an ancient Sudanese craft, with roots running as deep as the Nubian civilization in 300 years BC. It flourished during the ninth and eighth centuries BC in Kouch Kingdom (Gillon, 1984).

Recent excavations around the old city of Meroe, which established as a very important African artistic centre from the sixth to the third centuries BC, uncovered fine pieces of decorated pottery (Figure 7) and iron objects as well as small gold and silver rings and ornaments.

At the present time the best known areas for pottery are Western Sudan and Om Durman, the traditional capital of the Sudan. The pots are well finished with finely decorated surfaces.

FIGURE 7

DECORATIVE POTTERY, NORTHERN SUDAN



4.1.9 Weaving

This traditional craft is continually threatened by an expanding modern weaving and textile industry. It was introduced and practised by a group of Southern Egyptians who settled in many parts of Northern, Central Sudan and Om Durman (ElTayib, 1988). After a time their industry spread to many other regions of the Sudan.

Sudanese traditional designs are simple and limited to one or two colours only. Most of this woven material is cotton-based and worn by both men and women. It is of high quality and is now rather expensive compared to industrially manufactured textiles.

4.1.10 House decoration

Because it was most commonly found in Nubia, the only evidence of this traditional craft vanished under the rising waters of the High Dam in 1964. House decoration represented a well established Nubian artistic practice. The designs reflected their Islamic cultural background as well as their pre-Islamic traditional heritage. Richly ornamental external and internal decorations were applied on walls and carried out by certain Nubian families (Wenzel, 1972). The fine craft of house decoration found in Northern Sudan in the city of Wadi Halfa disappeared with it. Geometrical shapes, animal and bird representations, ceramic plates and Arabic calligraphy were drawn on both external and internal wall surfaces.

Another important form of house decoration consisting mainly of floral motifs, patterns and calligraphic compositions of verses from the 'Quran' as employed on the walls of mosques. Sometimes these decorations were produced by visiting artists from the Arab world, especially Morocco and Egypt.

The Islamic style of decoration was commonly applied to buildings in the ancient city of Suakin. The city, an example of a small Turkish town, was built between the sixteenth and twentieth centuries (Greenlaw, 1976). The artists employed to decorate it were Turkish, Egyptians and the Hedjazis of the Arabian Peninsula.

4.1.11 Decorative gourd

Gourds are found in all regions and used as plates, cups and containers. They are found in almost every home and used by every member of tribes in the South Eastern and South Western Sudan. Gourds in both the Northern and Western regions of the Sudan are decorated with systematic and symmetrical geometric patterns.

In the Southern regions gourd decorations depicted highly stylized animal representations and geometrical motifs. Gourds are also decorated by attaching small sea shells and beads around their edges.

The Angassana tribes treat decoration as an important method of recording particular incidents and their daily events in tribal life. Their gourd decoration depict scenes from their war battles, activities, animal representations and environment.

Abstract patterns, simplified representations and geometrical motifs cover the surface of almost all the gourds produced by the Nuba tribes. Figure 8 shows a gourd decoration depicting representations.

Hot iron rods, knives and nails are tools most commonly used for applying motifs on gourd.

FIGURE 8

DECORATIVE GOURD, NUBA MOUNTAINS

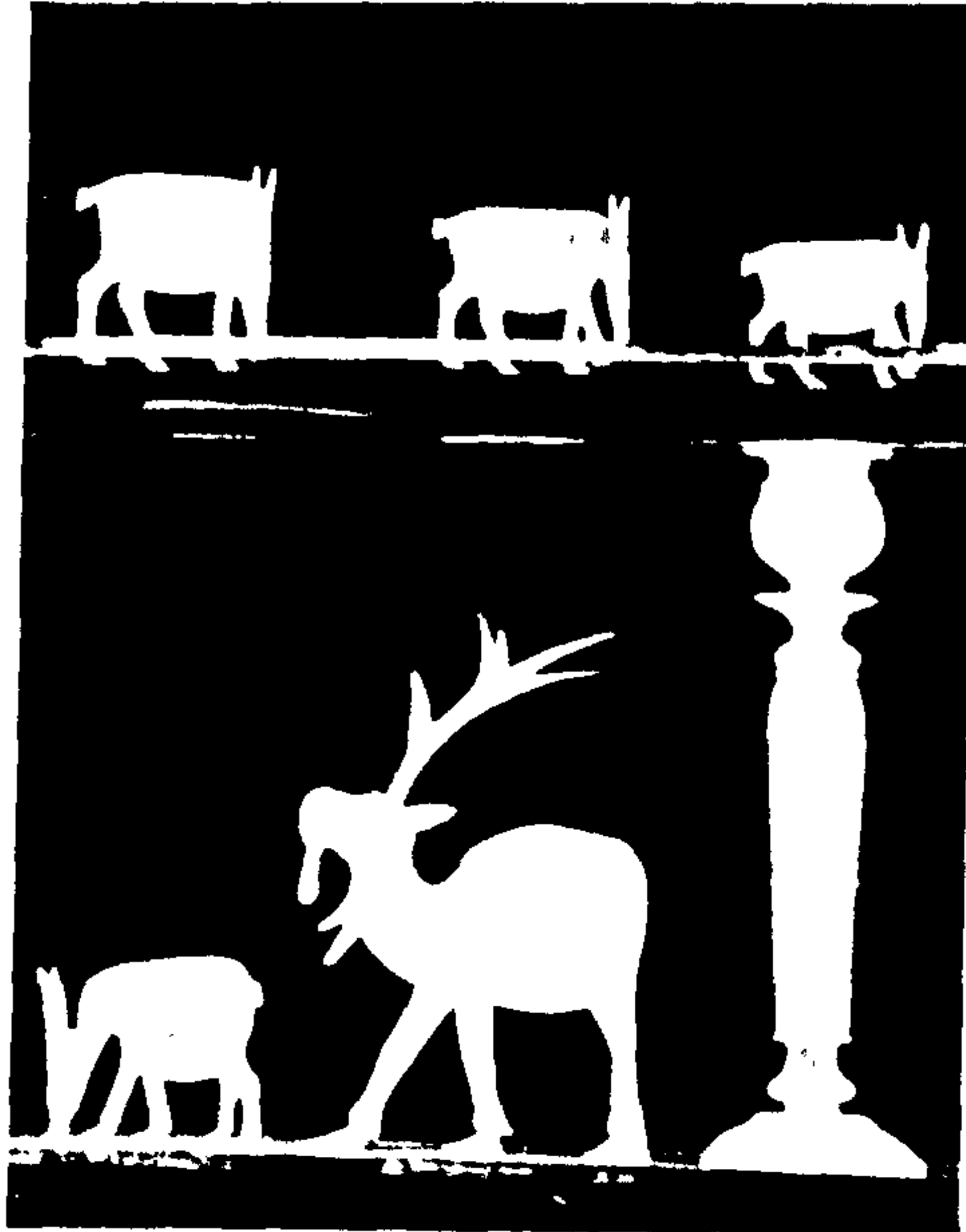


4.1.12 Wood carving

Plates and stools, ashtrays, book-ends, combs and walking sticks are carved from wood and mostly produced in Southern Sudan. Wooden masks, small ivory and ebony animal and human representations are carefully carved and decorated as shown in (Figure 9).

FIGURE 9

CARVED REPRESENTATIONS, SOUTHERN SUDAN



Most of these traditional artifacts and objects are produced for domestic use. But for economic reasons and because of the continual demand for such items by tourists and collectors they are exhibited for sale in market places.

Carved wooden furniture for the home and the office is now mass-produced by means of modern technology in all modern industrialized cities.

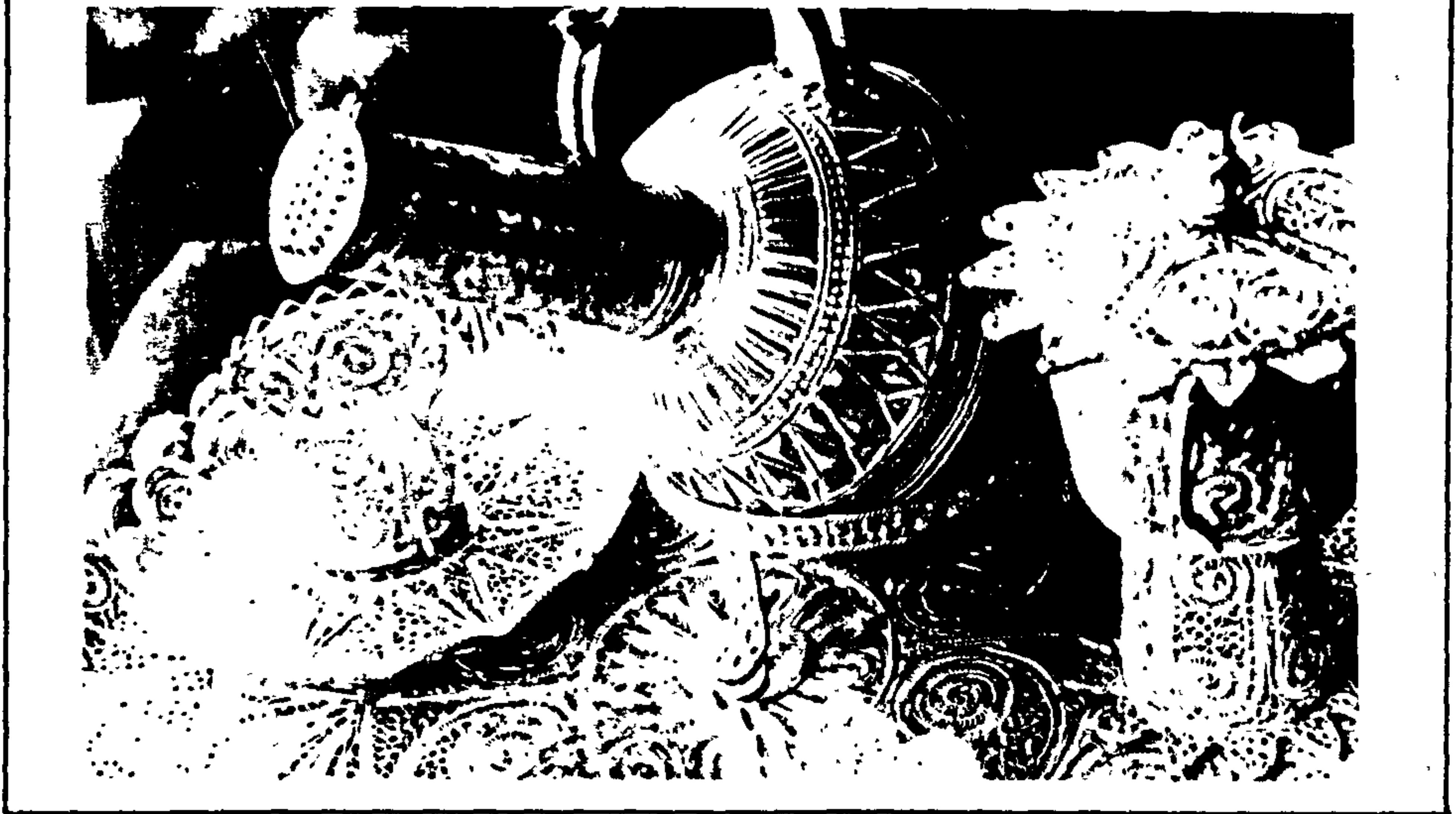
4.1.13 Engraving

Engraving covers works on gold, silver, tin and leather. Gold and silver are used for making ear-rings, bracelets, chest and neck ornaments. Designs and decorative patterns vary from one region to another. Figure 10 shows finely engraved coffee jars, cups and trays made of silver. Different tribes within the same region sometimes produce different motifs and patterns.

Leather, tin and silver are mostly used for making and decorating charms. Charms are folded in leather or put in decorative tin or silver boxes. Hand-made leather products such as wallets, sandals, belts, handbags and cushions are produced in cities and towns. Eastern Sudan's traditional leather products are of high quality.

FIGURE 10

ENGRAVED SILVER OBJECTS, CENTRAL SUDAN



4.1.14 Body painting

Body painting was a personal craft of the Nuba tribes. It was a very important element in celebrations.

The Nuba paint geometric motifs and animal representations all over their bodies. Faris (1972) and Anderson (1979) pointed out that painted designs, whether non-representational or representational, are related to the symmetry and structure of the human body. They claimed that the main purpose of the Nuba body painting was the celebration of the strong and healthy body.

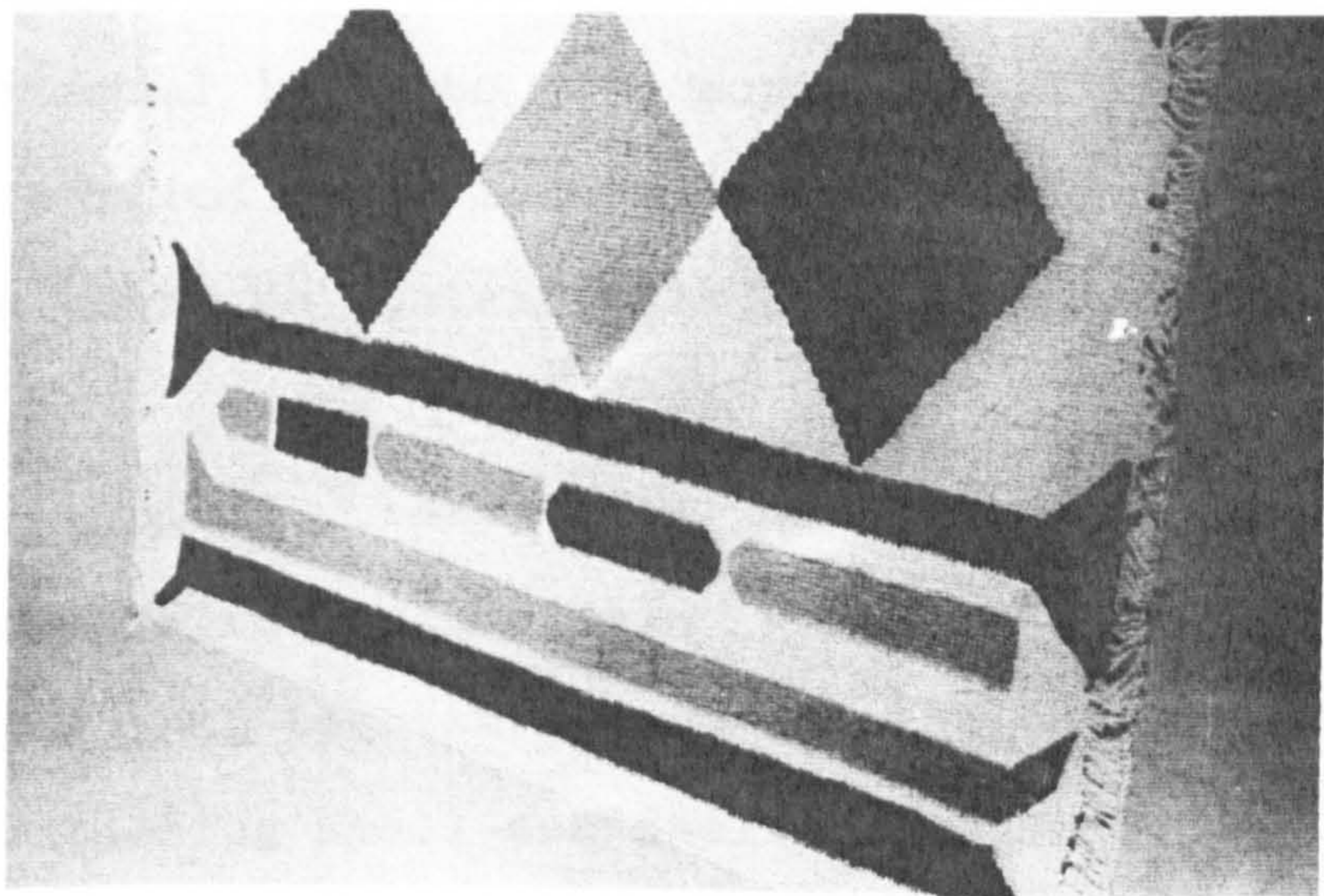
4.1.15 Carpet making

Carpets, usually of local materials such as wool and cotton, are made and used by nomads. They are considered essential domestic objects in every nomad's tent.

Geometric motifs and floral abstract motifs are always used to decorate carpets. Carpet designs differ from one region to another in terms of pattern and colour. Western Sudan is the best known region for high quality carpets with reference to skills, motifs and designs. An example is shown in (Figure 11).

FIGURE 11

CARPET, WESTERN SUDAN



Prisoners are instructed in carpet making during their imprisonment in the hope that they will practise the trade when they are released. The prison authorities exhibit high quality carpets for show and sale annually.

4.1.16 Basket making

Baskets, both with and without lids, are considered to be one of the most essential tribal domestic objects (ElTayib, 1988). They differ in shape and size according to their use.

Sudanese baskets are made of different local materials such as palm leaves, leather, cotton and wool cords. The main body is usually constructed of palm leaves. Leather is added as an external layer to give more strength. Mud is also applied as an internal wall to the basket if it is meant to contain milk or oily substances.

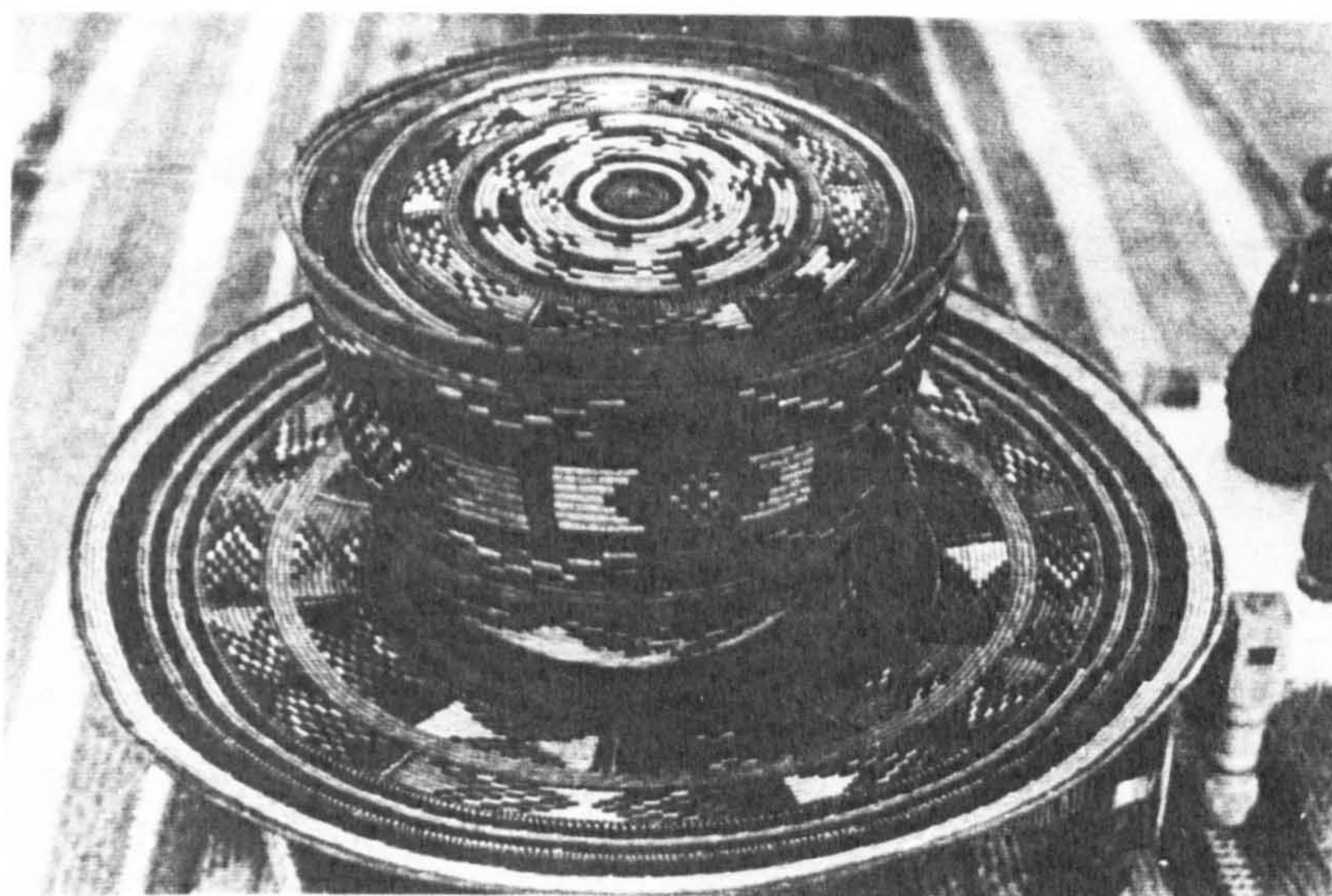
The typical basket is decorated by adding coloured straw to the main woven strips before joining them together. More decorations are added by attaching small sea shells, beads and leather strips to the walls. The same materials and

techniques are used to make mats for both praying and sleeping. Plain uncoloured mats made of the best quality palm leaves are used for funereal purposes. Mats decorated with few motifs and coloured strips are generally used for sleeping. Colourful mats and tray and lid containers with rich decorations and geometrical motifs are used in marriage ceremonies and for family celebrations (Figure 12).

Both natural and coloured trays of the same materials are in daily use by Sudanese tribes all over the country. They are used as food covers.

FIGURE 12

TRAY AND LID CONTAINER, WESTERN SUDAN



4.1.17 Costumes

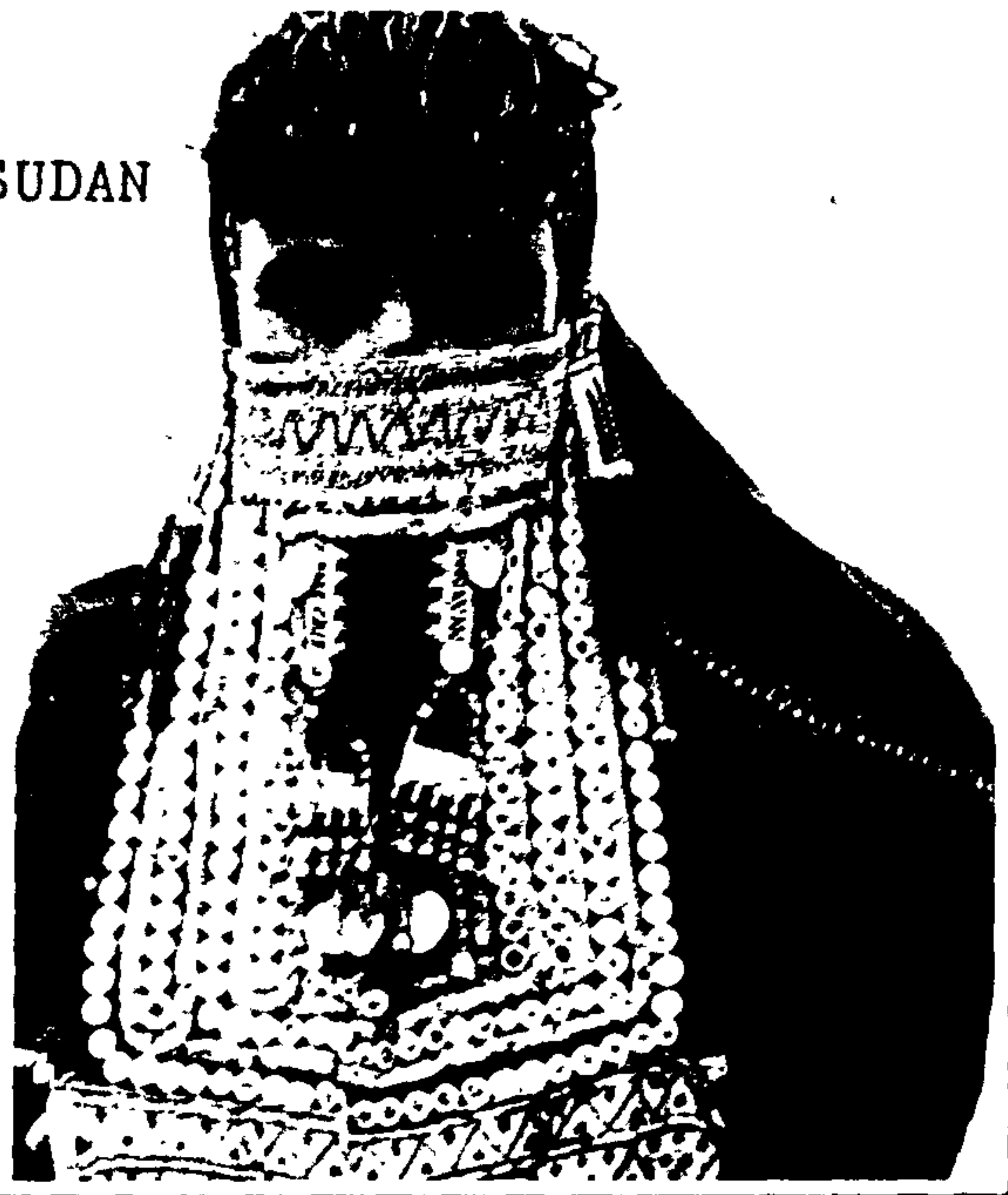
Costumes differ considerably from one region to another. In the Northern regions of the Sudan where peoples of Arab origin live, cotton textiles are commonly used. Most of the material is imported or manufactured in Sudanese industrial cities.

In the Southern region beads, leather, animal skin and small sea shells are widely used in costume design but they are rarely used in other regions.

Traditional costumes made of local materials are worn during tribal and national ceremonies. Figure 13 shows an example of women's costume from Eastern Sudan.

FIGURE 13

COSTUMES, EASTERN SUDAN



4.1.18 Selection of artifacts

During the interviews discussion took place about the best way to conduct an investigation in such a way that a sample of artifacts could be identified from each region yet could be said to be representative of Sudanese indigenous artifacts as a whole. All the experts concluded that it was impossible for one researcher, in a limited period of time, to study the entire range of traditional craft forms produced in the Sudan. It was suggested by both the archaeologist and the material culture expert that, for the sake of the proposed comparison, the crafts most commonly in use today should be selected for

consideration. With this in mind, it was agreed that 'containers' and 'ornaments' should be the focus of the investigation. The justification for this choice was that i) such artifacts are in common use, ii) they represent a wide range of crafts and iii) their surface designs are highly decorative.

The artifacts that were eventually selected for research included almost all Sudanese traditional crafts in the Sudan today with the exception of house decoration, body painting, carpet making and costume. House decoration had already been fully investigated by Wenzel (1972). Carpet making and traditional costume design are only practiced in a few regions. The above crafts, together with body painting, which has vanished within the Nuba recently, were excluded from this investigation.

The next chapter reports on the classification of surface designs carried out with a selected sample of artifacts.

CHAPTER 5

CLASSIFICATION OF SURFACE DESIGNS ON ARTIFACTS

5.1.0 Surface Design Check-list

Before the analysis and classification of surface designs took place a check-list was drawn up by the researcher in consultation with art educators, art historians and other art experts in the United Kingdom. The final list was examined by a material culture expert in the Sudan who approved it without any alterations. It included four sets of questions concerning representations, motifs, patterns and pattern arrangements on the surface of the artifacts and, lastly, art styles.

- a) The questions concerning representations were: Are they figurative or non-figurative, or are they a combination of both?
- b) The questions concerning motifs were directed to the dominant motifs found on each artifact. They were: Are they animal, human, floral, geometrical or organic?
- c) The questions concerning patterns and

pattern arrangements were: i) Are the patterns symmetrical or asymmetrical; and ii) are pattern arrangements systematic or random, horizontal or vertical, circular and curvilinear or angular?

d) There were two questions concerning art styles. The first was: Are the motifs realistic, abstract, decorative or symbolic? The second question was directed to the experts who were asked if the artifacts were made by individuals or groups.

During the visits to institutions, the researcher took photographs and made slides of material culture items and indigenous artifacts found in the Northern, Western, South Western, Southern, South Eastern, Eastern and Central regions of the Sudan. Artifacts were selected in response to the views of the experts as to whether or not they were representative of the indigenous material culture of these regions. They were documented under the supervision of the anthropologists and museum experts. In total, one hundred and

forty-nine original artifacts in the form of containers and ornaments were studied and documented. The containers included baskets with and without lids, trays, different sorts of pots, gourd, grinders, water and coffee jars. They were made out of palm leaves, leather, clay, wood, sea shells, beads, gourds, tin and silver. The ornaments included ear-rings, bracelets, head-bands, neck and chest ornaments and charms. The materials were gold, silver, tin, leather, wool and cotton strips and beads.

Thirty-one, twenty-six, twenty-two, twenty, twenty-four and nineteen artifacts came from Central, Southern, the Nuba Mountains, Western and Northern Sudan respectively. There were only six artifacts from the Angassana Mountains available for investigation. The reason for this was that the Angassana tribes keep all the artifacts they make for their own use. According to ElTayib (1988,p37) their gourds are decorated by village craftsmen on behalf of the tribe and presented to their brides as wedding gifts and are not made to be sold or given away. In this case a collection of drawings based on

photographs made by a graphic designer was the data source.

In photographing individual items of material culture particular attention was paid to their surface designs in the form of representations, motifs and patterns and to the frequency with which they appeared on items. A check-list was filled in for each artifact in the same way.

The surface designs (representations, motifs and patterns) were recorded by means of both photography and drawing. Surface designs from each of the seven regions were drawn on separate working taxonomy sheets. All the working taxonomy sheets were retained so that they could be used during the next stage of the research, namely, the analysis and classification of the surface designs that had been documented.

5.1.1 Descriptors Adopted for Classification Purposes

The following terms adopted by the researcher and applied in the classification and description of artifacts selected for study were agreed upon after consultation with material culture experts,

anthropologists, archaeologists and art educators both in the Sudan and in the United Kingdom. They were derived from previous studies referred to in the review of research in the previous chapter (Trowell, Hodder, Vansina, Fischer, Leuzinger and Kroeber). The key terms and their definitions were:

Surface design: Decoration applied onto the surface of an artifact by means of painting or engraving.

Representation: Likeness of human, animal and plant.

Animal: Representation of animal.

Human: Representations of human, whole or in part.

Floral: Representation of plant.

Organic: Cellular motif shape.

Motif: Unit in a pattern or design.

Pattern: Repeated decorative design of related motifs.

Arrangement: The way representations, motifs or patterns are organized on a surface.

Style: Distinctive mode of expression.

Stylized: Representation or design according to a style rather than according to nature.

Symmetrical: Bilateral or balanced design.

Decorative: Purely ornamental, serving the function of decoration only.

Contrasting: Solid areas on light surfaces.

Hatched: Fine, closely spaced parallel lines drawn on top of each other in different directions.

Shaded: Fine, closely spaced parallel lines.

5.1.2 Analysis and Classification of Indigenous Imagery

The surface designs documented on the working taxonomy sheets were analysed in three stages. Firstly, artifacts and surface designs from each of the seven regions were described. Secondly, representations, motifs and patterns in the surface designs from the different regions were compared. Thirdly, an attempt to establish regional styles was made.

In the first stage, the analysis, the number of

artifacts collected from each region was recorded and the materials were identified. The total number of surface designs from each region was determined and details of their draftsmanship noted.

The second stage involved the comparison of similarities and differences in the representations, motifs and patterns found in the surface designs on artifacts from different regions.

In the third stage an attempt was made to establish regional styles with reference to the findings about the artifacts' surface design characteristics. Next, regional styles were compared with each other with the aim of determining whether or not there were major similarities and differences between regions. This process necessitated the formulation and application of a definition of the term 'style'.

During this stage of the research also the surface designs were divided into two major regional groups in accordance with the findings

about major similarities and differences and regional styles. The two groups identified were named: a) 'Northern' and b) 'Southern'. The 'Northern' category included surface designs on artifacts from the Northern, Western, Eastern and Central regions. The 'Southern' category included surface designs on artifacts from the South-western (the Nuba Mountains), the South-eastern (the Angassana Mountains) and the Southern regions.

The sum of three hundred and twenty-nine surface designs were classified on the artifacts identified as a focus for this part of the research. Surface designs from each region were recorded on separate taxonomy sheets and categorized according to the key descriptors.

Forty-six surface designs were classified on artifacts found in the Northern region, sixty-six surface designs on artifacts from the Western region, forty-six surface designs on artifacts from the South-western region and forty-five surface designs on artifacts from the Central region. Forty-two surface designs were classified

on artifacts found in each of the Southern, the Eastern and the South-eastern regions (Table 1).

TABLE 1

NUMBERS OF REPRESENTATIONS, MOTIFS AND PATTERNS IN SURFACE DESIGNS ON ARTIFACTS FROM THE SEVEN REGIONS

PARTICULARS	REGIONS							TOTAL
	N	W	E	C	SW	S	SE	
ARTIFACTS	24	20	19	31	22	26	7	149
SURFACE D	46	66	42	45	46	42	42	329
REPRESNT.	00	00	00	00	11	17	40	68
MOTIFS	58	38	35	45	29	26	10	241
PATTERNS	33	37	33	52	42	20	04	221

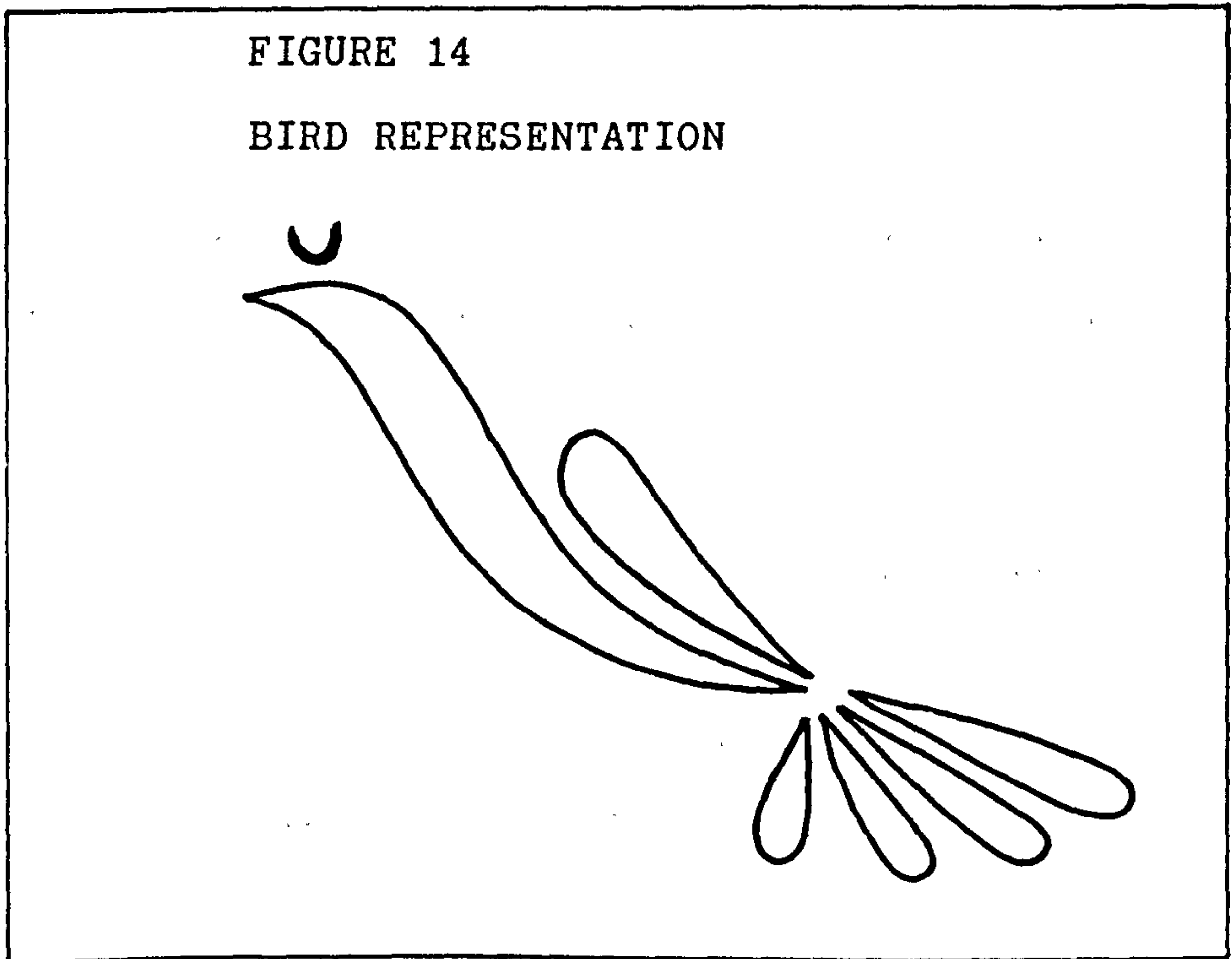
5.2.0 Northern Region

Twenty-four artifacts from this region were included in the study. They were comprised of containers, trays, cups, and ear, chest, head, forehead, hand, nose and foot ornaments. The ornaments were made of gold, silver and tin while the containers and trays were made of wood and

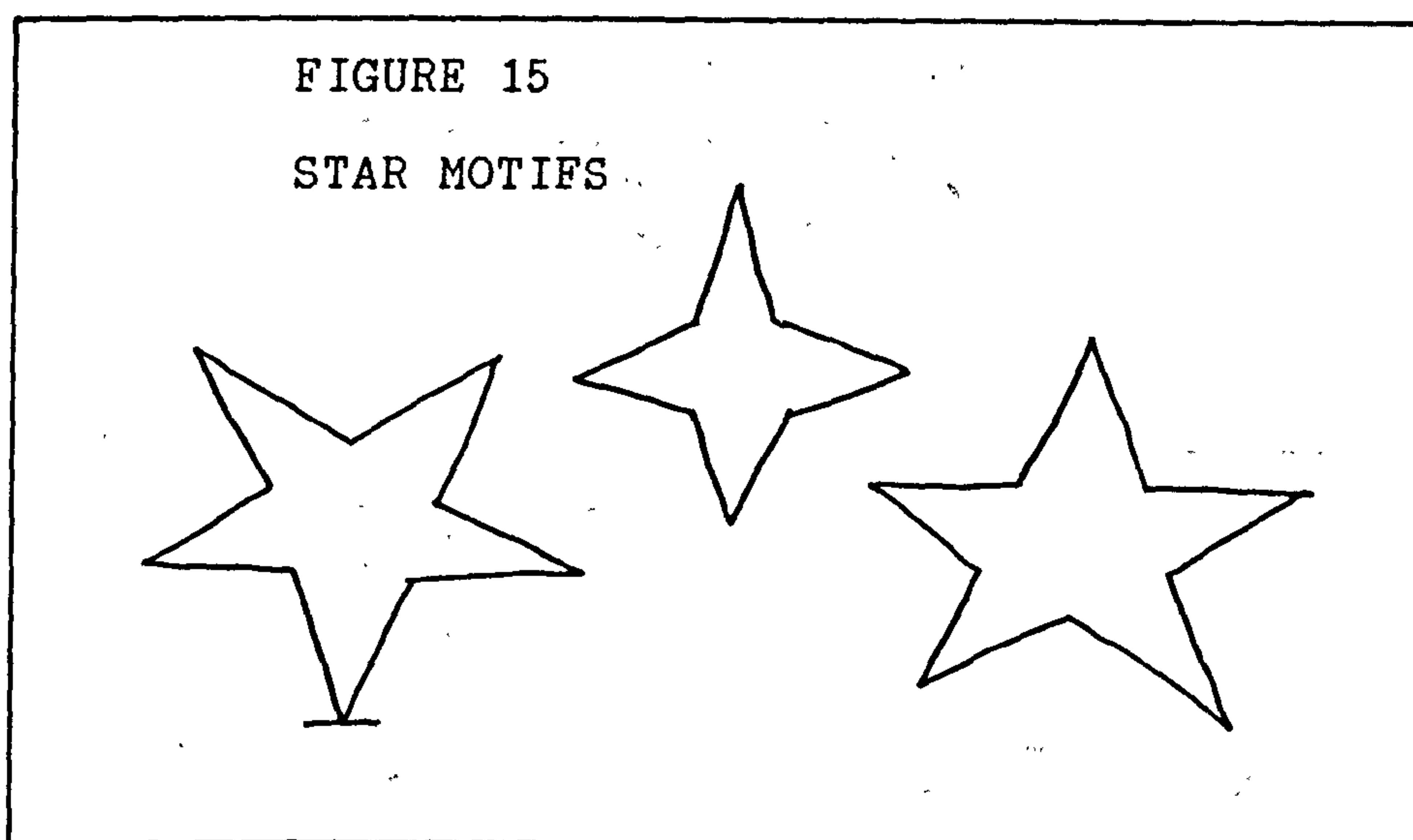
palm leaves.

Forty-six different surface designs incorporating one representation, fifty-eight different motifs and thirty-three different patterns were documented via drawing and included on taxonomy sheets.

Human representations did not appear in the surface designs at all and only one bird representation was found engraved onto an ear ornament (Figure 14).



The majority of the motifs observed were floral and geometric. Organic motifs were the second most numerous. Four and five-pointed star motifs appeared in the surface designs on many of the ornaments, in various placements and sizes (Figure 15).



A stylized flower-like motif in the form of a five-point star, was depicted on one ear ornament (Figure 16).

Leaf motifs were depicted in different ways. Some were depicted in outline only, others were more detailed and the outlines were filled in with shades or dots (Figure 17).

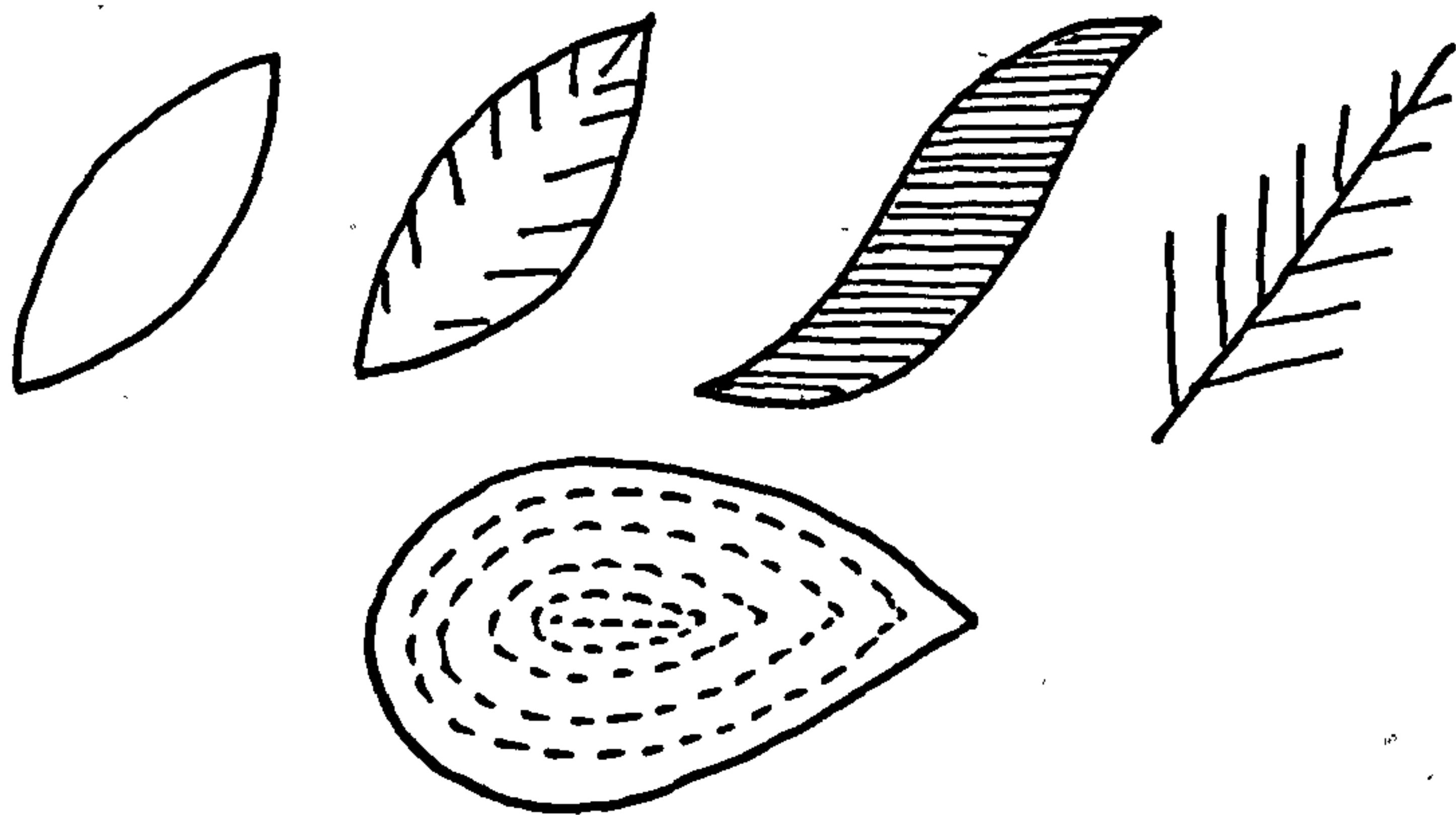
FIGURE 16

FLOWER-LIKE MOTIF

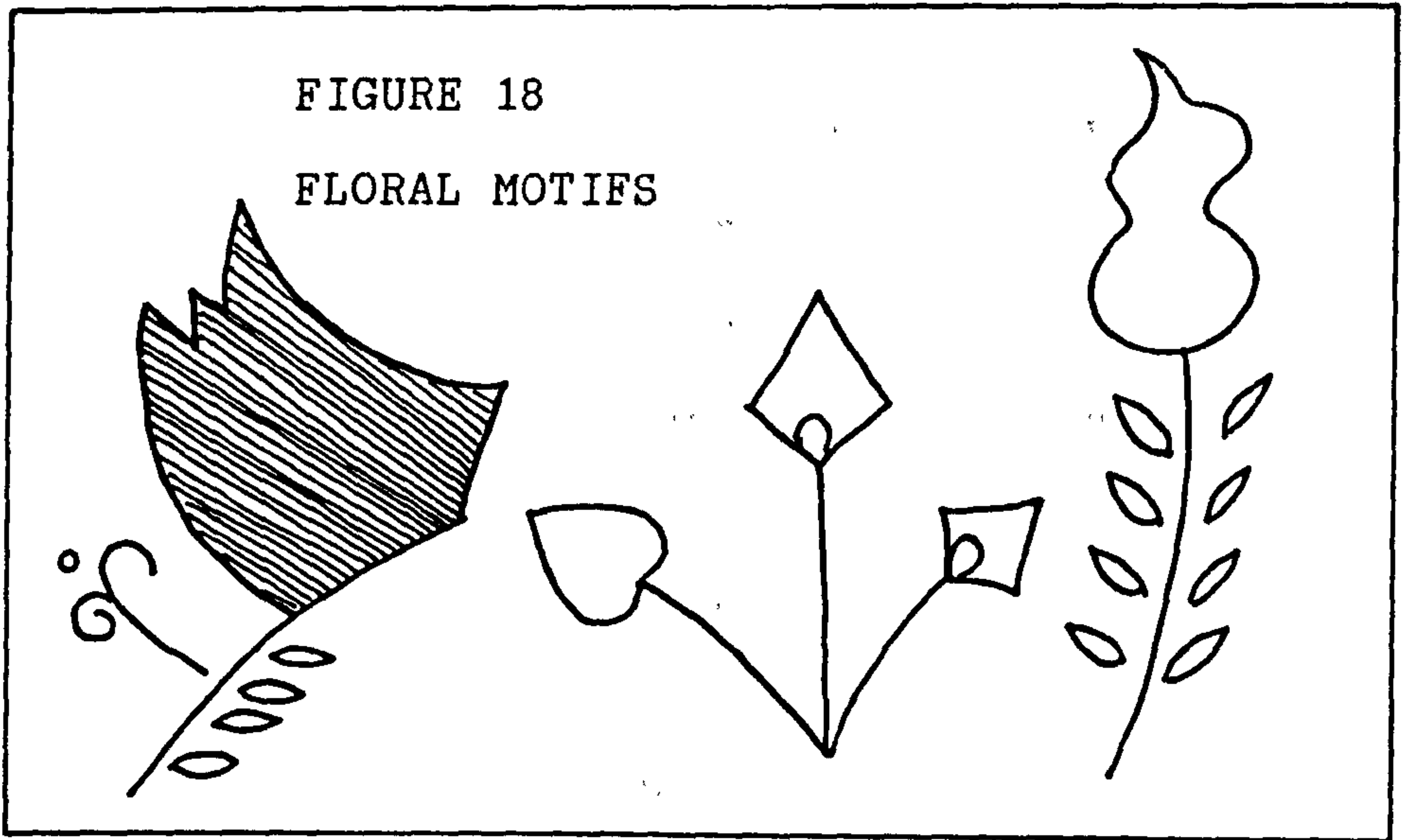


FIGURE 17

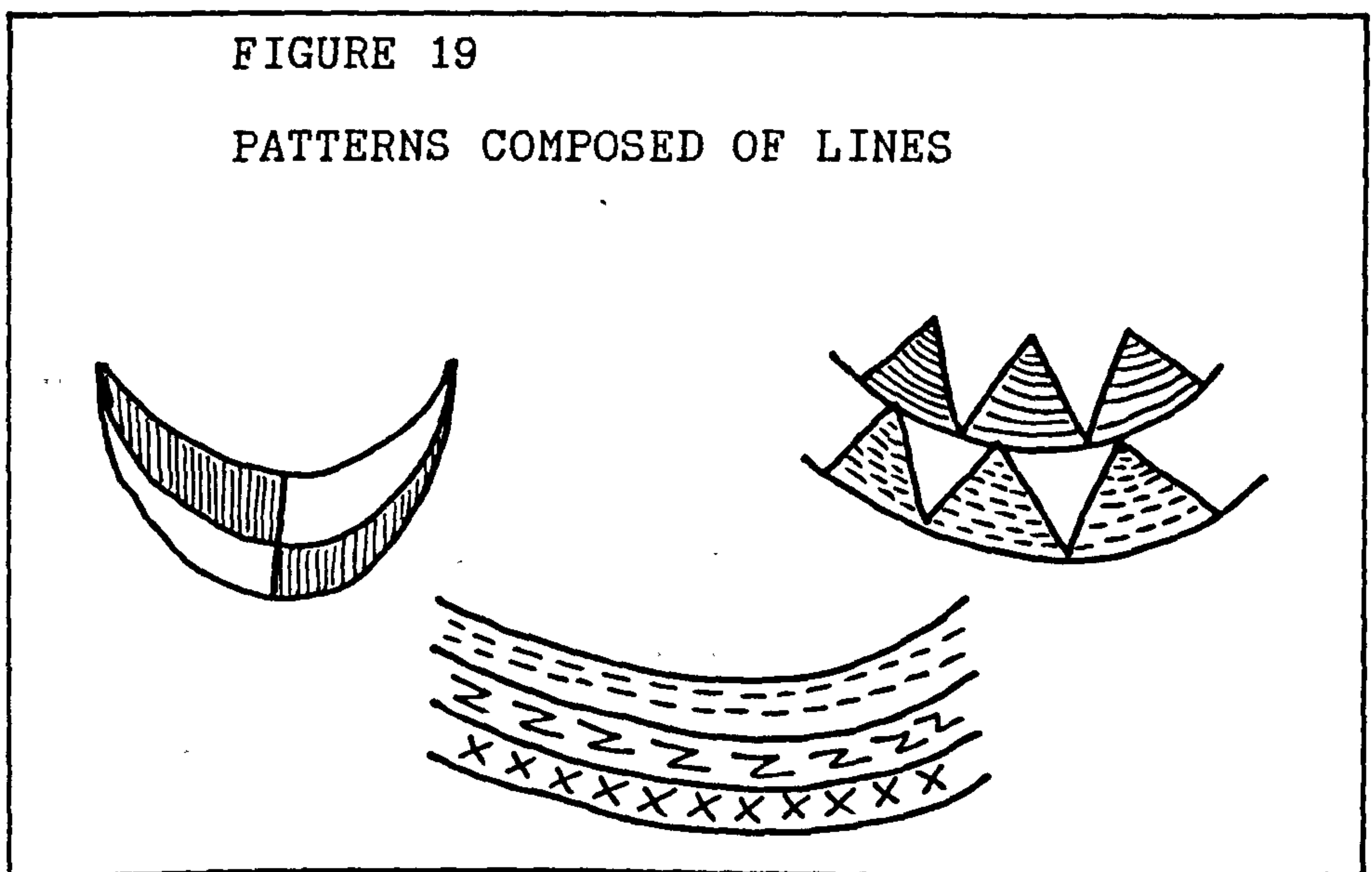
LEAF MOTIFS



Various plant representations were engraved on different types of ornaments. They were composed of diamond, star, heart and organic motifs (Figure 18).



All the patterns applied as decoration were arranged symmetrically on the surface of the artifacts. The representation, motifs and patterns were all composed of straight lines, crosses and dotted lines or shaded (Figure 19).



5.2.1 Western Region

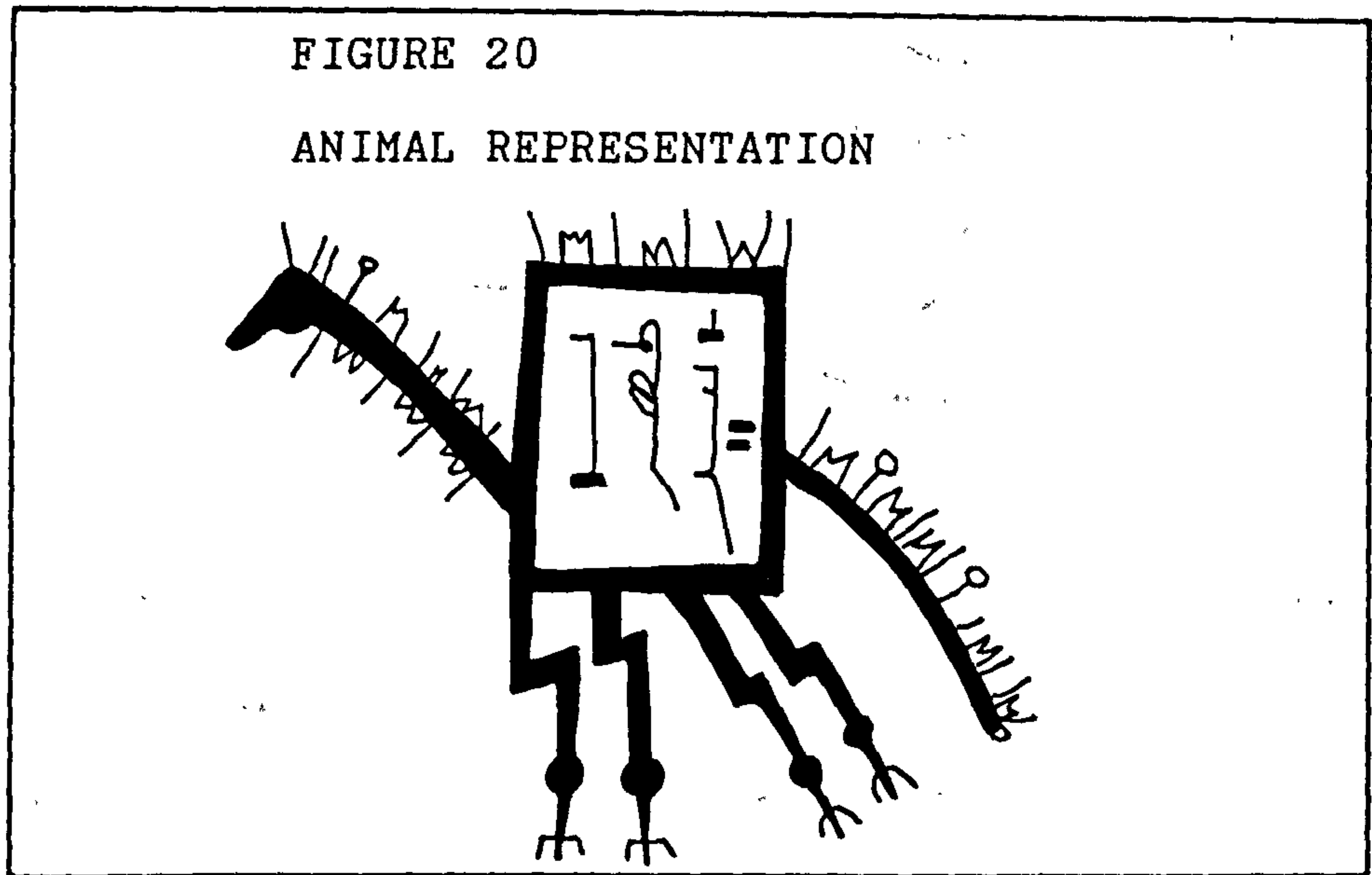
The museums supplied the researcher with twenty artifacts from the Western region of the Sudan. The artifacts included head and ear ornaments, charms, trays, containers, gourds and swords. They were made of palm leaves, leather, wool, sea shells, beads, wood and paper.

Sixty-six different surface designs incorporating fifteen representations, thirty-eight different motifs and thirty-seven different patterns were observed on these artifacts.

Highly stylized animal and bird representations which were much in evidence on charms, but not on any of the other artifacts were found later to have been produced by a Nigerian community living in the region.

Human representations were not evident at all. The archaeologist (Interview 5, 1988, p.24) and the folklorist (Interview 7, 1988, p.37) agreed that the fifteen representations of animals and birds produced by the Nigerians had a magical symbolic function. They were positioned

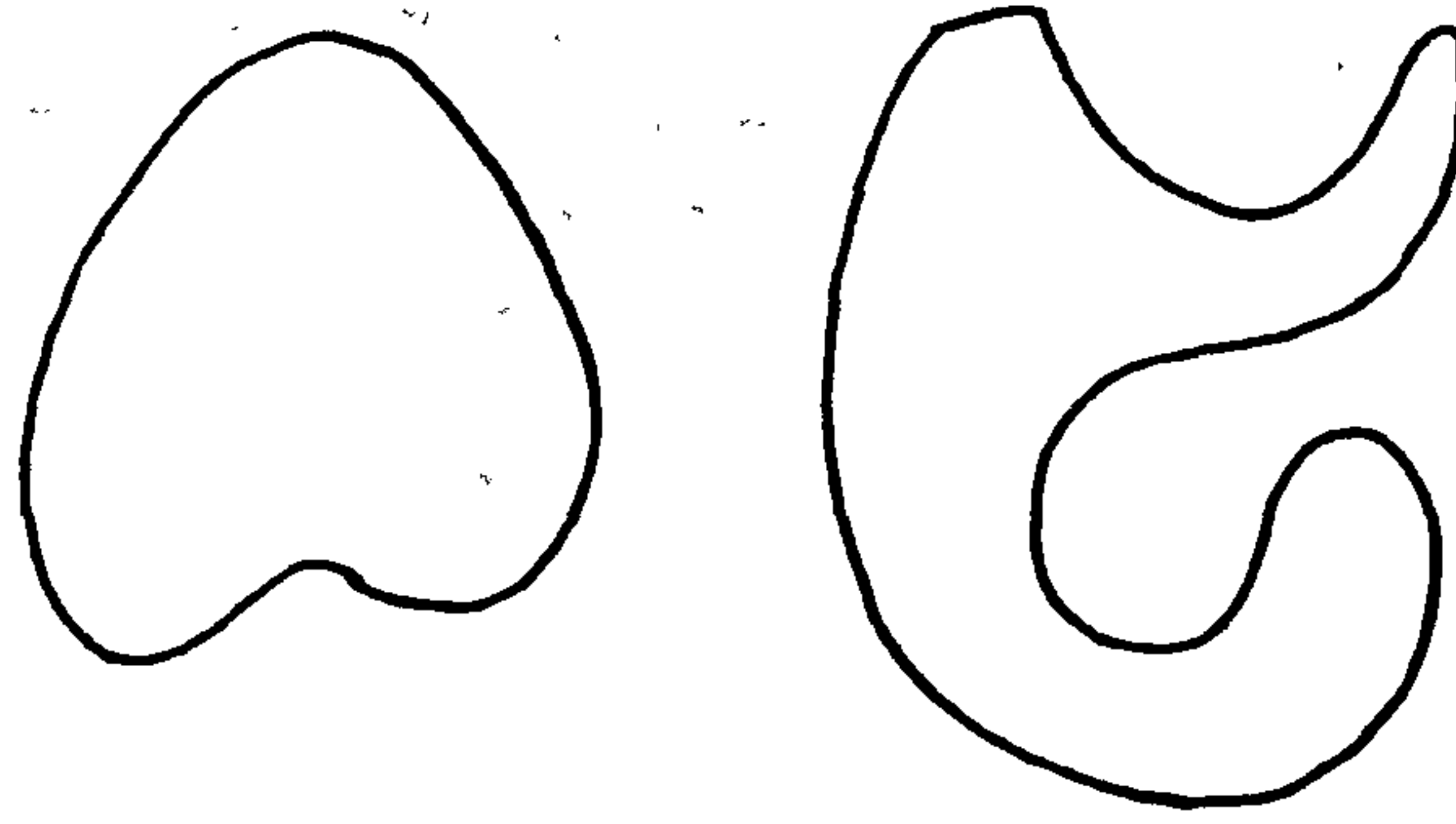
asymmetrically on the surface of the charms, occurred singly and they had words and letters incorporated into them (Figure 20).



Geometric motifs were common to all surface designs and organic motifs were the second most numerous. Floral motifs were rare. The few organic motifs were drawn in outline only (Figure 21). This treatment was different from that of all other representations, motifs and patterns found in the surface designs on artifacts from this region.

FIGURE 21

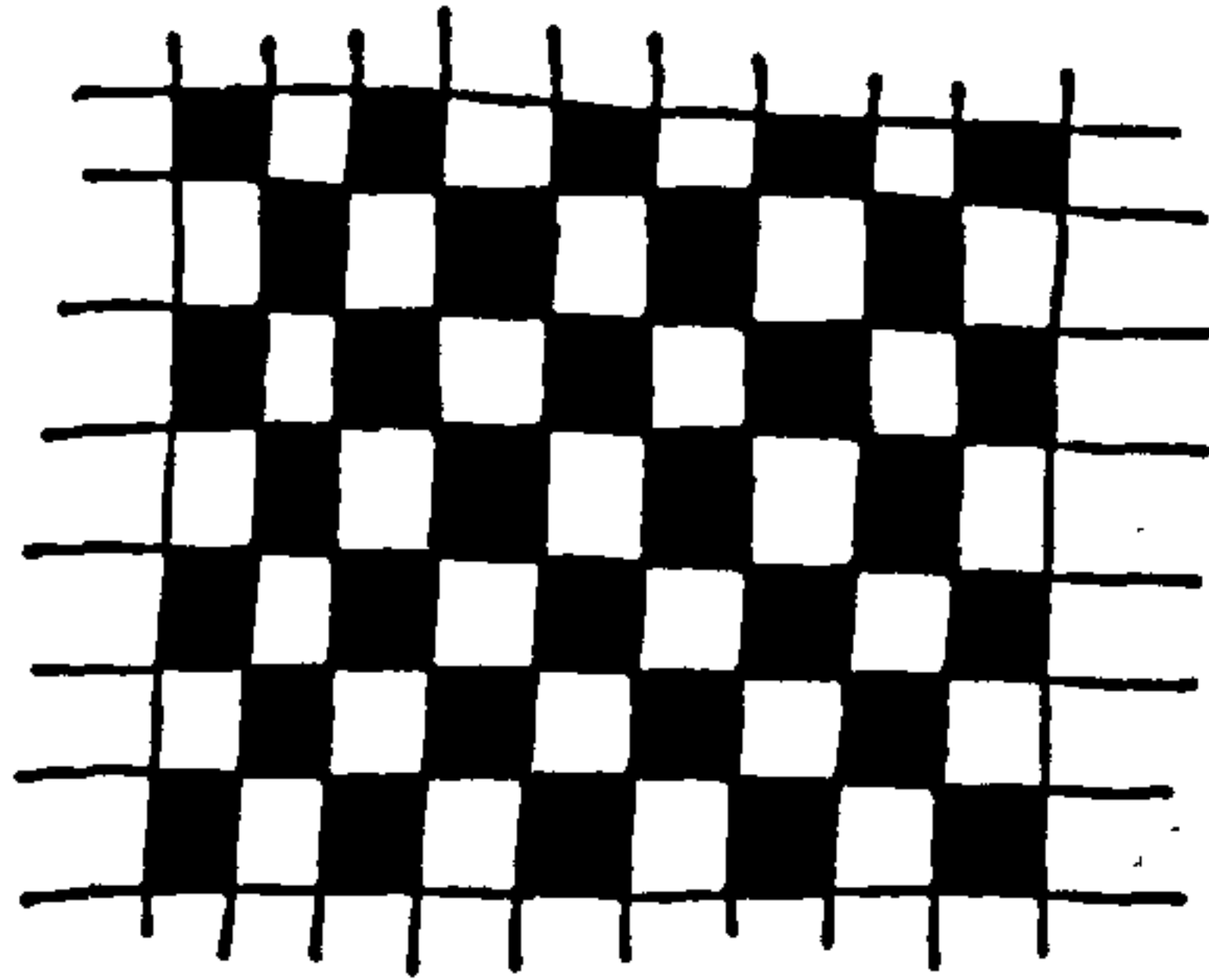
ORGANIC MOTIFS



The majority of the patterns were arranged symmetrically in the surface designs on the artifacts and both the folklorist (Interview 7, 1988, p.37) and the archaeologist (Interview 5, 1988, p.23) considered that they had been applied to the artifacts for decorative reasons only and had no apparent symbolic meaning. Patterns composed of small geometric motifs were a common feature of almost all the surface designs from the Western region (Figure 22).

FIGURE 22

GEOMETRIC PATTERNS



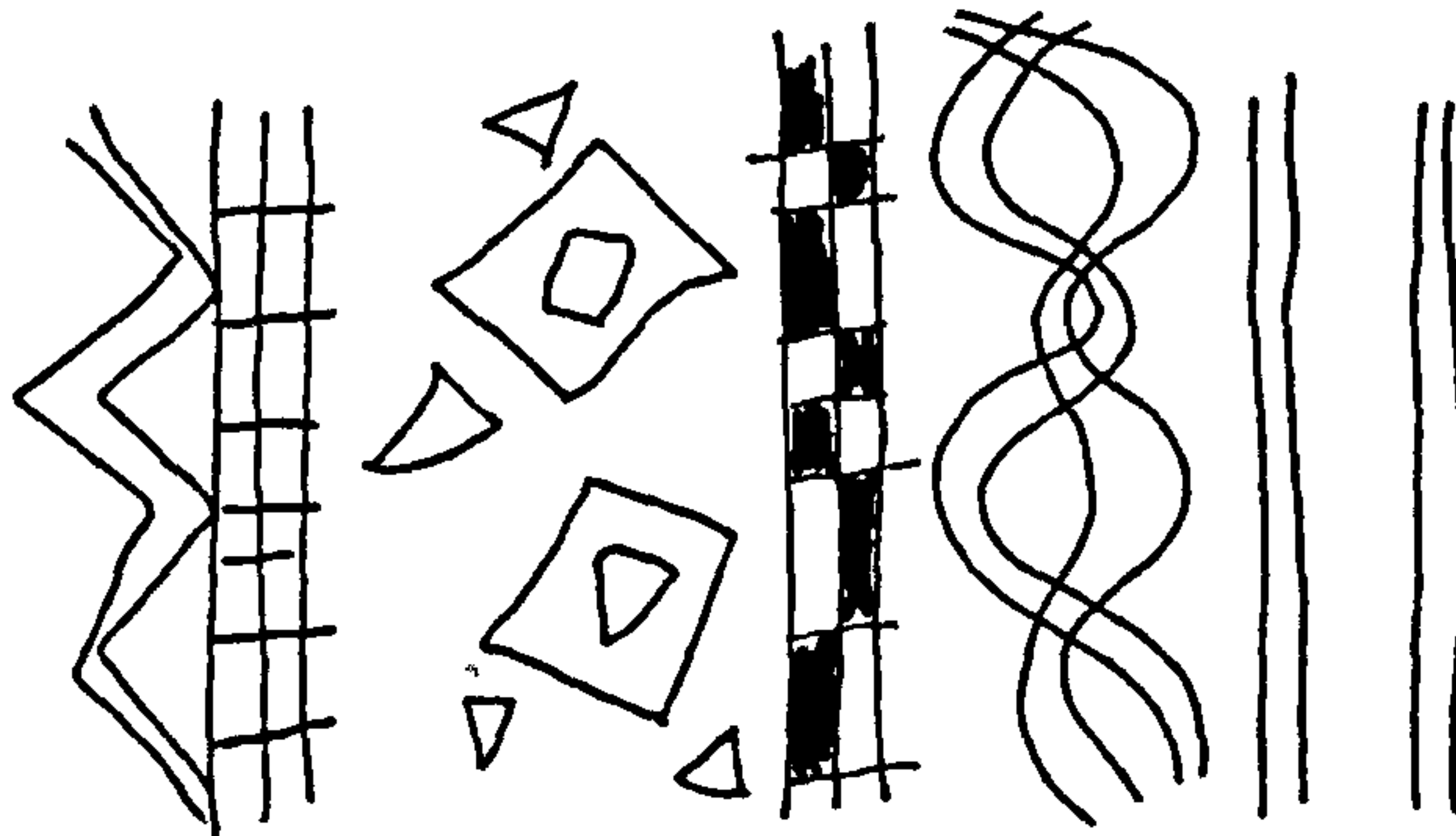
5.2.2 South-western Region

A total of twenty-two artifacts found in this region ranging from chest, forehead and neck ornaments to boomerangs, gourd containers, bowls and trays were documented and classified. The materials were gourds, clay, beads and wool strips.

The researcher drew forty-six surface designs in all, consisting of eleven representations, twenty-eight motifs and forty-two patterns. In the majority of cases, the representations, motifs and patterns covered the entire surface area of the artifacts. They were crudely drawn in different sizes (Figure 23).

FIGURE 23

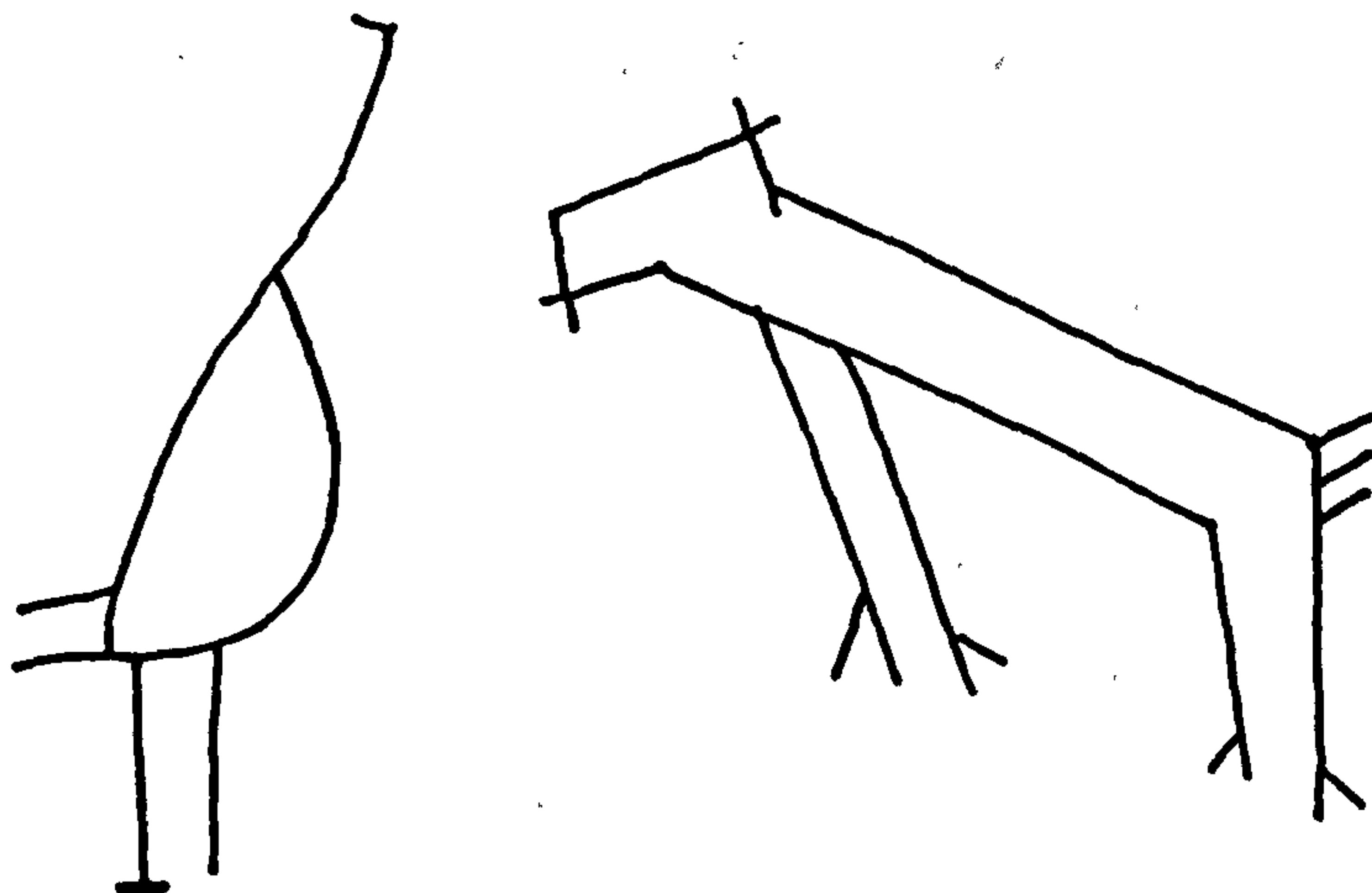
CRUDELY DRAWN PATTERNS



Human representations were completely absent in the surface designs from this region, but stylized representations of animals and birds were evident (Figure 24).

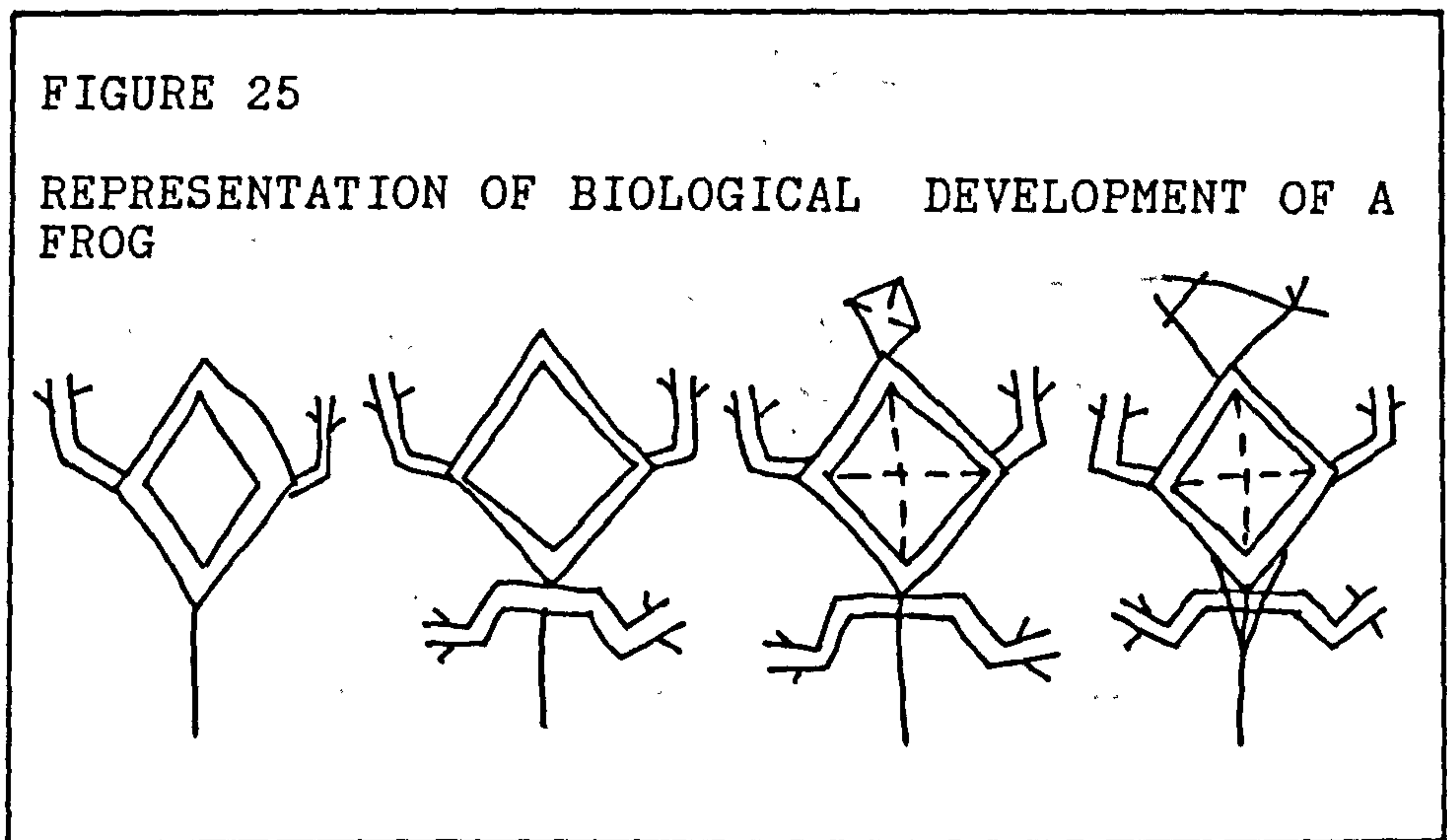
FIGURE 24

BIRD AND ANIMAL REPRESENTATIONS



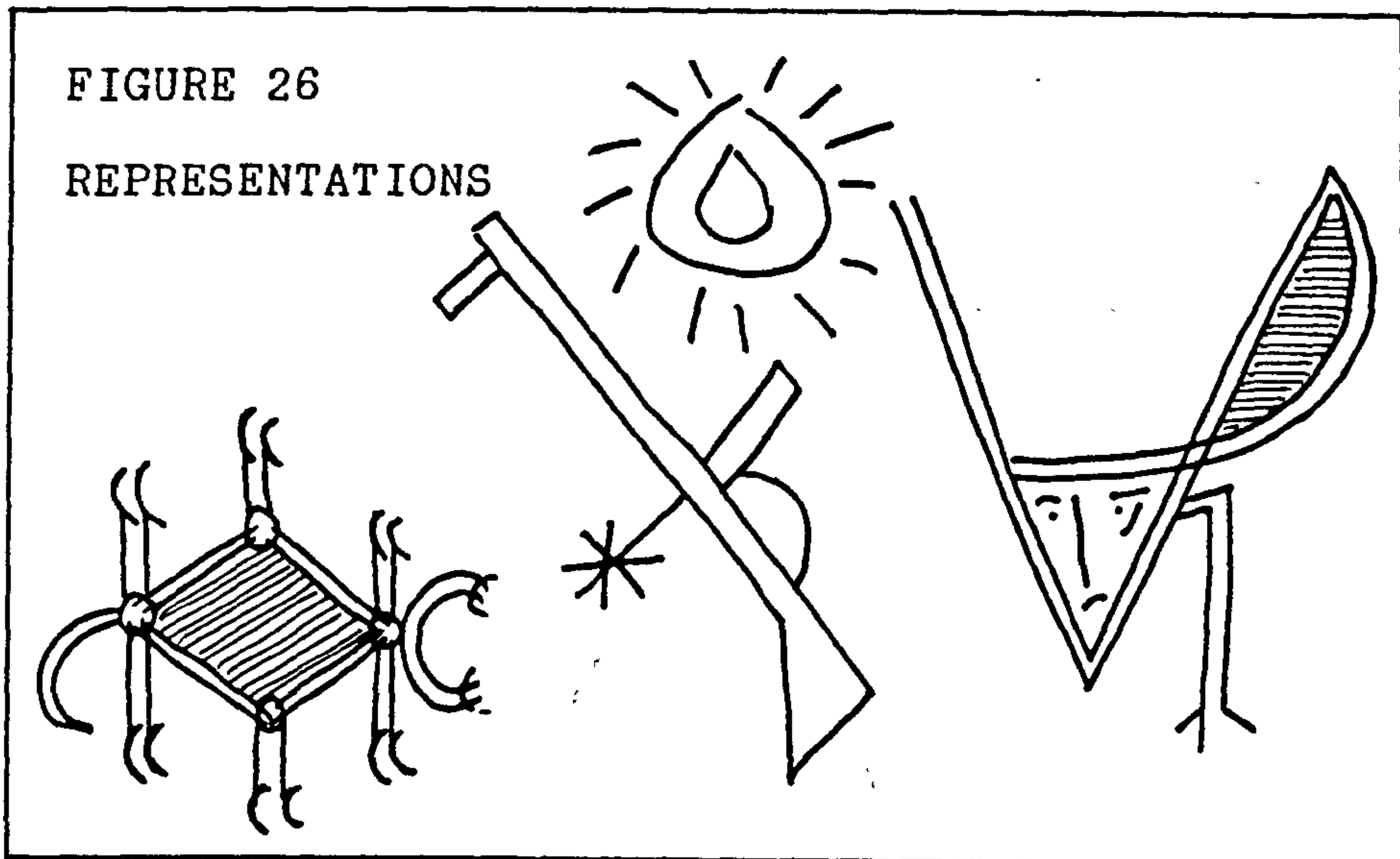
Four representations on one gourd container

depicted stages in the biological development of a frog (Figure 25).



The majority of motifs in the surface designs on artifacts from the South-western region were composed of triangles and squares. While triangles and squares appeared in almost all cases, there were very few circles. Very few floral or organic motifs appeared on surface designs from the South-western region.

Ten out of twenty-eight motifs were classified by the archaeologist, museum experts and the folklorist as the sun, fantastic animals, scorpions and frogs (Figure 26).



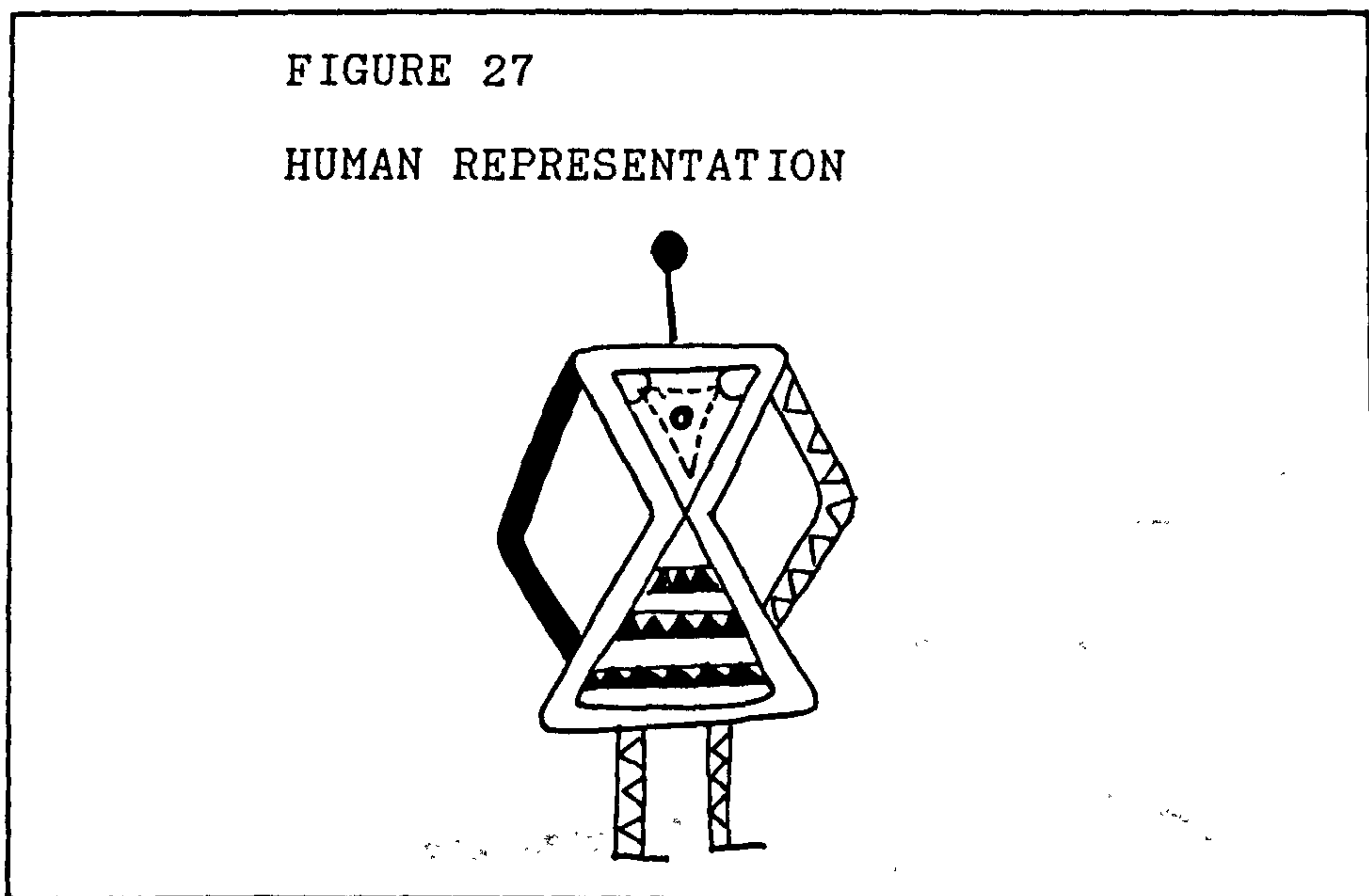
The majority of the patterns were asymmetrical in arrangement and, according to the experts, were decorative in function.

5.2.3 Southern Region

The twenty-six artifacts from this region included gourd containers, clay pots, tobacco pipes, masks, fans and chest ornaments. They were made of clay, wood, beads, sea shells and wool strips. Forty-two surface designs incorporating seventeen representations, twenty-six motifs and twenty patterns were documented and classified.

The single full length human representation that

appeared on the surface of one of the gourds was constructed from two triangles representing the body and a small circle for the head (Figure 27).



Five long faces with big ears were carved from wood. They had no surface decoration other than motifs in the form of hatches indicating hair (Figure 28).

Highly stylized linear animal and fish representations were evident on one gourd container only (Figure 29).

FIGURE 28
CARVED FACE

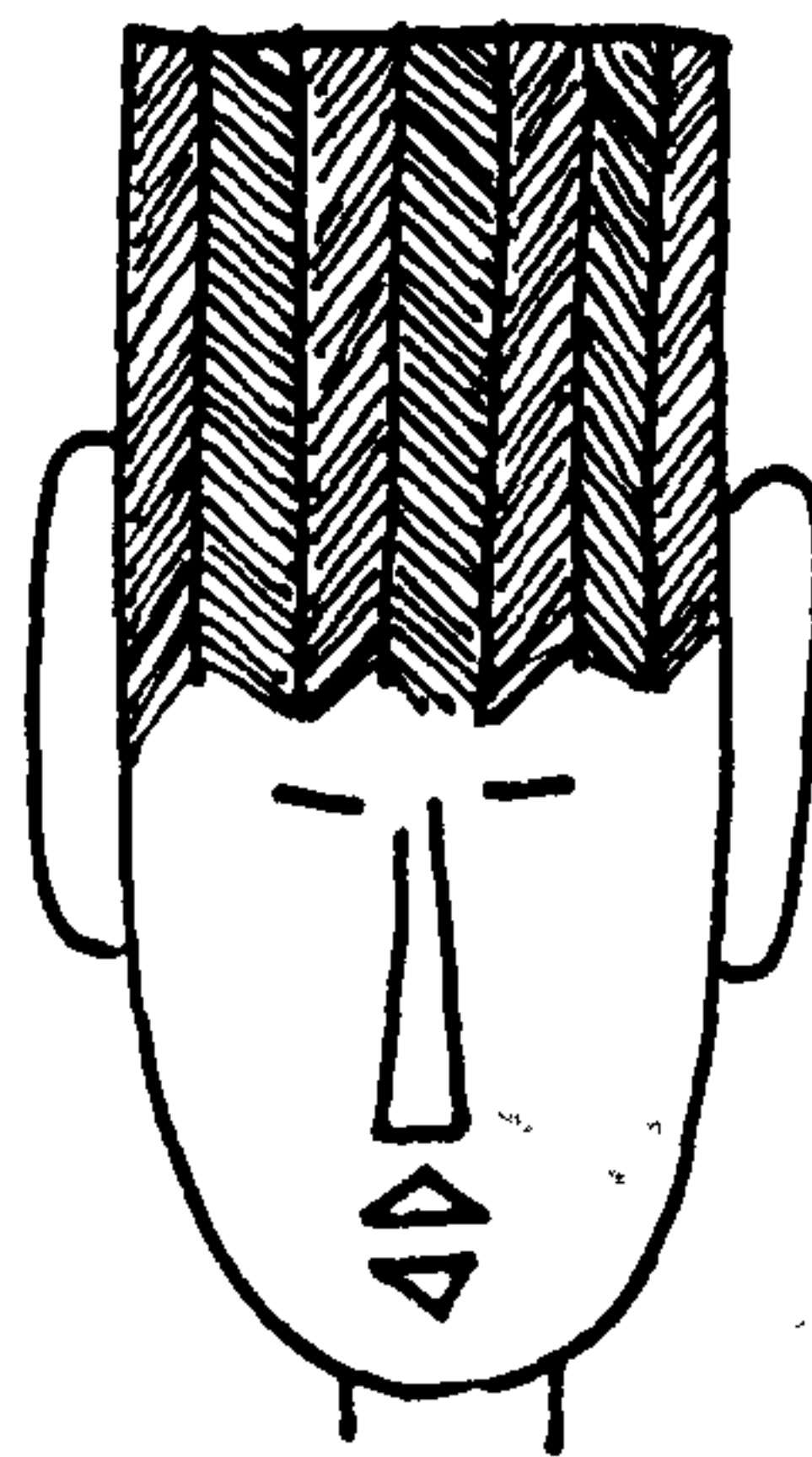


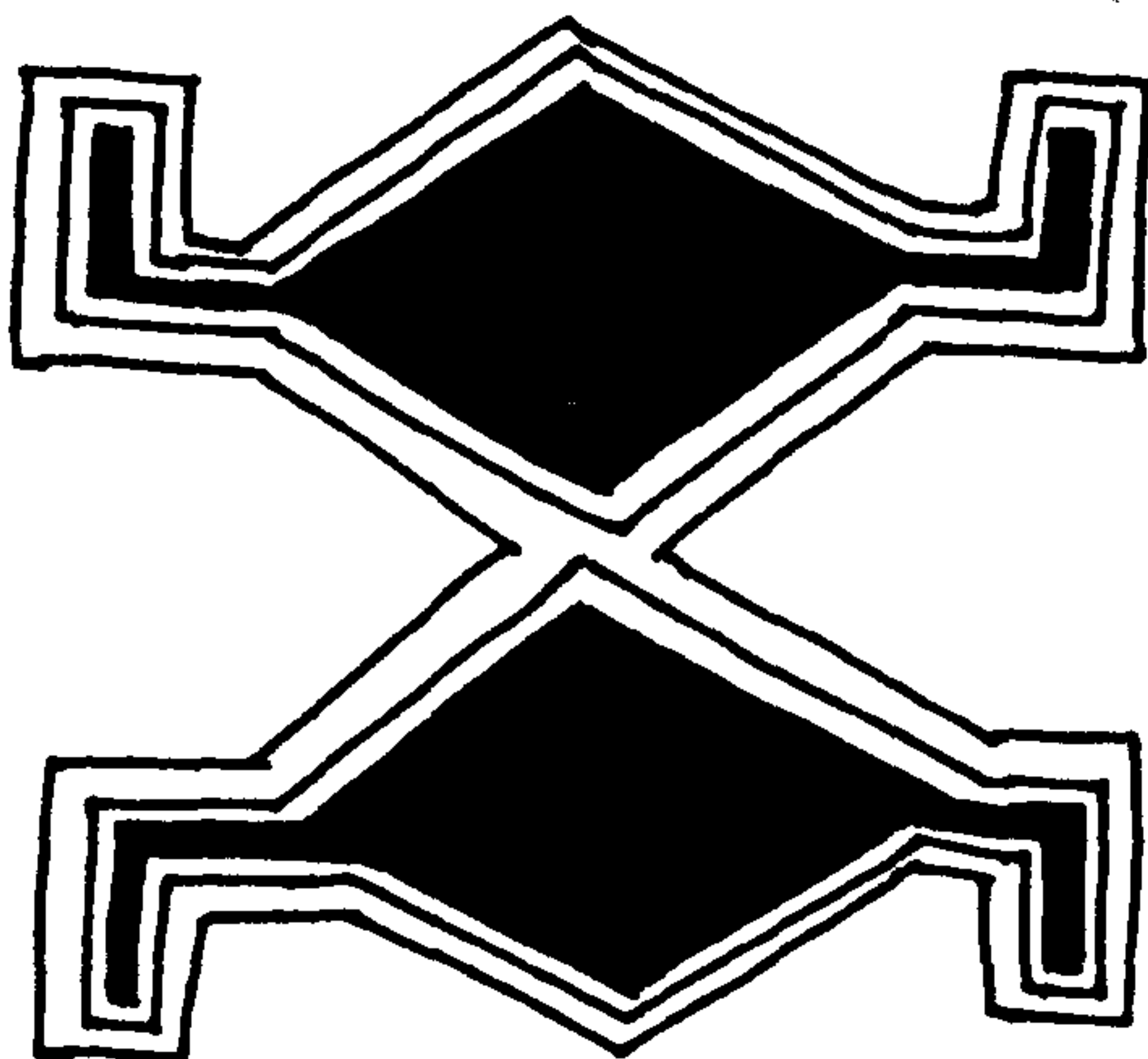
FIGURE 29
ANIMAL AND FISH REPRESENTATIONS



Geometrical motifs and patterns were common but very few floral motifs appeared on artifacts. Asymmetrical patterns consisting of triangular and diamond shaped motifs were common and considered by the experts to be decorative in function. Geometric abstract shapes decorated many gourds (Figure 30).

FIGURE 30

GEOMETRIC ABSTRACT MOTIF

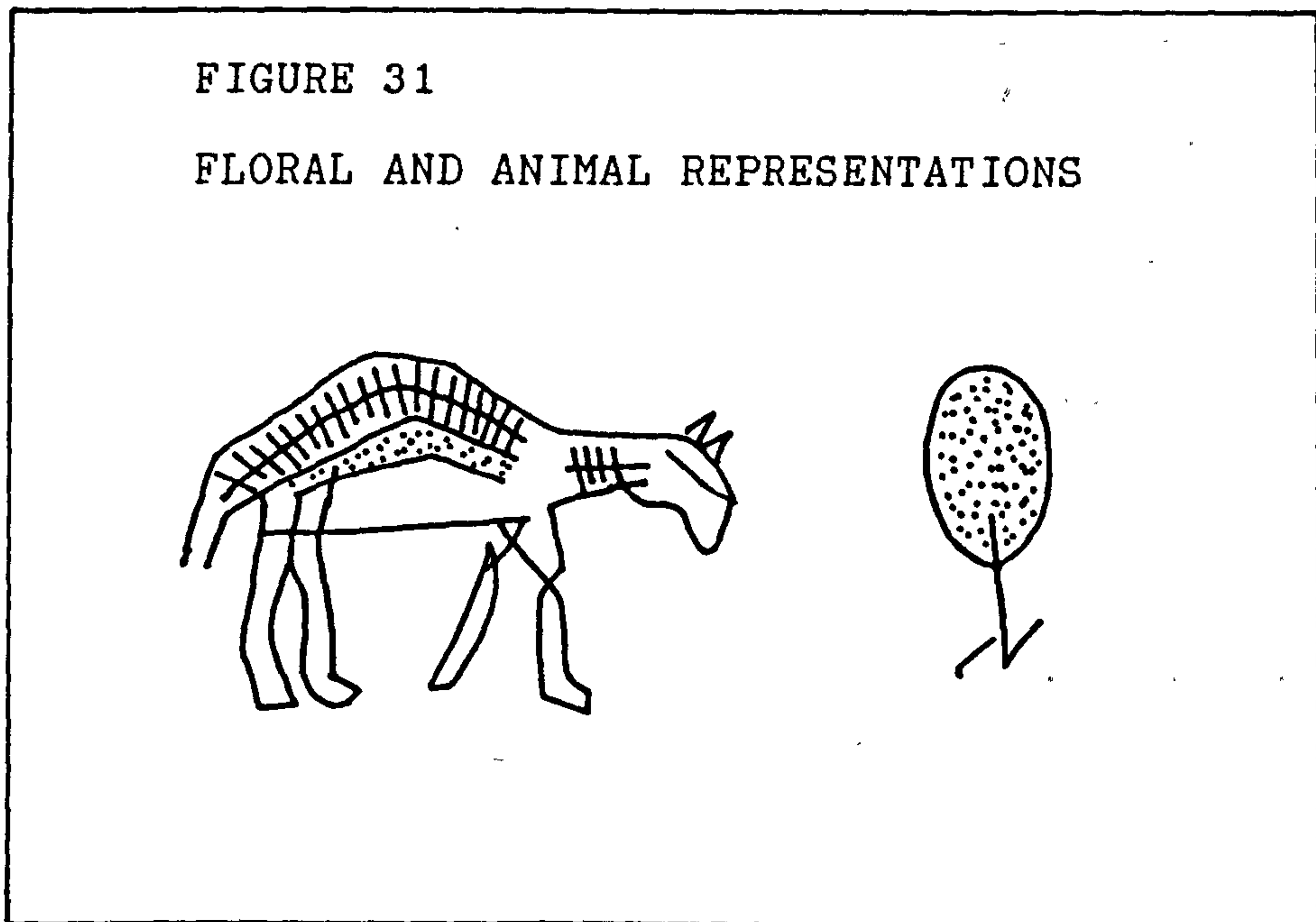


5.2.4 South-eastern Region

Only seven artifacts were available for examination from this region. They consisted of three gourd containers, two boomerangs, one forehead band and one chest ornament. The materials were wood and iron for the boomerangs and wool bands for the forehead ornament and gourds. Forty-two surface designs incorporating forty representations, ten motifs and only four patterns were documented and classified on artifacts from this region.

All the representations, motifs and patterns were drawn in discontinuous outlines. Dots or hatches

were added inside the outlines of the representations and motifs (Figure 31).



The majority of representations drawn on the surfaces of the artifacts depicted humans and animals. Gourds were entirely decorated with human representations engaged in a range of daily activities such as working, fighting and hunting (Figure 32).

A sexual act was recorded on a gourd depicting a battle between two tribes (Figure 33).

FIGURE 32

HUMAN REPRESENTATIONS AT WORK

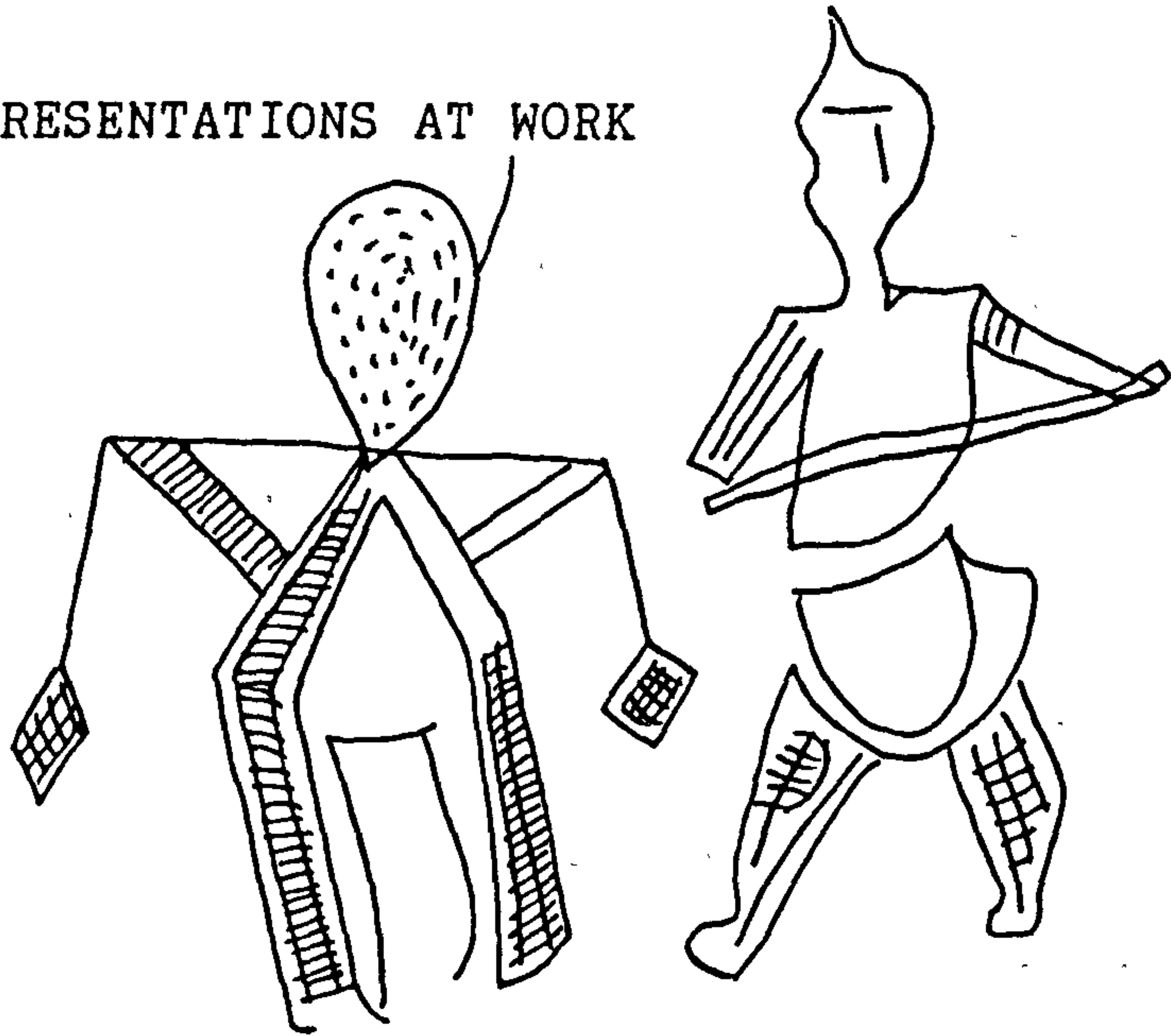
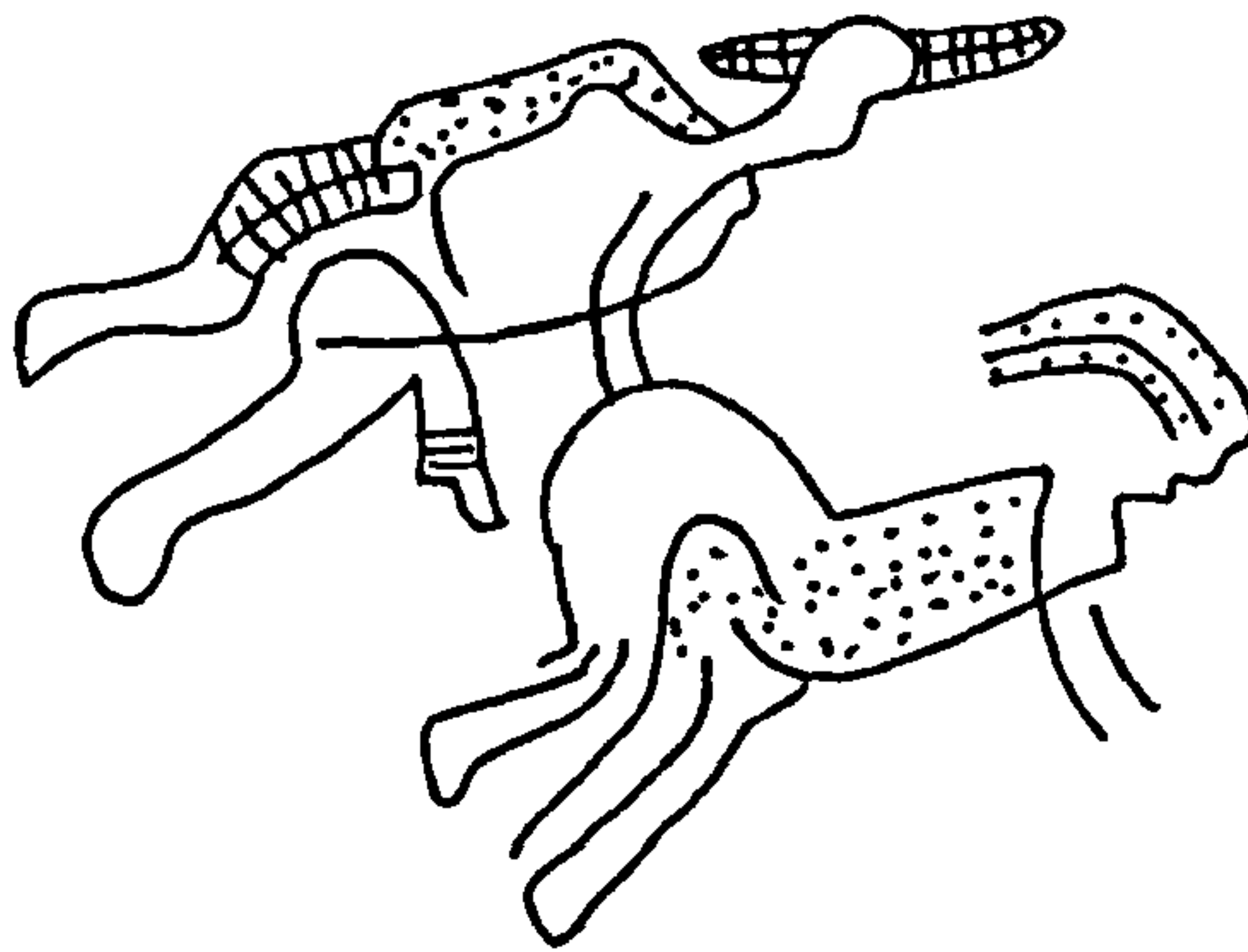
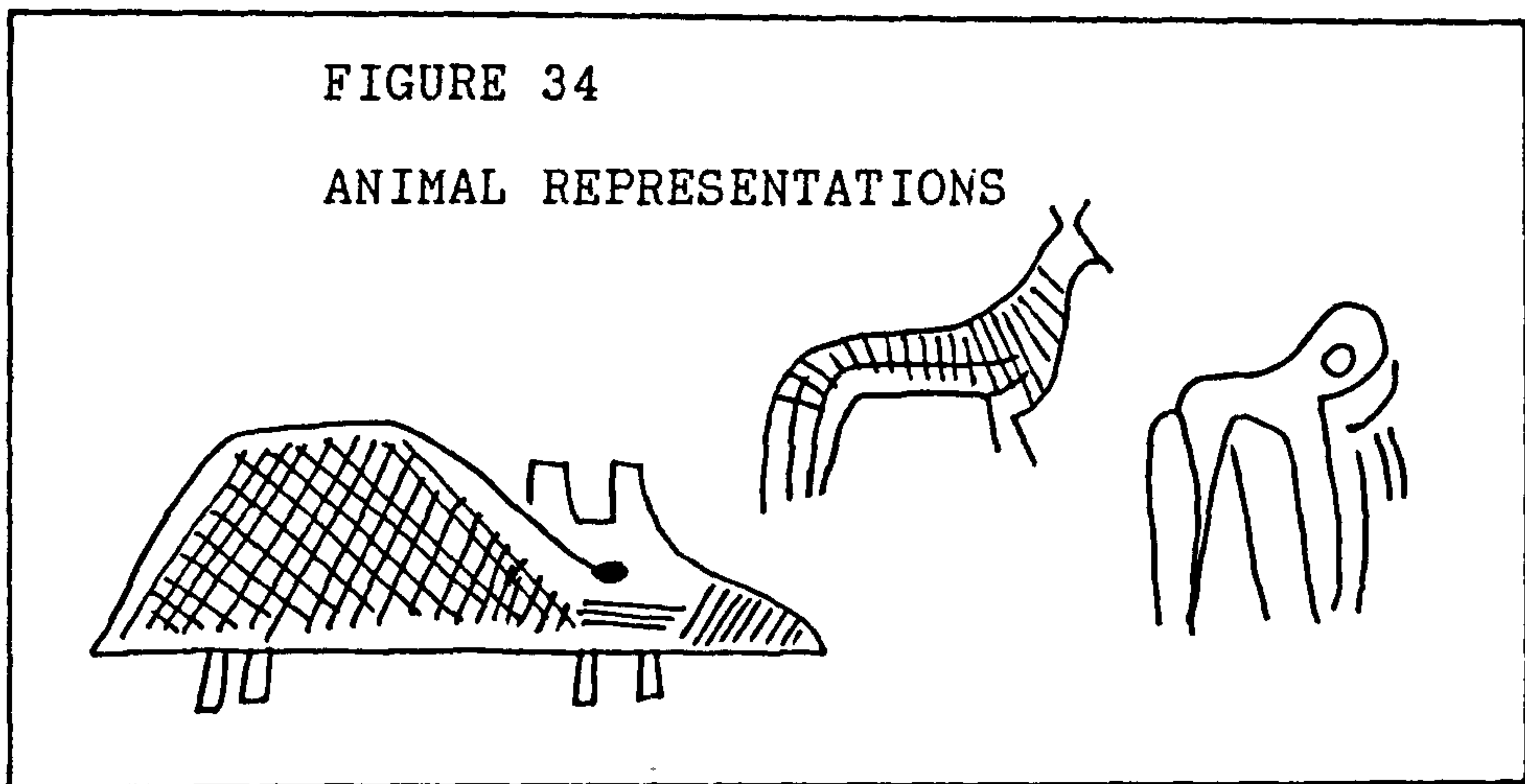


FIGURE 33

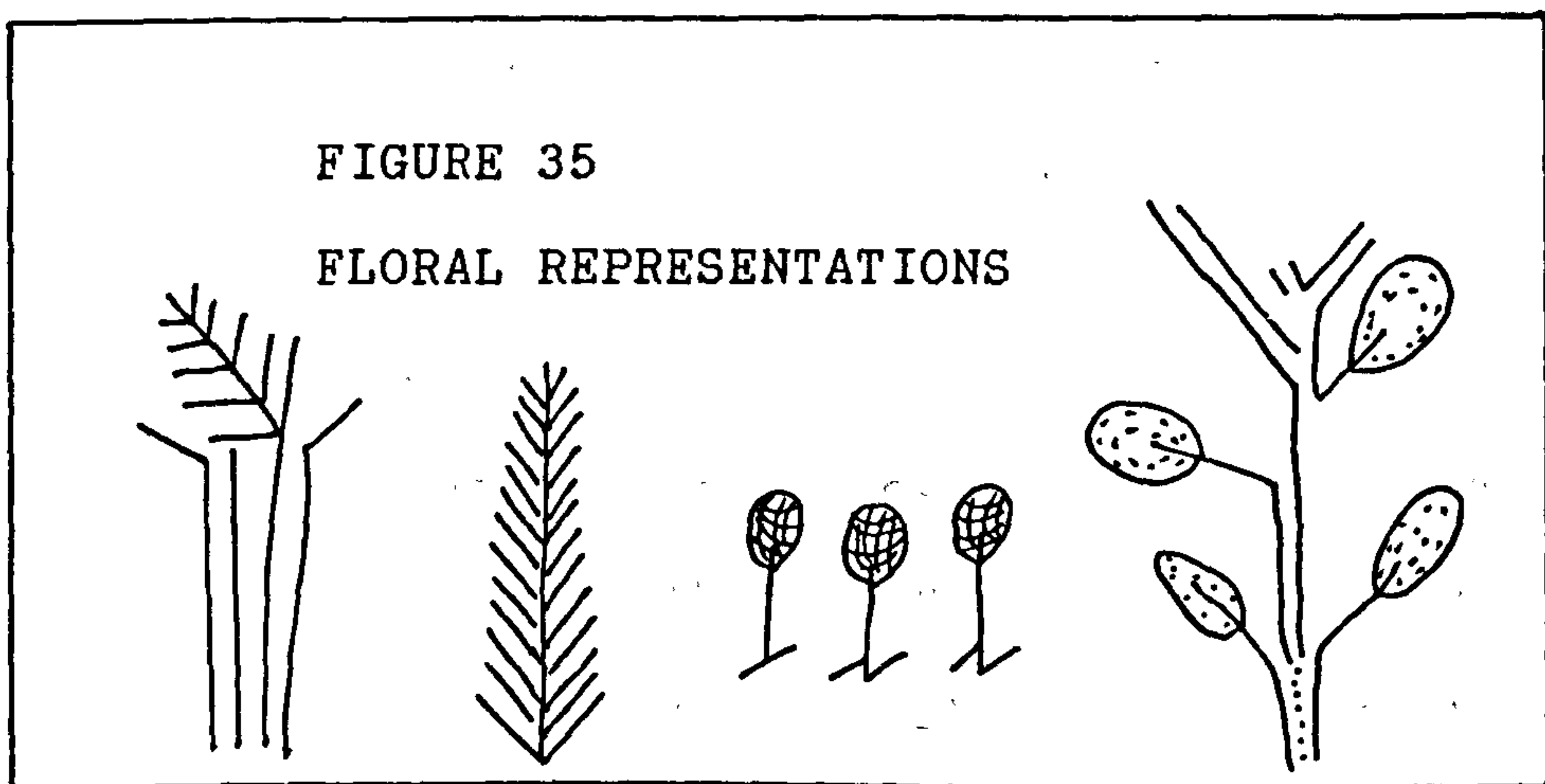
REPRESENTATION OF SEXUAL ACT



The representations of deer, monkeys, camels, donkeys, horses, dogs, snakes, scorpions, mice and birds were drawn with little attention to detail (Figure 34).

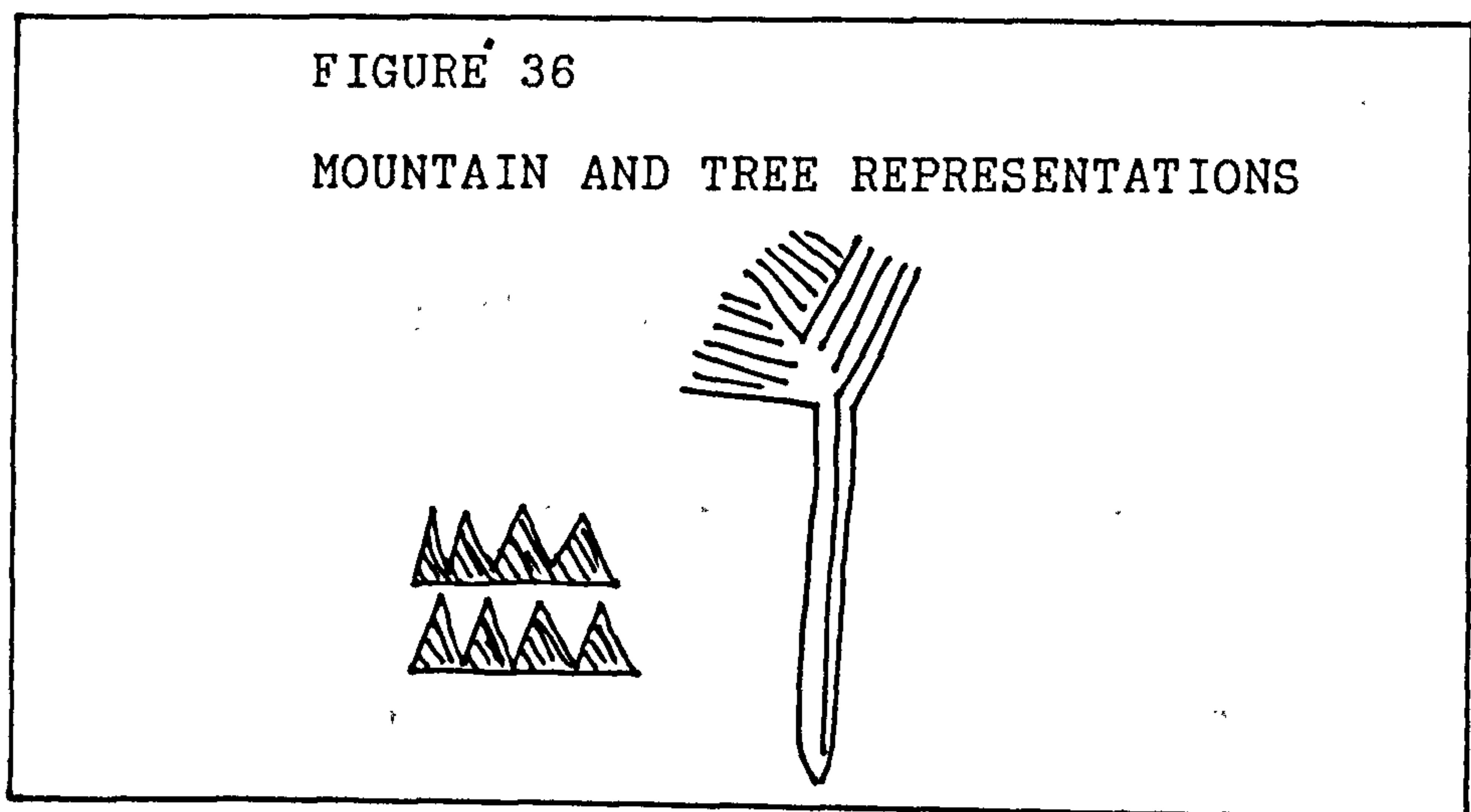


Tree representations were depicted in various ways according to their botanical classifications. Tall palm tree representations, broad leaved tree representations, wheat grass and palm leaf representations were depicted on gourds (Figure 35).



A few floral motifs were evident but other kinds of geometric and organic motifs were rare. The

geometric motifs on the forehead ornaments were arranged symmetrically. On one gourd some geometric motifs were found to represent mountains (ElTayib, 1988, p. 38) and a tree representation was depicted by means of straight lines next to them (Figure 36).



The four patterns depicted in these surface designs were asymmetrically arranged.

5.2.5 Eastern Region

Nineteen artifacts consisting of trays, bags, pots, coffee and water jars, combs, daggers, mats, veils and kohl applicators (traditional eye liners to apply kohl onto eyelids) were documented and classified. Wood and leather were the most common materials. The mats were made of

palm leaves, the kohl applicators were made of silver and the coffee and water jars were made of clay.

Forty-two different surface designs incorporating thirty-five different motifs and thirty-three different patterns but no representations were documented and classified on the artifacts from this region. Human and animal representations were completely absent.

All the motifs were skillfully drawn in outline only. Hatches provided tonal contrasts (Figure 37). Circular, triangular and diamond motifs in various combinations were found on almost all the artifacts (Figure 38). A few floral motifs were depicted.

FIGURE 37

MOTIFS WITH CROSSED LINES SHOWING TONAL CONTRAST

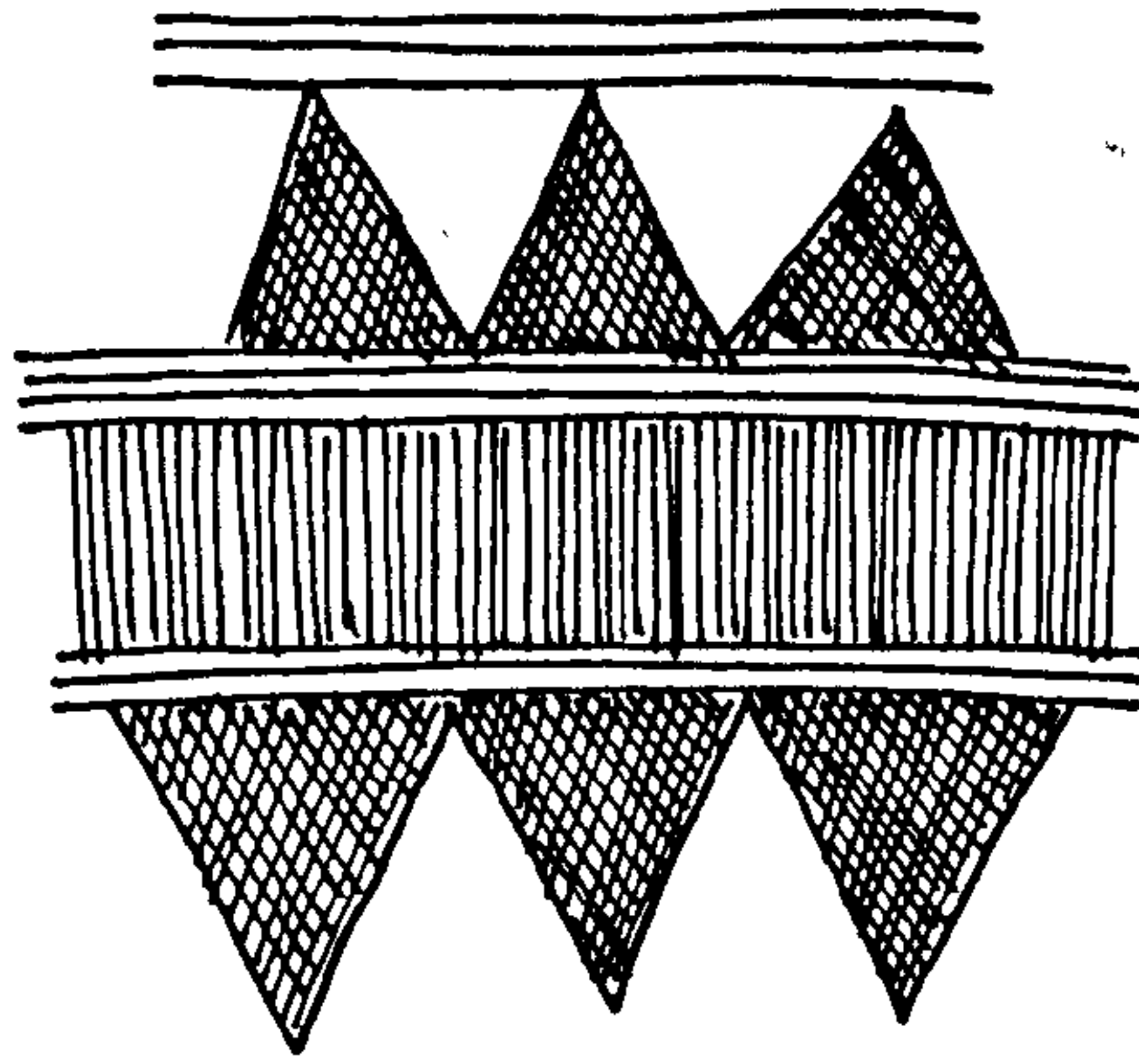
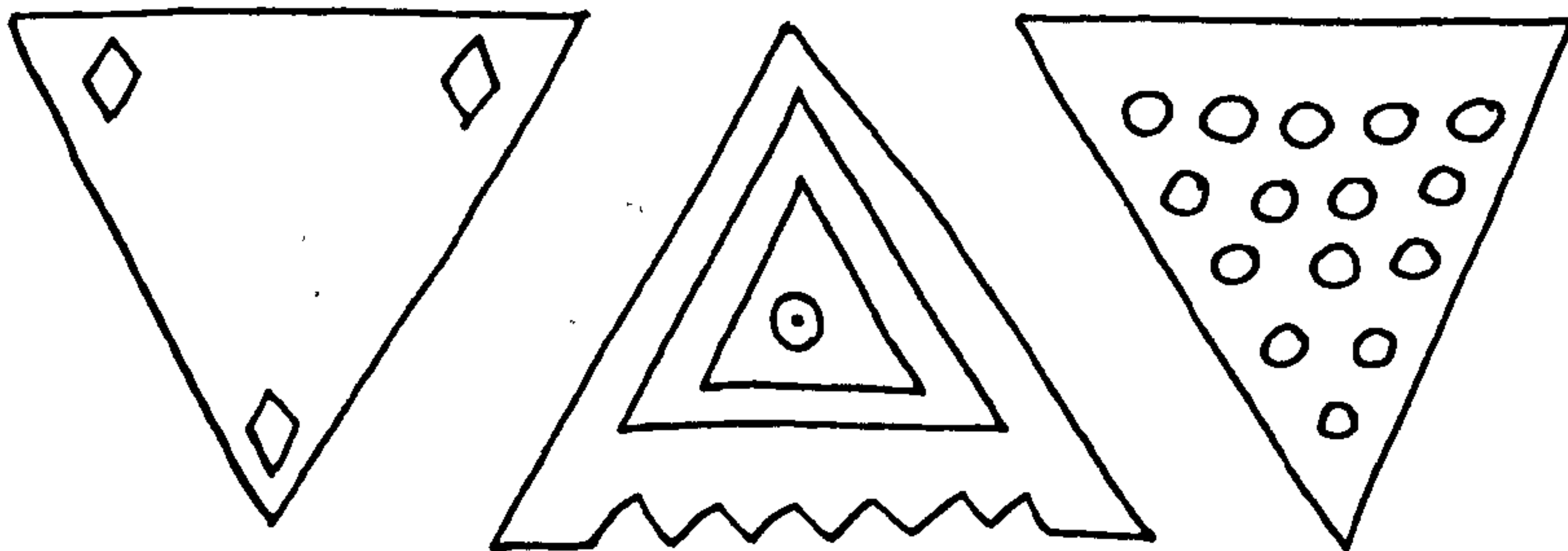


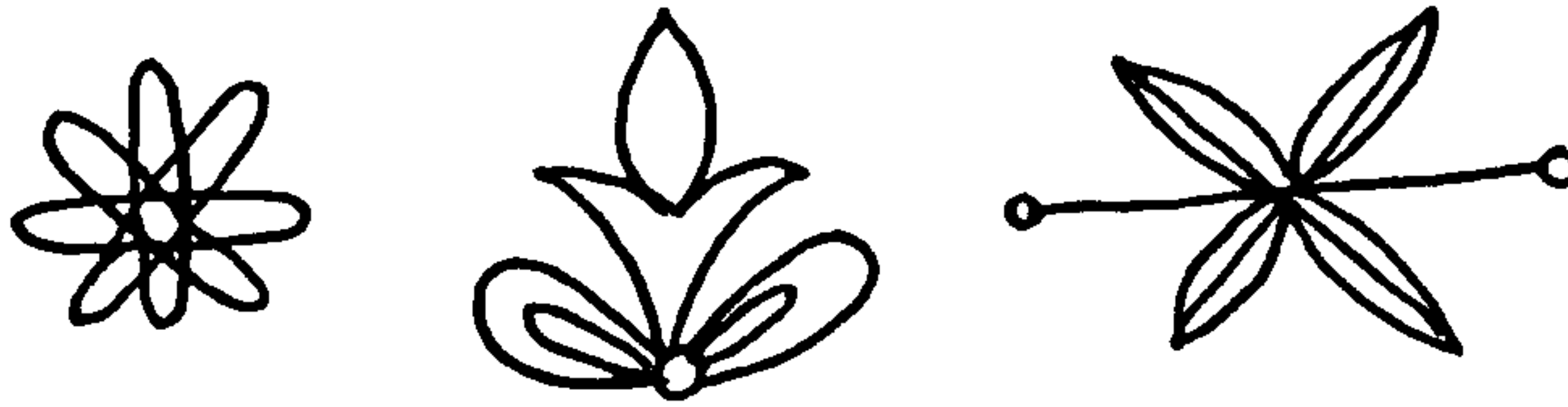
FIGURE 38

GEOMETRIC MOTIFS



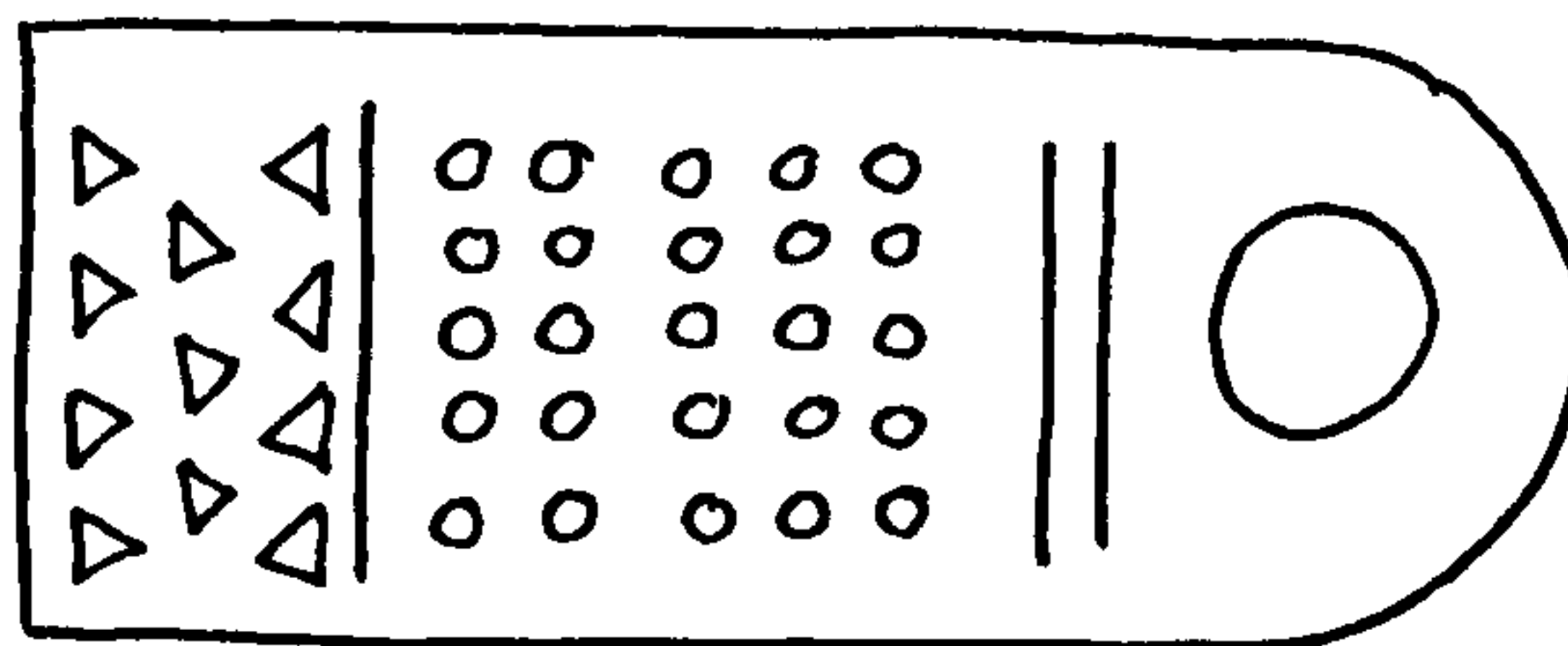
Patterns composed out of a few floral motifs were arranged symmetrically and skillfully drawn (Figure 39).

FIGURE 39
FLORAL MOTIFS



All the patterns were decorative in function and symmetrical in arrangement. All patterns were bounded within line frames (Figure 40).

FIGURE 40
PATTERNS ENCLOSED WITHIN A FRAME



5.2.6 Central Region

The surface designs on thirty-one artifacts from the Central region of the Sudan were documented and classified. The artifacts included coffee

pots, jars, trays, caps, charms and kohl applicators. The materials were silver, gold, tin, palm leaves, clay and cotton cloth.

Forty-five surface designs incorporating forty-five different motifs and fifty-two different patterns were documented and classified but no representations were found.

Geometrical and floral motifs were skillfully drawn and executed and flower representations were constructed from geometric motifs (Figure 41). Very accurately drawn, finely engraved geometric, organic and floral motifs were found on various tin, silver and gold artifacts (Figure 42).

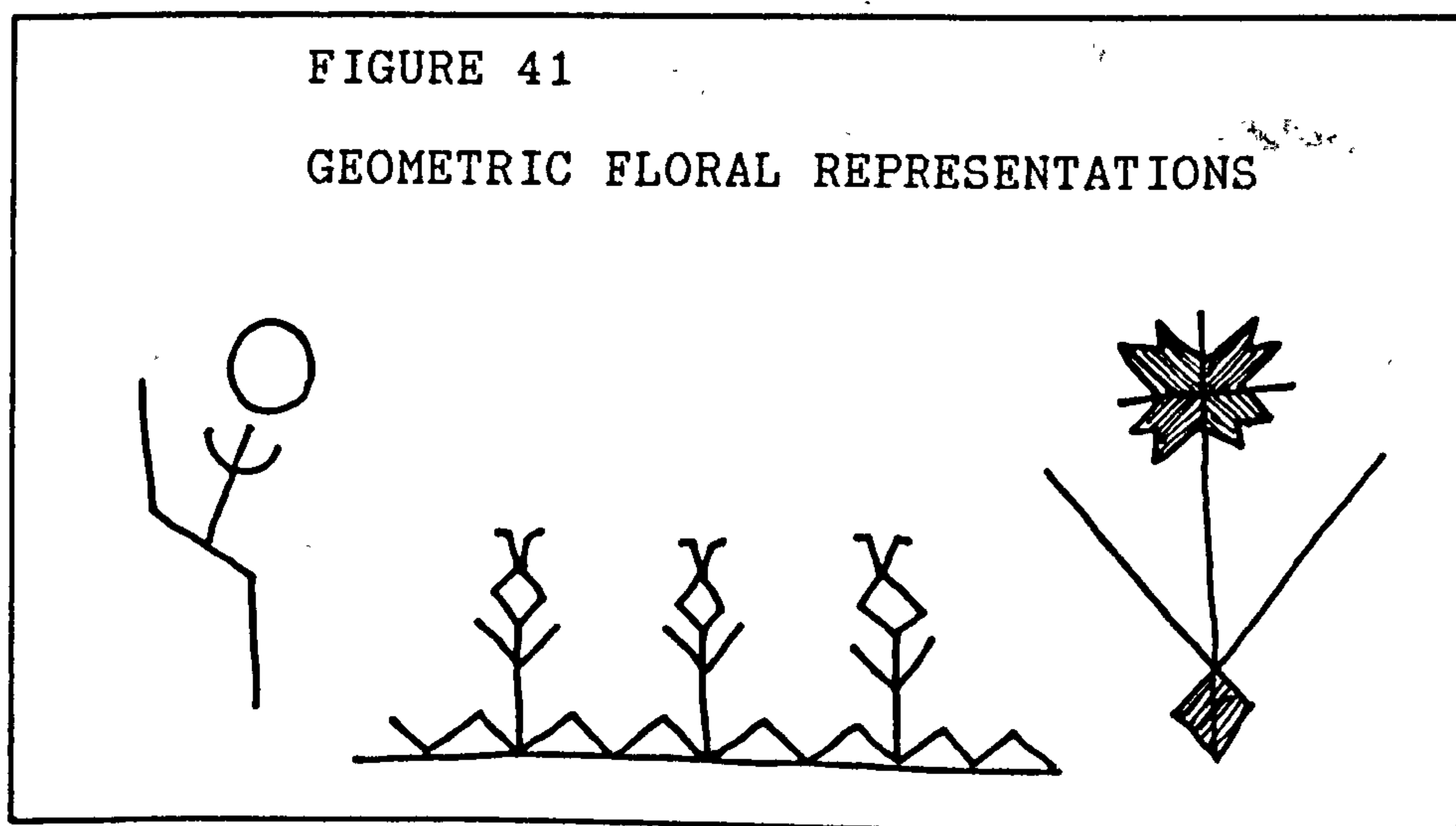
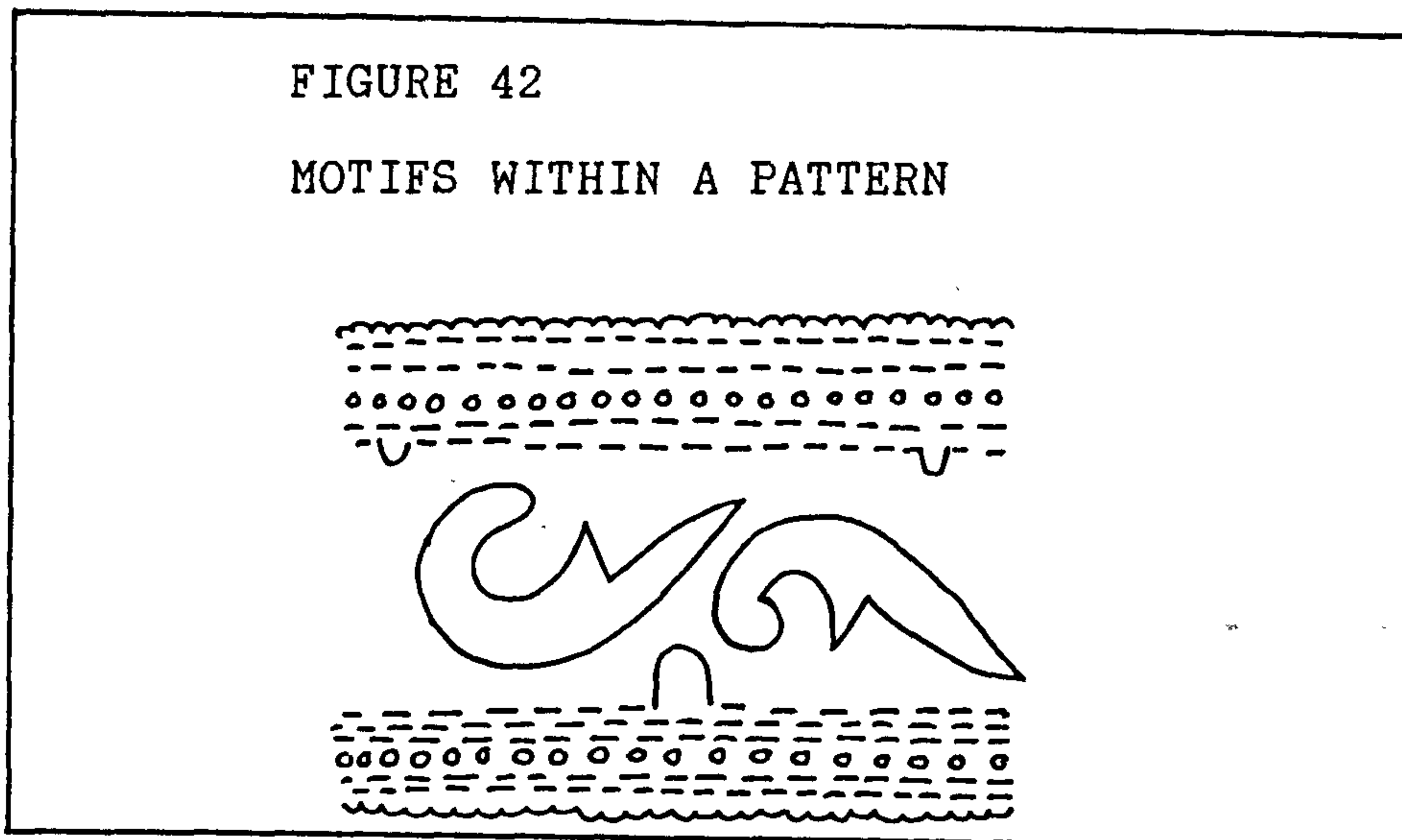


FIGURE 42

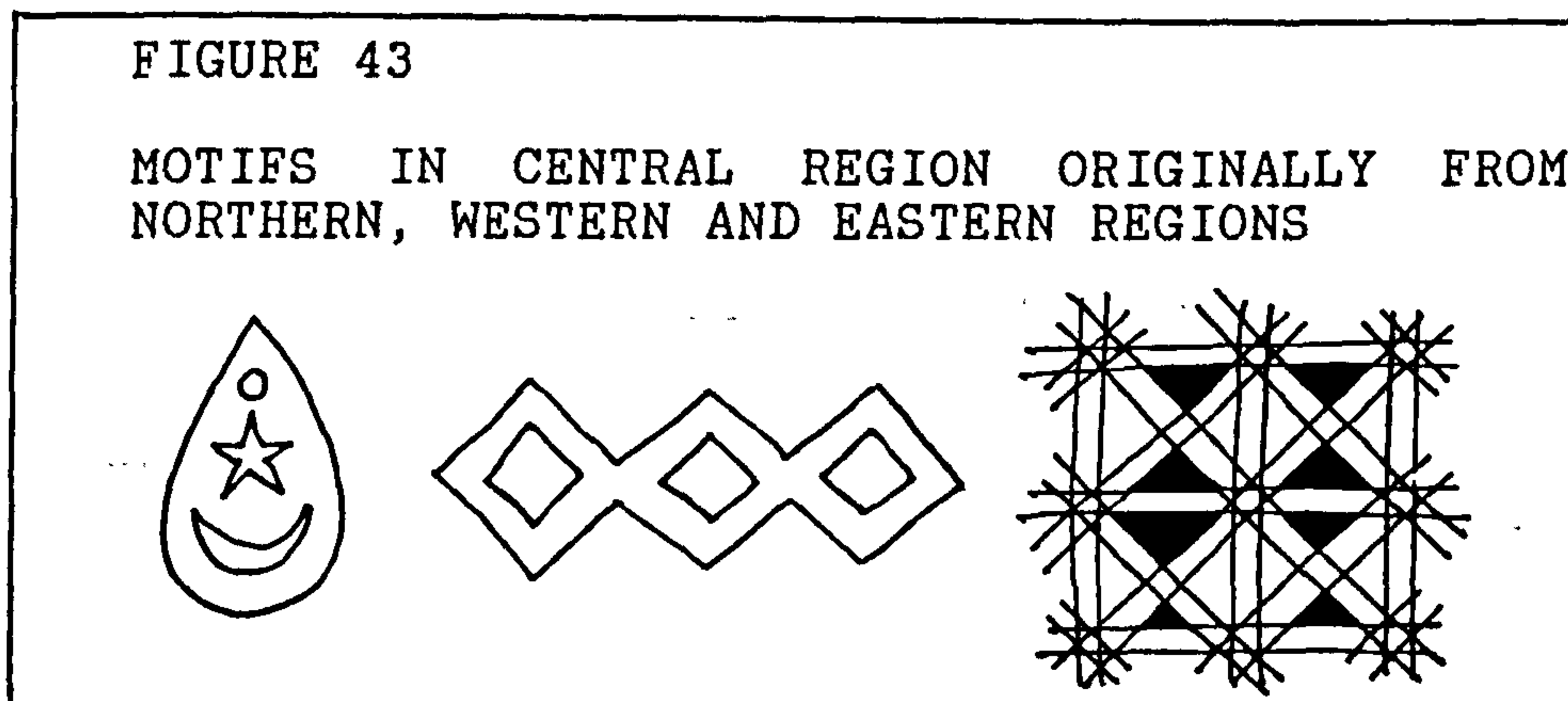
MOTIFS WITHIN A PATTERN



Motifs borrowed from the Northern, Eastern and Western regions of the Sudan (Hakim, 1988, p.25 and ElTayib, 1988, p.40) were evident on artifacts from the Central region (Figure 43).

FIGURE 43

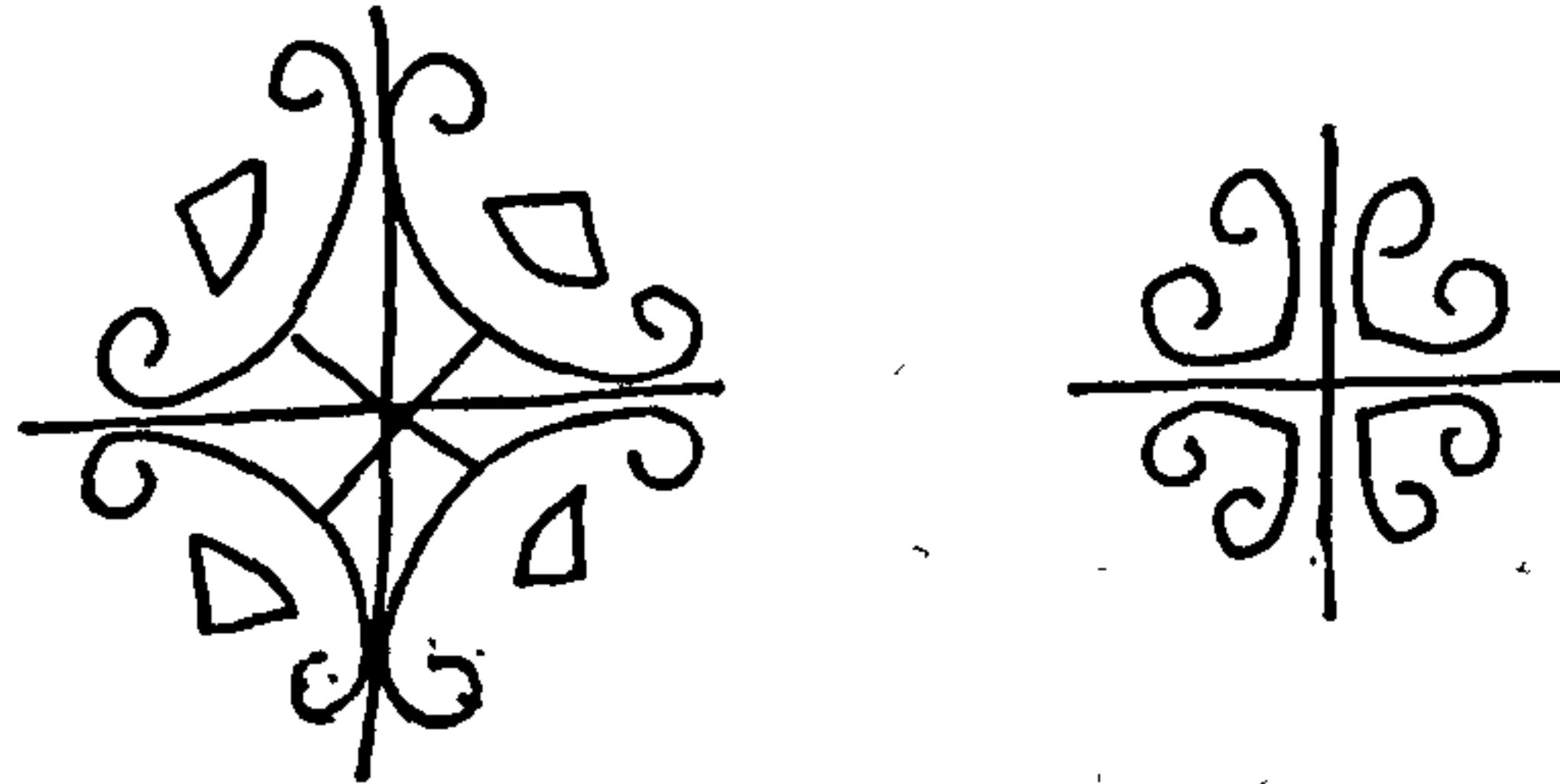
MOTIFS IN CENTRAL REGION ORIGINALLY FROM NORTHERN, WESTERN AND EASTERN REGIONS



Flower-like patterns with motifs derived from early Khartoum iron fences were engraved on coffee trays (Figure 44).

FIGURE 44

FLOWER-LIKE PATTERNS



Patterns composed of geometric motifs in brick-like arrangements appeared on head caps (Figure 45). Also contrasting patterns of arrow motifs were used in decorating these caps (Figure 46).

FIGURE 45

BRICK-LIKE PATTERNS

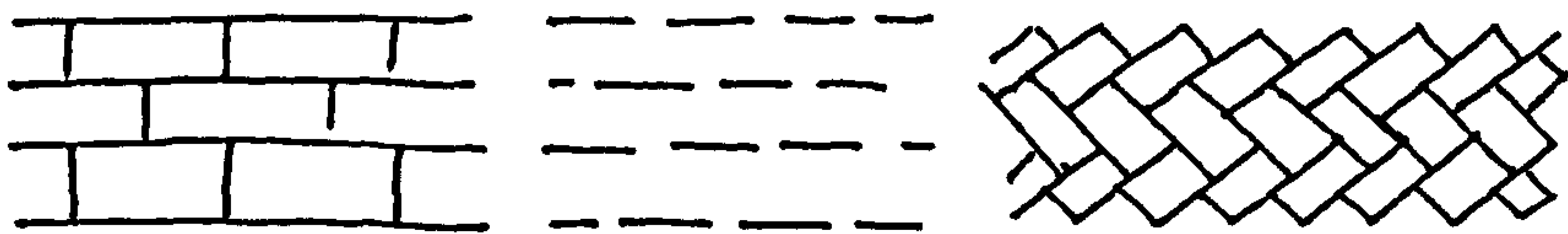
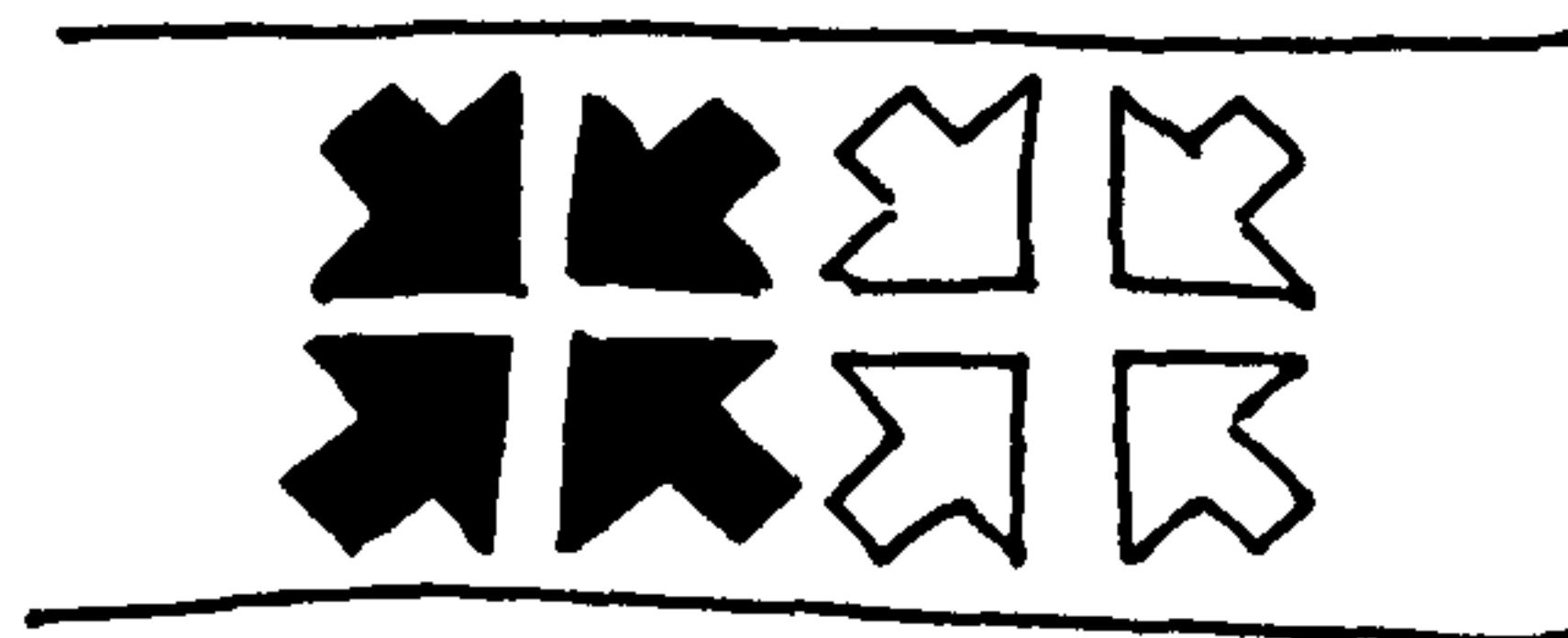


FIGURE 46

CONTRASTING PATTERNS



5.3.0 Definition of 'Style'

A definition of 'style' was essential before any classification of the representations, motifs and patterns of the different regions of the Sudan could take place. According to Otten (1971), Mills (1971), Kaplan and Manners (1972) and Edgerton (1974), the consideration of art styles, the effect of techniques upon them and regional styles are concerns of anthropologists. Therefore anthropological literature was consulted again in an attempt to arrive at a suitable definition.

'Style' as defined by Finch (1974,p.1) is 'The distinctive characteristics that enable the observer to link an art work together with other works'. For Layton 'style' was characterised by:

The range of subjects it depicts, by the regular shapes to which elements of these subjects are reduced and by the manner that components of the art work are organized into a composition (Layton, 1981,p.134).

Vansina (1984,p.78) referred to 'style' as 'formal elements common to a series of works by

one or several artists and, also, the formal elements that are uncommon or even unique'. He quoted four elements by which Olbrechts (1959) had established styles. They were: i) The element of added and decorative detail to the main form, ii) the position of the forms in space, iii) their proportions and iv) their sculptural detail. Vansina (1984) also claimed that 'position in space' and 'proportion' are important in determining art styles.

Layton (1981) Munn and Murphy and Durkheim all classified styles as either 'geometric' or 'figurative'. Shapiro (Layton, 1981) opposed 'geometric' to 'naturalistic', Bascom (1969) opposed 'geometric' to 'representational'. 'Schematization' and 'naturalism' were Ucko's classifications (Layton, 1981). The term 'style' and 'styles' were defined in different ways. But 'geometric' style was commonly used in opposition to style that was 'figurative', 'representational' or 'naturalistic'. For the purposes of this particular study, the researcher chose 'geometric' as the opposite of 'figurative' or 'representational'. This decision was made

during the analysis and once it had become clear that all the representations, motifs and patterns tended to fall into one or other of these two categories. With reference to these categories the following similarities and differences in regional styles were observed:

5.3.1 Arrangement of Surface Designs

The Northern Regional Group

- a) The surface designs on artifacts from the Northern, Western, Eastern and Central regions were symmetrical in arrangement.

- b) The surface designs on artifacts from Northern, Western, Eastern and Central regions covered small areas of the surface of the artifacts.

The Southern Regional Group

- a) The surface designs on artifacts from the Southern region, the Nuba and the Angassana Mountains were asymmetrical in arrangement.

- b) The surface designs on artifacts from the Southern region, the Nuba and the Angassana covered almost all surface area.

5.3.2 Representations

The Northern Regional Group

There were no representations of the human figure or animals evident in the surface designs on the artifacts from the Northern regions.

The Southern Regional Group

- a) The representations of animals in the surface designs on the artifacts from the Nuba Mountains were made up of crudely drawn geometric motifs and lines.
- b) The representations of animals in the surface designs on the artifacts from the Southern region were highly stylized and drawn in thick and thin lines. Although there were very few details on the animal representations, the fish were drawn with a variety of

lines and dots.

c) The representations of animals in the surface designs on the artifacts from the Angassana Mountains were crudely drawn and tended to be shaded by crossed lines and hatches. Animal representations were composed of a series of single lines. Little attention was given to details.

d) The representations of the human figure constituted a major element in the surface designs on the artifacts from the Angassana Mountains. The figures were engaged in different activities. They were crudely drawn in a series of single lines, hatches, crossed lines and dots.

5.3.3 Motifs

The Northern Regional Group

a) Floral motifs of different shapes and sizes were apparent in the surface designs on artifacts from both the

Northern and Central regions; but very few were apparent in the surface designs on artifacts from the other regions.

- b) The majority of the motifs in the surface designs on artifacts from the Northern, Western, Central, Eastern and South-western regions were geometric.
- c) The motifs in the surface designs on artifacts from the Northern, Western, Eastern and Central regions were neatly drawn.

The Southern Regional Group

- a) Very few geometric motifs were in evidence in the surface designs on artifacts from the South-eastern and Southern regions.
- d) The motifs in the surface designs on artifacts from the South-eastern and the South-western regions were crudely drawn.

5.3.4 Patterns

The Northern Regional Group

The geometric patterns in the surface designs on artifacts from the Northern, Western, Eastern and Central regions were neatly drawn and limited to one or two motifs applied to the surface of the artifact.

The Southern Regional Group

a) Almost all the patterns in the surface designs on artifacts from the Southern region and the Nuba Mountains, and a very few of the Western region, were geometric and in contrast arrangements.

b) The geometric patterns in the surface designs on artifacts from the Nuba Mountains and the Southern region were crudely drawn. They consisted of more than two motifs in different sizes applied to the surface of the artifact.

5.3.5 Regional styles

A 'geometric' style characterized the surface

designs of all the different regions of the Sudan with the exception of the Angassana Mountains.

The Northern Regional Group

The regional style in the Northern, Western, Eastern and Central regions of the Sudan was 'geometric'. There were no representations of the human or animals.

The Southern Regional Group

a) The regional style in the Southern region and the Nuba Mountains was 'figurative' and 'representational'; or 'geometric'.

b) The regional style in the Angassana Mountains tended to be both 'figurative' and 'representational'.

5.4.0 Summary of Findings

One hundred and forty-nine artifacts from the seven geographical/cultural regions of the Sudan were available for study (Table 1). The sum of three hundred and twenty-nine surface designs were identified and documented on these

artifacts. The surface designs were sub-divided into representations, motifs and patterns. A total of sixty-eight representations, two hundred and forty-one motifs and two hundred and twenty-one patterns were recorded by means of drawing; firstly, in pencil onto a prepared artifact check-list and secondly, in black ink on working taxonomy sheets (Appendix I).

The classification and analysis of surface designs on the artifacts from the seven different geographical/cultural regions was carried out in three stages. i) The artifacts from each region were labelled according to their function, ii) representations, motifs and patterns on the surfaces of the artifacts were recorded by means of photography and drawing, iii) representations, motifs and patterns in the surface designs from the different regions were compared in an attempt to establish regional styles. Similarities and differences in the characteristics of the representations, motifs and patterns were analysed and regional styles were identified as follows:

5.4.1 Findings about Representations

There were no human and animal representations evident in the surface designs on artifacts from the Northern, Western, Eastern or Central regions. Images of animals in the surface designs on artifacts from the Southern region were highly stylized and skillfully drawn. Images of animals in the surface designs on artifacts from the South-western region were composed out of geometric motifs. Representations of animals in the surface designs on the artifacts from the South-eastern region were composed out of a series of single lines and crudely drawn. Representations of the human figure in the surface designs on artifacts from the South-eastern region were evident on almost all these artifacts and were crudely drawn by means of a series of single lines.

5.4.2 Findings about Motifs

Floral motifs were common in the surface designs on artifacts from both Northern and Central regions. There were very few floral motifs on artifacts from the other geographical/cultural

regions. Geometric motifs were predominant in the surface designs on the artifacts from the Northern, Western, Central, Eastern and South-western regions. Very few geometric motifs were evident in surface designs on artifacts from the Southern and South-eastern geographical cultural regions.

5.4.3 Findings about Patterns

The geometric patterns in the surface designs on artifacts from the Northern, Western, Eastern and Central regions were composed out of one or two motifs. Solid geometric patterns on contrasting light natural surfaces characterized almost all the surface designs on artifacts from the Southern and the South-western regions but very few from the Western region. The geometric patterns in the surface designs on artifacts from the South-western and the Southern regions were constructed out of more than two motifs. There were very few geometric patterns in the surface designs on the artifacts from the South-eastern region.

5.4.4 Findings about Art Styles

The findings about similarities and differences in the surface design characteristics on artifacts from the seven geographical/cultural regions of the Sudan led to the researcher classifying them into two major stylistic categories. The first stylistic category, characterised as 'Northern', included the Northern, Western, Eastern and Central geographical/cultural regions. The second stylistic category, characterised as 'Southern', included the Southern, South-western (the Nuba Mountains) and South-eastern (the Angassana Mountains) geographical/cultural regions.

5.4.5 Stylistic Characteristics of Surface Designs

The Northern Regional Group

The findings about stylistic characteristics of surface designs in the Northern category were that:

- a) The surface designs on artifacts from all the Northern geographical/cultural regions were 'geometric' not 'figurative' or 'representational'.

- b) Representations, motifs and patterns were symmetrically arranged on the surface of artifacts and drawn in outline only.
- c) There were no representations of human or animals.
- d) Motifs and patterns were skilfully drawn.
- e) Motifs and patterns were drawn by means of continuously flowing outlines.
- f) Motifs and patterns partially covered the surface of the artifacts.

Southern Regional Group

The findings about the stylistic characteristics of surface designs in the Southern category were that:

- a) The surface designs on artifacts from the Southern region were both 'figurative' and 'representational'.

Surface designs on artifacts from the South-western and the Southern regions show higher frequencies of 'geometric' style than those from the South-eastern region.

- b) Representations, motifs and patterns were asymmetrically arranged on the surface of artifacts and constructed out of single lines.
- c) The majority of representations on the surface of artifacts were of the human figure and animals.
- d) Representations, motifs and patterns on the surface of artifacts from the South-eastern and South-western regions were crudely drawn.
- e) The majority of representations, motifs and patterns on the surface of artifacts were drawn using broken lines.

f) Representations, motifs and patterns on artifacts from all the Southern regions covered almost the entire surface area.

After the analysis and classification of the surface designs was completed, taxonomy sheets were developed for use in the next stage of the research. Separate sheets were used to record the representations, motifs and patterns from each of the seven geographical/cultural regions. The next chapter reports on a survey of contemporary Sudanese graphic design students' work.

CHAPTER 6

SURVEY AND ANALYSIS OF STUDENTS' CONTEMPORARY GRAPHIC DESIGN

6.1.0 Plan of Action

The main focus of the research reported so far has been the development of a definitive taxonomy of representations, motifs and patterns indigenous to the different regions of the Sudan. As one means of validating the taxonomy and testing its application to a consideration of contemporary graphic design work, a survey of graduates' work was undertaken.

Prior to undertaking this survey it was hypothesised that:

- a) The frequency of cross-regional indigenous
 - i) representations, ii) motifs and
 - iii) patterns in the work of graphic design graduates during the period from 1982 to 1988 would be significantly higher than those produced during the period from 1968 to 1982.

- b) When graphic design students express

themselves visually, characteristics of their cultural background will show in their visual forms to a significant degree.

- c) When graphic design students are introduced to cultural environments other than their own, image imprinting will be visually expressed and retained together with the imagery of these environments.

This part of the research necessitated the construction of a survey instrument, the analysis of examples of work by a sample of graphic designers graduating from Khartoum College of Fine and Applied Art during the last twenty years (1968/87) and an investigation into their cultural backgrounds. It was carried out during the last six weeks of the previously mentioned visit to the Sudan.

The principal reason for using graduates from Khartoum College of Art was because of the availability of, on the one hand, a substantial body of recorded work and, on the other, biographical information concerning the students

themselves. The purpose of conducting the survey was to determine the extent to which:

- a) Indigenous imagery from the different regions recorded on the taxonomy sheets was evident in graduates' graphic designs.
- b) Selected graphic design items could be identified and grouped according to imagery characteristic of the two main regional groups, and,
- c) Representations, motifs and patterns in graduates' graphic designs incorporated indigenous imagery characteristic of their regions of origin.

It was anticipated also that data gathered from this study could show whether or not changes in curriculum planning which had been implemented in 1982 had affected the graduates' use of imagery; and whether, in the light of these changes, cross-regional imagery was more frequent after 1982.

The survey took place after the taxonomy had been completed and the key questions and hypotheses for this part of the research emerged from the fieldwork and analysis of surface designs. The research questions were:

- a) Is there evidence of indigenous
 - i) representations, ii) motifs and
 - iii) patterns in the work of graphic designers who have graduated from Khartoum College of Fine and Applied Art over the last twenty years? If so, does it reflect the students' regions of origin?

- b) Is there evidence that the curriculum change has affected the students' choice of cross-regional imagery during this time?

The survey was carried out in six stages, five of which were completed in the Sudan. The last stage was completed under supervision in the United Kingdom. The stages were:

- a) Collection of data concerning the graduates' regional origins together with examples of

their art work stored in the archives of the Graphic Design Department.

- b) Organisation of graphic design items according to students' regional origins.
- c) Selection of a sample of students' graphic design items for classification by a panel of art educators.
- d) Choice of a panel of art educators to conduct the classification.
- e) Analysis of data and report of findings.

6.2.0 Data Collection

The Graphic Design Department has an established practice of retaining two or three items of art work produced by each student during their final year of study. It is College policy to build archives of contemporary students' art work for exhibition and teaching purposes.

Over five hundred items of art work completed during the students' final year had been

collected and stored at the Graphic Design Department up to the time of this research. The items consisted of posters, book-covers, record-sleeves, greeting cards and book and magazine-illustrations. They varied in kind from general graphics, illustration, typography, photography and printing to lino-printing. The different colour combinations ranged from black and white to full-colour and from mono-colour to multi-colours. Media included poster colours, coloured inks, printing inks, coloured paper, lino and scraper-board. All items were executed on paper and card ranging in size from 10 to 70 centimetres wide and 15 to 100 centimetres high.

The Graphic Design Department's records showed that two hundred and fourteen students from the Northern, Western, Eastern, Central and Southern regions had graduated over the previous twenty years (Table 2). Of these, one hundred and eighty-seven were male and twenty seven were female. Their numbers varied in any one academic year from between seven to thirteen as shown in Table 2.

TABLE 2

TOTAL NUMBERS OF STUDENTS GRADUATING DURING THE PERIOD 1968-87 BY REGIONS AND SIZES OF SAMPLES INCLUDED IN THE SURVEY AS PROPORTIONS OF THE TOTAL.

	REGIONS					TOTAL
	N	W	E	C	S	
STUDENT NOS.	70	39	26	64	15	214
PROPORTIONS.	33%	18%	12%	30%	7%	100%
SAMPLE NOS.	33	18	12	30	7	100

The records showed that no students from the South-eastern or the South-western regions had graduated from the Graphic Design Department during that time.

6.2.1 Collation of Graphic Design Work

A list of graphic design graduates' names, year of graduation and region of origin was prepared from the College records. Graphic design items by students from each of the five regions were collated separately. A total of one hundred and eighty items of graphic design by students from the Northern region were found in the archives. There were one hundred and sixty-two items by

students from the Central region, one hundred and two by students from the Western region, sixty-eight by students from the Eastern region and forty items by students from the Southern region. Once these items had been sorted into regions the next stage was to identify and separate work by individual students within each regional group in preparation for a final selection.

6.2.2 Selection of Sample of Graphic Design Items

According to Adams (1985), a good sample should reflect an accurate profile of the population it represents. A proportional method of sampling the graduates' work was adopted for the research. The relative proportions of students selected from each region are shown in Table 2.

The researcher followed Moser's (1971) 'stratified simple random sample design'. The number of students from each region was based on their relative proportion to the whole student population (Table 2). Out of the two hundred and fourteen graphic design graduates, a random sample of a hundred students was selected. It was

necessary to reduce the number of items in the sample for practical reasons so that the task of the proposed examination undertaken by experts would be of a manageable size. The outcome was that the work of thirty-three students from the Northern region, thirty from the Central region, eighteen from the Western region, twelve from the Eastern region and seven from the Southern region were included in the sample. The numbers of students finally selected was divided proportionally according to the regional origins of graphic design graduates over the last twenty years.

There were two hundred and forty-four items of graphic design produced by the selected one hundred students in the sample. The number of items produced by any one student varied from two to three. The individual student's work was sorted out. One hundred graphic design items were randomly chosen from the whole. The process of selection was carried out by the researcher with a member of the Graphic Design staff, in the following manner; 1) Each student's work was put on the floor separately. The piles of work were

placed in a circle; ii) a point in the circle was selected randomly and iii) the top item was removed from all odd numbers and the second item from even numbers.

Almost all design examples of projects taught within the Graphic Design Department over the last twenty years were represented in the final selection of work. The sample included forty-four book covers, twenty posters, fourteen book illustrations, twelve greetings cards and ten record sleeves completed by students during their final year. Sixty eight items had been produced between 1968 and 1981. The remaining thirty-two items had been produced after the major change in the curriculum reported in chapter two (p.57) had taken place in 1982.

In the final stage, the one hundred items of graphic design were numbered randomly from one to a hundred and exhibited in one of the Graphic Design studios. No names, dates or information about the students' region of origin were indicated on or near any of the exhibited work. This was because it was important for the

research findings that none of the members of the examining panel had any prior knowledge of either the items or the students' regional origins.

6.2.3 Panel of Art Educators

A panel of eight art educators (two acting as a supplementary group and six as the main group) was selected. The panel consisted of three graphic designers, a sculptor, a painter, two textile designers and an industrial designer. The common factors uniting them were that:

- a) they were established Sudanese artists and designers with extensive teaching experience,
- b) they were interested in indigenous craft forms as a source of inspiration for their art, and finally,
- c) they agreed to take part in the survey.

6.2.4 Implementation of Survey

Main Group

Each of the six members of the main group was provided with copies of the taxonomy sheets of representations, motifs and patterns developed

previously from the studies of the surface designs of the artifacts from different regions (Appendix II). One week was allowed for the completion of the proposed classification of the students' work. The six members of the main group were instructed to study the taxonomy sheets and to identify, in writing, each item's region of origin on classification forms. They worked individually and returned their completed classification forms.

Supplementary Group

One graphic designer and one textile designer were not shown the taxonomy sheets and were requested to classify students' work in advance of the main group members and to identify the works' regional origins on the classification forms. Their responses are included in Table 5.

6.2.5 Classification Sheets

Next, two summary sheets of the responses of all members of the group were prepared by the researcher. The results listed on classification forms were placed in adjacent columns according to the random numbers on each of the exhibited

items. Secondly, the numbers used by the group members were replaced by the original numbers previously allocated to the selected items.

Two final master sheets were completed. The first consisted of eight adjacent columns (Appendix III). The number of each item was recorded in the first column. The names of members of the group were entered in the next six columns. The total number of members who had correctly attributed the regional origins of each item of work were entered in the eighth column. The second master sheet consisted of four columns (Appendix IV). The number of each item was recorded in the first column. Names of members in the supplementary group were entered in the next two columns. The number of correctly attributed items by both members were entered in the fourth column.

6.2.6 Analysis of Survey Data

The experts' classification forms were checked against the original list of graduates' regional origins. The terms 'correct' and 'incorrect' were used to report on the experts attribution of the regional origins of the graduates' work.

Table 3 shows the number of correct attributions made by each expert. The result reveals that correct attribution ranges from between seventy four percent to eighty three percent.

TABLE 3

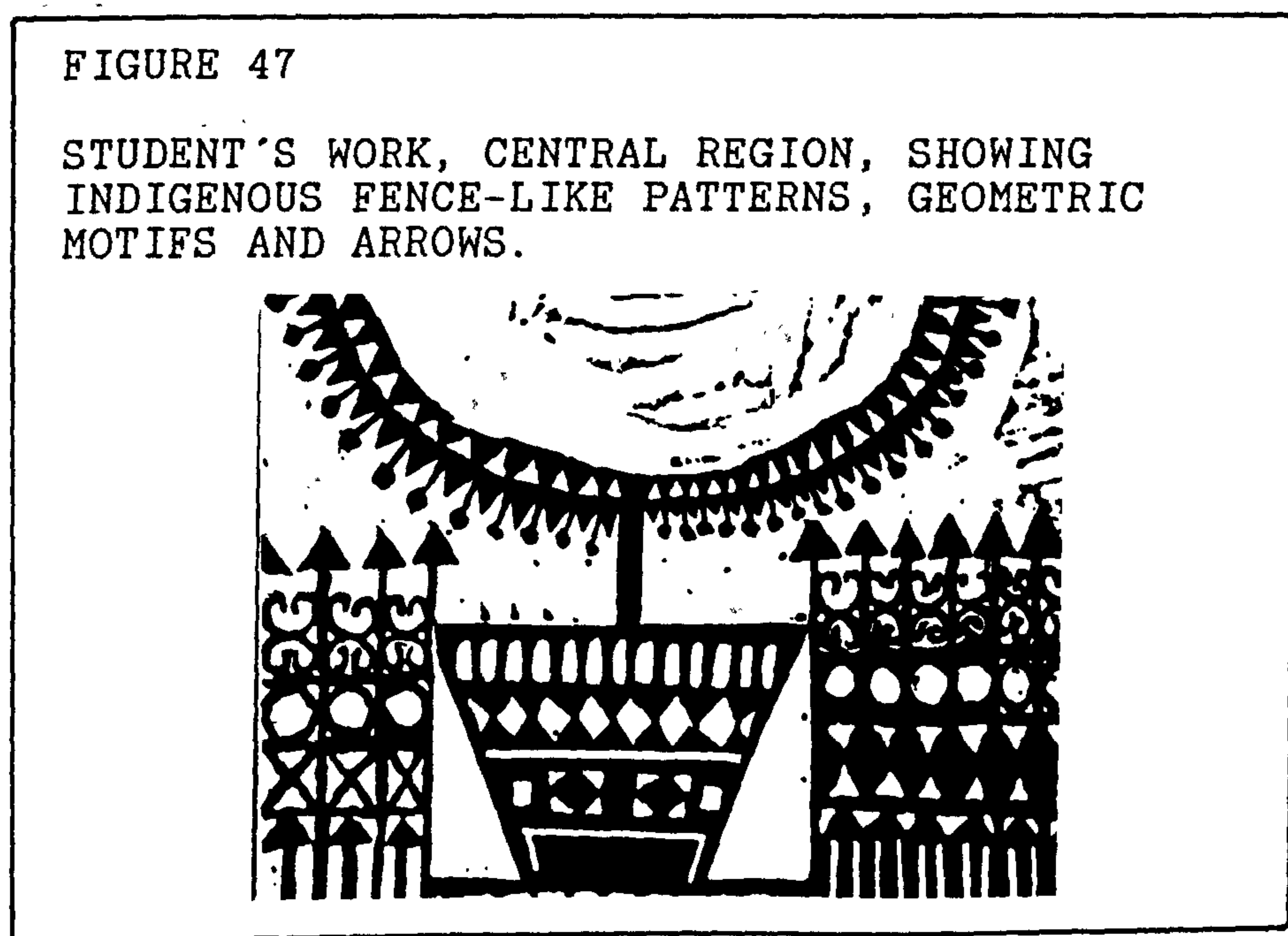
NUMBER OF GRAPHIC DESIGN ITEMS (N = 100) CORRECTLY ATTRIBUTED BY EACH MEMBER.

MAIN GROUP	
MEMBERS	CORRECTLY ATTRIBUTED
SCULPTOR	74
PAINTER	76
TEX. DES.	78
IND. DES.	75
GR. DES. 1	82
GR. DES. 2	83
SUPPLEMENTARY GROUP	
GR. DES.	42
TEX. DES.	38

6.2.7 Central Region

Thirty items by students from the Central region

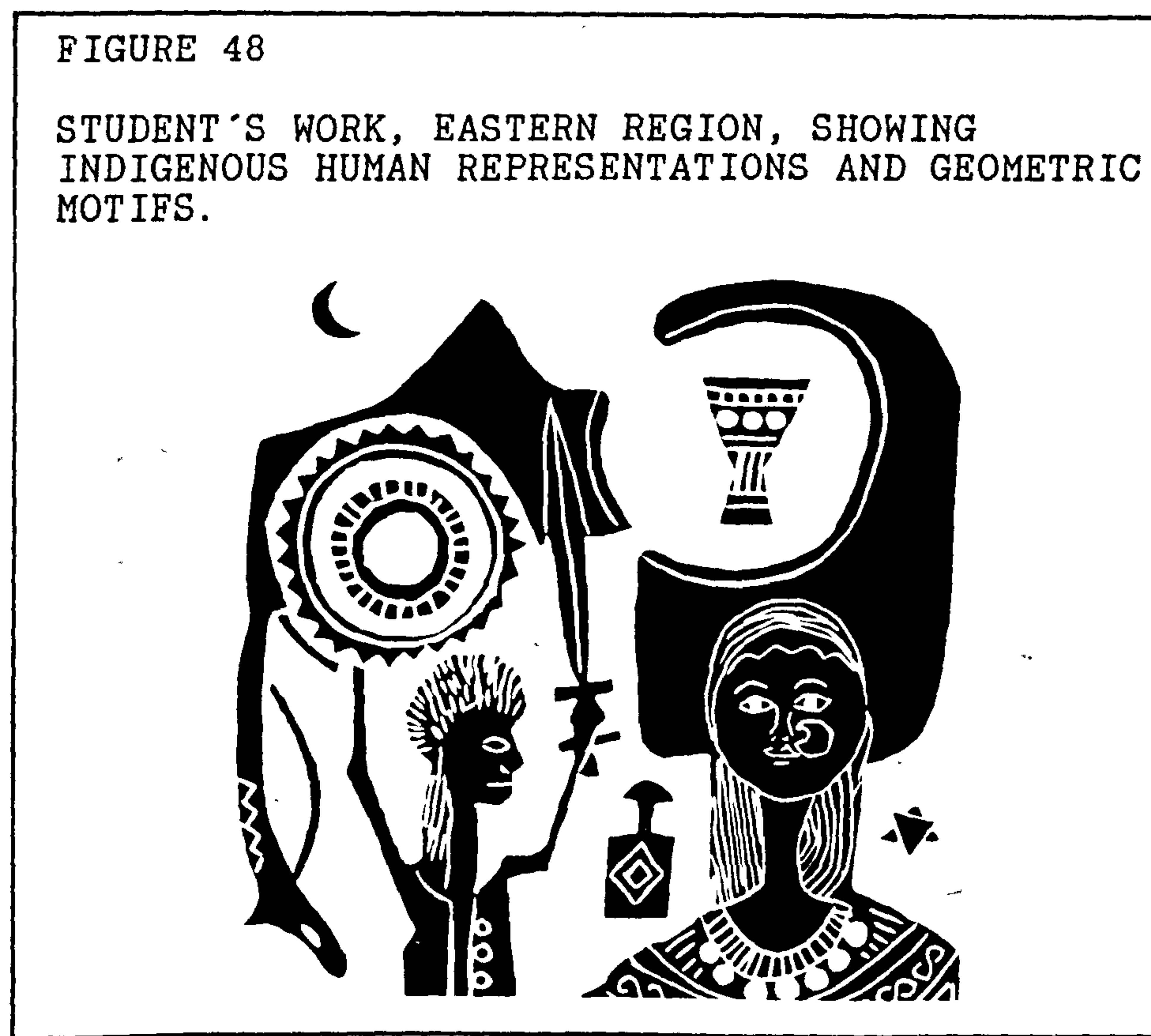
were included in this survey. Eighteen of these were correctly attributed by all members of the group as incorporating representations, motifs and patterns characteristic of the students' region of origin. A book cover illustrated by a student from this region (Figure 47) is an example of work correctly attributed by members. Eight items were correctly attributed by two members only, three items were correctly attributed by one member only and the last item was incorrectly attributed by all members.



6.2.8 Eastern Region

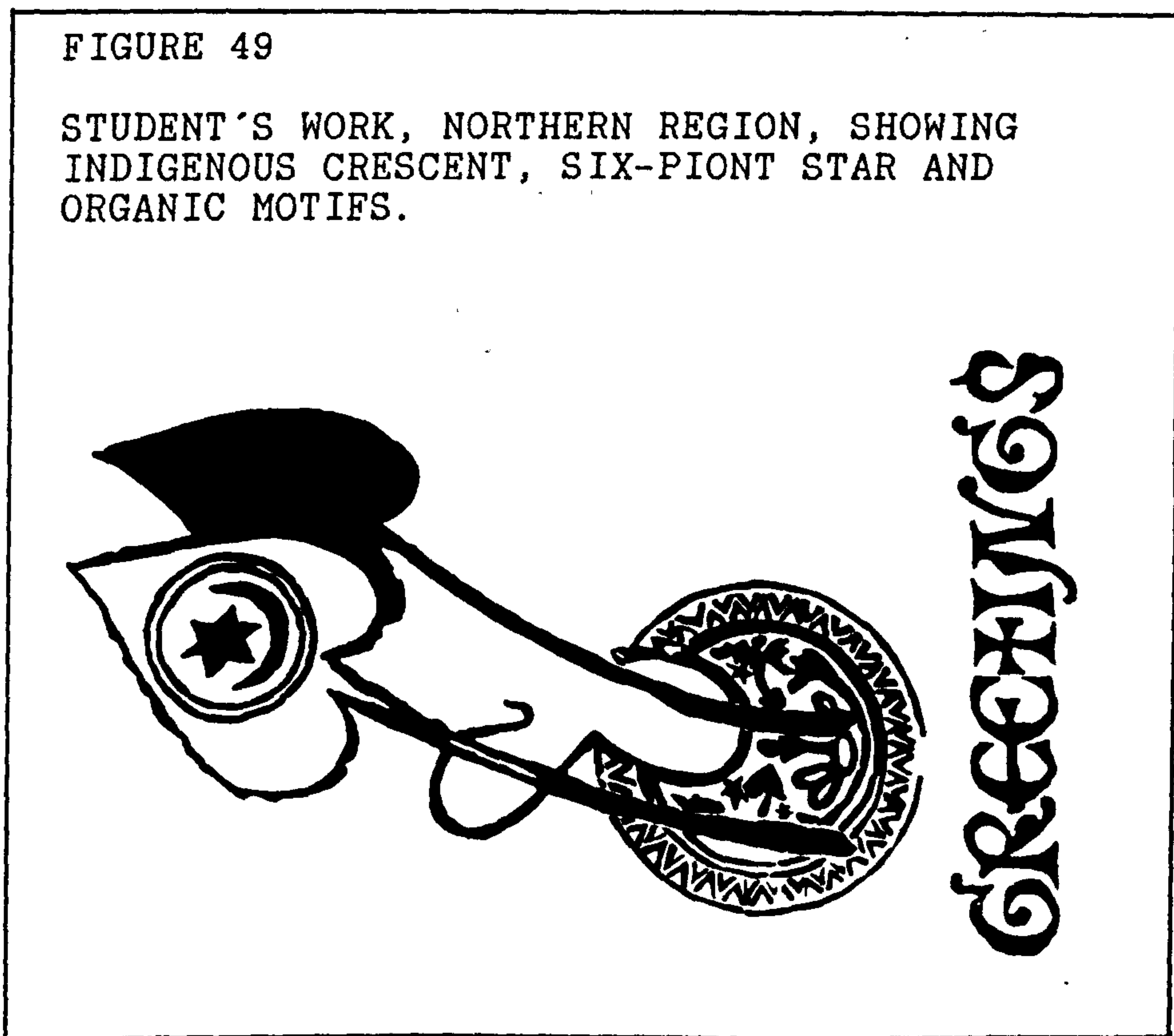
Twelve items by students from the Eastern region

were included in this survey. Eight of these were correctly attributed by all members as incorporating representations, motifs and patterns characteristic of the students' region of origin. A book cover designed by a student from this region incorporating regional indigenous imagery is shown in Figure 48. Two items were correctly attributed by three members only. Two items were correctly attributed by two members only and the last item was correctly attributed by only one member.



6.2.9 Northern Region

Thirty-three items by students from the Northern region were included in this survey. Twenty-three of these were correctly attributed by all members as incorporating representations, motifs and patterns characteristic of this region. A greeting card incorporating regional imagery was designed by a student from this region is shown in Figure 49. Four items were correctly attributed by two members and six items were correctly attributed by only one member.



6.2.10 Western Region

Eighteen items by students from the Western region were included in this survey. Fourteen of these were correctly attributed by all members as incorporating representations, motifs and patterns characteristic of this region. A poster design incorporating regional imagery is shown in Figure 50. Two items were correctly attributed by two members and the remaining two items were correctly attributed by only one member.

FIGURE 50

STUDENT'S WORK, WESTERN REGION, SHOWING
INDIGENOUS ANIMAL REPRESENTATION WITH WORDS
INCORPORATED ONTO IT.



6.2.11 Southern Region

Seven items by students from the Southern region were included in this survey. All items were correctly attributed by the six members as incorporating representations, motifs and patterns characteristic of the students' region of origin. A book illustration incorporating representations and motifs indigenous to this region is shown in Figure 51.

FIGURE 51

STUDENT'S WORK, SOUTHERN SUDAN, SHOWING
INDIGENOUS HUMAN REPRESENTATION AND STYLIZED
OX.



6.2.12 Incorrectly Attributed Items

- a) Twelve items produced by students from the Central region were incorrectly attributed to other regions. They were identified as having motifs and patterns characteristic of the Northern, Eastern and Western regions. A magazine cover by a Central region student incorporating imagery from the Northern, Eastern and Western regions is shown in Figure 52.

FIGURE 52

STUDENT'S WORK, CENTRAL REGION, SHOWING FENCE-LIKE PATTERNS; CALLIGRAPHY AND WALL DECORATIONS FROM NORTHERN, EASTERN AND WESTERN REGIONS.

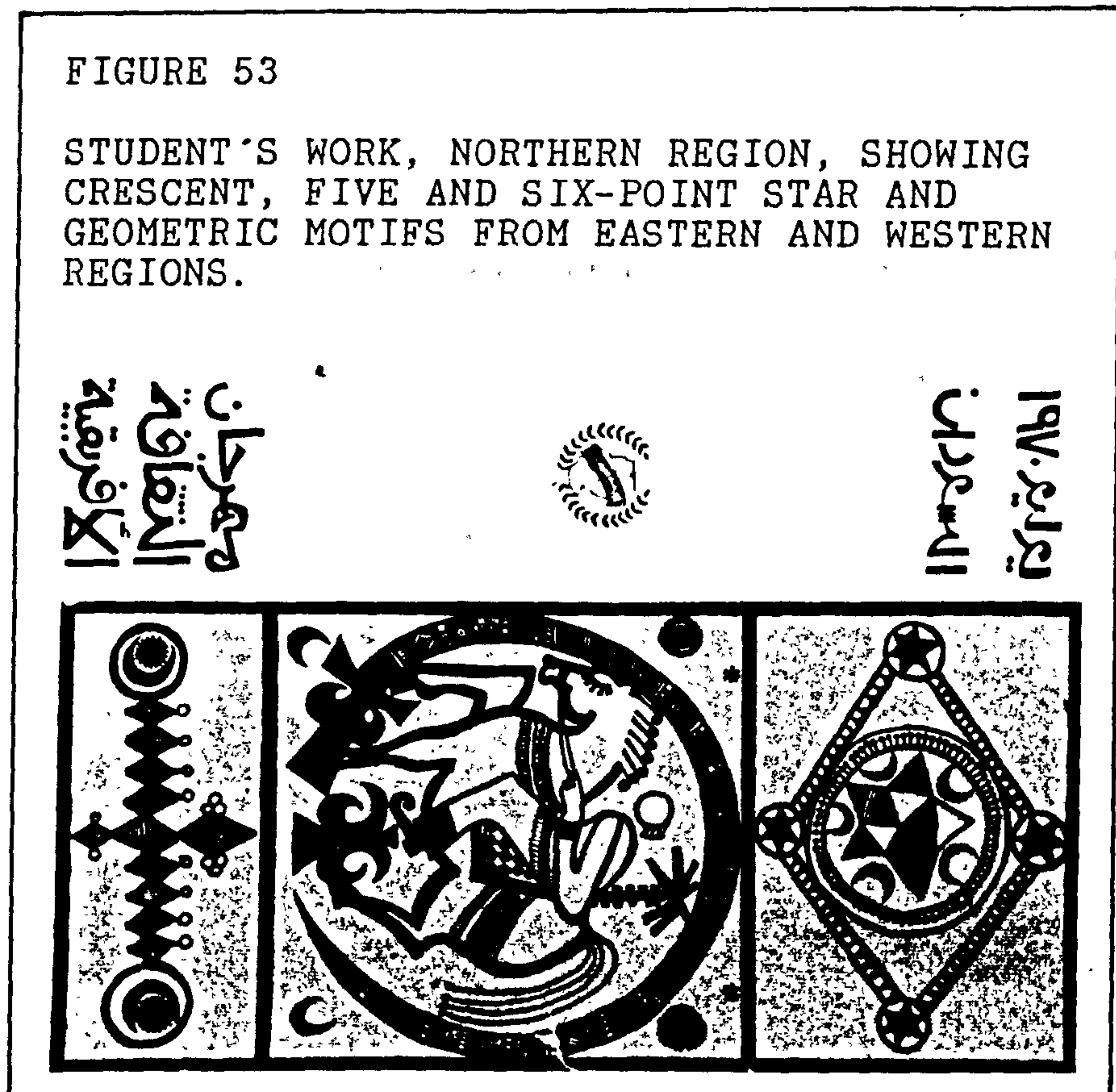


None of the items produced by students from this region were found to have representations, motifs or patterns characteristic of the Southern region.

b) Four items produced by students from the Eastern region were incorrectly attributed as having motifs and patterns characteristic of the Northern and Central regions. One member considered another item by a student from this region as having motifs and patterns characteristic of the Western region. No item by students from this region was attributed as having representations, motifs or patterns characteristic of the Southern region.

c) Ten items produced by students from the Northern region were incorrectly attributed as having motifs and patterns characteristic of the Eastern, Western and Central regions. A poster design (Figure 53) incorporated imagery from these three regions. Two other items produced by students from this region were attributed by two members as having motifs and

patterns characteristic of the Southern region.



- d) Three items produced by students from the Western region were incorrectly attributed as having motifs and patterns characteristic of the Northern, Central and Eastern regions. Experts incorrectly attributed two items by students from this region as having representations, motifs and patterns characteristic of the Southern region. A

magazine cover (Figure 54) is one of these two items.

FIGURE 54

STUDENT'S WORK, WESTERN REGION, SHOWING LETTERING, GEOMETRIC MOTIFS AND INDIGENOUS HUMAN REPRESENTATION FROM SOUTHERN REGION.



6.2.13 Students' Use of Imagery

a) There were twenty-nine items found by members to have representations, motifs and patterns characteristic of regions other than those of the students' own region. Fourteen of these had been produced during the period 1968/81. They represented twenty-one percent of the total. The remaining fifteen items had been produced after the changes in curriculum had been made in 1982.

total.

b) There were three categories of students' work:

i) Graphic design work that depicted representations, motifs and patterns characteristic of other regions. This group included items produced by students from the Northern, the Central and the Eastern regions. They shared motifs and patterns characteristics of all three regions.

ii) Graphic design work that depicted very few representations, motifs and patterns characteristic of other regions. This category included items produced by students from the Western region.

iii) Graphic design work that did not depict any representations, motifs or patterns characteristic of any other region. This category included all items produced by students from the Southern region.

6.2.14 Summary of Findings

- a) Seventy of the one hundred items included in this study were correctly attributed by all six members as having representations, motifs and patterns characteristic of the students' region of origin. Details are shown in Table 4

- b) Twenty-three of the thirty-three items produced by students from the Northern region were correctly attributed by all the members as incorporating motifs and patterns characteristic of this region.

TABLE 4

TOTAL NUMBERS OF GRAPHIC DESIGN ITEMS
CORRECTLY AND INCORRECTLY ATTRIBUTED BY
ALL SIX MEMBERS BY REGION.

	REGIONS					TOTAL
	N	W	E	C	S	
NO. OF WORK	33	18	12	30	7	100
ATTRIBUTED	23	14	8	18	7	70
INC. ATTRIB.	10	4	4	12	0	30

- c) Fourteen of the eighteen items produced by students from the Western region were correctly attributed by all the members as incorporating motifs and patterns characteristic of this region.
- d) Eight of the twelve items produced by students from the Eastern region were correctly attributed by all the members as incorporating motifs and patterns characteristic of this region.
- e) Eighteen of the thirty items produced by students from the Central region were correctly attributed by all the members as incorporating motifs and patterns characteristic of this region.
- f) All seven items produced by students from the Southern region were correctly attributed by all group members as incorporating representations, motifs and patterns characteristic of the Southern region only.
- g) With very few exceptions, incorrectly

attributed items produced by students from any of the four Northern regions were found to have motifs and patterns characteristic of the other three regions within the Northern group.

h) None of the incorrectly attributed items produced by students from the Central region were found to have motifs or patterns characteristic of the Southern region.

i) None of the incorrectly attributed items produced by students from the Eastern region were found to have motifs or patterns characteristic of the Southern region.

j) Only two of the items produced by students from the Northern region were judged by two members each to have motifs and patterns characteristic of the Southern region.

k) Only two of the items produced by students from the Western region were found to have motifs and patterns characteristic of the Southern region. One by three members and the other by one member only.

- l) Graphic design work produced by students from the Northern, the Central and the Eastern regions shared motifs and patterns characteristic of their regions.
- m) Graphic design work produced by students from the Western region depicted very few motifs and patterns characteristic of other regions.
- n) Graphic design work produced by students from the Southern region did not show any motifs or patterns characteristic of any of the other regions.

6.3.0 Findings and Conclusions

Effects of Access to the Taxonomy Sheets

Each of the six members who were members of the main group correctly attributed the regions of origin of at least seventy-four students. The textile designer and the two graphic designers had correctly attributed the regions of origin of seventy-eight, eighty-two and eighty-three students respectively.

The two members of the supplementary group, who were not shown the taxonomy sheets prior to the classification, had correctly attributed the regions of origin of thirty-eight and forty-two students respectively.

The taxonomy sheets appeared to be an important factor influencing the correct attribution of the students' regions of origin. Without the taxonomy sheets members were very much less successful in their judgements about the regional origins of the students.

Students' Work and Their Regional Origins

The members correctly attributed the regional origins of over seventy-four of the students from their work. This indicates that students did use imagery which was characteristic of their regions of origin.

Students' Use of Imagery

The representations, motifs and patterns from the different regions of the Sudan recorded on the taxonomy sheets were evident in the students' work. Some of the students' work depicted imagery

characteristic of their regions of origin only, while others included imagery characteristic of other regions as well.

Curriculum Change

With reference to the hypothesis stated on pages 162-3 items produced by students after the changes in curriculum planning in 1982 were found to show evidence of more cross-cultural awareness and use of more cross regional imagery (forty-seven per cent of the total work) than those produced before (twenty-one per cent). With the exception of work produced by students from the Southern region, this indicates that these changes in curriculum planning were effective and did fulfil one of the main objectives of the College.

In summary,

- i) the images in the work produced by students from the Southern region were mono-regional;
- ii) the images produced by students from the Western region were multi-regional to a limited extent;

- iii) the images in the work produced by students from the Northern and Eastern regions were more multi-regional and
- iv) the images in the work produced by students from the Central region were the most multi-regional of all.

This indicated that students from the Southern region did not apply any other region's indigenous imagery in their work. Students from the Central region applied a mixture of other regions' indigenous imagery in their work. This could be because the Central region is a meeting point for people from all other regions.

The next chapter deals with the educational applications and outcomes of the research as a whole and includes conclusions and recommendations regarding curriculum planning for Khartoum College of Art.

CHAPTER 7

EDUCATIONAL APPLICATIONS AND OUTCOMES

7.1.0 Educational Implications Arising out of the Research

Once the analysis and classification of indigenous Sudanese surface designs and the survey of students' work had been completed the following observations were made about their possible educational applications and outcomes:

7.1.1 The Survey of Indigenous Imagery

The analysis and classification of indigenous Sudanese surface designs carried out in Part A had led to the researcher categorizing this indigenous imagery into two major regional groups that differed considerably from each other stylistically. The taxonomy sheets that had been developed for this purpose were understood to constitute an important resource for future teaching in that they provided Sudanese art and design educators with a new set of criteria for the classification of indigenous imagery and, also, for the analysis of stylistic characteristics of contemporary graphic design work.

Furthermore, the interviews with museum experts and the review of research into material culture carried out during this part of the research had led to a consideration of ways in which anthropological curriculum content could be included in museum education and in the programme of study for students at Khartoum College of Art.

7.1.2 The Survey of Students' Work

The findings about indigenous representations, motifs and patterns in the work of graphic design students at Khartoum College which were the outcome of the survey in part two, were that:

- a) There was a considerable degree of correlation between the imagery students incorporated into their graphic design work at the College and the indigenous imagery of their region of origin.
- b) Work of students from the Northern regional group tended to be cross-cultural in the sense that it incorporated indigenous

imagery from several regions within this group.

c) Work of students from the Southern regional group incorporated the indigenous imagery of this region only.

d) Work produced after 1982 (the date when the College policy about cultural awareness was implemented) incorporated more cross-regional imagery than that produced before 1982.

7.2.0 Establishing a Basis for Curriculum Reform

The stated aim of this research as a whole was that of establishing a basis for curriculum planning and reform in Art Education in general and in Graphic Design at Khartoum College of Art.

Prior to formulating educational recommendations the researcher judged it essential to consult literature in art education which addressed the question of curriculum planning, reform and multi-cultural issues. Literature by specialists in African Art and Art Education including

Greenough (1966), Fafunwa (1967), Makulu (1971), Thompson (1981), Datta (1984) and by spokesmen for international organisations including Ceso (1969), and Unesco (1961, 1968, 1977), was consulted. It became clear that they had already identified important guidelines for curriculum planning in African nations such as the Sudan which took account of:

- a) the design of teaching materials;
- b) policy for educational institutions;
- c) curricula development and research
- d) teaching methods in art and design.

Many of their publications included lists of policy statements and curriculum guidelines intended to assist curriculum developers in this type of multi-cultural curriculum planning.

After consulting this literature this researcher selected the following fifteen items as most pertinent to the task in hand as it related to the findings of the research and the current educational situation in the Sudan.

The following recommendations concerning the design of teaching materials; policy for educational institutions; curriculum development and research; and teaching methods in art and design were understood to relate to the needs of Khartoum College and the research objectives stated in chapter two (2.2.3).

7.2.1 Design of Teaching Materials:

The recommendations concerning teaching materials and textbooks were that:

- 1) They should be developed in such a way that they illuminated the local environment of the students and reflected their cultural heritage.
- 2) They should be written by African nationals and based on research carried out in Africa.
- 3) They should be related to the needs of the particular students concerned and their cultural origins.

7.2.2 Policy for Educational Institutions

The recommendations regarding educational institutions were that they should:

- 4) Seek to become the academic focus of national life and reflect the social, economic, cultural and political aspirations of the people.
- 5) Encourage elucidation and appreciation of indigenous culture and heritage and seek to dispel misconceptions about Africa through research and teaching of African Studies.
- 6) Promote a sufficient volume of research to form a sound basis for teaching; to contribute to universal knowledge and take account of environment, cultural heritage and the demands of technological progress and economic development.
- 7) Equip, train and produce people with a

reasonable degree of technological competence, and encourage talented students by giving them opportunities for training locally and abroad.

7.2.3 Curriculum Development and Research

The recommendations concerning curriculum development and research were that:

- 8) Efforts should be made to reshape existing curricula to conform to African interests and conditions, to reflect African national life and to contribute to the development of national pride and unity.
- 9) New curricula should be 'African'; that is, they should rest on a foundation of specially African culture and be based on the special requirements of African progress in all fields.
- 10) Much attention should be given to training specialists in African history, music, culture and art, and to

the development of human resources to meet particular manpower needs.

- 11) Local craftsmen and women should be employed in educational systems and that, as well as inviting them to teach in colleges and schools, students should visit their workshops.

7.2.4 Teaching Methods in Art and Design

The recommendations concerning teaching methods in art and design were that:

- 12) They should be based on a highly developed understanding of cultural diversity in art and design and their implications for the curriculum. Only then could art and design teachers become central figures in cultural transmission and development.
- 13) Art and design teachers should help students analyse the aesthetic condition of their environment critically and assist them to become

knowledgeable about the social significance of the arts in a variety of cultural and political contexts.

14) They should help students to understand the multifaceted interaction of the elements of design, together with its function and structure.

15) They should plan programmes based on the materials of the students' indigenous culture and encourage them to use these in novel or creative ways.

Since policy for educational institutions was understood to be a political and administrative matter however, policy statements were not put forward for consideration as an outcome of this research. Curriculum development issues and research stated above which could be applied and adopted within Khartoum College were taken on board. They were applied in the development of i) a computer program and visual aids, ii) a strategy for the introduction of anthropological curriculum content and iii) a compulsory course

component for Foundation and Graphic Design students.

7.2.5 Application of the Findings

a) Computer Package

A computer program was devised with the aim of creating a convenient visual data base for use by Sudanese art educators, material culture and museum experts and art students. It was intended that it should be used both as a storage and a retrieval system.

The program was planned using structured outlines specifying the main required operations. These were broken down into a number of processes and a module was constructed for each. A flow chart was developed to show how the processes were related to each other in the overall program. The actual design of the program was carried out directly at the keyboard and was checked and modified by the researcher until it achieved the pre-specified requirements. BBC BASIC language was used for data handling and video aided equipment was employed to include

visuals. A program for one Sudanese region was written first, then it was repeated with the other six regions. A menu was constructed which included programs of all seven regions and included instructions on how to run the program as a whole.

The completed program was menu driven and included regional and sub-menus. The main menu offered seven optional menus covering the seven regions of the Sudan. Each regional menu offered three sub-menus including representations, motifs and patterns. The first sub-menu was divided into two human and animal representations. The second sub-menu was divided into geometric, floral, organic and miscellaneous motifs. The third sub-menu covered patterns.

The computer program showed motifs only.

Representations and patterns were referred to in a program outlined in an accompanying taxonomy booklet. There were two main reasons for the production of the booklet. Firstly, at the present time, computers are not in use in

Khartoum College of Art. It is possible however to gain access to them in other departments of the Polytechnic. Secondly, the old BBC computers used in the Sudan often produce a low quality representation. So, for teaching purposes, taxonomy booklets were designed for use with or without the computer program.

b) Visual Aids

The working taxonomy sheets that had been prepared during part A of the research were understood to provide a starting point for the future development of a large quantity of teaching materials of use both for art education purposes and museum studies. The decision was made that the imagery documented on the taxonomy sheets should be presented in its existing form as a means of introducing students to the concept of a visual grammar and vocabulary which is indigenous to the Sudan; and, with the intention of encouraging them to add to it. In connection with this, it is recommended that further documentation and analysis of indigenous imagery from the

different regions should be carried out by art and design students and members of staff in the field, supervised by anthropologists. The aim of this should be to add to the record of visual materials already available to Sudanese people in general, to preserve Sudanese cultural heritage and to prepare teaching materials. This work should be carried out jointly and encouraged by specialists in the fields of, both, art education and material culture.

c) Research into Cultural Meanings of Artifacts

The anthropological studies consulted during part A of the research emphasised the importance of knowledge about the meanings societies and tribal groups give to the representations, motifs and patterns they produce and the need to understand their social functions. In the case of indigenous Sudanese imagery, very little is known at present about its meaning in the societies concerned. As an outcome of this research it is recommended that a massive effort from art educators, material culture and museum experts

should be initiated in this area. Fieldworkers should consider not only documenting indigenous imagery but also recording its meaning and use. Visual documentation of artifacts' stylistic characteristics and findings about cultural meanings should be combined in such a way that the knowledge gained is complementary, and contributes to a comprehensive data resource for further research and study. Every institution in the Sudan concerned with art education and material culture should encourage these efforts both financially and academically.

It is suggested that the back-up computer package which was an outcome of this research is used at Khartoum College, both to introduce students to the nation's indigenous imagery and also as a storage and retrieval system.

The taxonomy sheets and computer package could be used by students working at Museums and Colleges of Art. All the material culture and museum experts interviewed for the purposes of the survey during part A of this research identified

a need for a more systematic documentation procedure for the study of artifacts. The above computer package was understood to be a preliminary step in that direction.

Finally, in order to meet the above recommendations concerning curricula development, artifact study and teaching methods in art and design the researcher devised a revised programme of study directed towards students on the Foundation and Graphic Design courses at Khartoum College of Art.

7.3.0 ii) Rationale for the Proposed Programme of Study

The proposed programme is a response to the need, identified by Omabegho (1984) for art education in African nations to play a role in influencing

A new aesthetic that combines the best of contemporary art, technology and design with the timeless beauty of traditional African art forms (Omabegho, 1984, p.208).

The proposed programme is based also on the following premises; namely i) that educators from all over the world are united in stressing the

importance of knowledge about the literature, music and art that constitutes mankind's global cultural heritage; ii) that all art programmes should lead to the development of a range of art skills including knowledge of art history and awareness of culture as well as to students' producing high quality creative art (Schultz, 1979); and iii) that community resources are also an essential component of any curriculum model in art and design (Hausman, 1979).

Curriculum theorists (Tyler, 1949, Eisner, 1966 and Beeby, 1970) have proposed that curriculum consists of the following four elements: i) objectives, ii) content or subject matter, iii) methods and iv) procedures, and evaluation. All curriculum planners have to answer the following four questions prior to developing new plans of instruction. What are the educational purposes to be attained? What are the educational experiences that will attain those purposes? How can these educational experiences be effectively organized?

And finally what evaluation procedure will determine that these purposes are being attained? (Tyler, 1949)

The proposed programme of study is an internal initiation oriented suggestion in that it is intended that it should be capable of being adopted and implemented without any political manipulation. While it is directed towards students on the Foundation and Graphic Design courses in particular, it is designed in such a way that it could be tailored to suit the needs of other departments within the College.

7.3.1 Objectives of the Proposed Programme of Study

In a multi-cultural society it is taken to be essential that students should be directed to observe, understand and evaluate the traditional art forms of their own cultural groups. They should also be encouraged to incorporate art forms from different cultural groups in their practical work to enrich their visual vocabulary. They should also conduct research and written assignments on material culture to develop critical thinking and interpretative abilities.

7.3.2 Content of Proposed Programme of Study

Both theoretical and practical modes of study are proposed. Knowledge derived from the academic

disciplines of 'Anthropology', 'Material Culture', 'Museum Studies' and the 'History of African Art and Artists' is considered essential to the study of indigenous art forms and their relation to culture.

7.3.3 Theoretical Component

The proposed theoretical component includes an introduction to these academic disciplines and to the major philosophical and theoretical approaches to material culture. It includes study of the role of artifacts in human society.

Instructions should be provided in:

- i) the significance of design in artifacts,
- ii) the relationship of design to function,
- iii) the relationship of design to appearance and
- iv) the relationship of design to style. It also includes instructions in methods of analysis of artifacts, description of artifacts and sources of information for analysis.

7.3.4 Practical Component

The practical component of the proposed programme of study includes:

- a) field studies of artifacts carried out for the purposes of documenting and analysing their surface design characteristics and functions within the cultures in which they exist;
- b) instruction in methods of documentation regarding surface designs, representations, motifs and patterns;
- c) comparison of drawings of artifacts from regional and cultural groups and,
- d) assignments in which students are required to incorporate indigenous art forms from the different regions of the Sudan in their contemporary art work with special reference to representations, motifs and patterns.

7.3.5 Teaching Methods and Students' Involvement

It is recommended that a variety of teaching strategies should be adopted including lectures, seminars, individual and group tutorials, workshops and slide shows; also that students

should be involved with the curriculum contents in the following ways:

- a) Through individual and group tutorials backed by slides, photographs, other visuals and first hand experience of actual artifacts collected from museums and collectors and on field visits;
- b) through written assignments which seek to develop their critical, analytical skills while focussing their attention on indigenous artifacts and traditional art forms;
- c) students should carry out research and study in the proposed modes with reference to traditional art forms. The practical aspects of the teaching should include supervised study visits to museums, craftsmen and women's workshops and local communities;
- d) presentations should be arranged by local craftsmen and women, practising

artists and designers with considerable experience in traditional art forms in workshops located at the College.

7.3.6 Evaluation

The intended broad learning outcomes of the proposed programme of study therefore, are that students should be able to demonstrate that they:

- a) understand the meanings and utility of indigenous art forms and their relation to contemporary Sudanese society and culture;
- b) have undertaken and are capable of research into indigenous cultural heritage particularly with regard to the comparison of similarities and differences between regional art forms in the Sudan and art forms in other African cultures;
- c) can promote the application of Sudanese traditional art forms and aesthetic values in contemporary art and design.

Specific learning outcomes will have to be identified by College staff if and when the programme is implemented.

7.3.7 Present Programme of Study

In the present foundation programme an introductory course on indigenous art forms is taught as part of 'Picture-making' together with 'Perspective Drawing', 'Design Elements', 'Pattern-making', and 'Colour Theory'. Details are shown in Table 5.

TABLE 5

PROGRAMME OF STUDY FOR THE FOUNDATION COURSE
WITH WEEKLY HOURS ALLOCATED FOR EACH
SUBJECT.

Subjects	Hours (per week)
Drawing & Anatomy	10
General Studies	3
Picture Making	5
Pottery	5
Sculpture	5
Calligraphy	2

7.3.8 Proposed Programme of Study

It is proposed that an extra five hours should be

allocated to the study of indigenous art forms under the heading of 'Material Culture'. Details are shown in Table 6. It is recommended that all College students attend the proposed programme during their Foundation Course.

TABLE 6

PROPOSED PROGRAMME OF STUDY FOR THE FOUNDATION COURSE AND WEEKLY HOURS ALLOCATED TO EACH SUBJECT.

Subjects	Hours (per week)
Drawing & Anatomy	10
General Studies	3
Picture Making	5
Pottery	5
Sculpture	5
Calligraphy	2
Material Culture	5

7.3.9 Proposed Reforms to Graphic Design

Programme of Study

Prior to making a decision regarding the programme of study for Graphic Design students, consideration was given once again to the particular characteristics of Graphic Design (2.3.0) and to two of the College objectives

stated in chapter two (2.2.3). These objectives referred to the College's intention to: c) encourage and promote the application of Sudanese traditional art forms and aesthetic values in contemporary art and design forms; and d) increase the general awareness and appreciation of contemporary Sudanese art and design forms.

With this in mind, the proposal is made that in future:

- a) All graphic design students should study the revised programme of study throughout the first two years of their specialization.
- b) Assignments incorporating indigenous imagery on projects such as posters, book and magazine illustrations, record jackets and calendars, should be included throughout the entire Graphic Design course. It should be a requirement, for example, that imagery incorporated into a set of book illustrations, a poster and a storyboard for television graphics referring to folktales produced after return from a field trip

should be indigenous to the region visited. All the sketches, working drawings and designs for such assignments should be produced on site. It would be preferable that students research and examine the philosophy and meanings behind the chosen indigenous imagery also.

c) Strong academic links such as teaching visits and collaboration over assignments should be established between Material Culture experts at museums and staff within the Graphic Design Department.

d) Research findings and studies into indigenous imagery carried out by staff and students at both institutions should be carefully structured, supported financially by the educational institutions concerned and made accessible to interested researchers and educators.

In conclusion, at the start of the research a problem was defined with reference to art education in the Sudan and was investigated; a

sample of indigenous imagery from seven different regions was documented, analysed and classified; and the resultant educational implications were explored. This dissertation which is an outcome of the research will be housed at Khartoum College of Art. The researcher will submit a final proposal to the College Board Committee on his return to the Sudan so that its educational applications and recommendations can be considered and a decision can be made as to whether or not they should be adopted and put in to action.

This research is the first study of its kind to be carried out by an art educator in the Sudan. The dissertation will be made available to colleagues and other researchers for consultation, discussion and comment. It is this researcher's hope that it will stimulate interest in a wide range of questions and problems concerning indigenous Sudanese imagery, its meaning, origins and application in art education.

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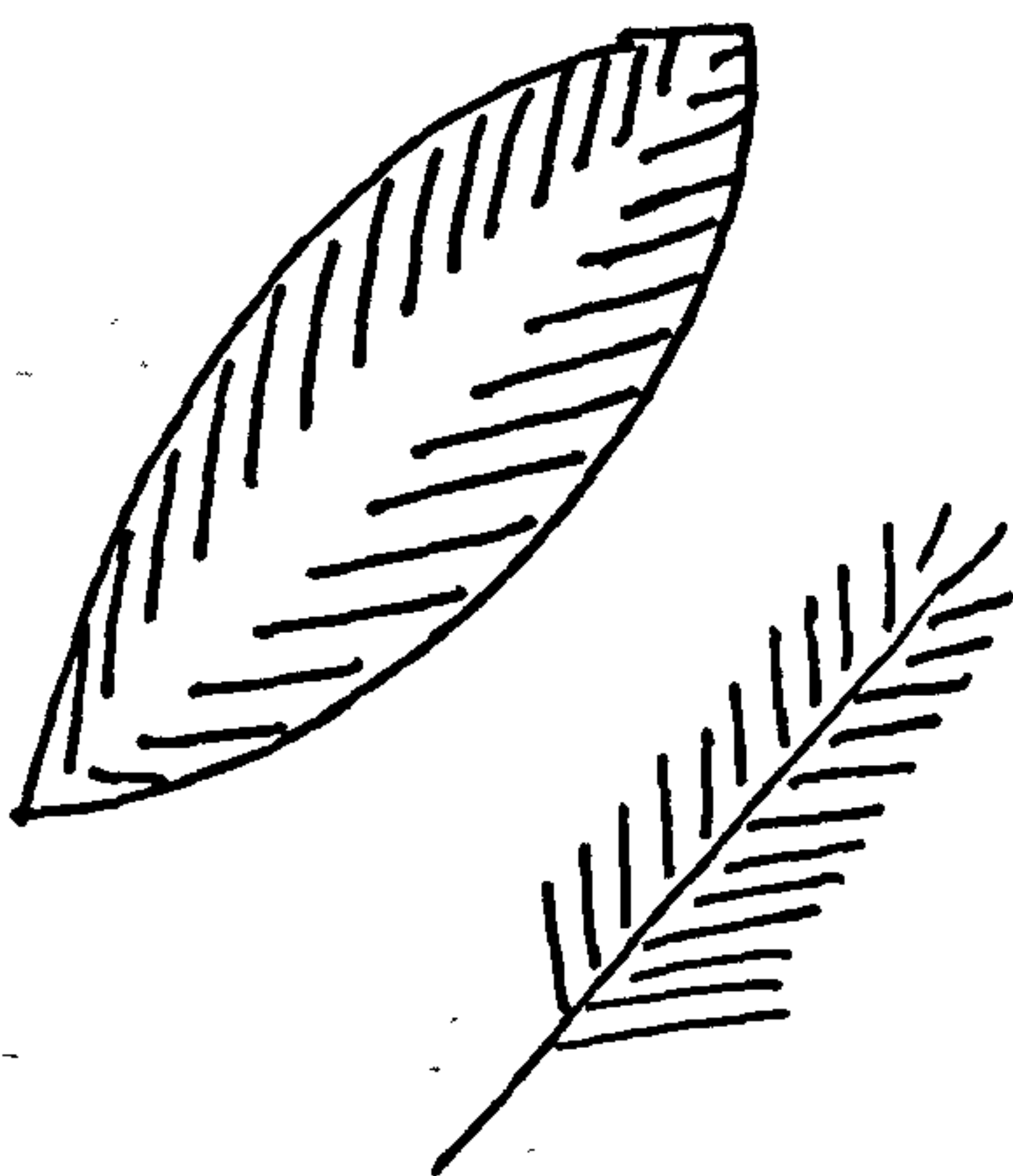
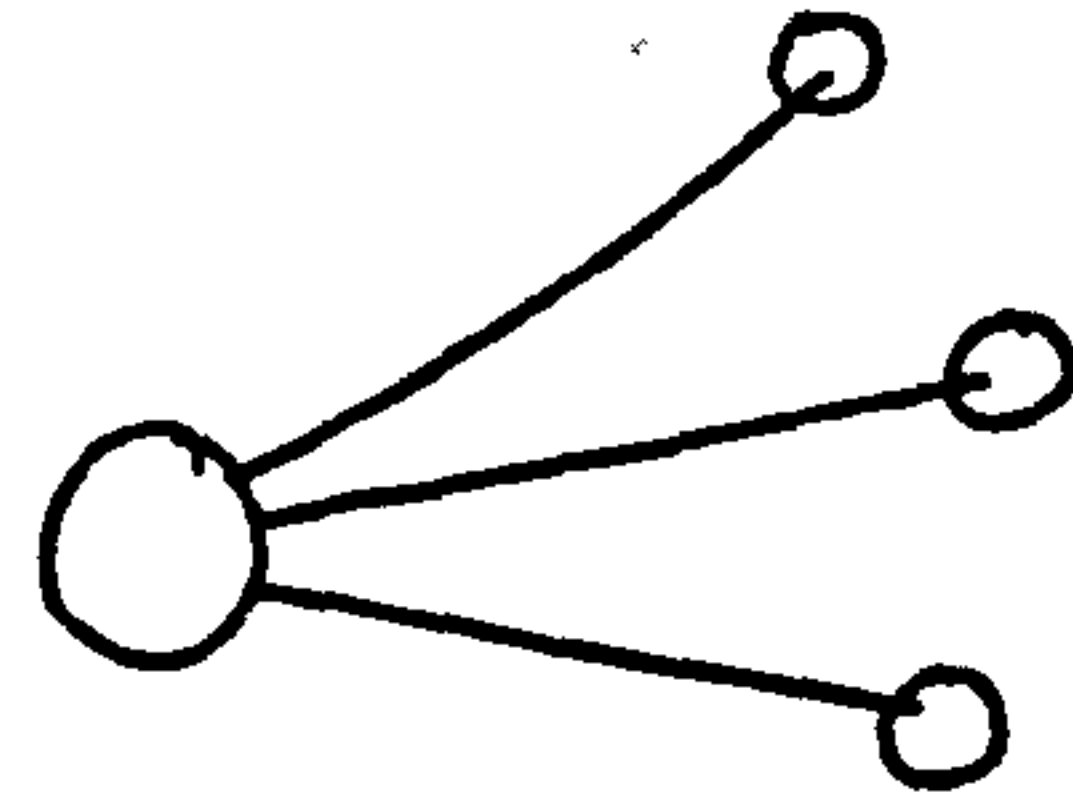
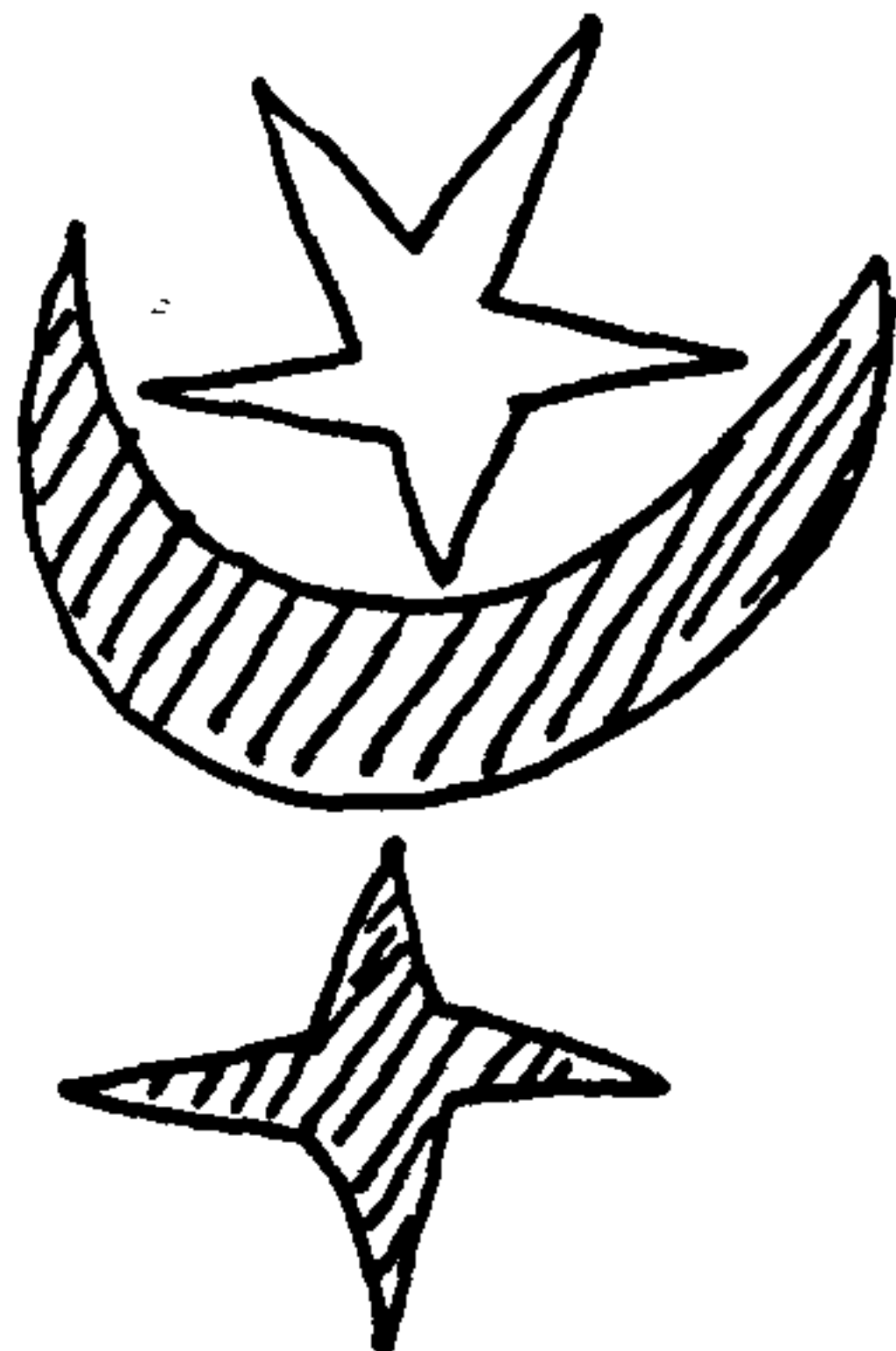
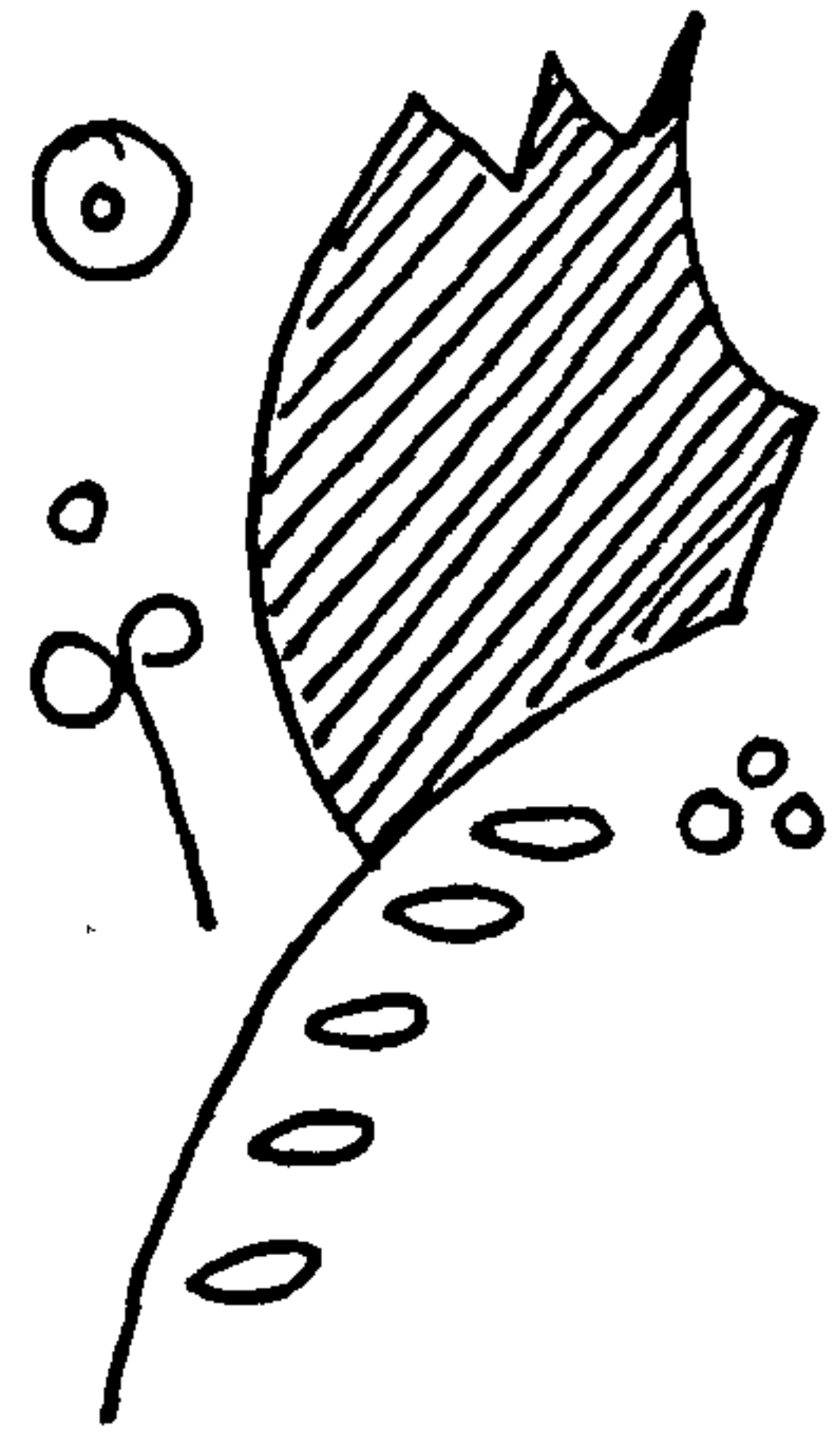
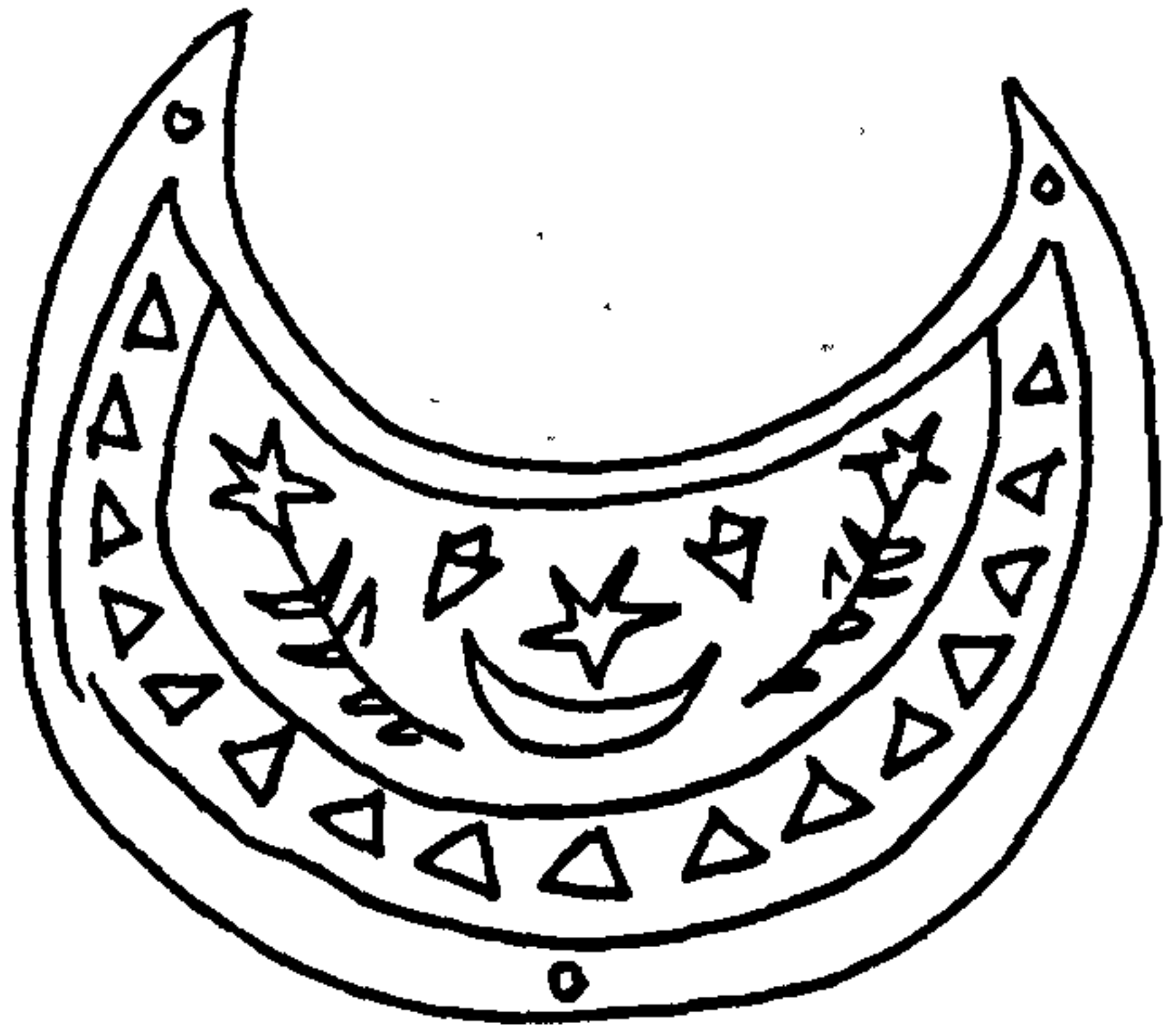
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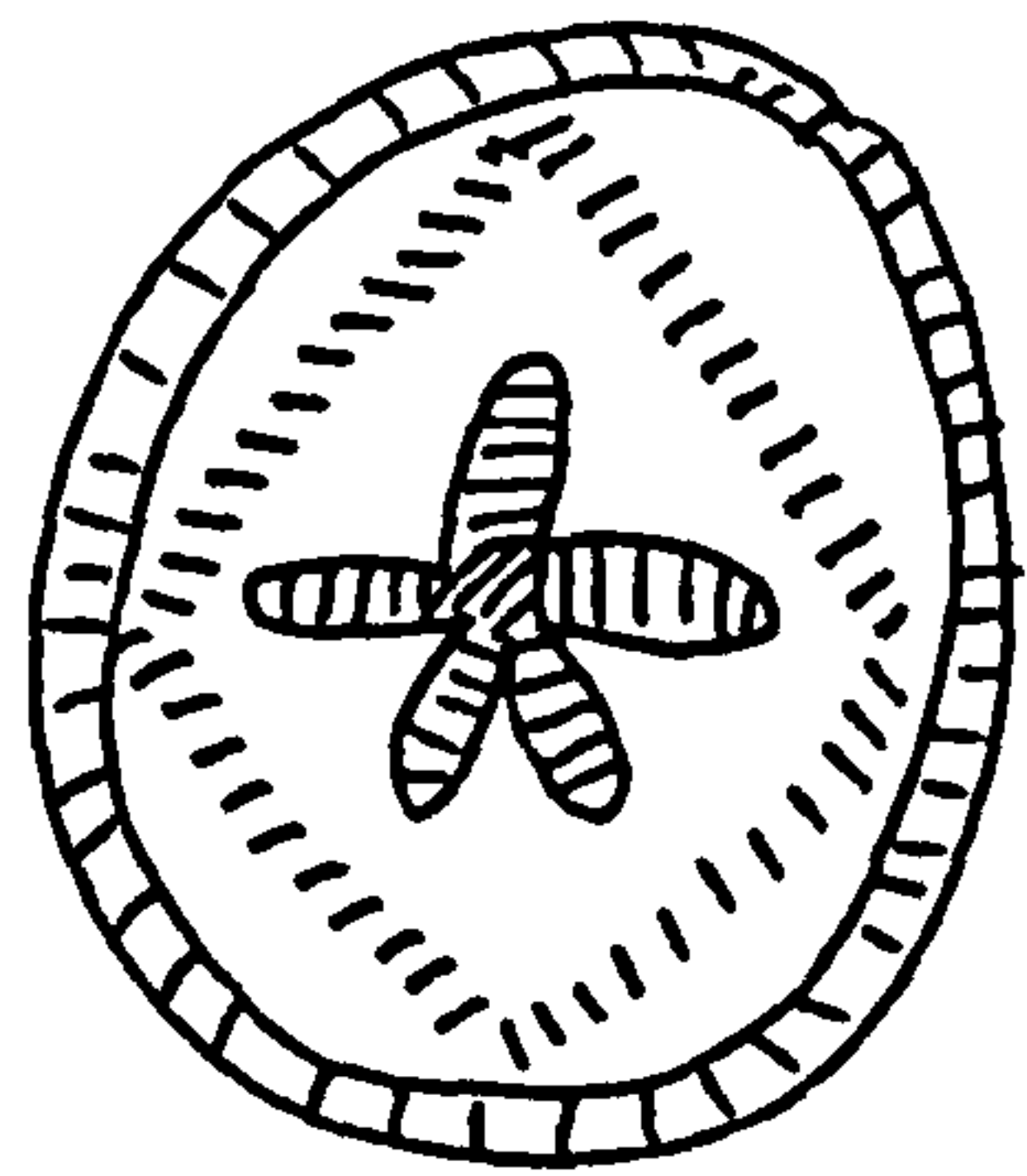
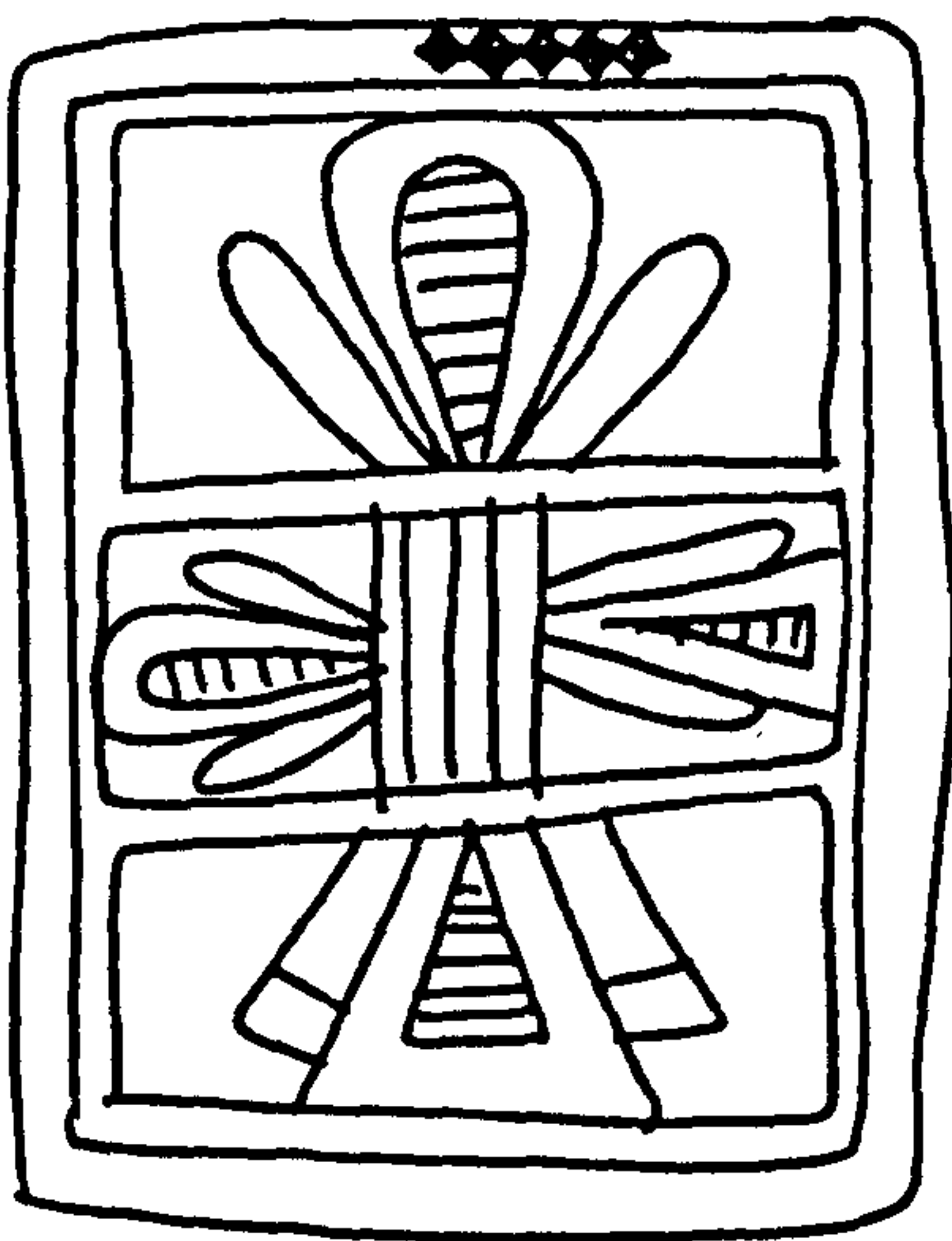
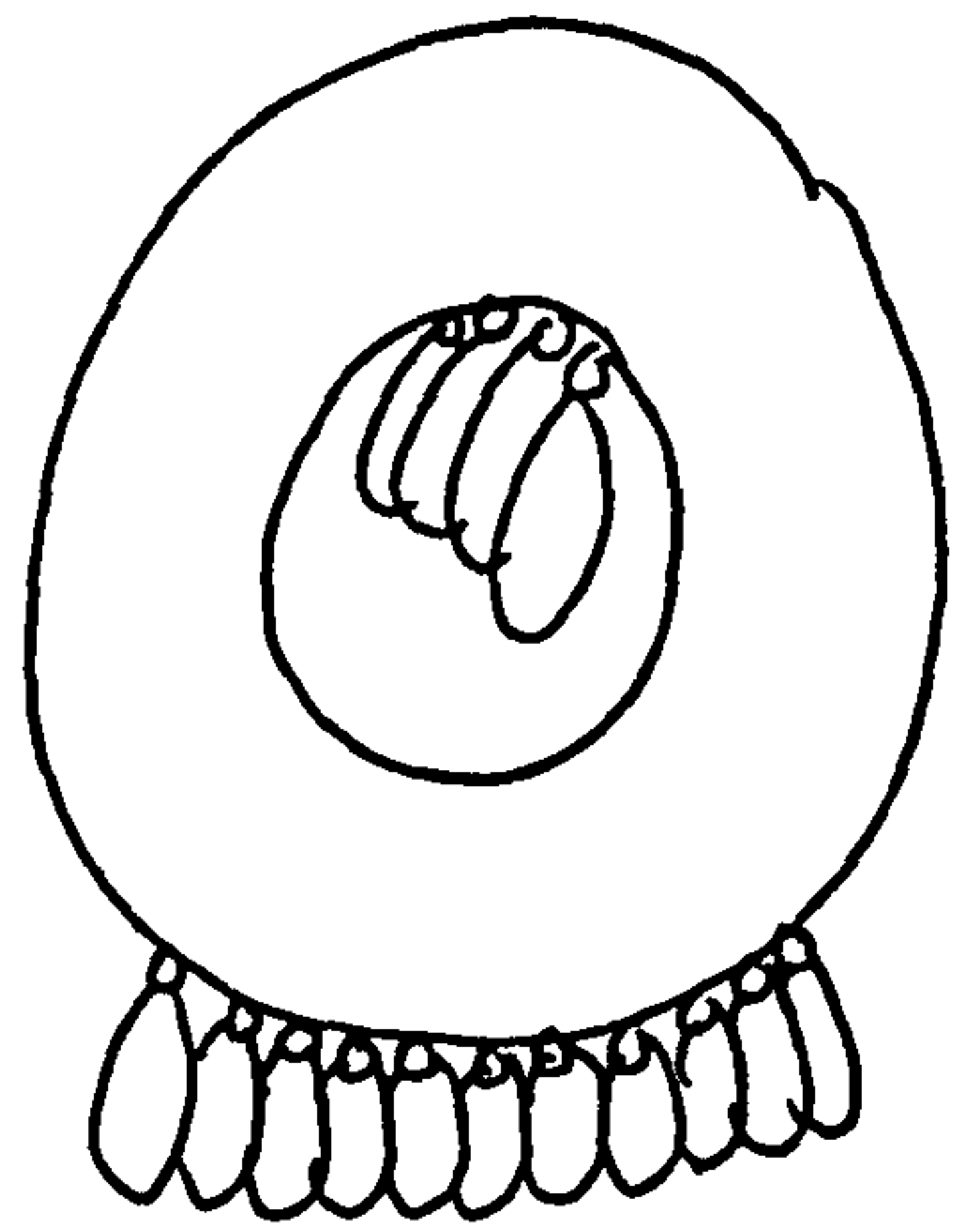
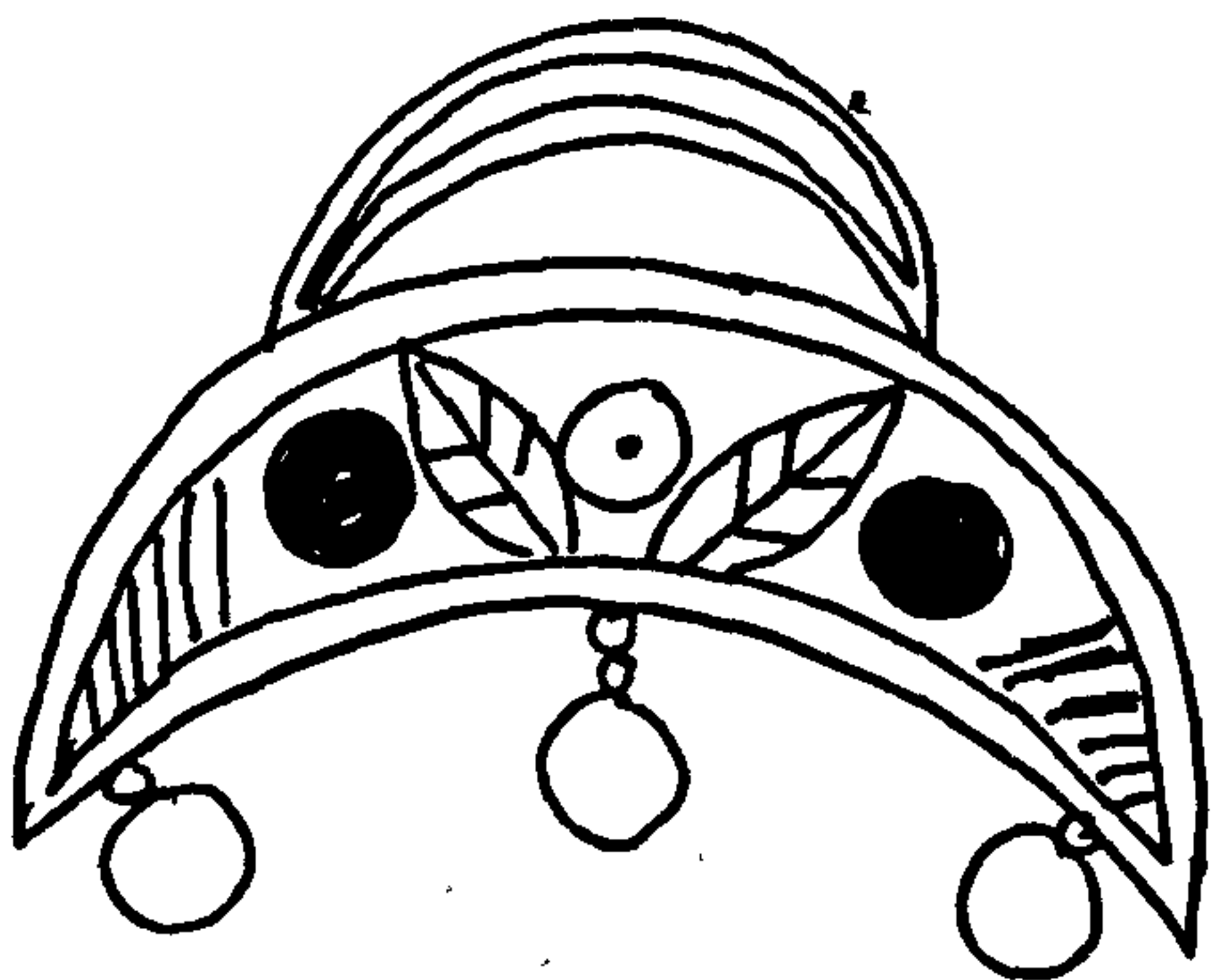
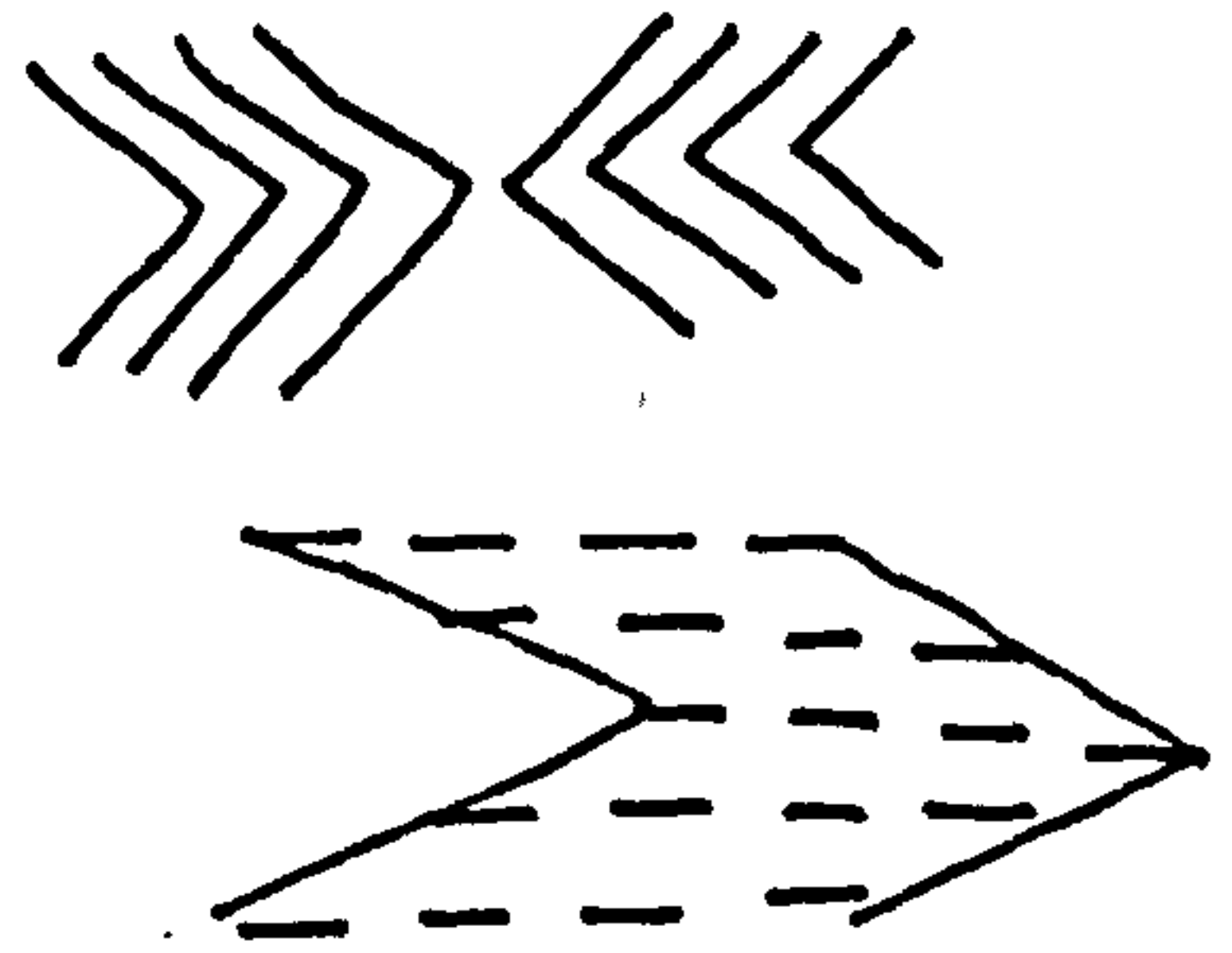
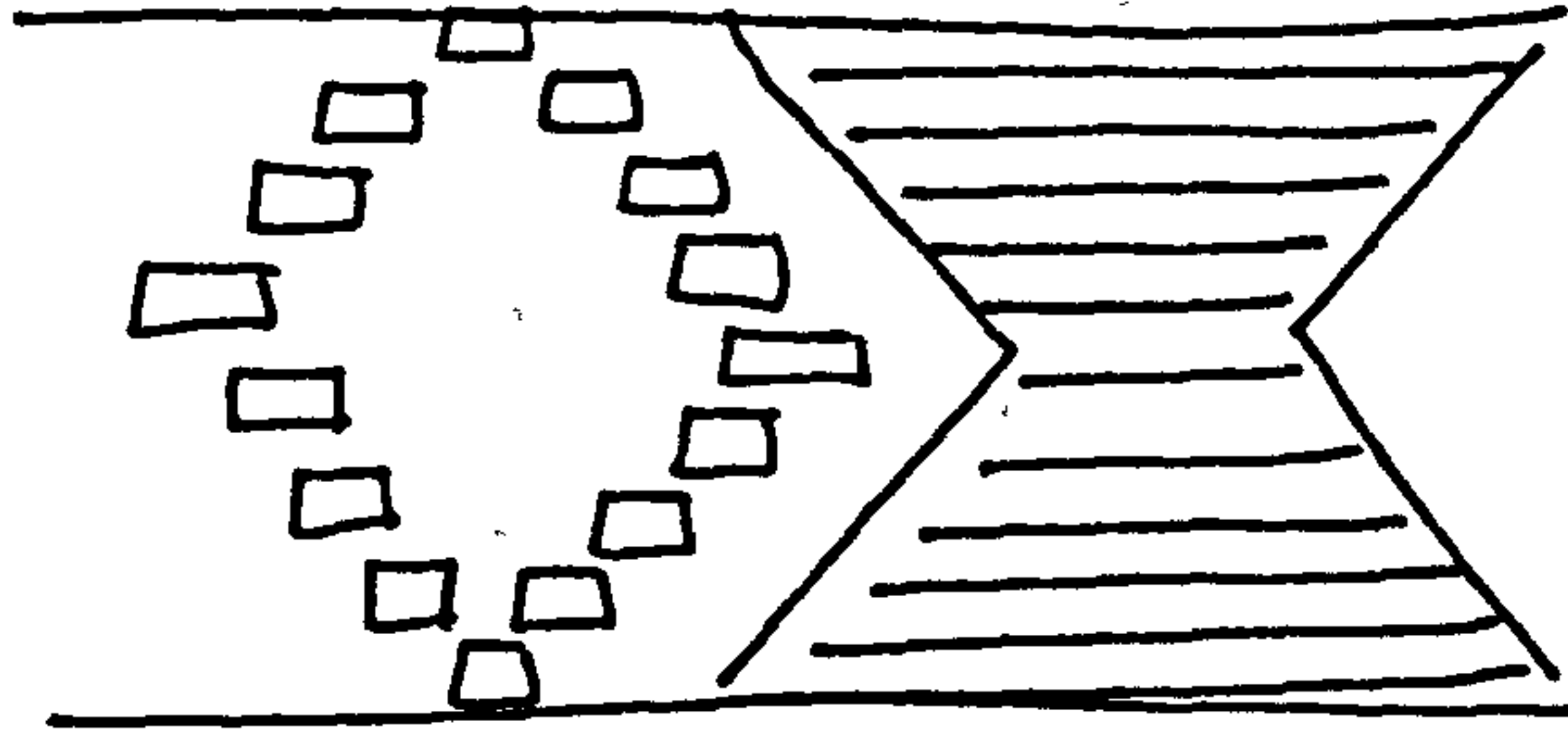
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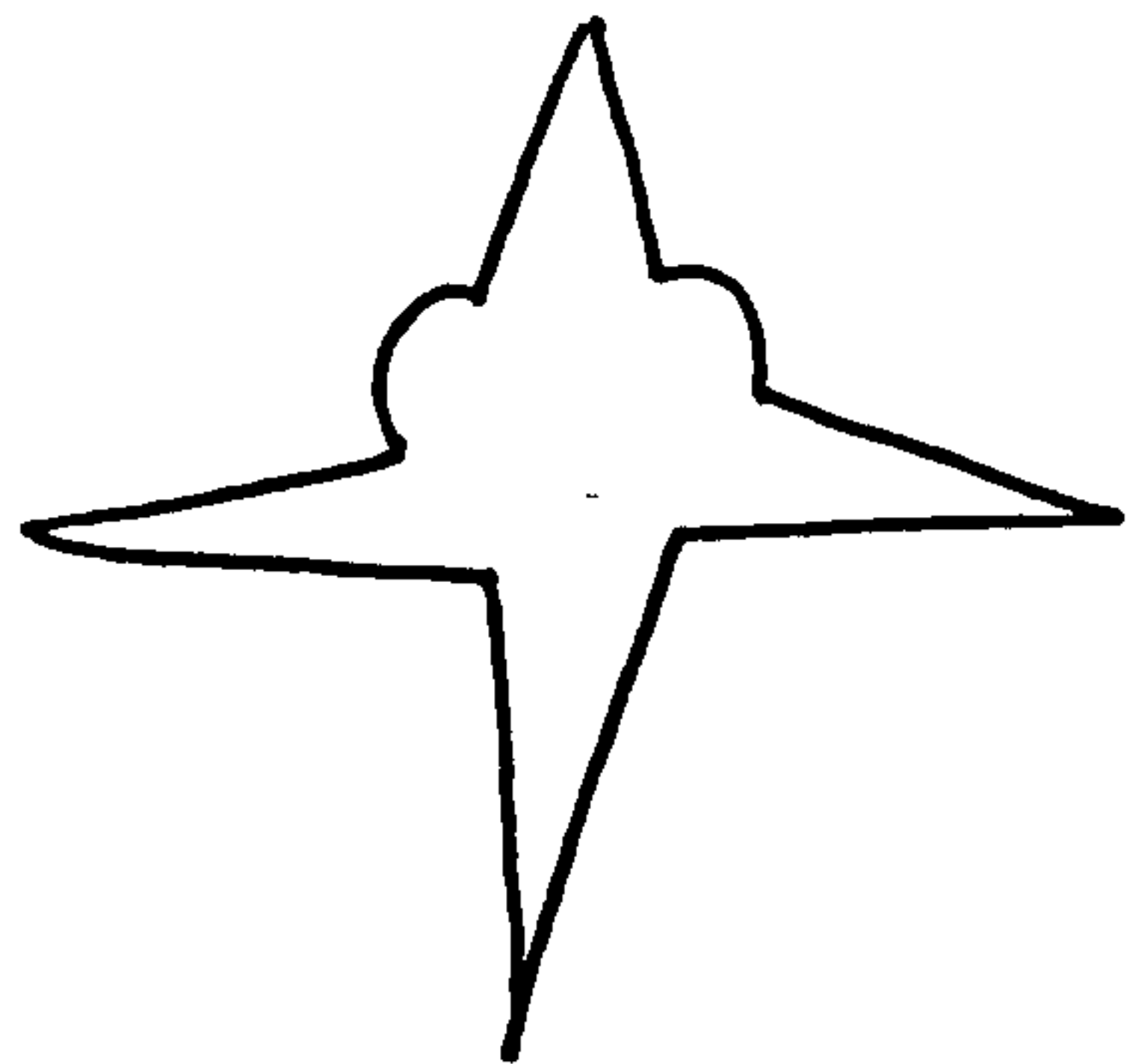
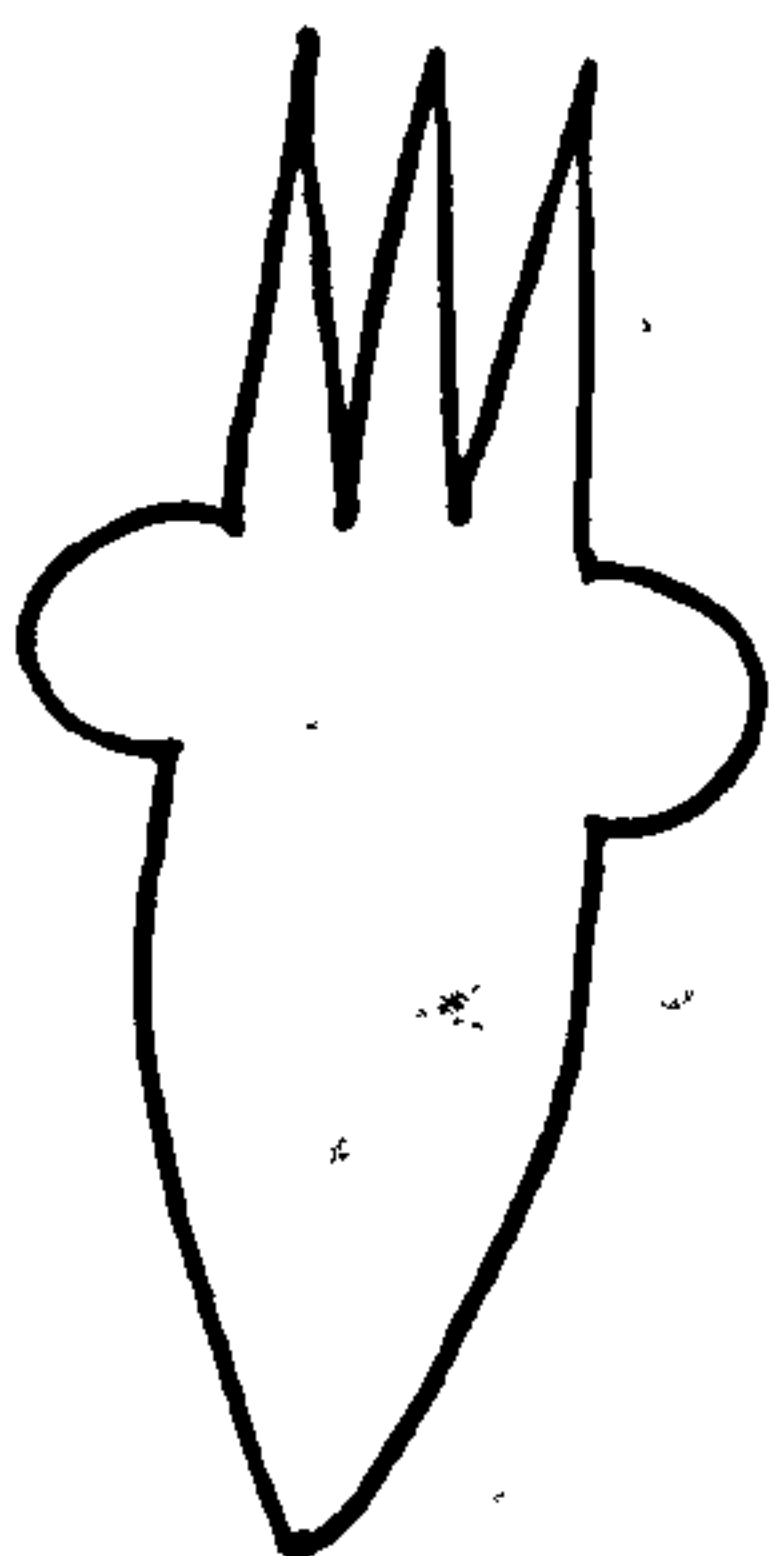
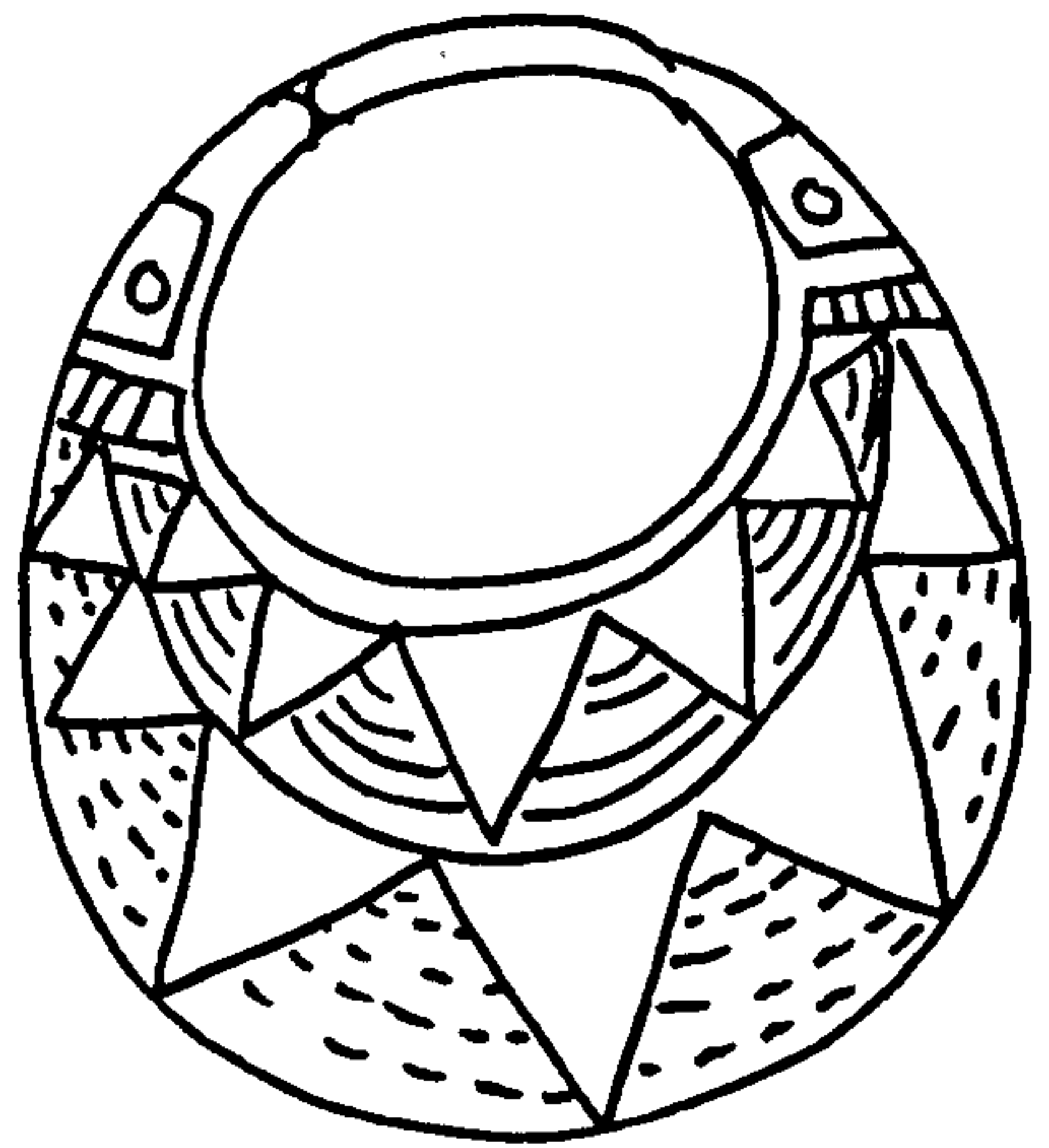
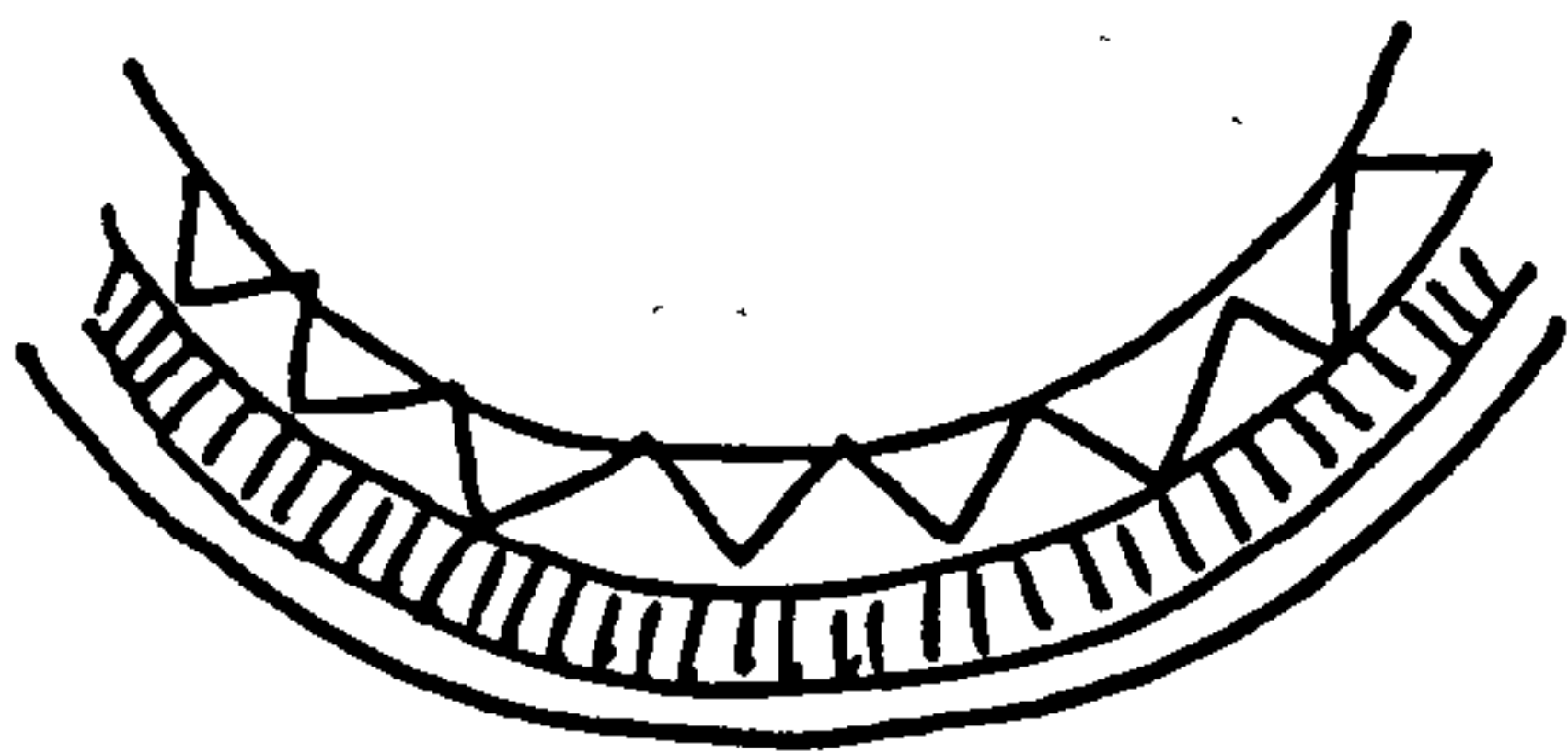
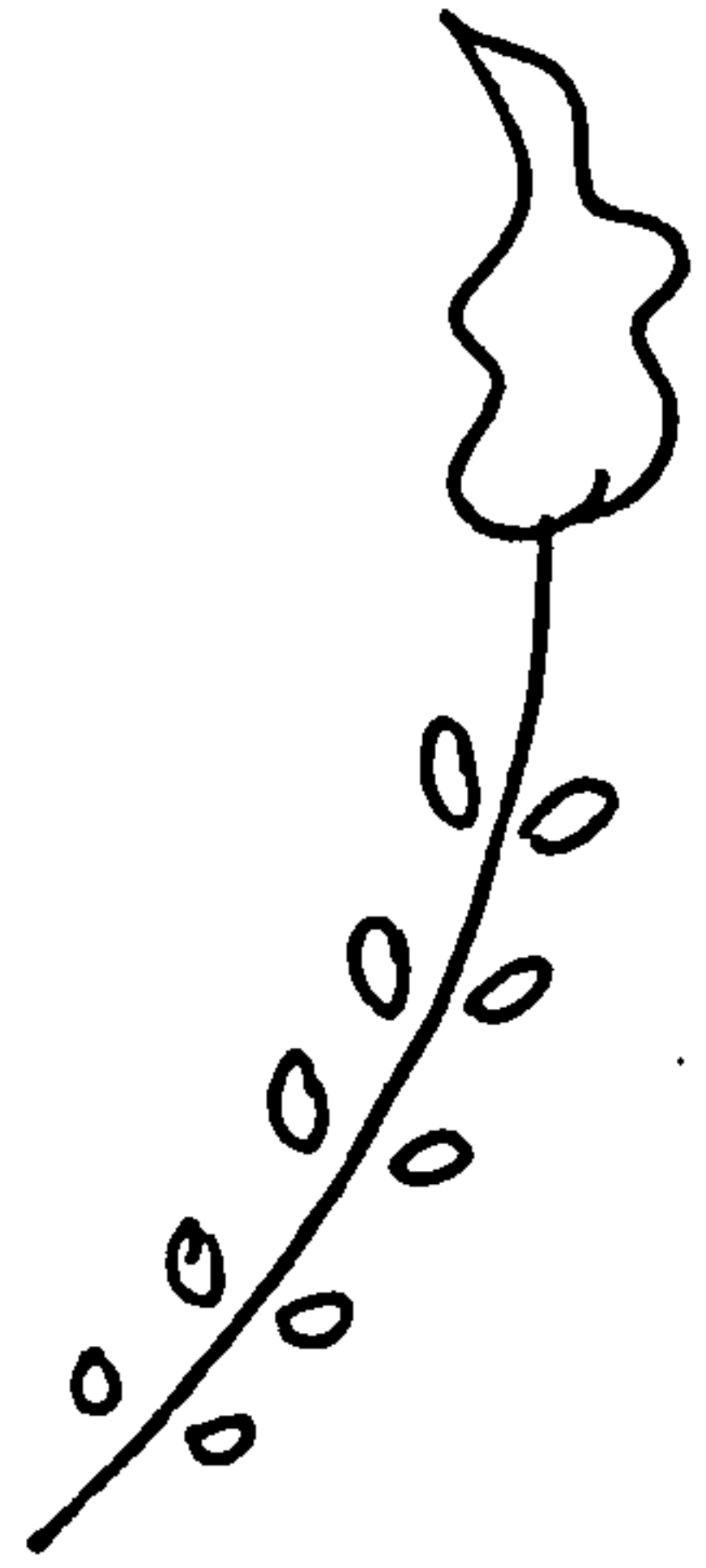
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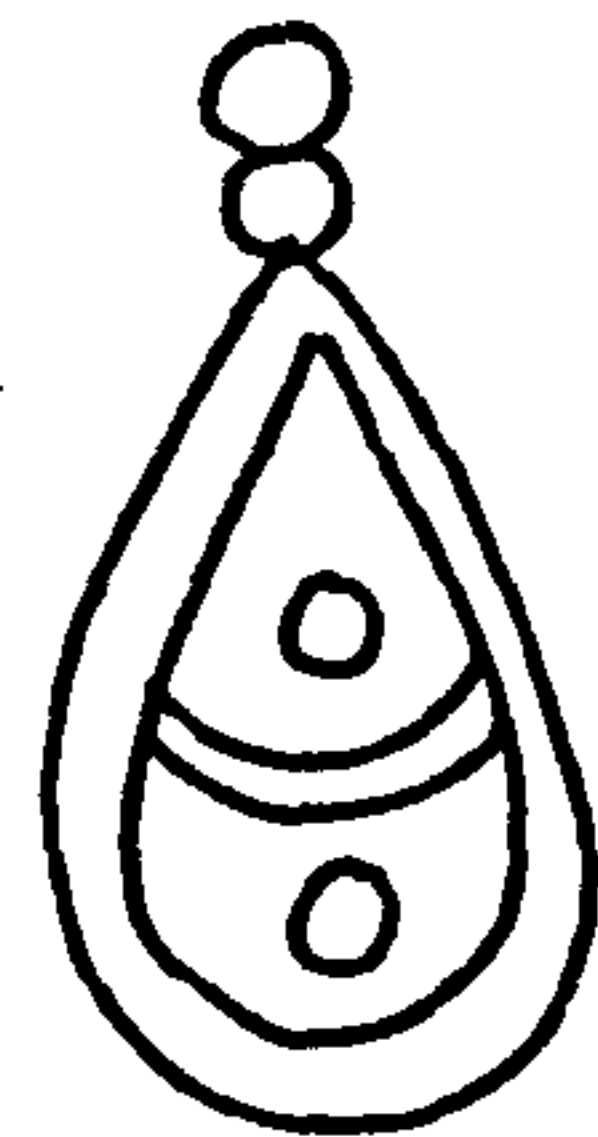
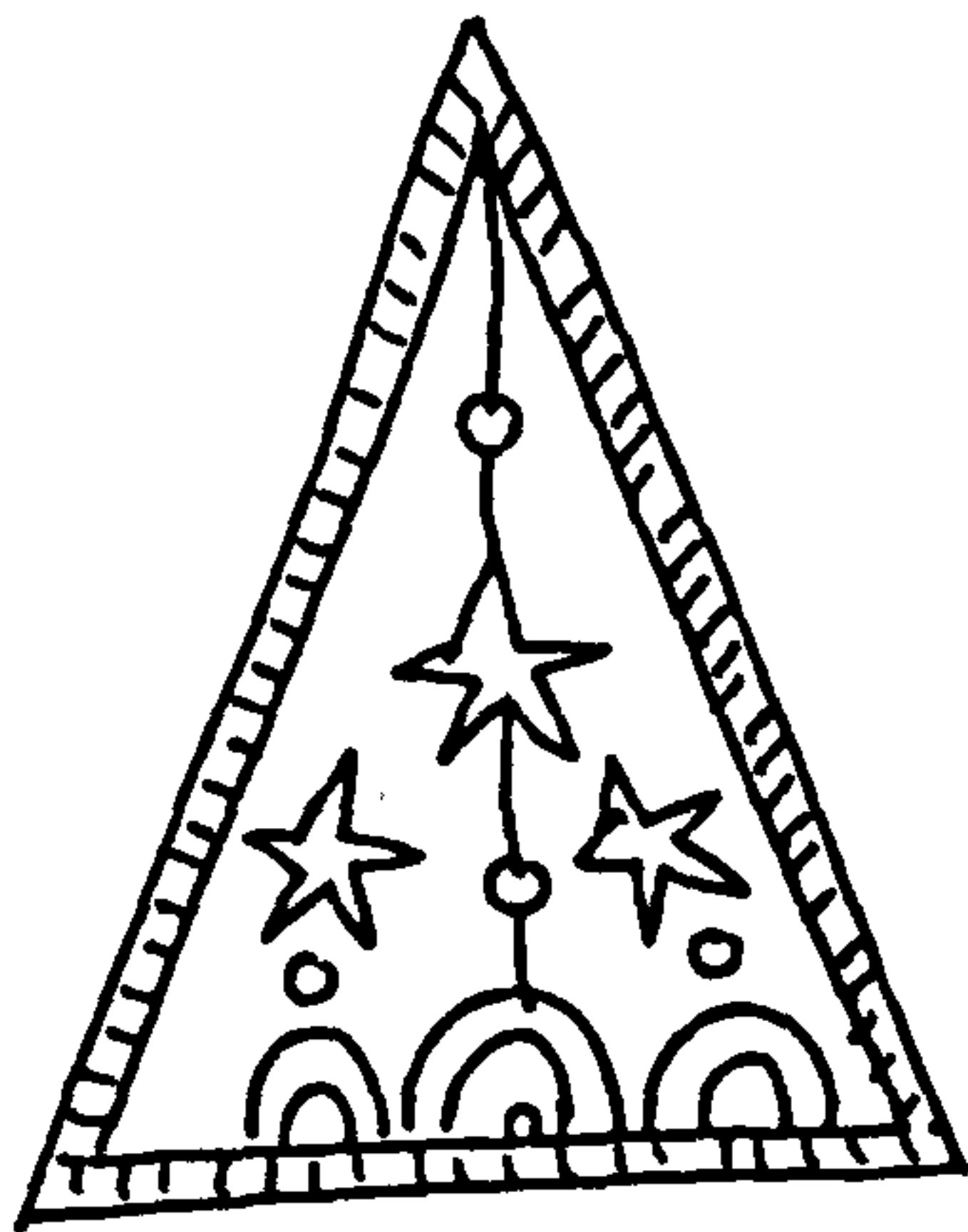
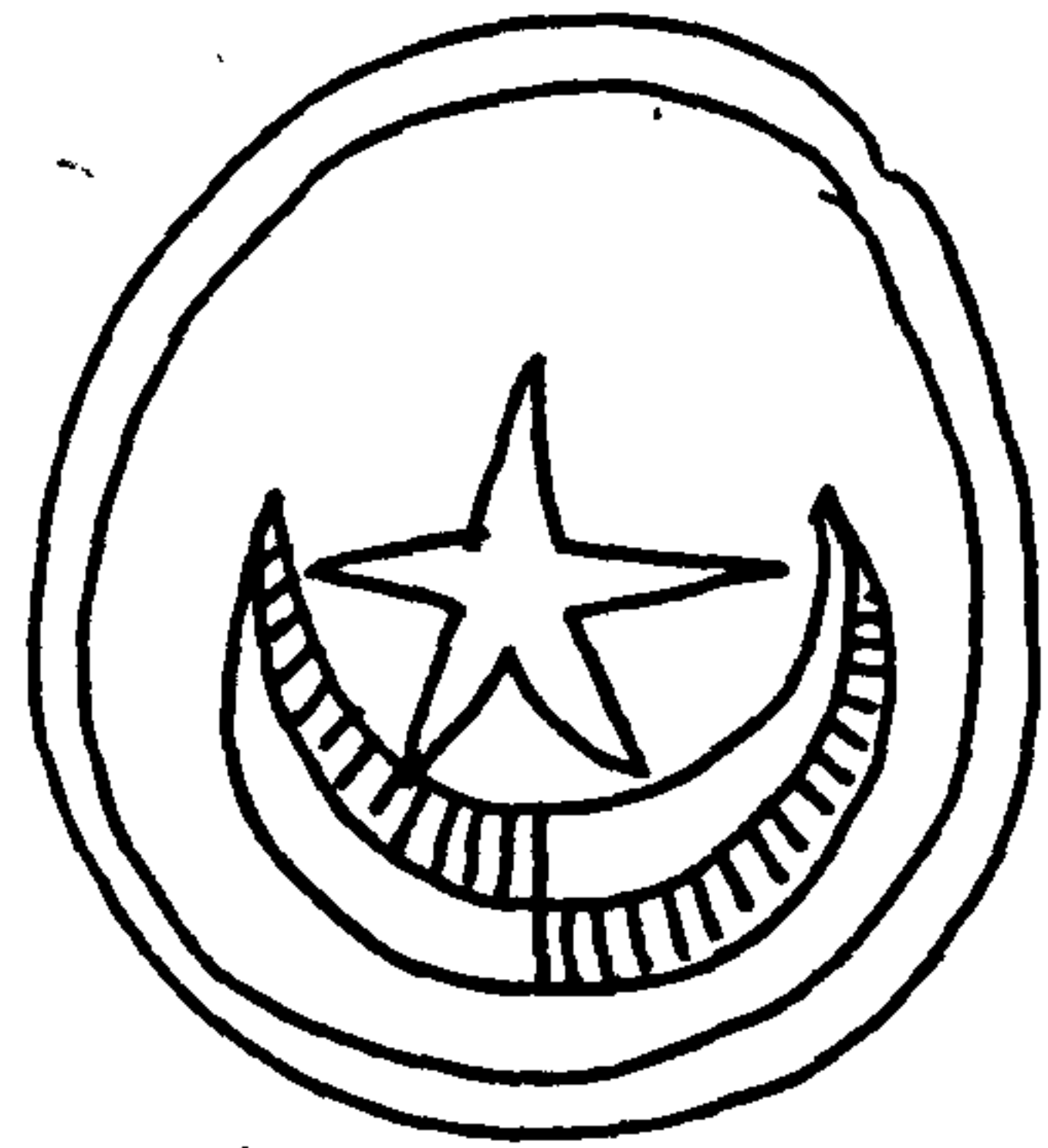
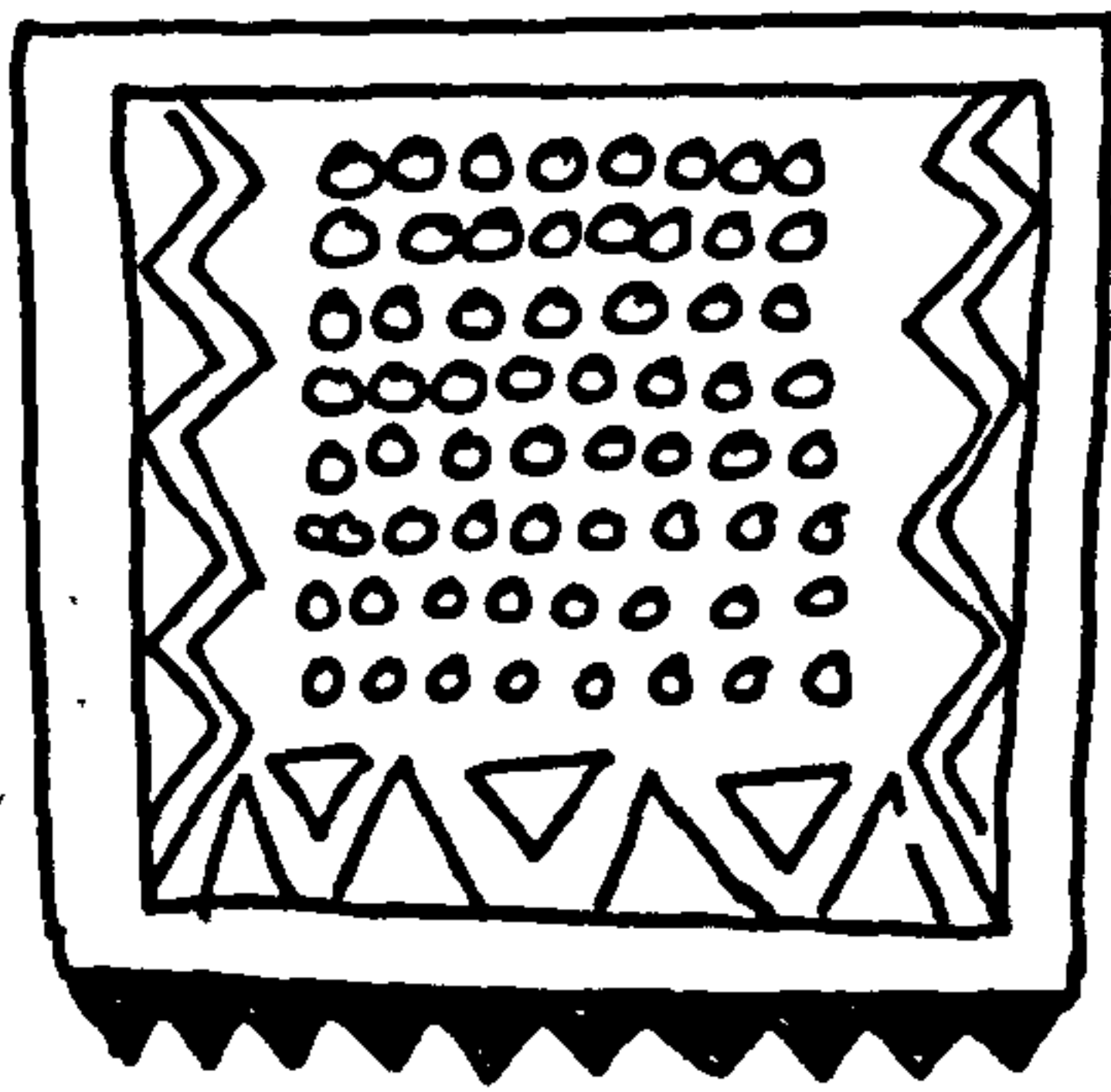
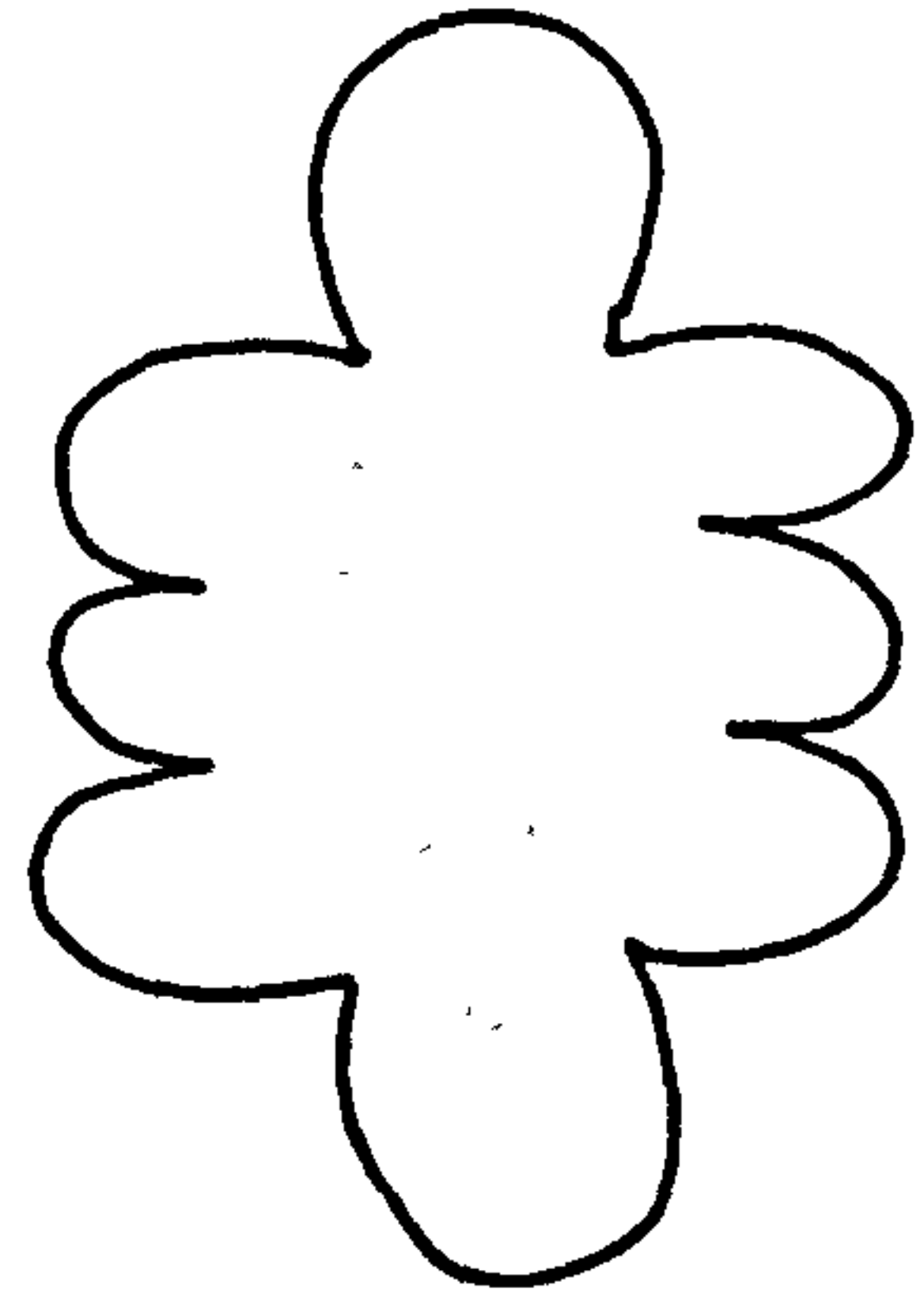
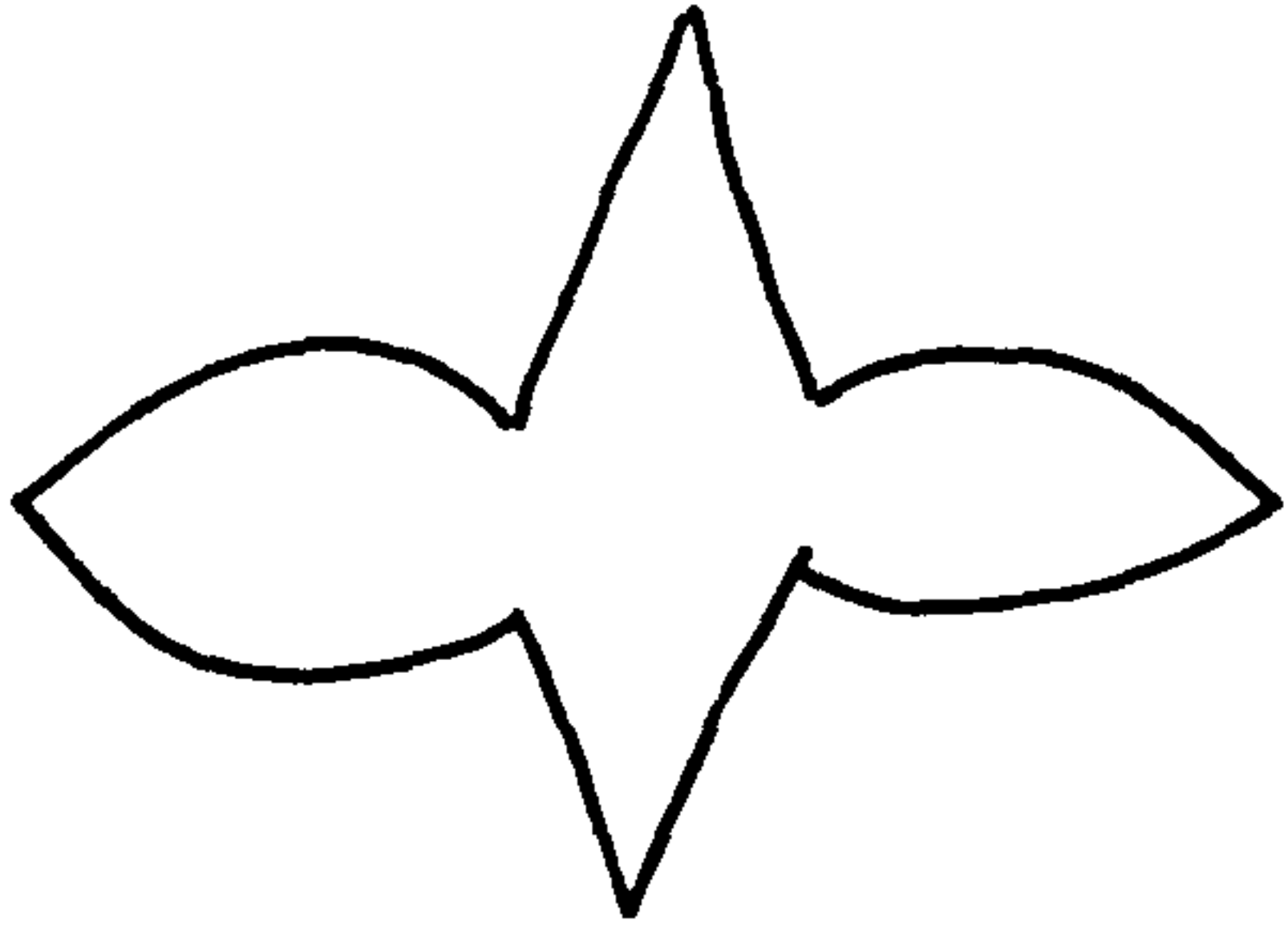
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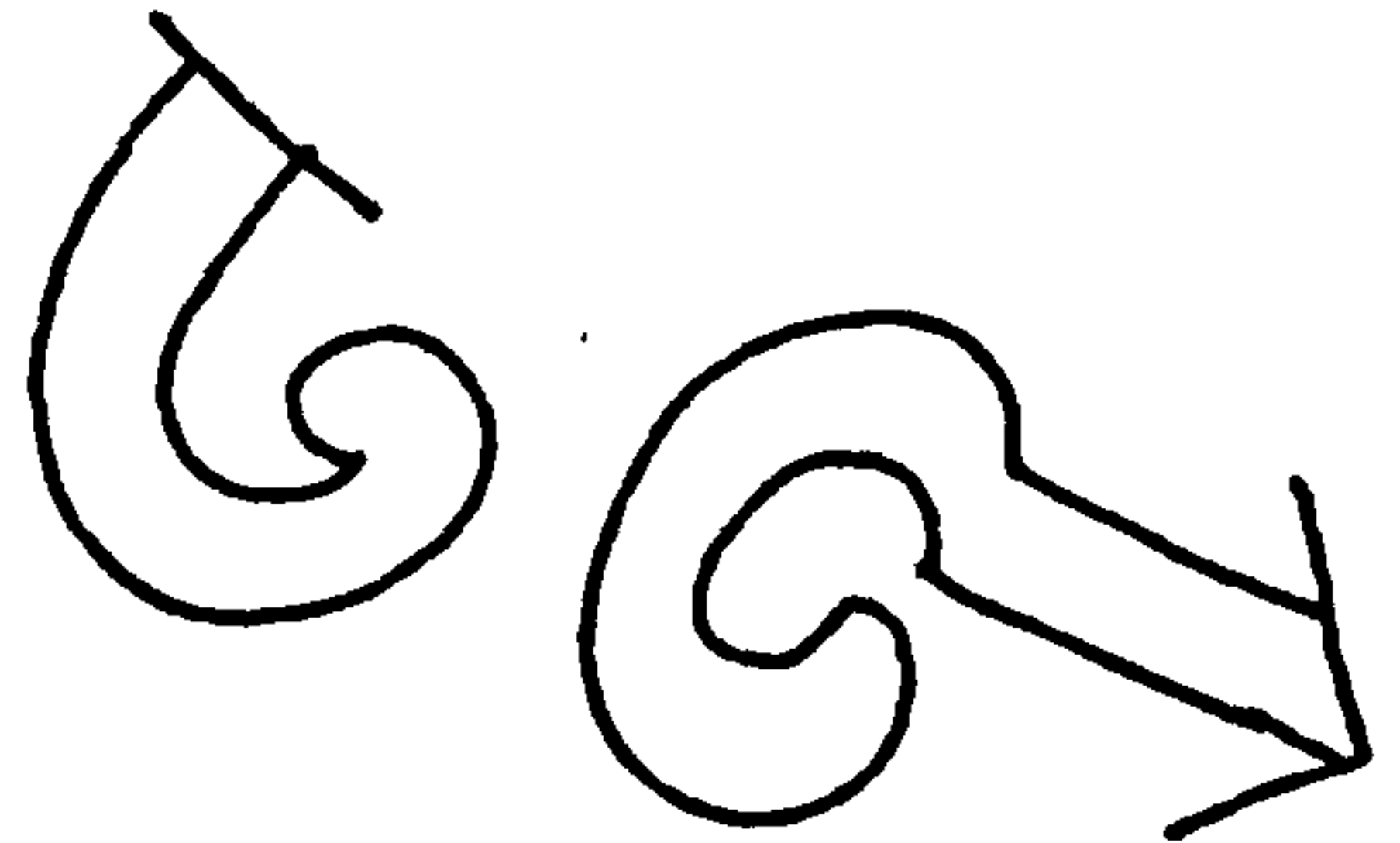
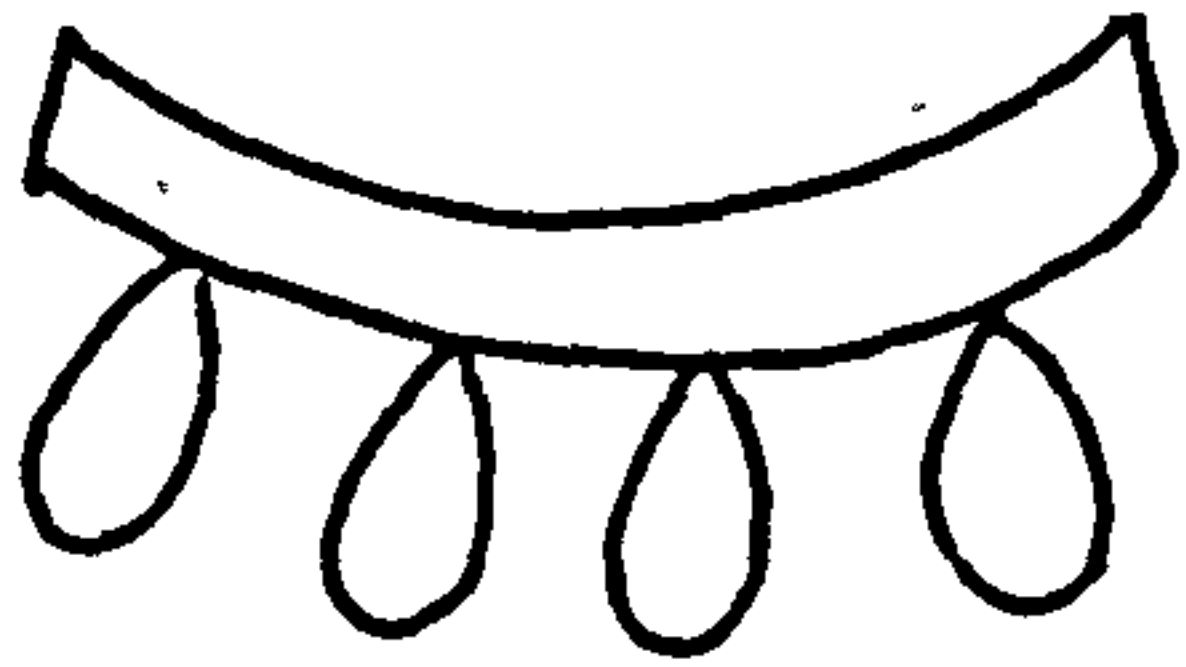
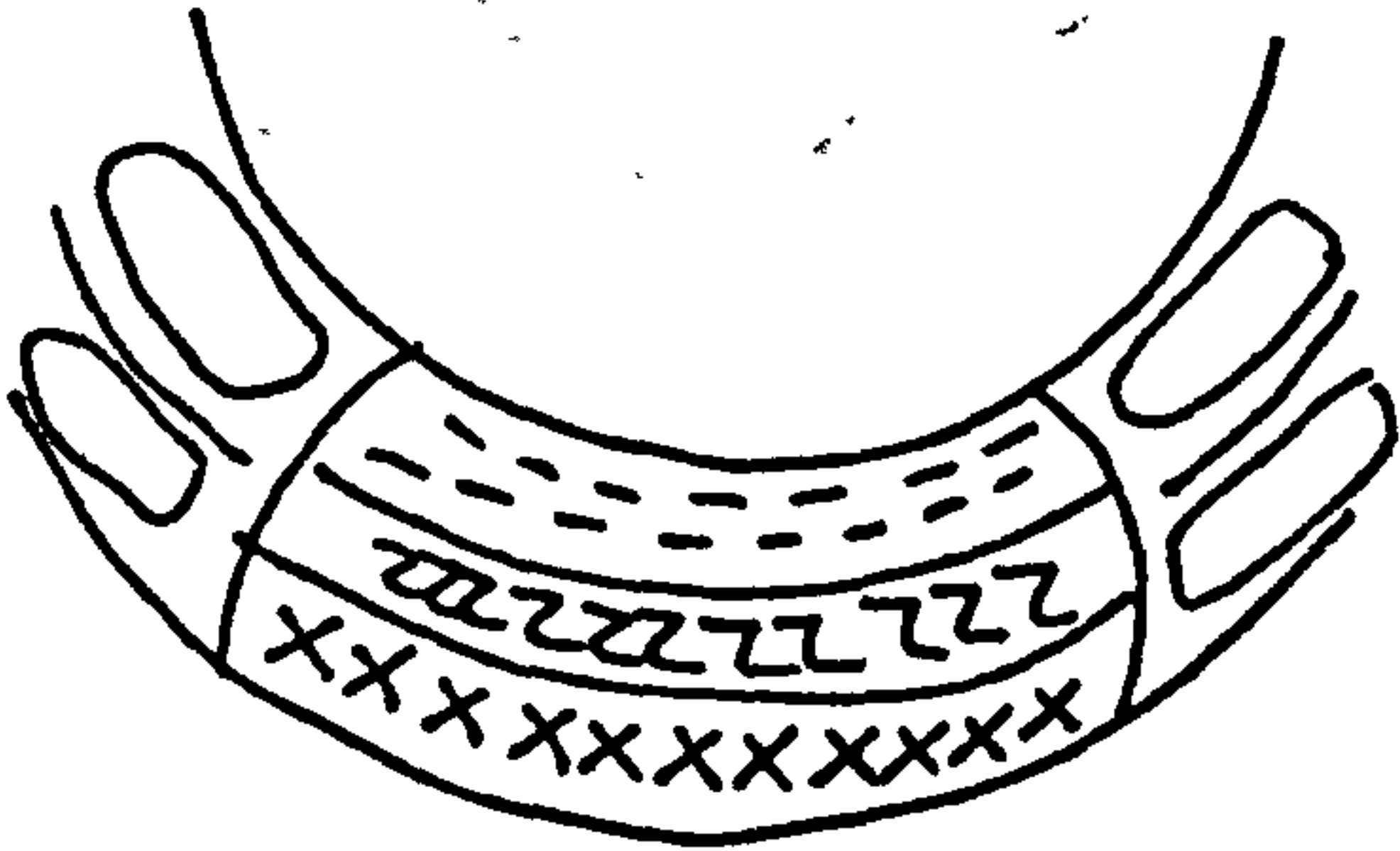
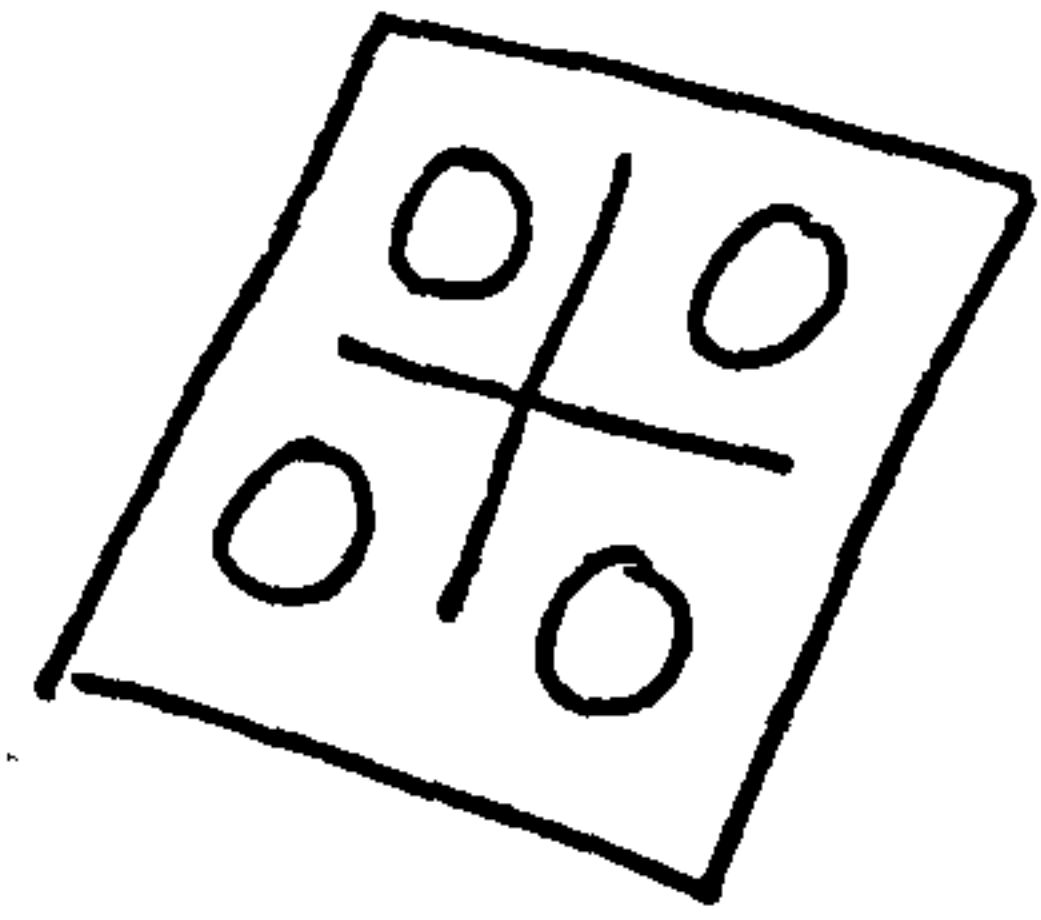
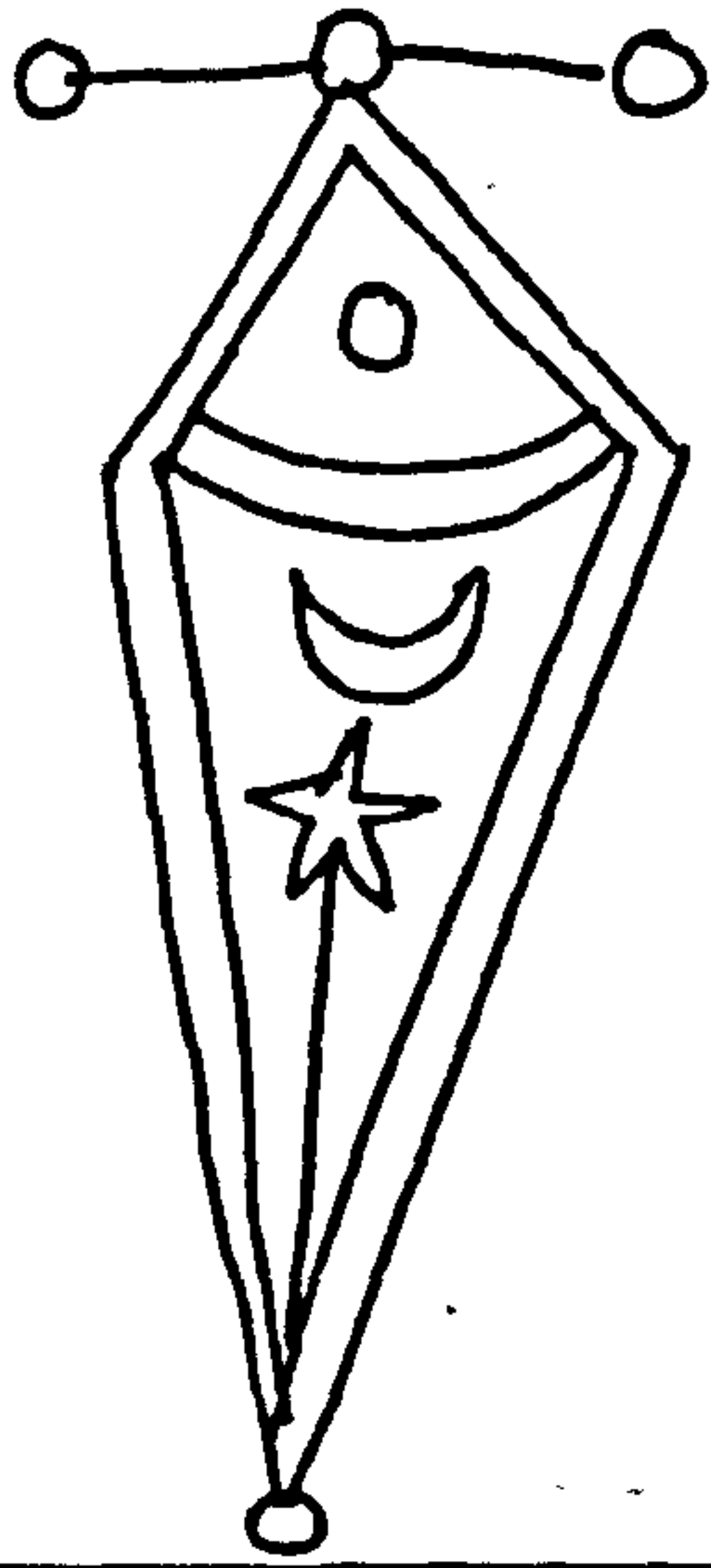
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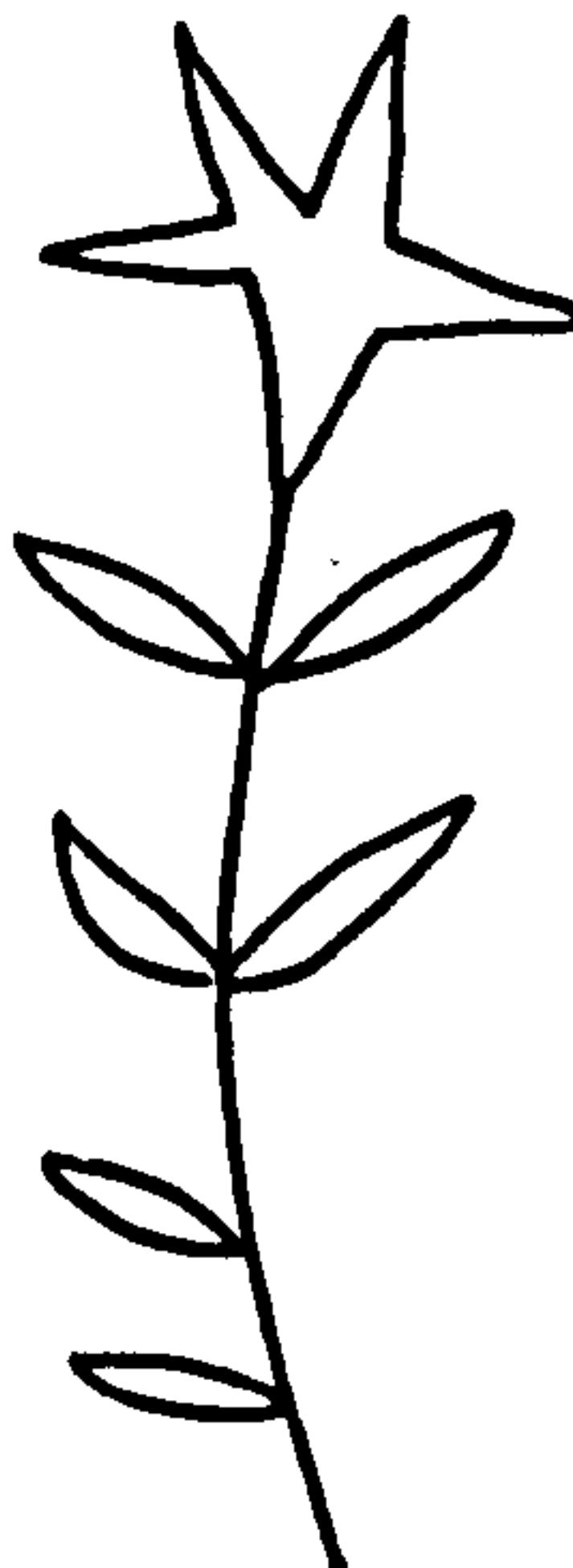
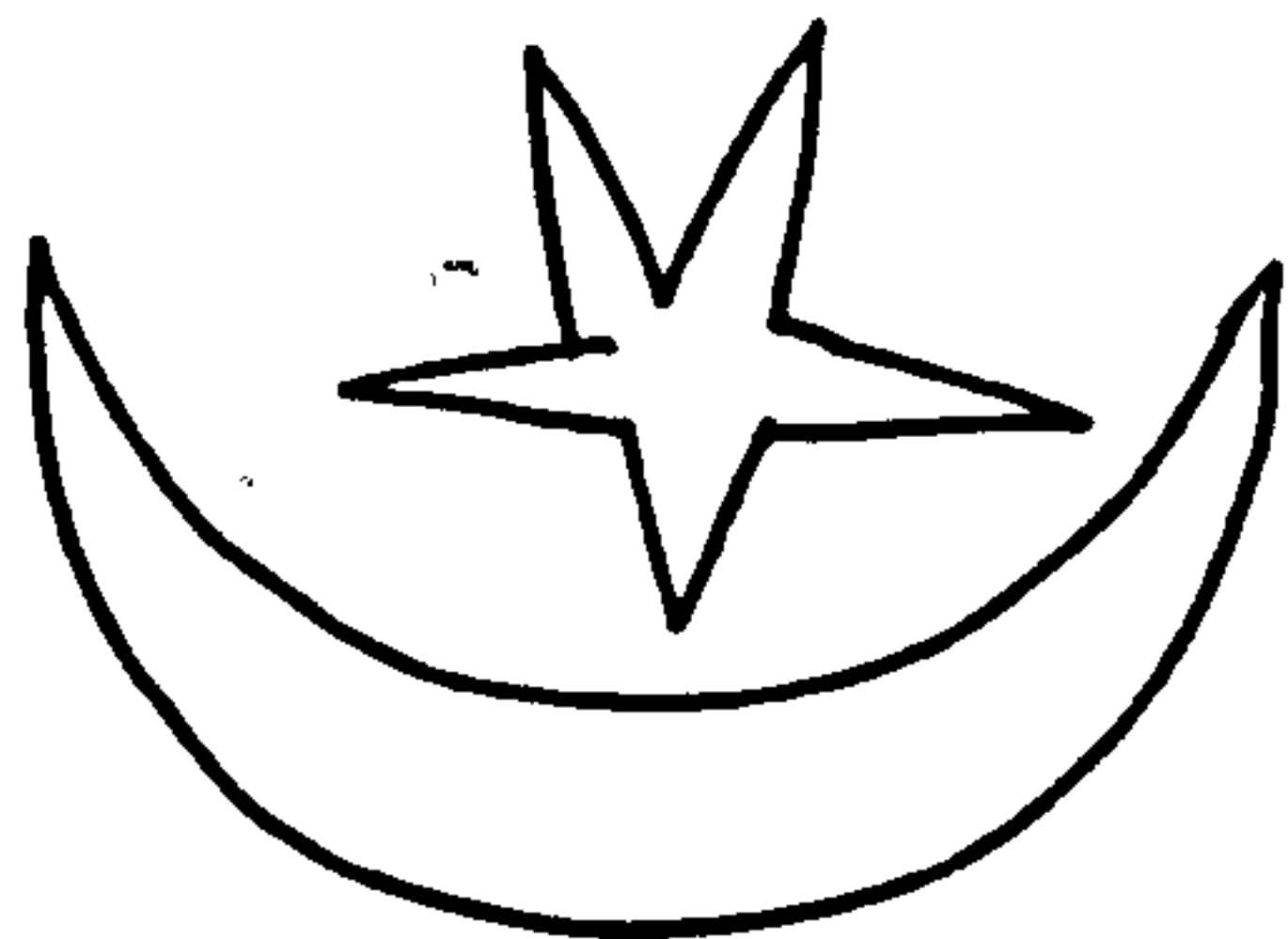
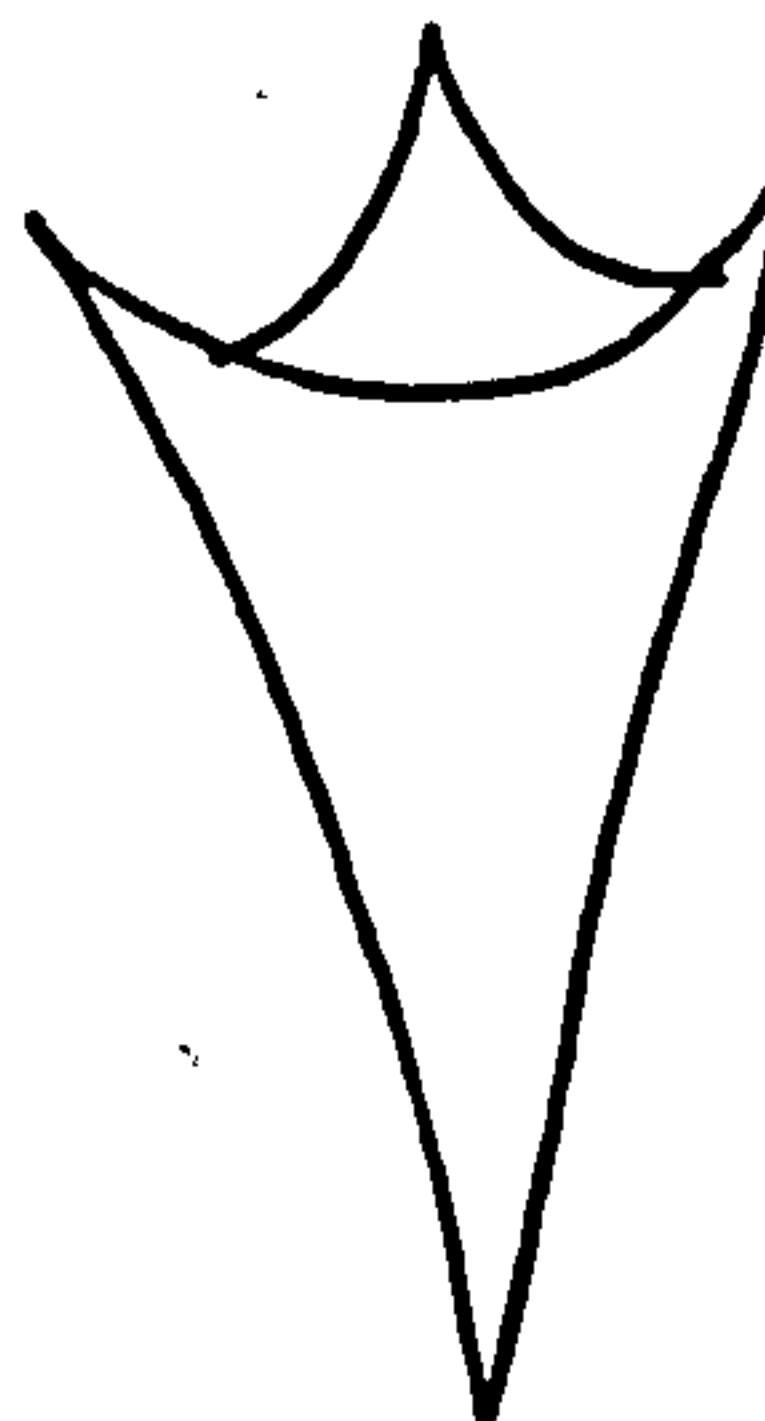
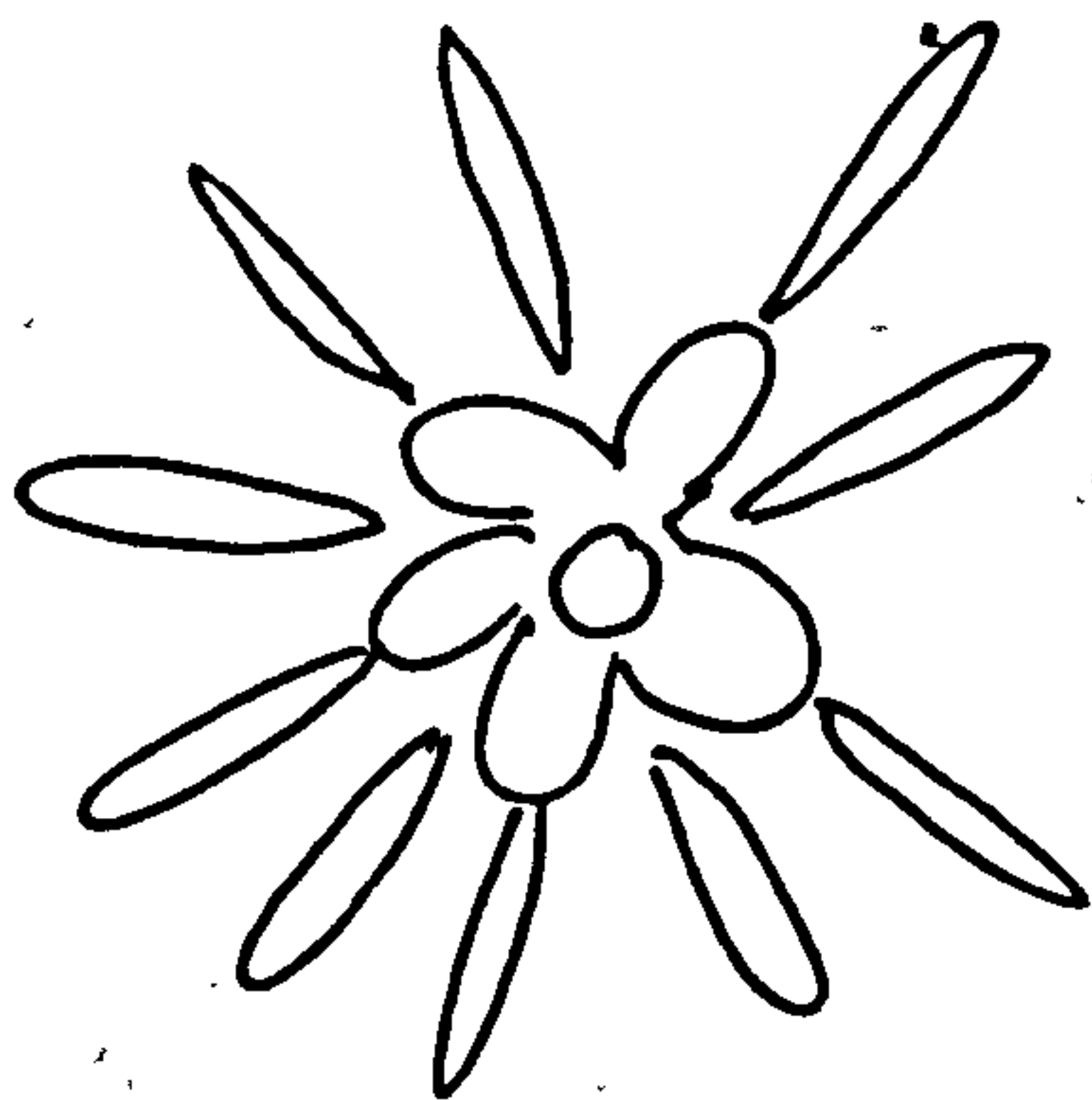
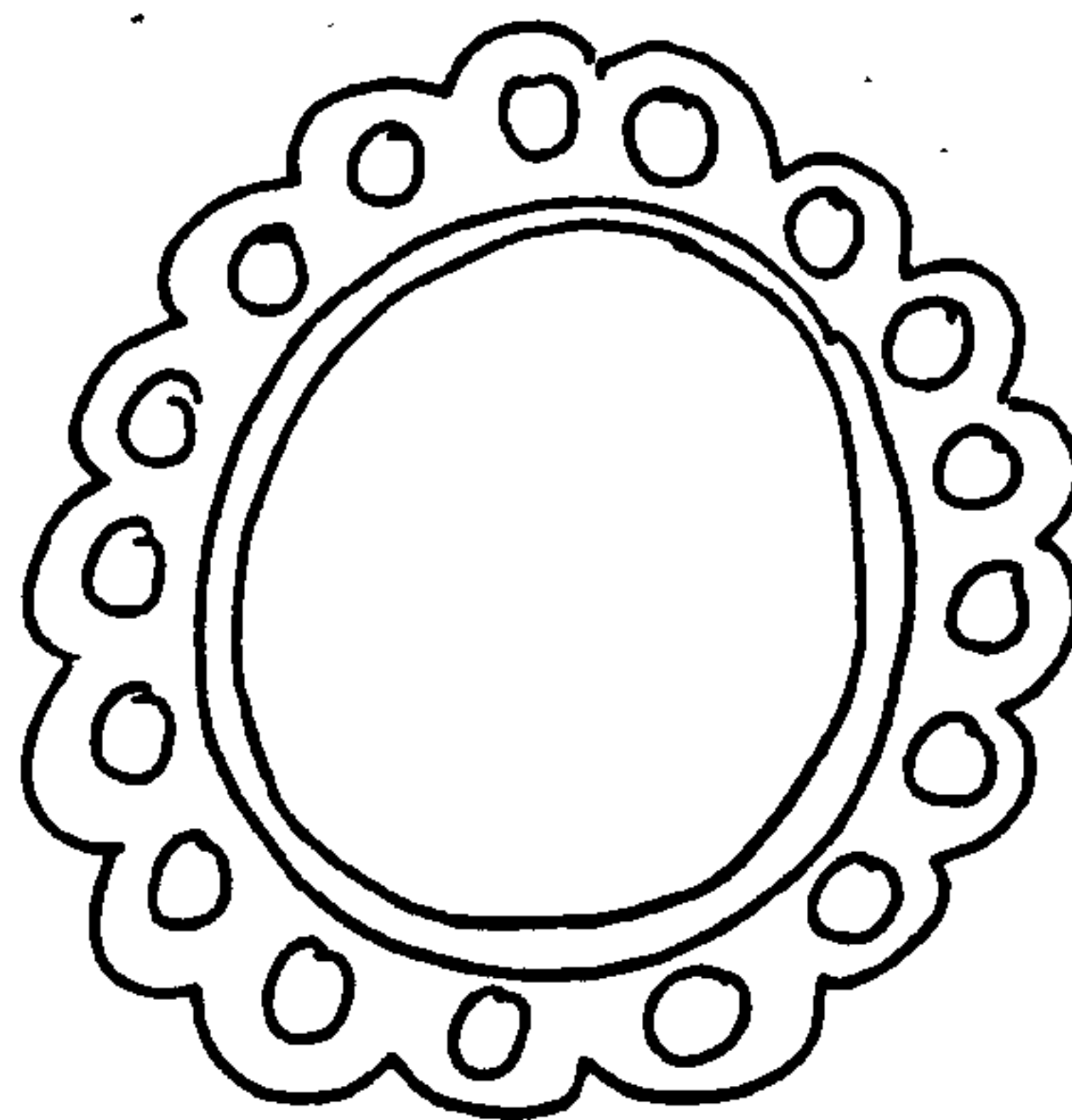
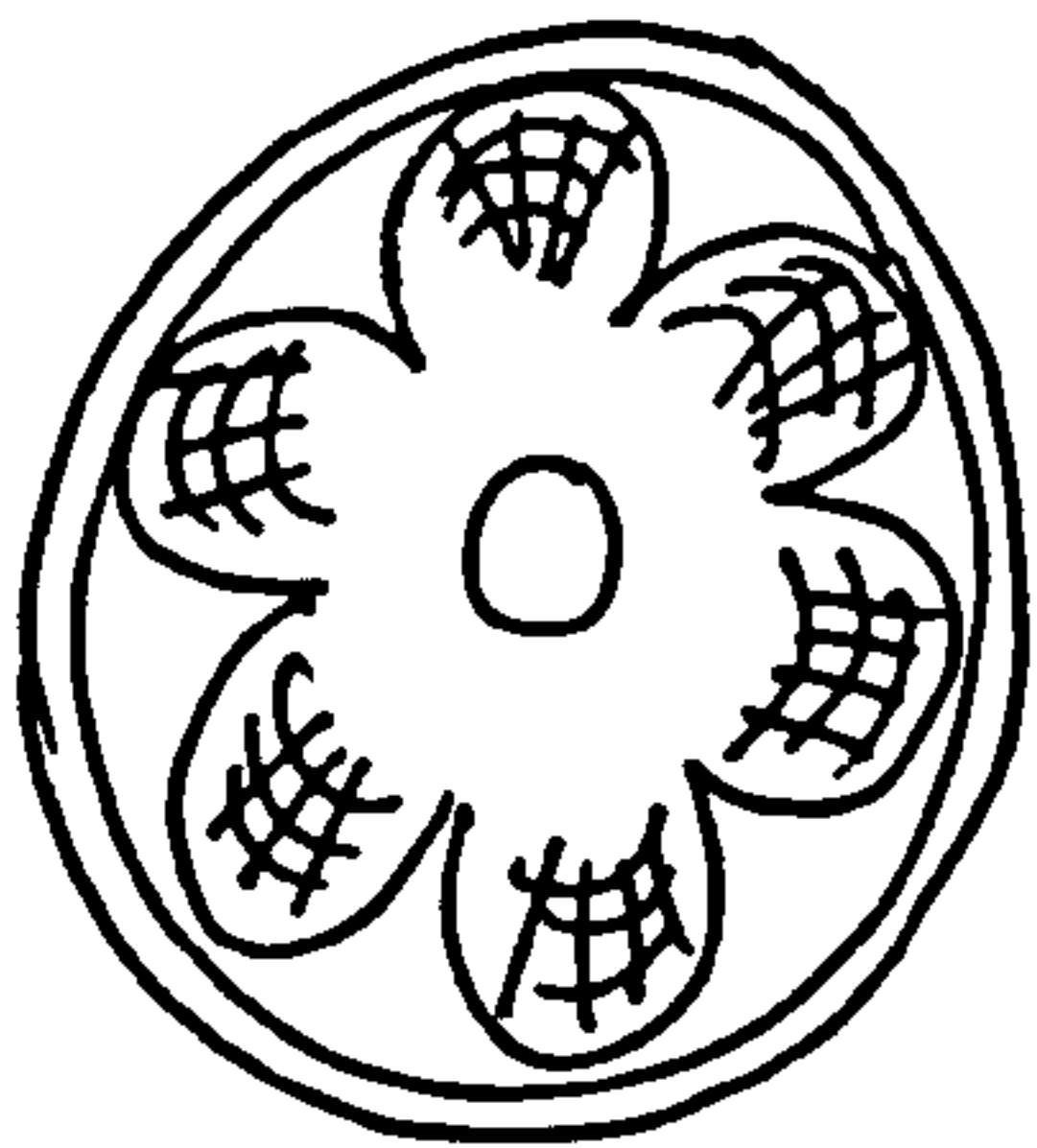


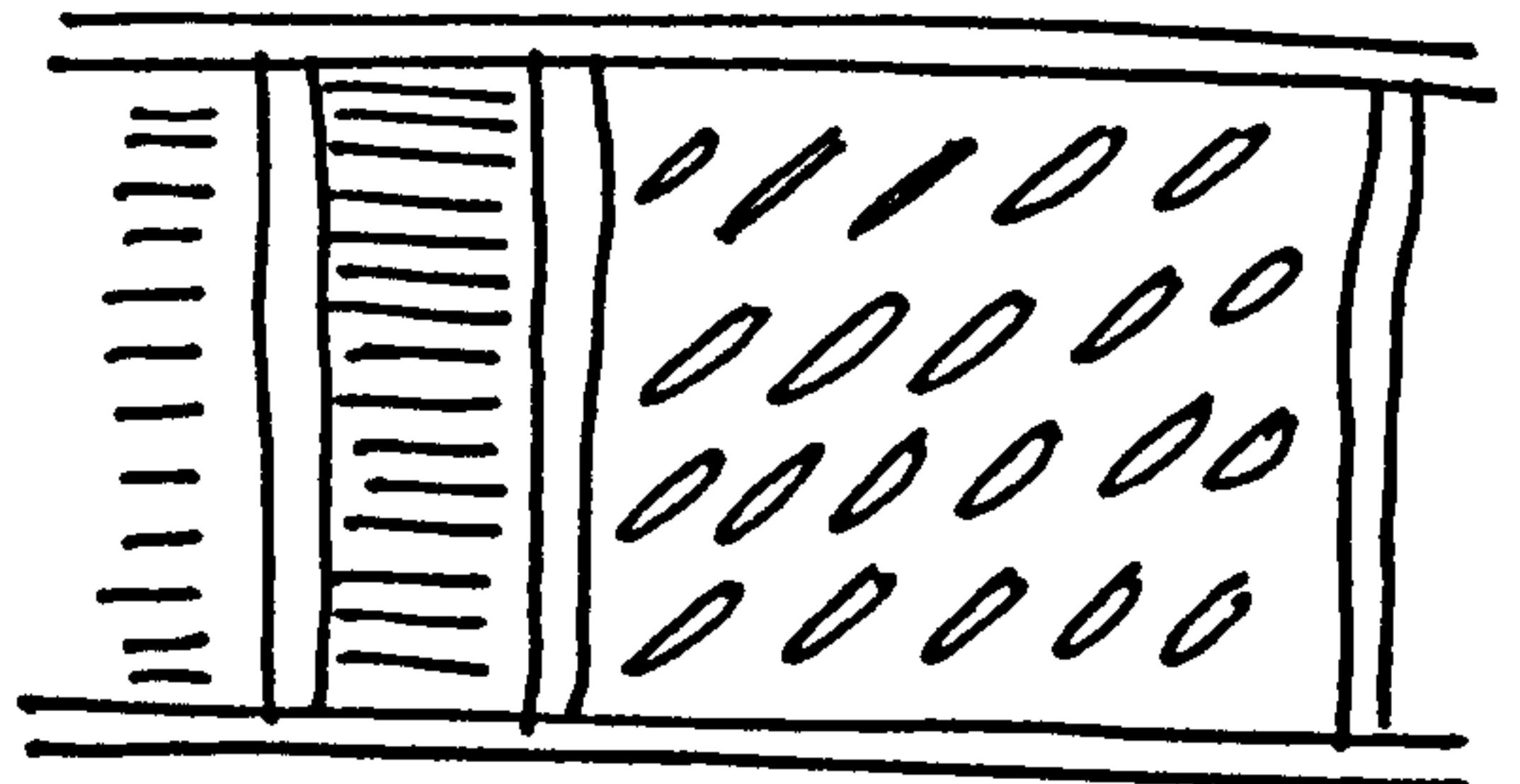
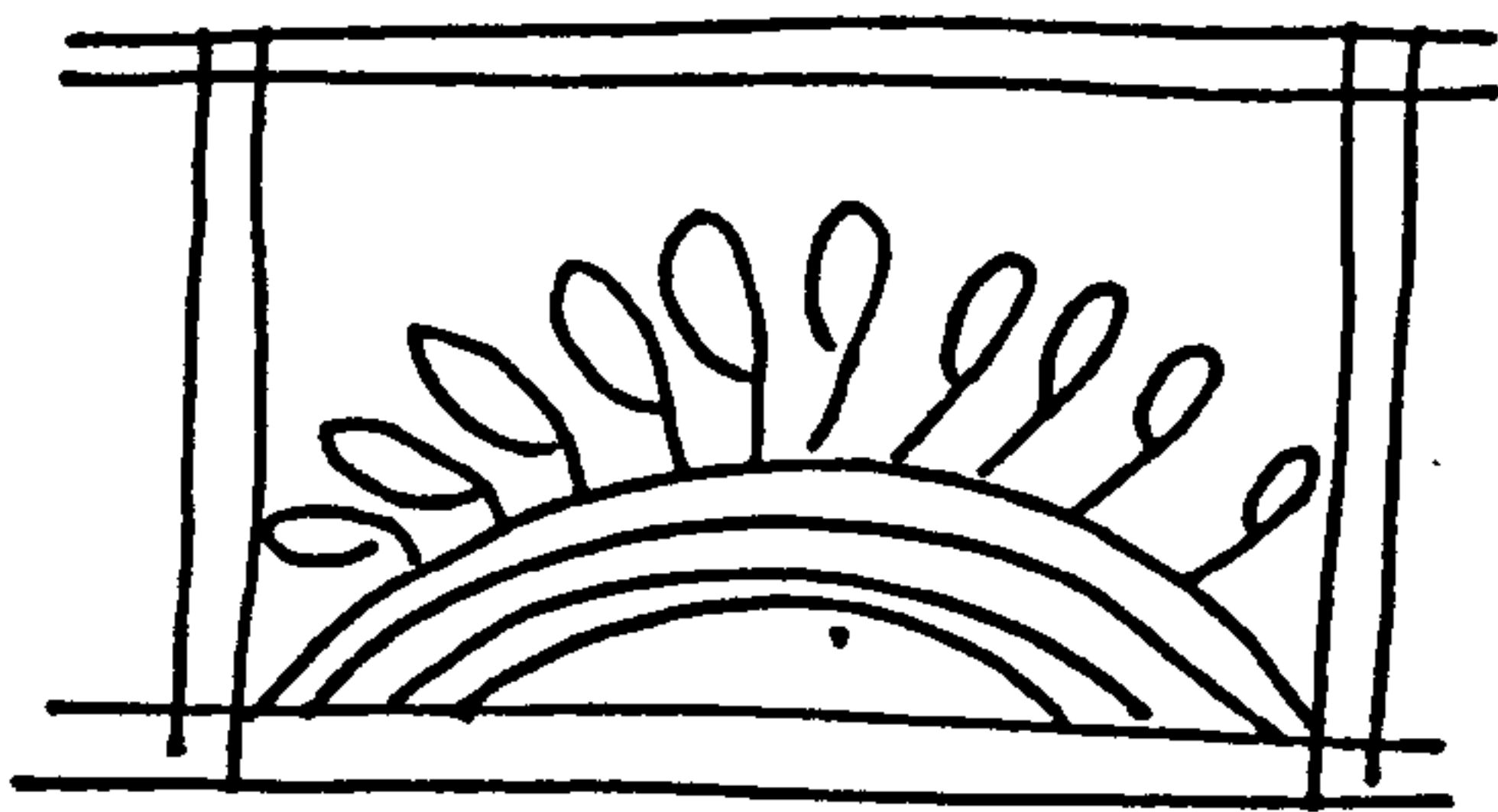
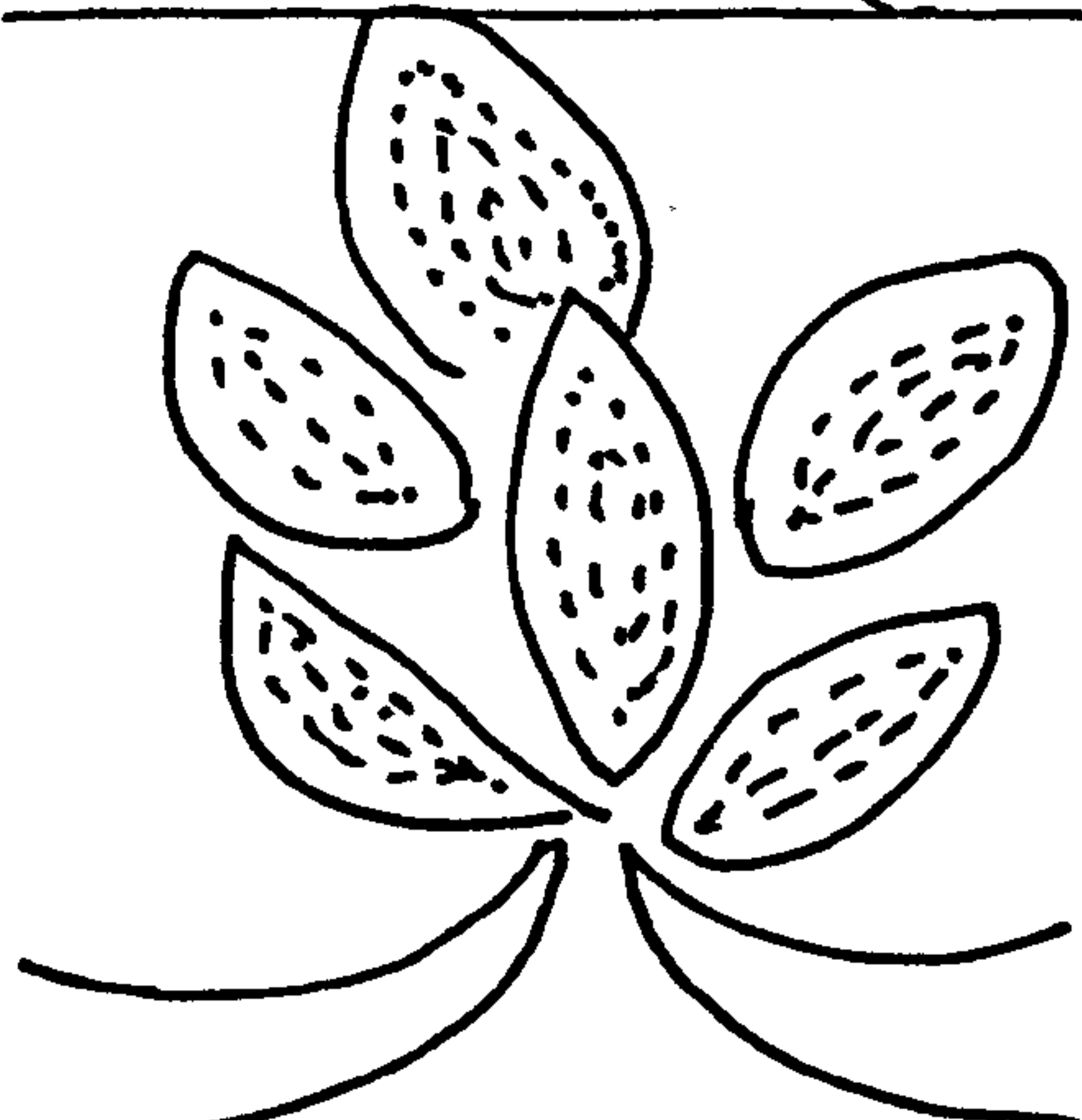
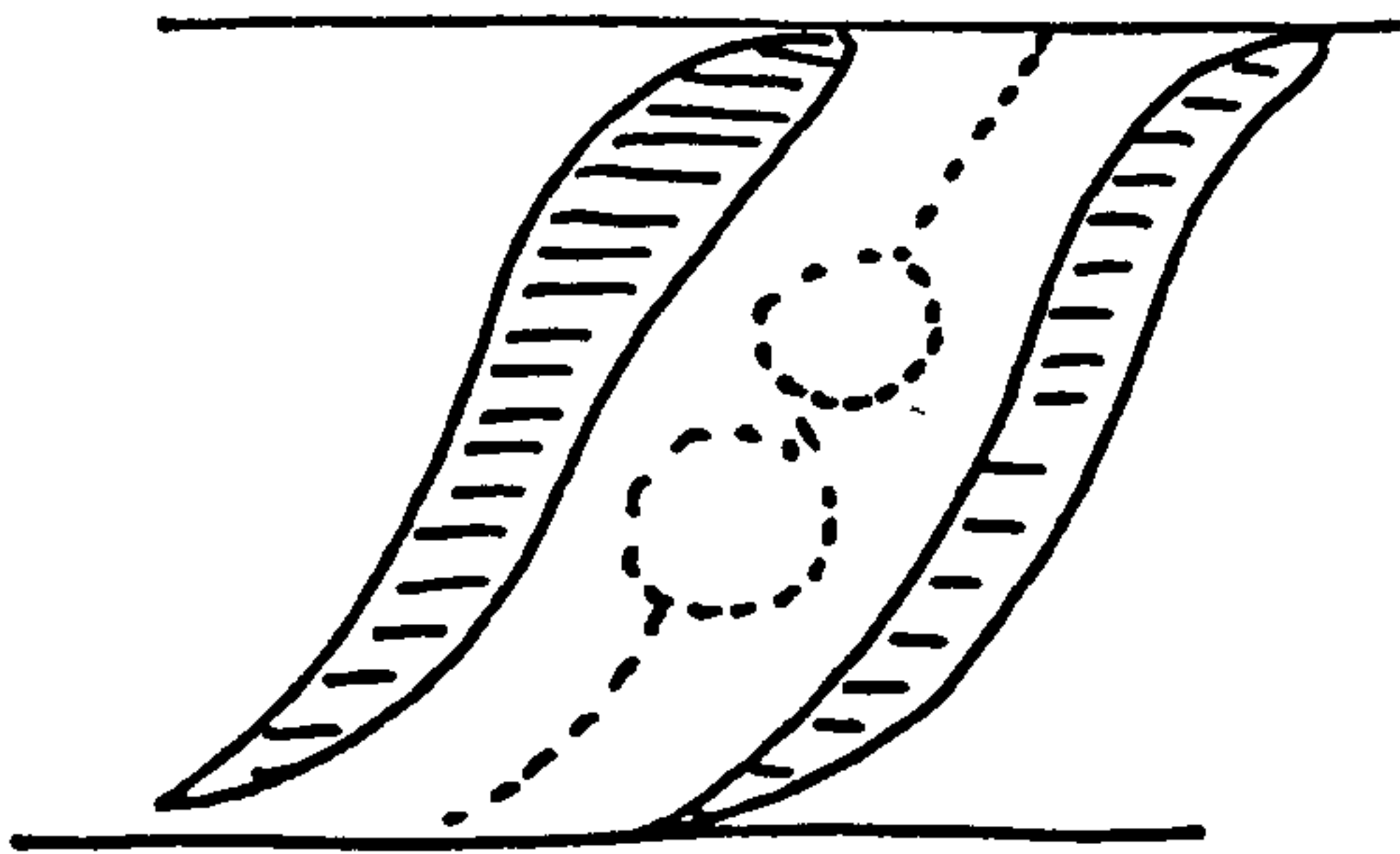
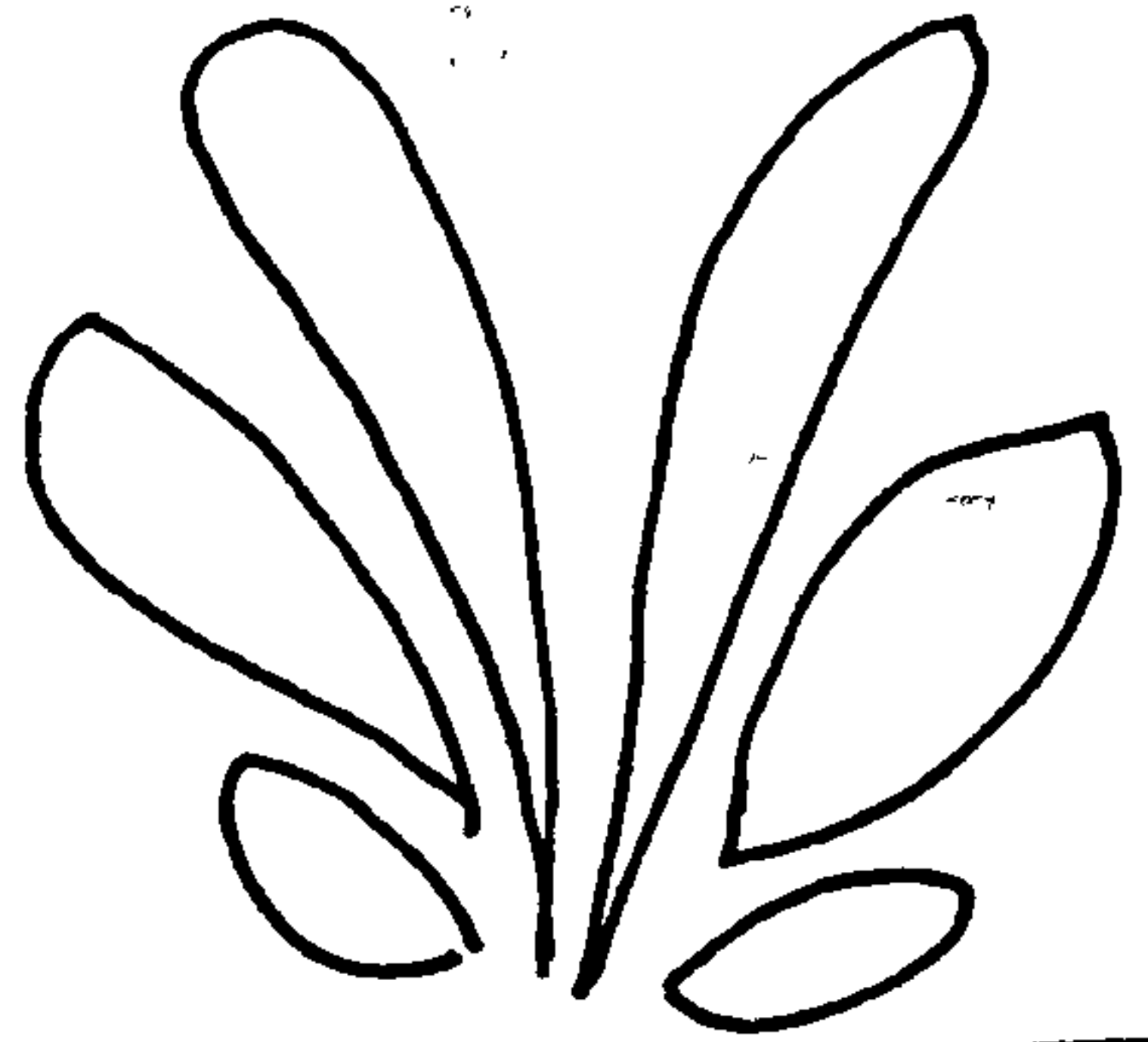
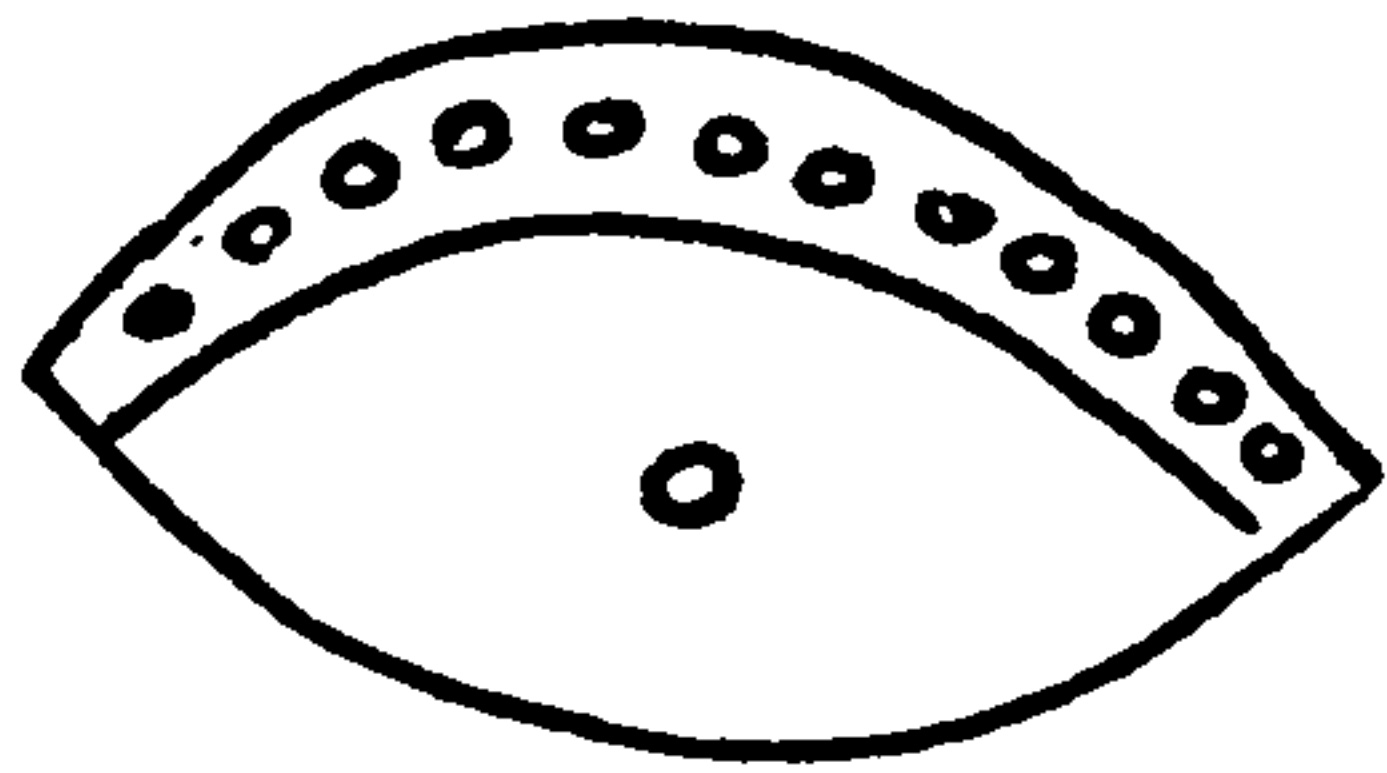


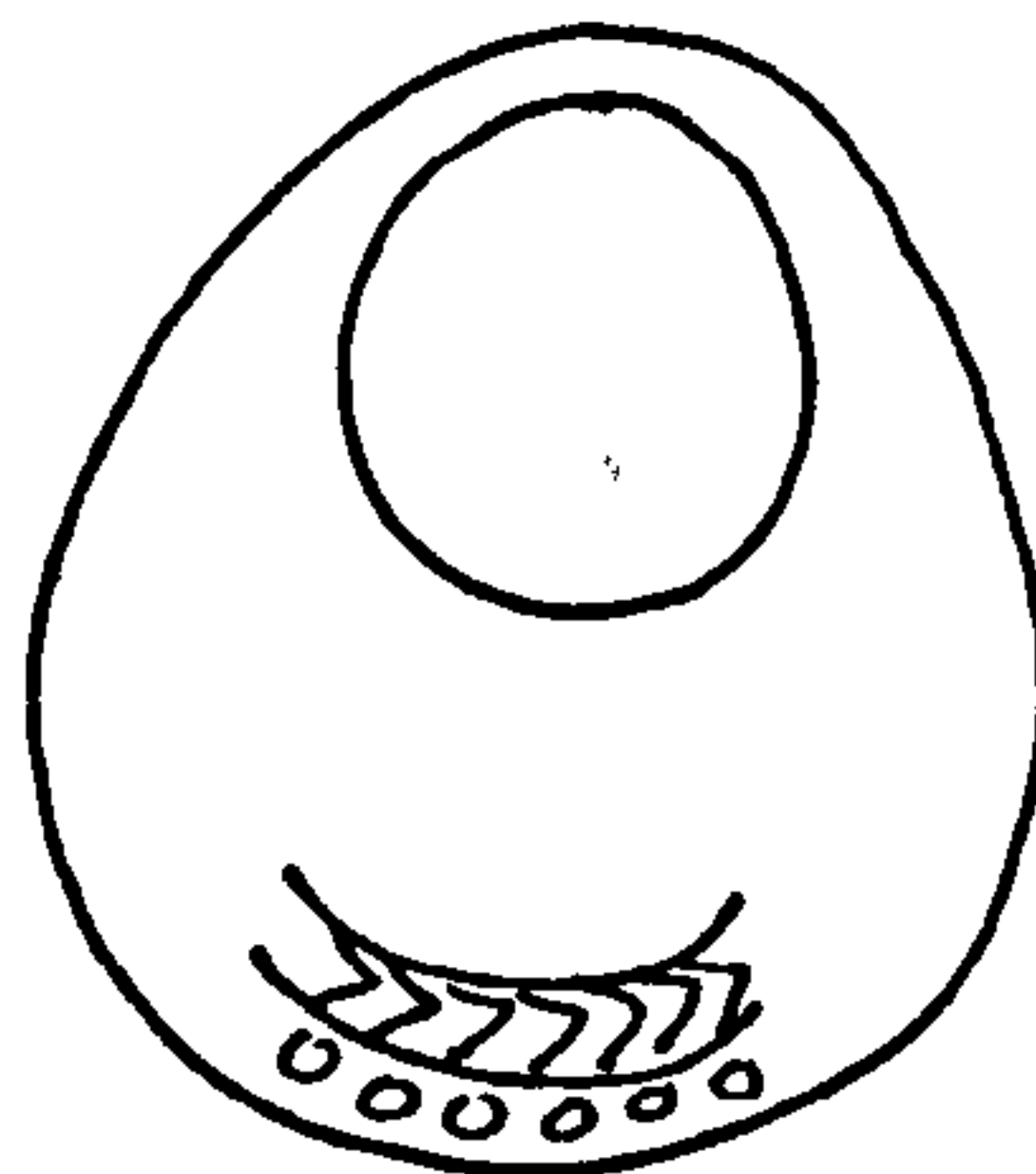
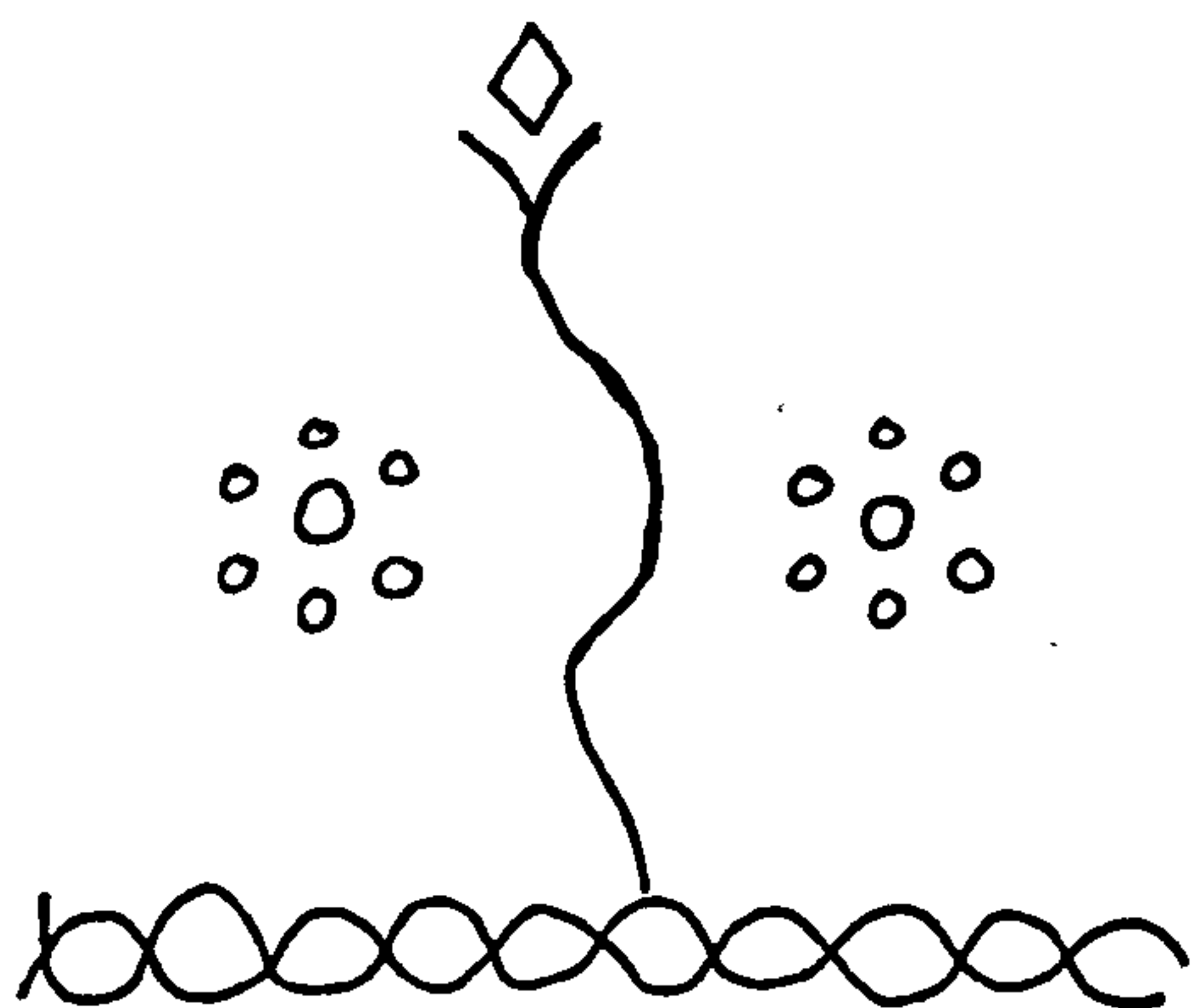
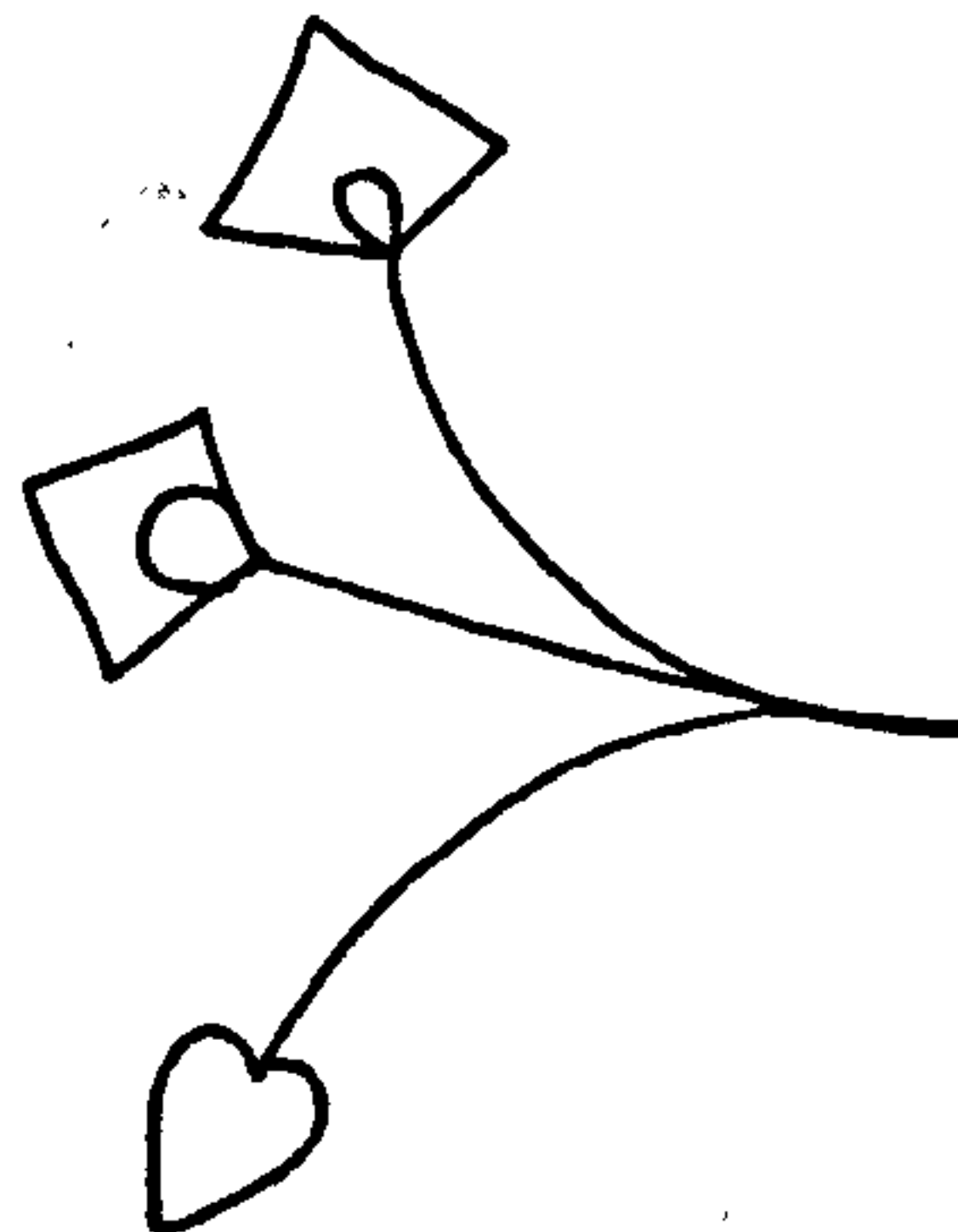
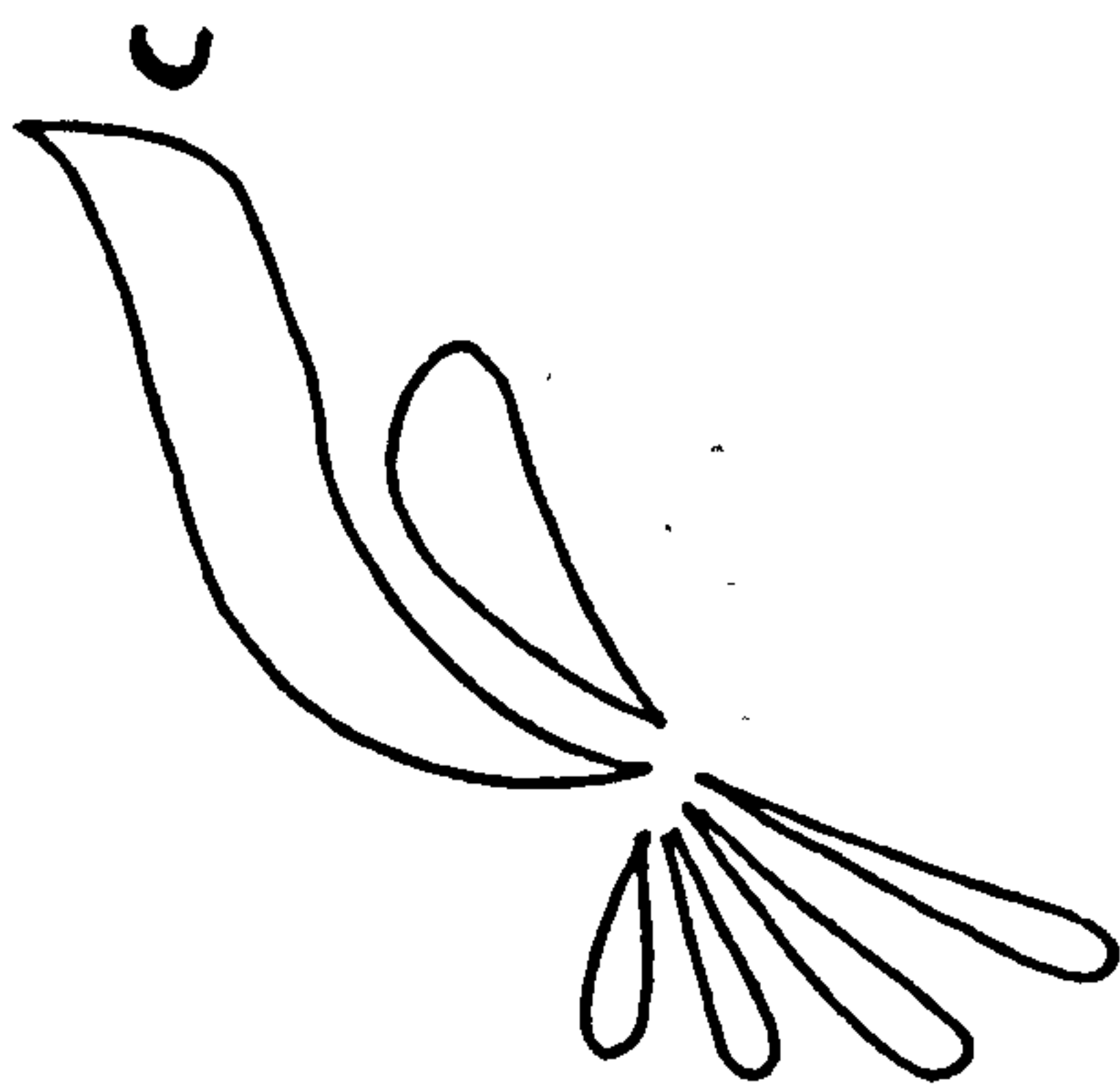


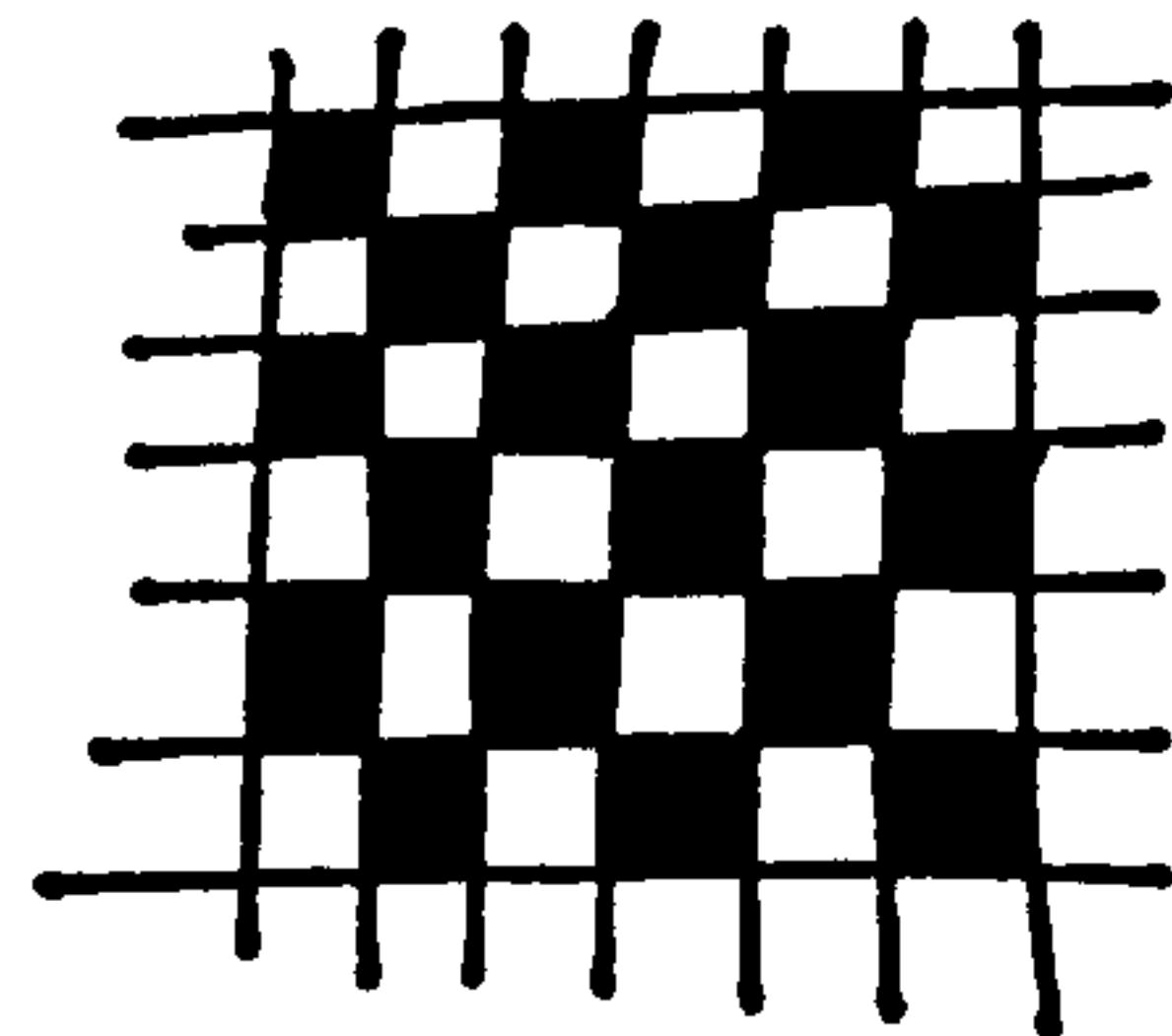
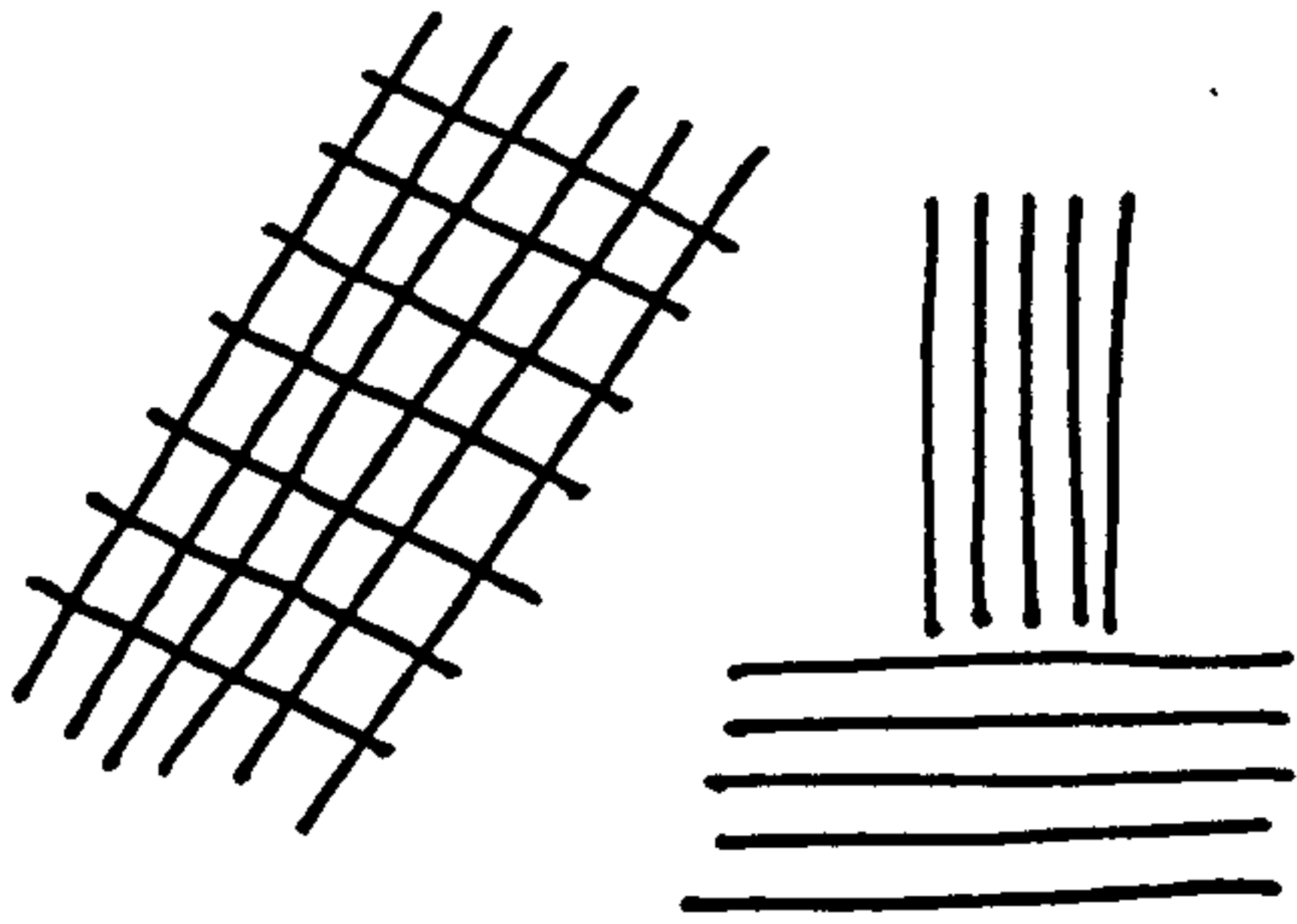
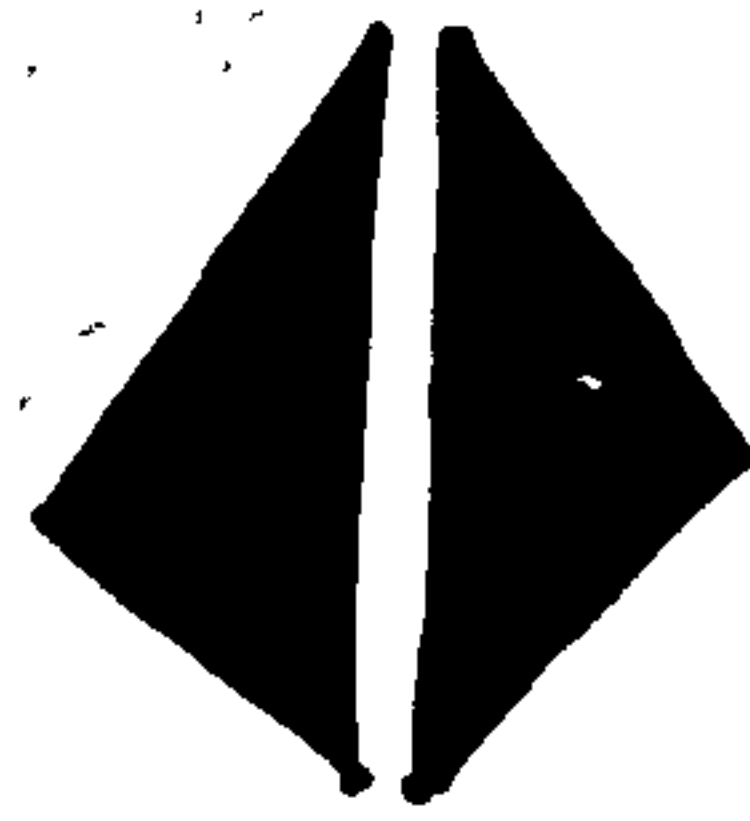
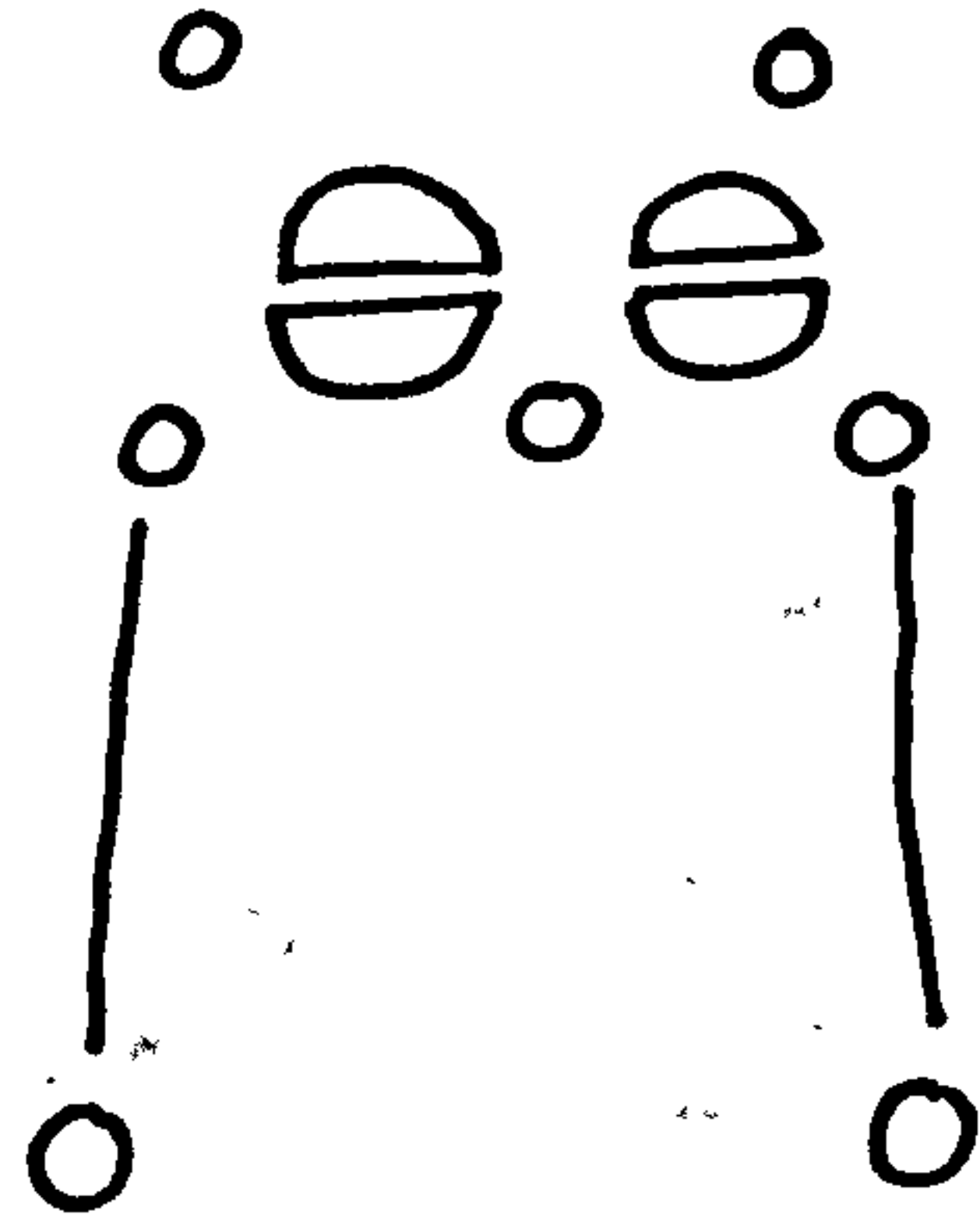
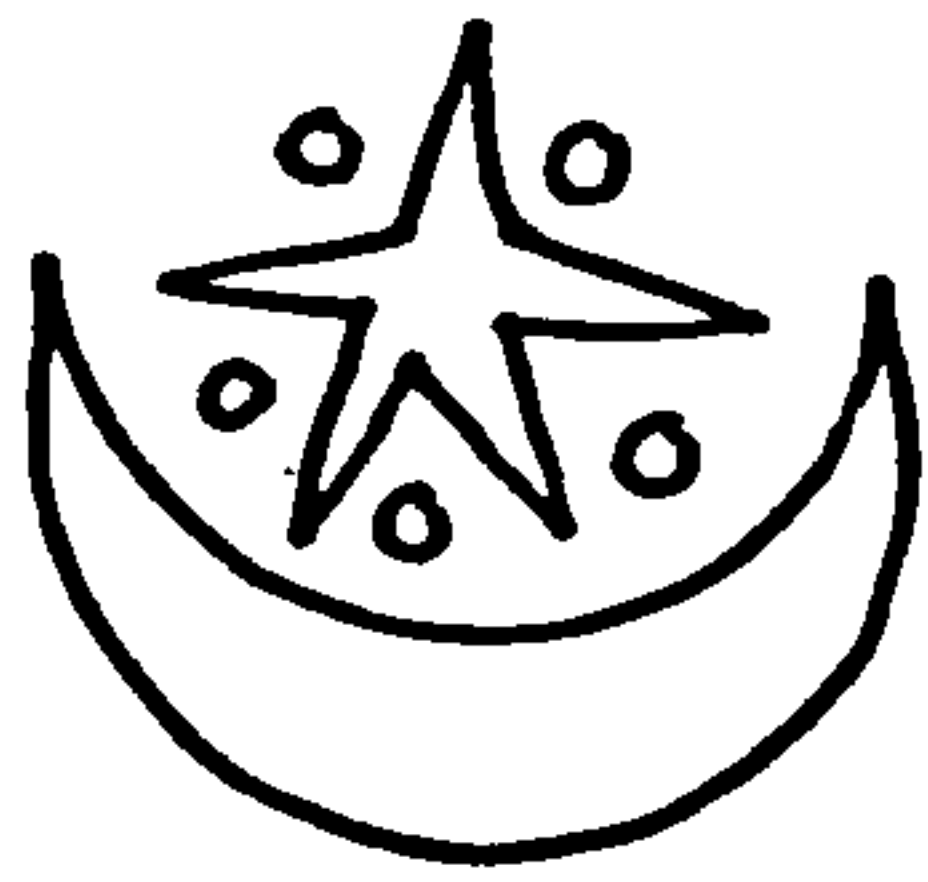


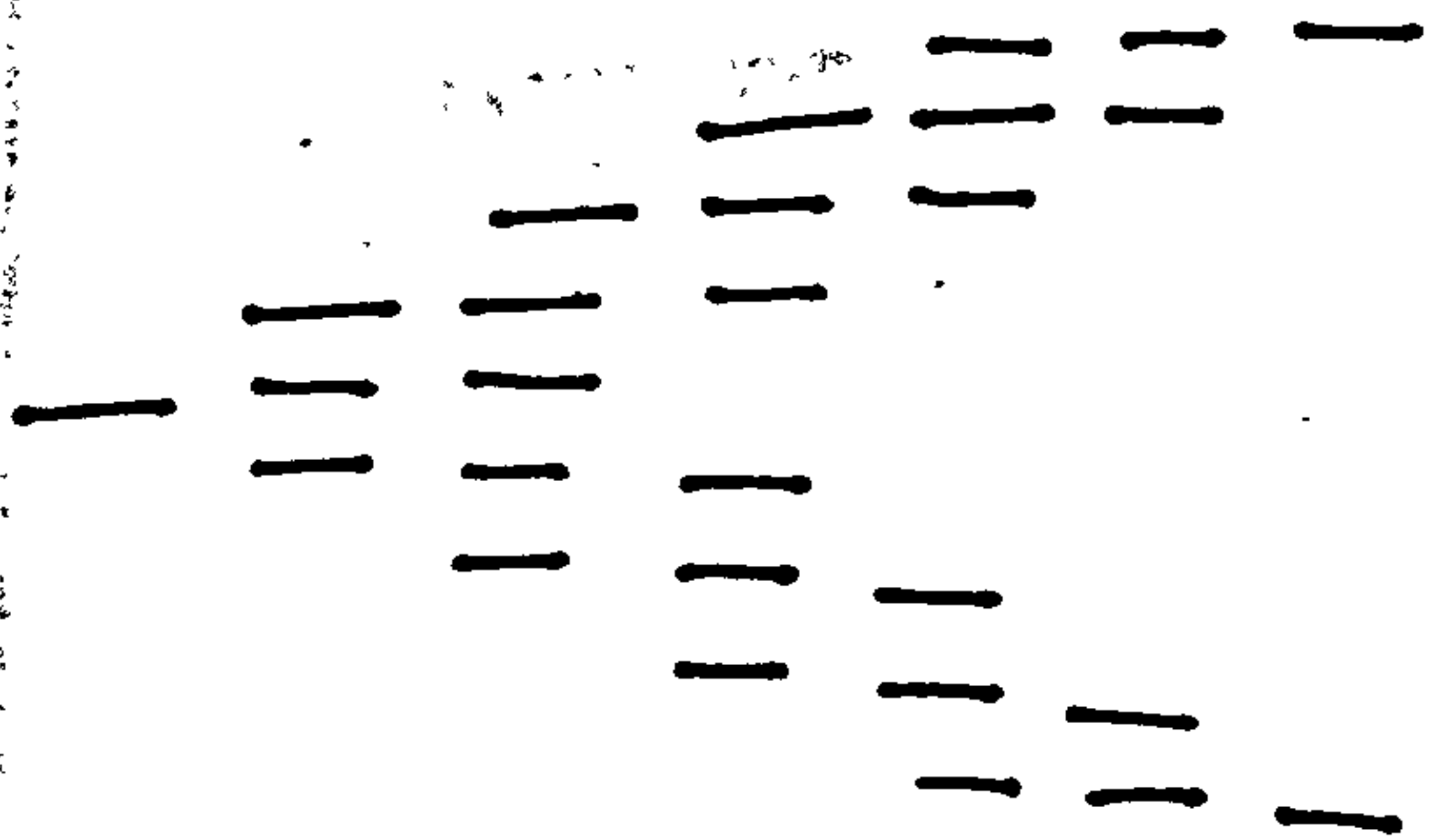
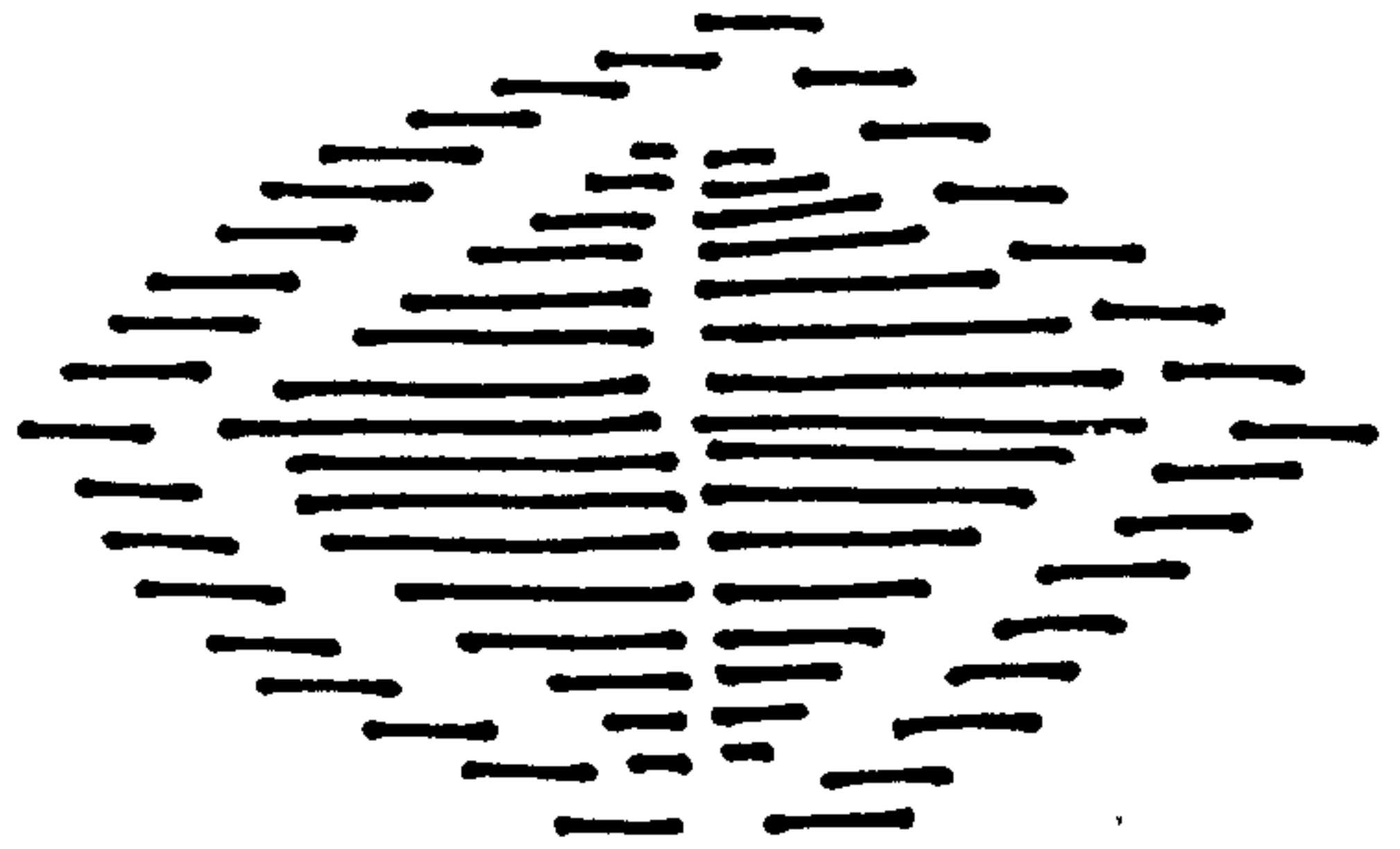
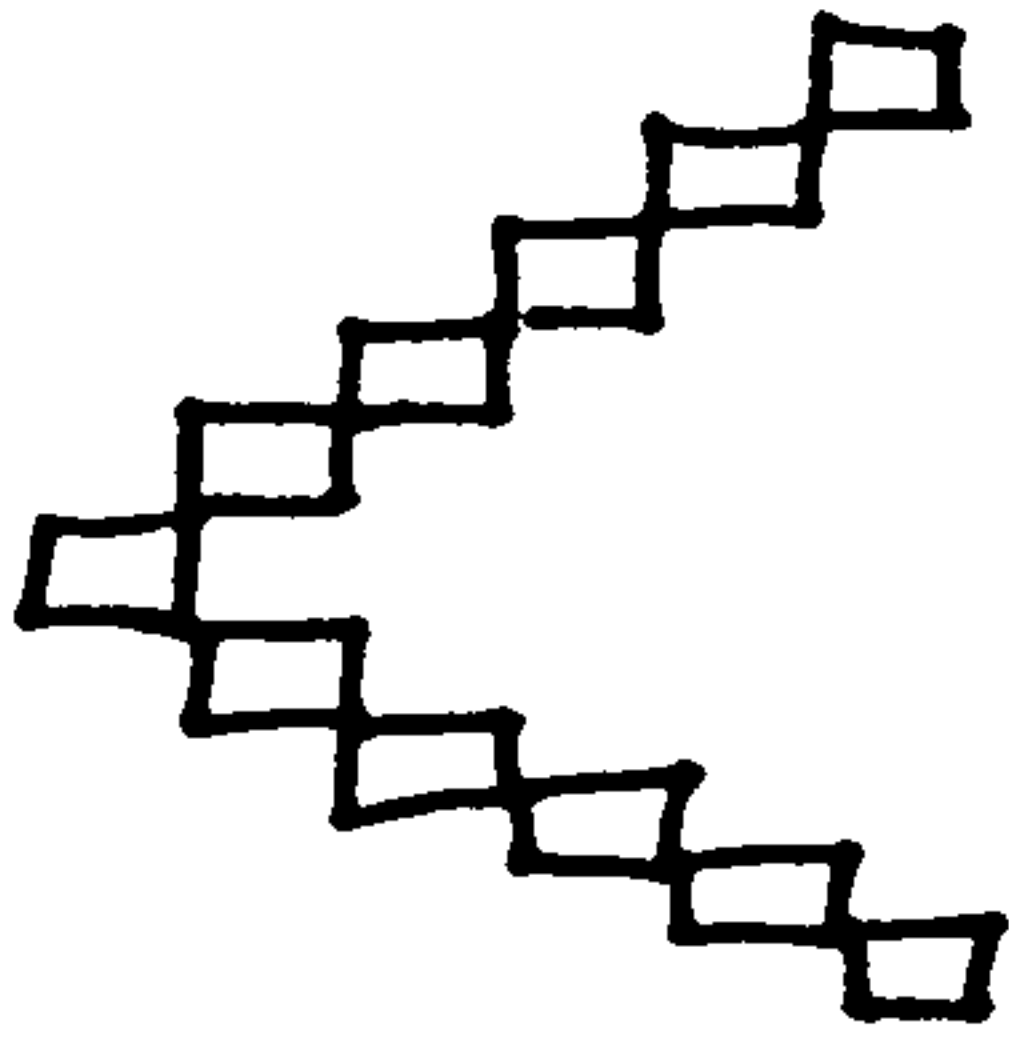
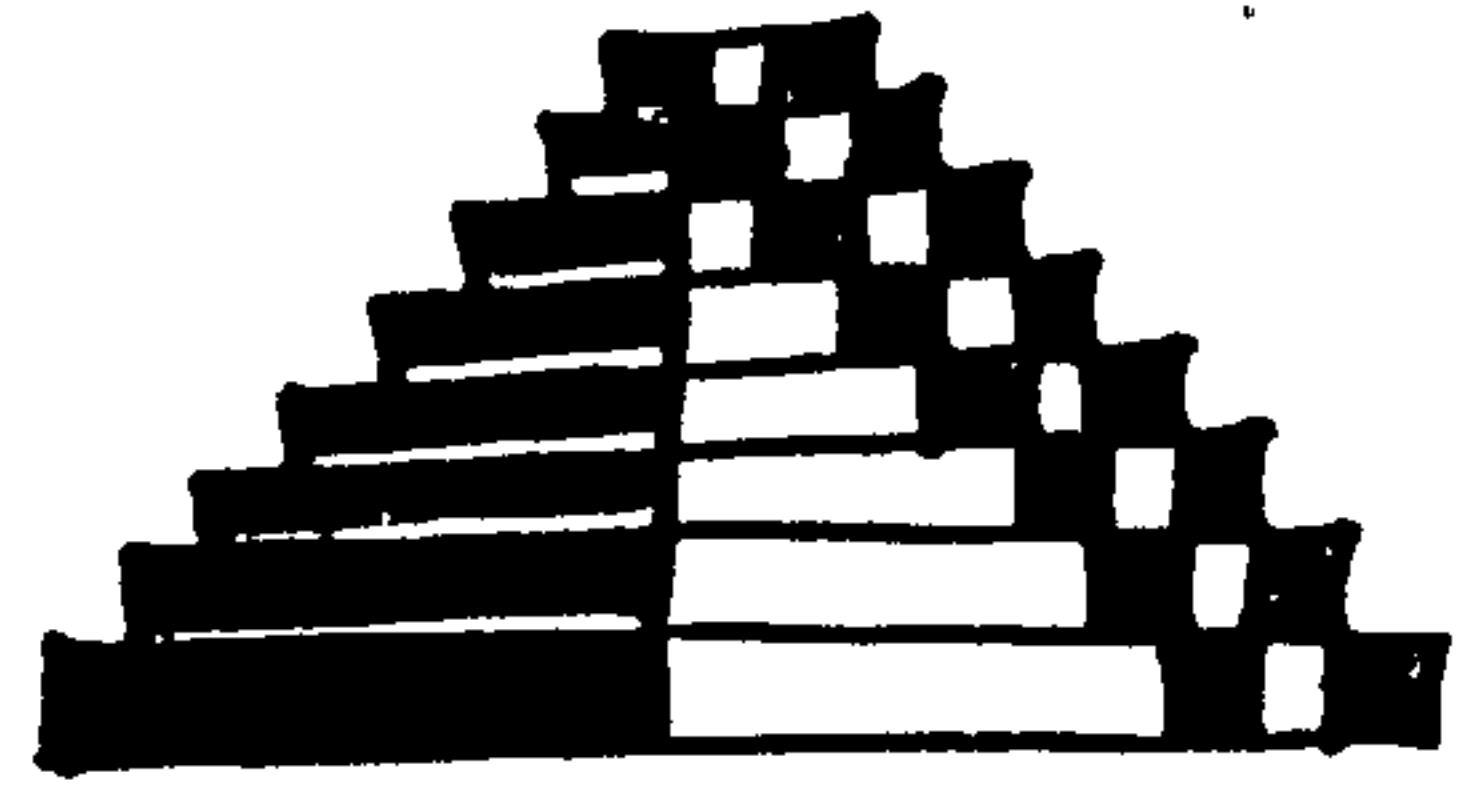
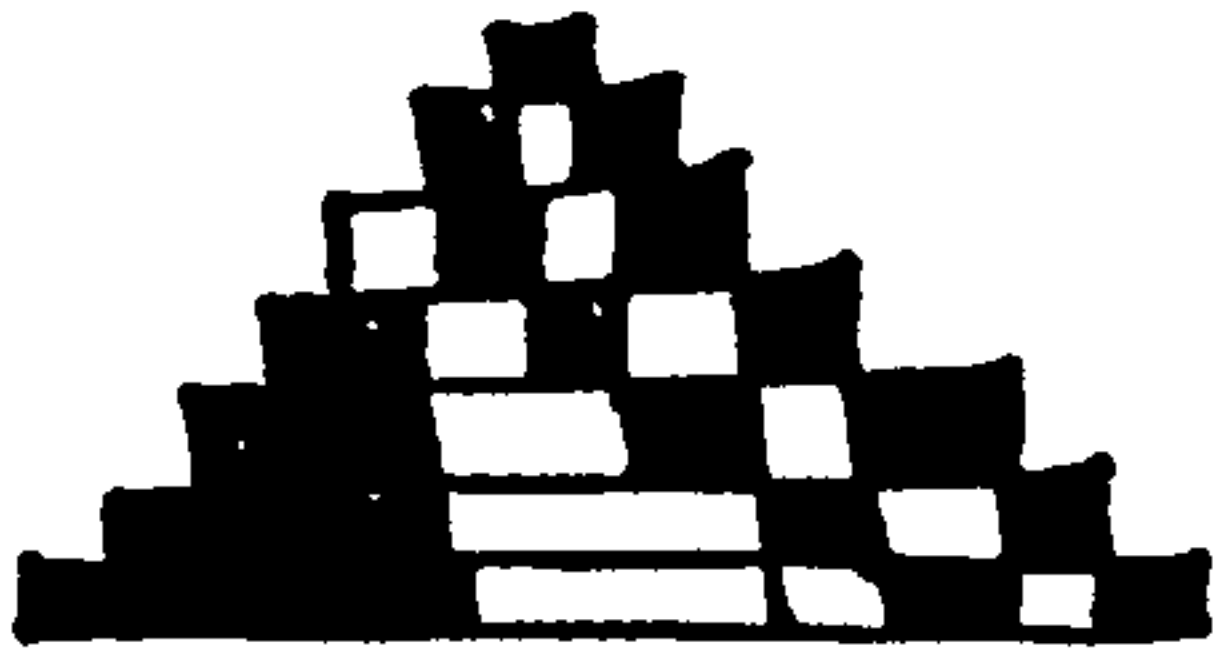


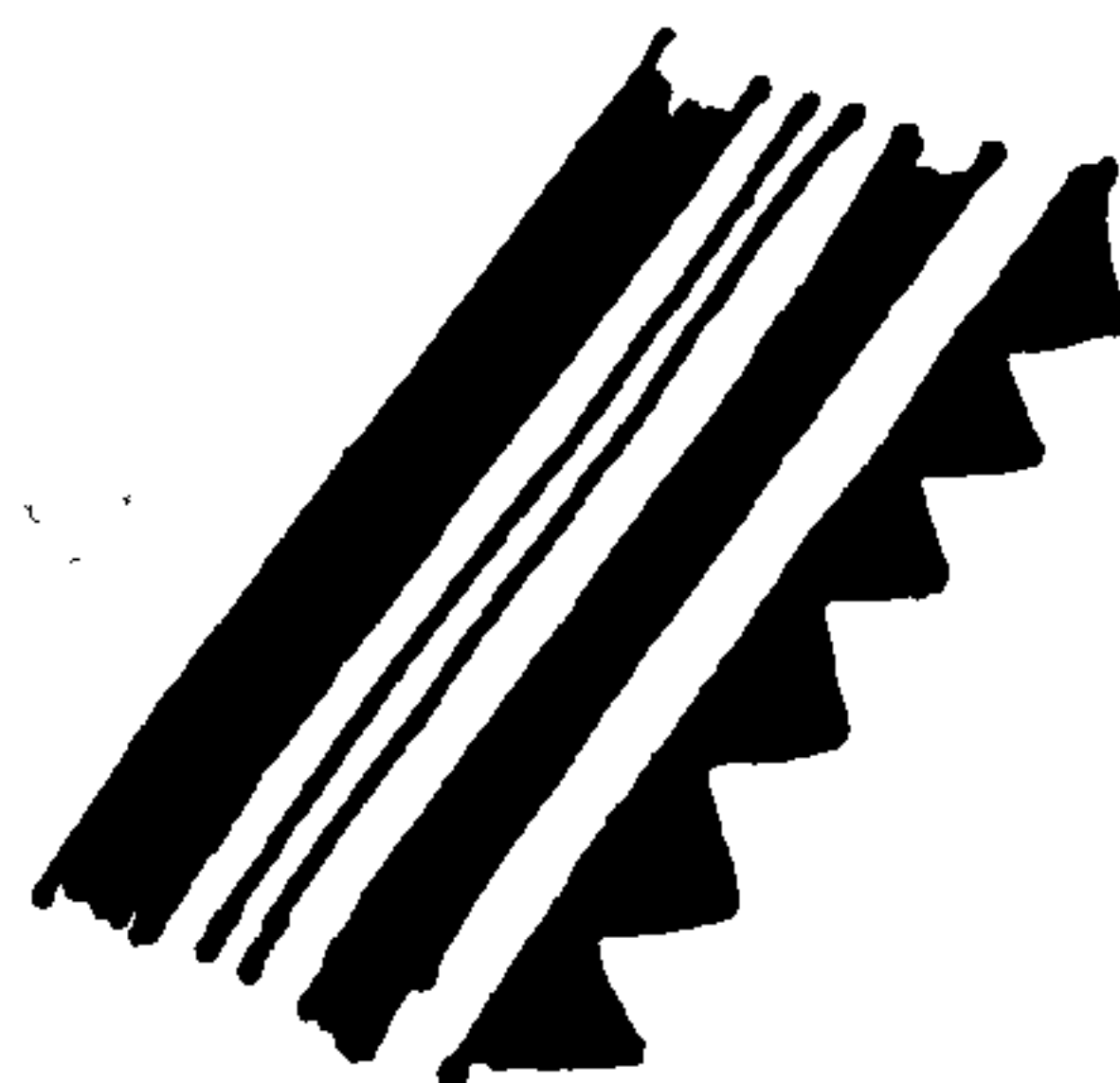
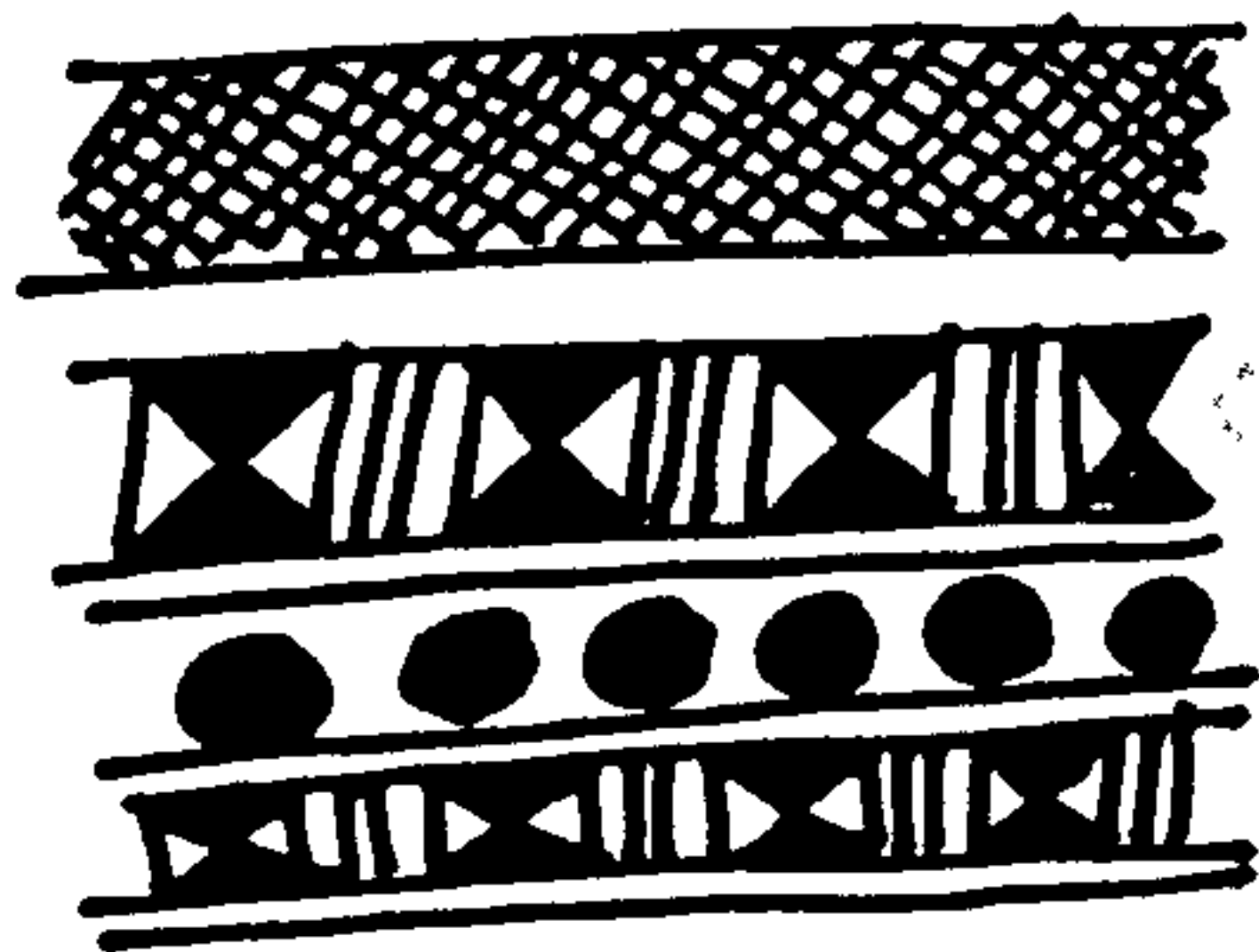
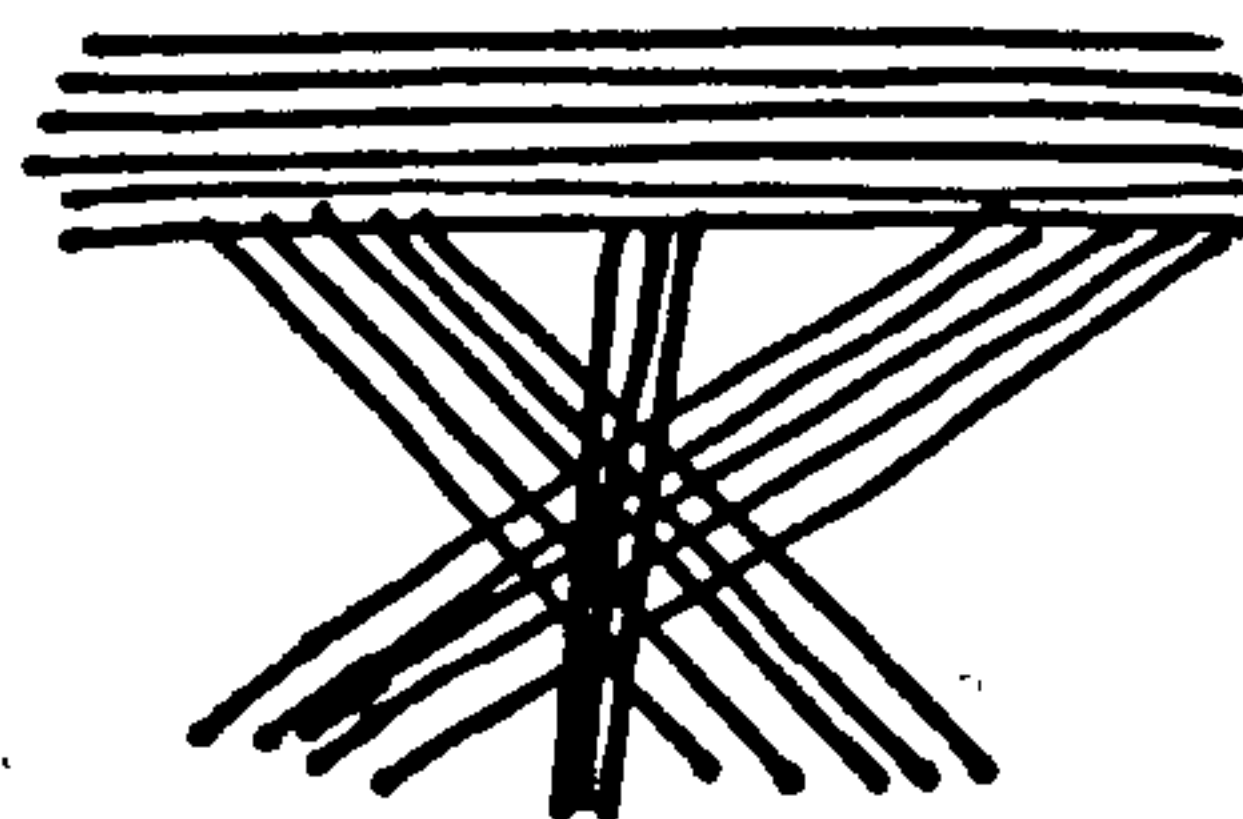
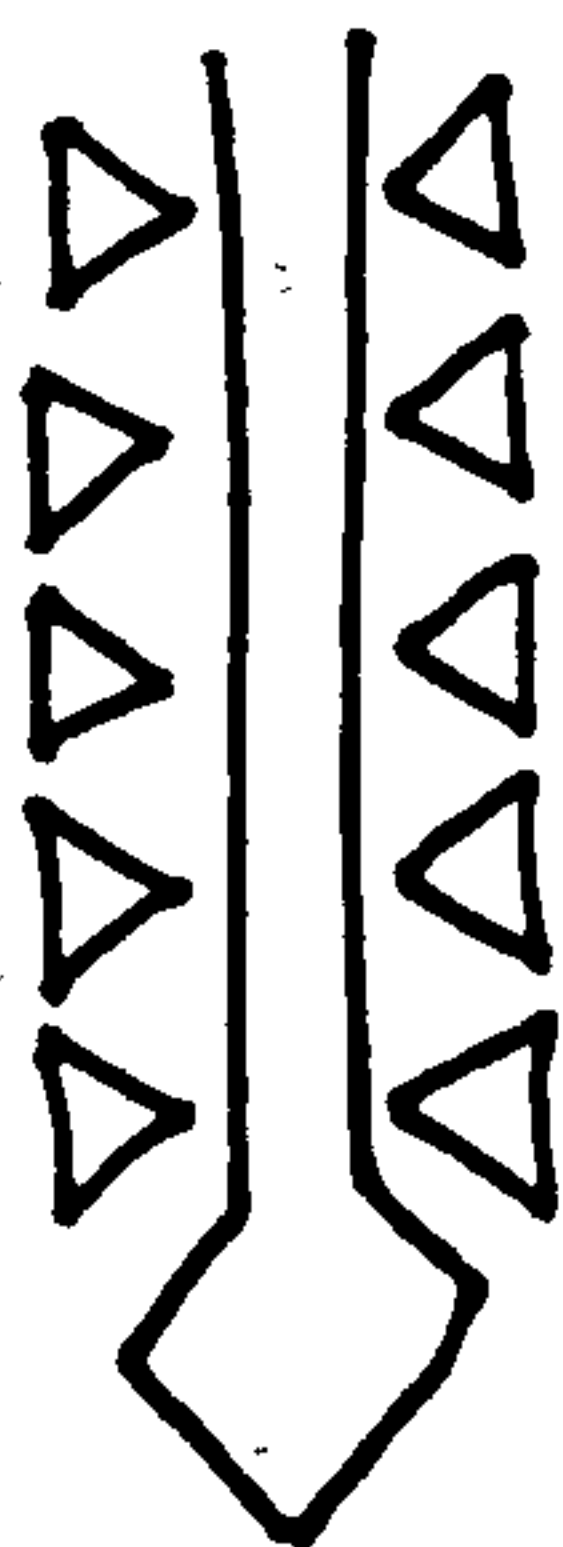
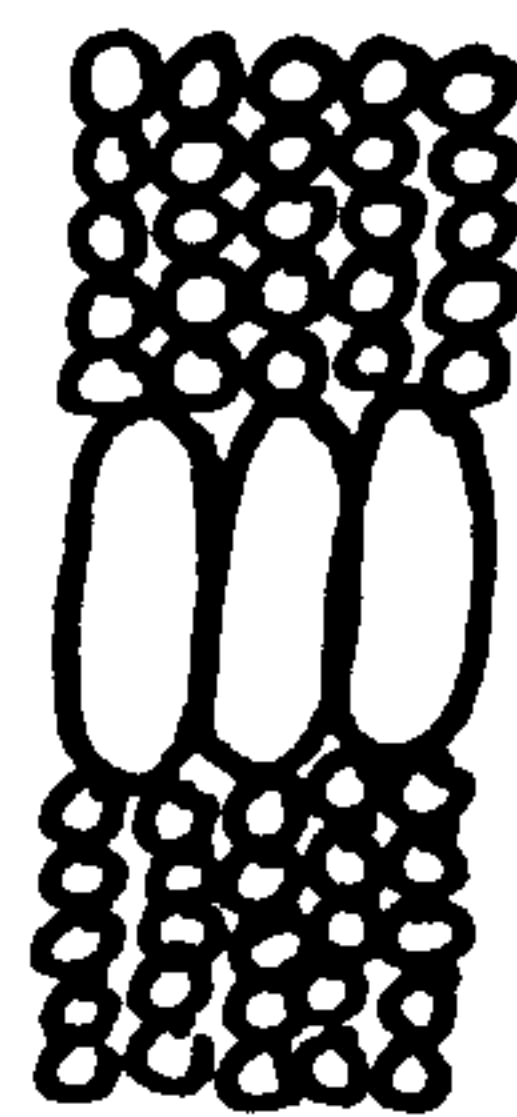
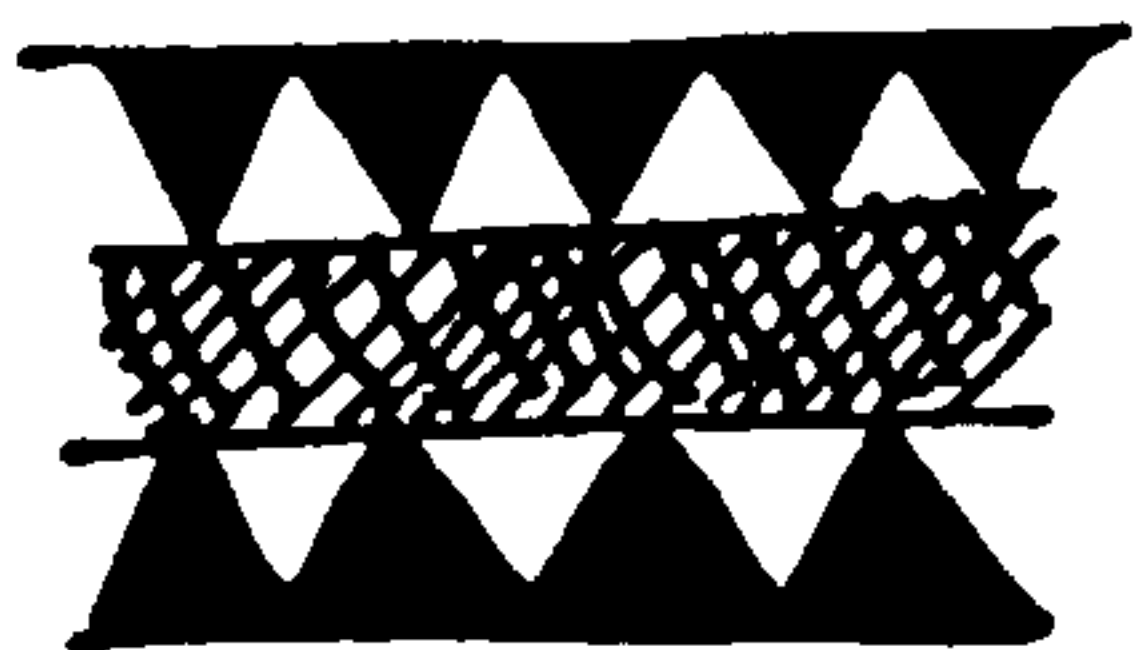


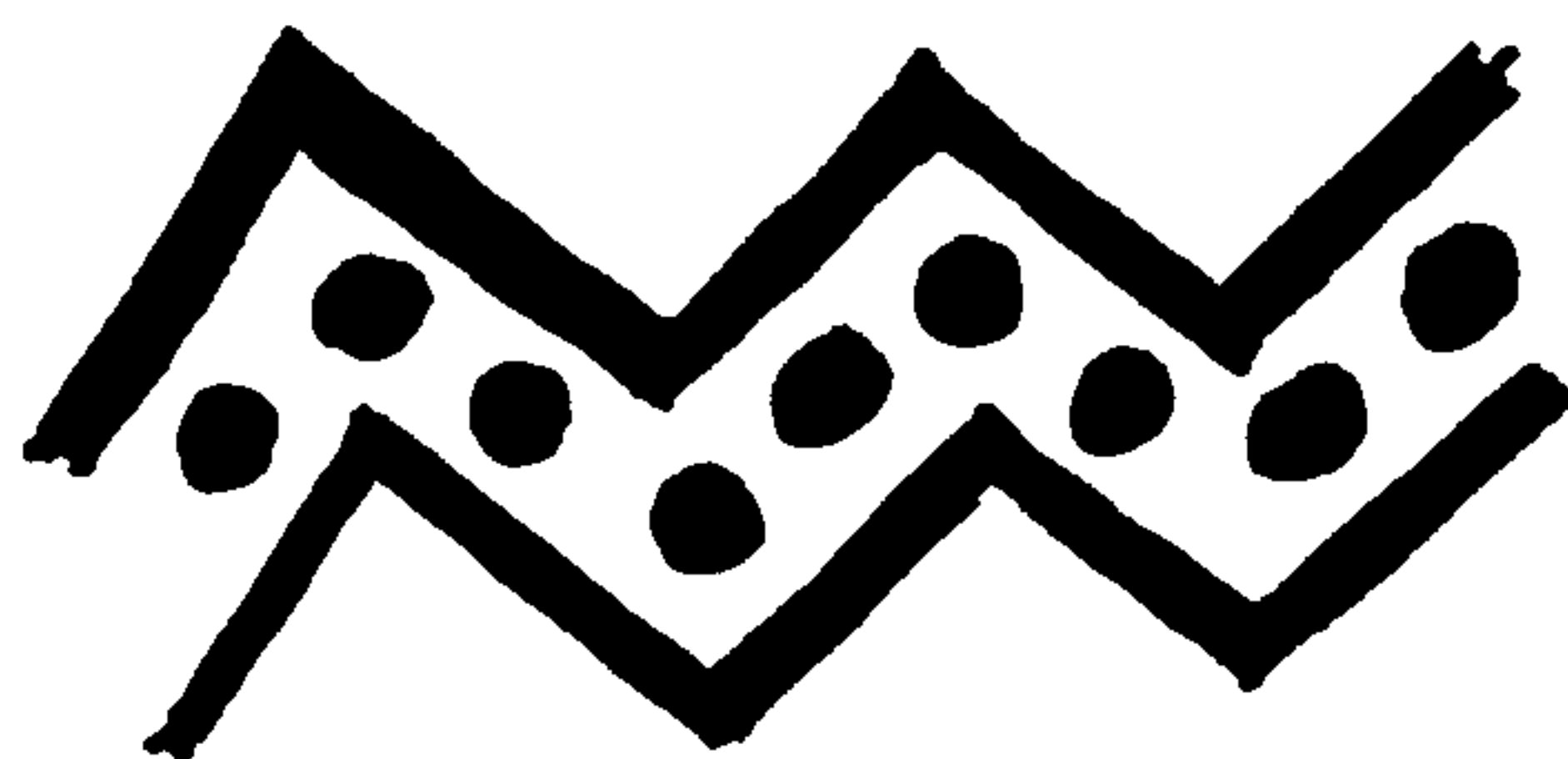
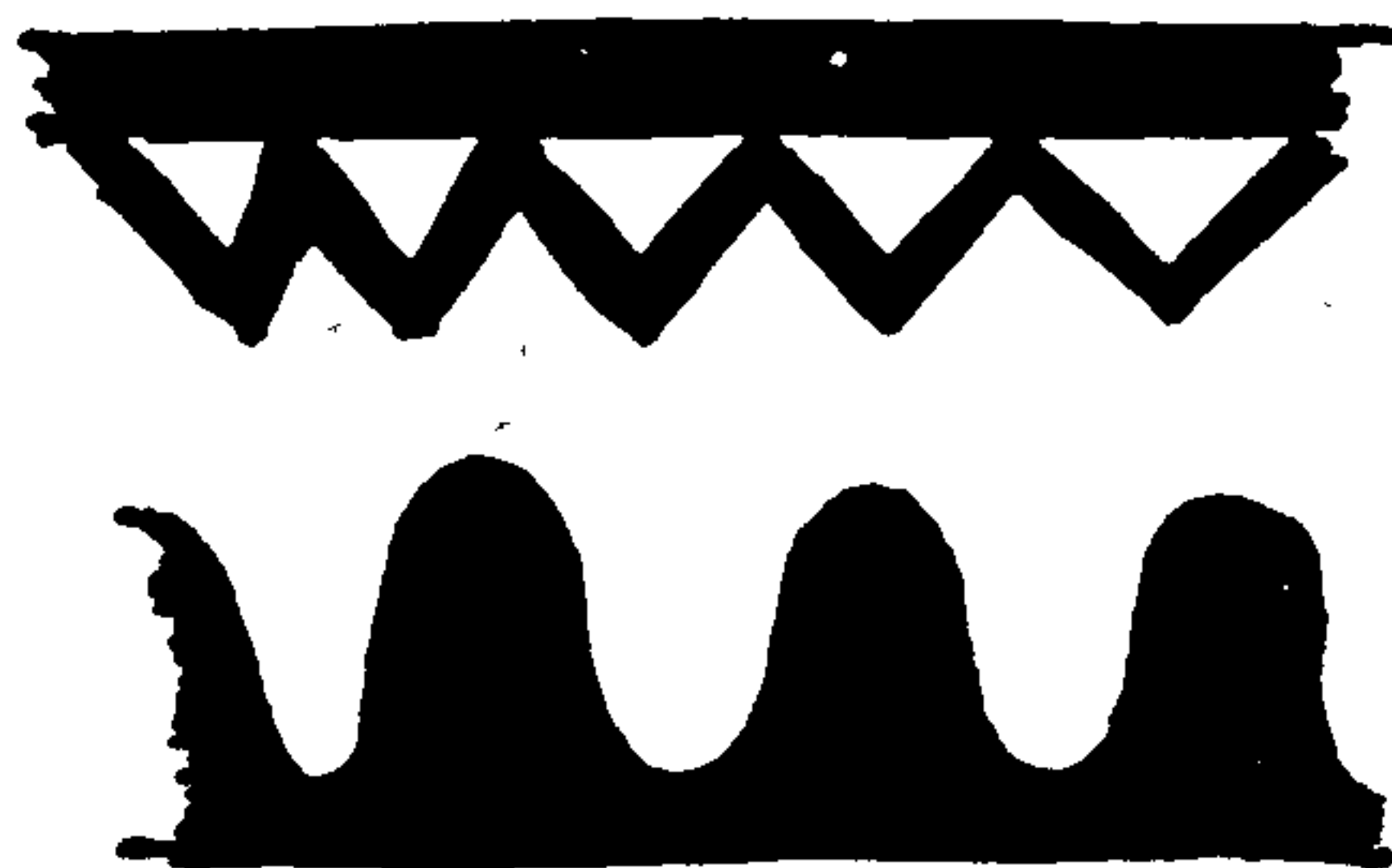
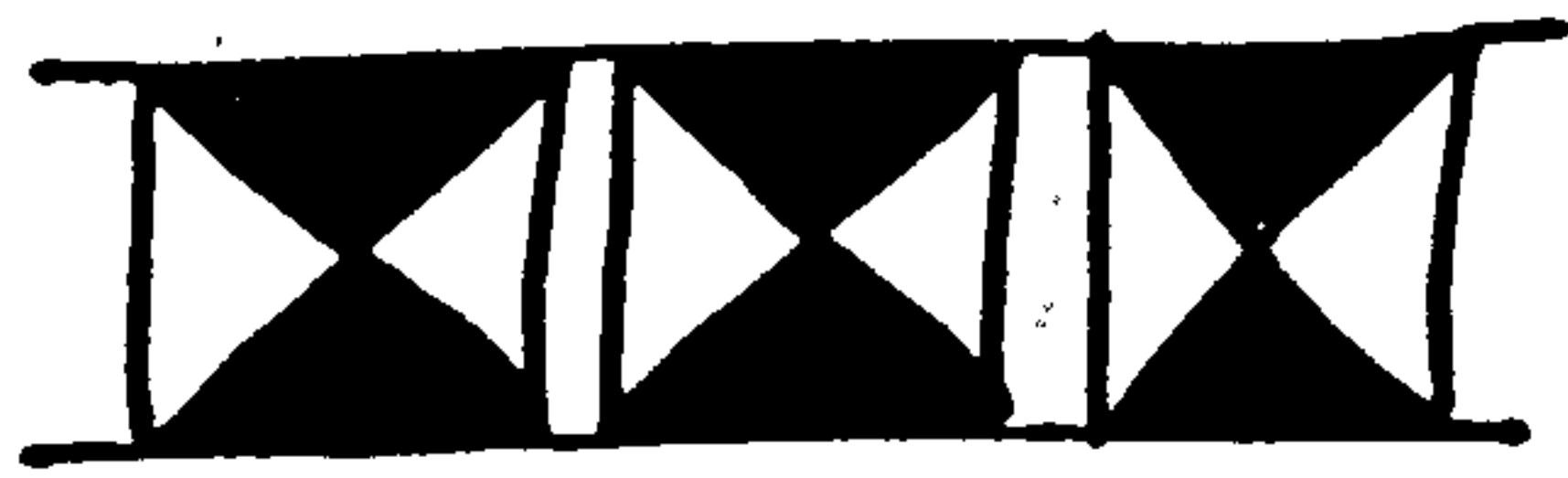


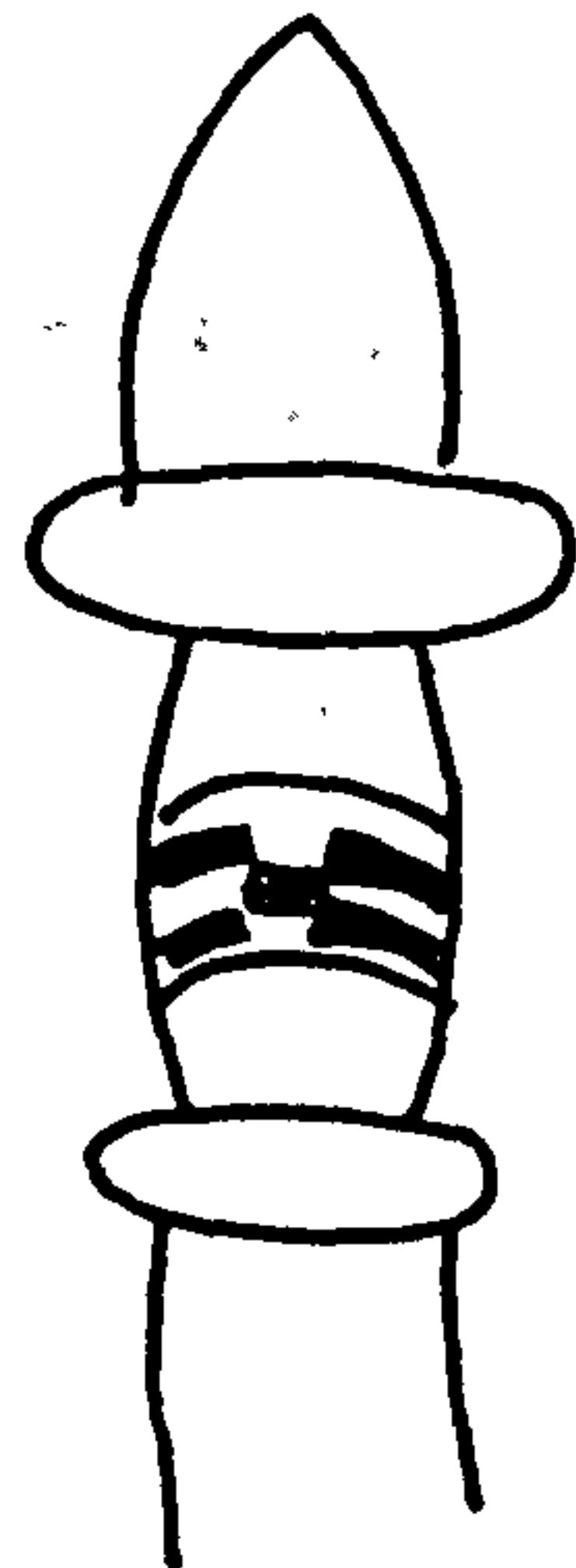
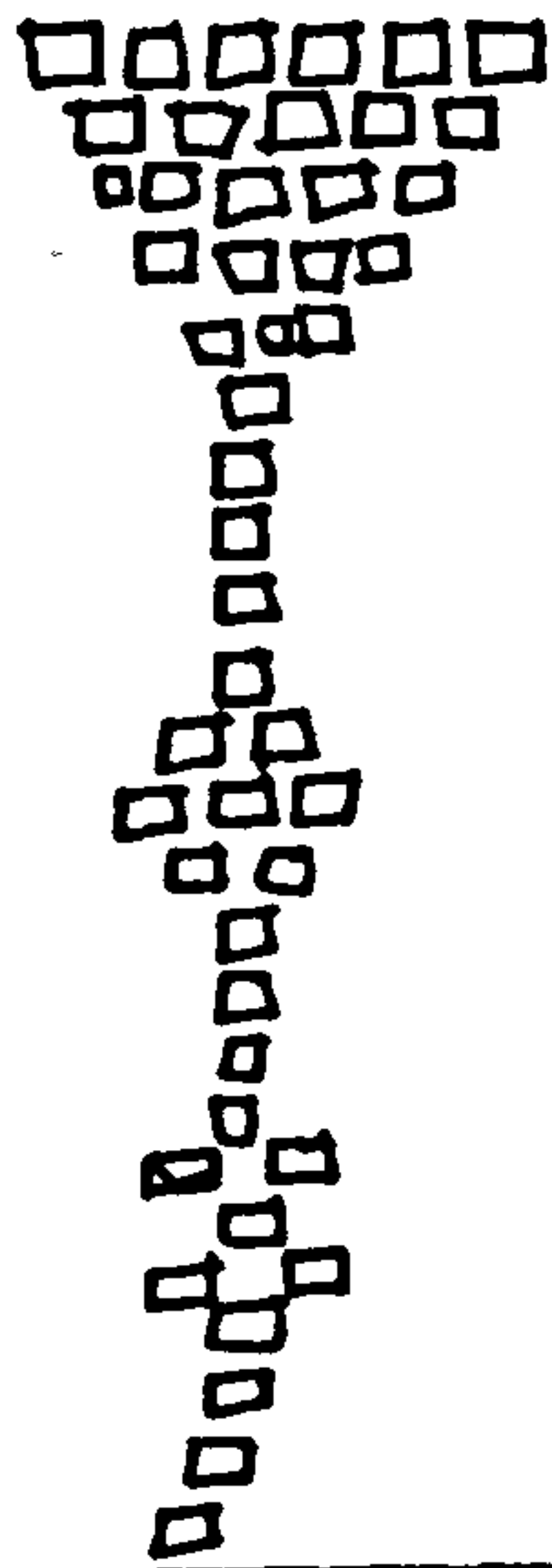
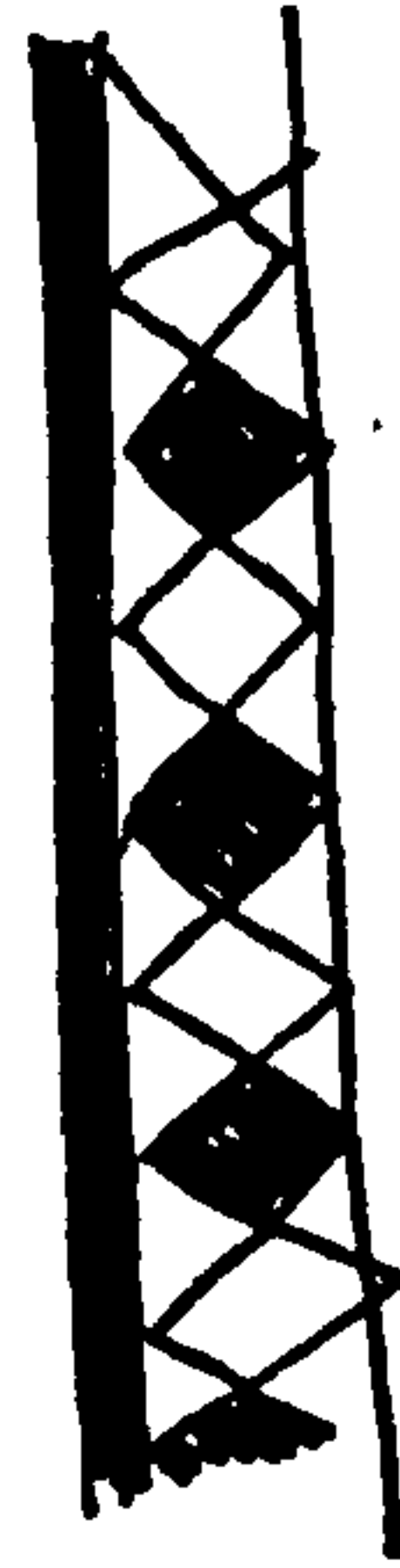
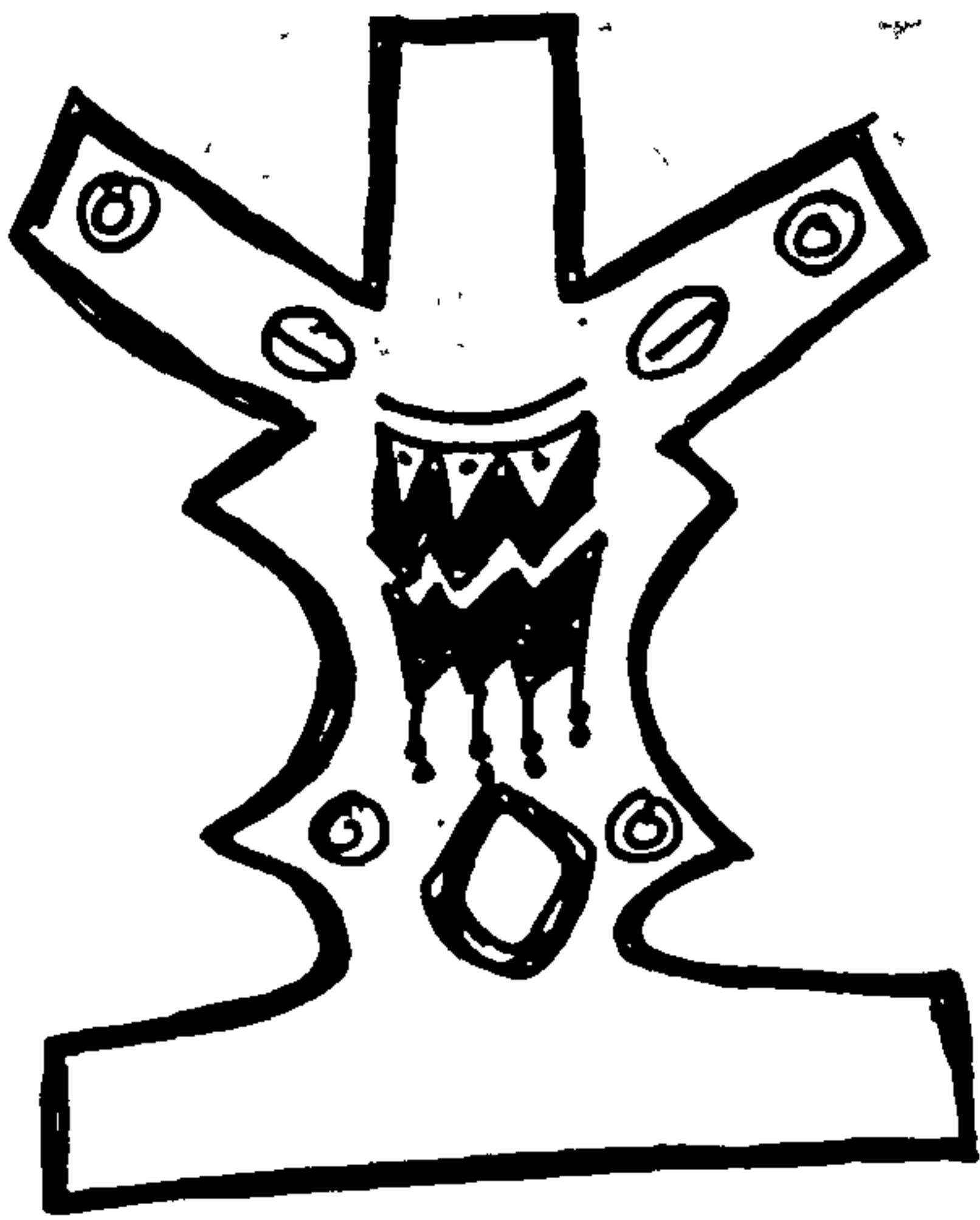
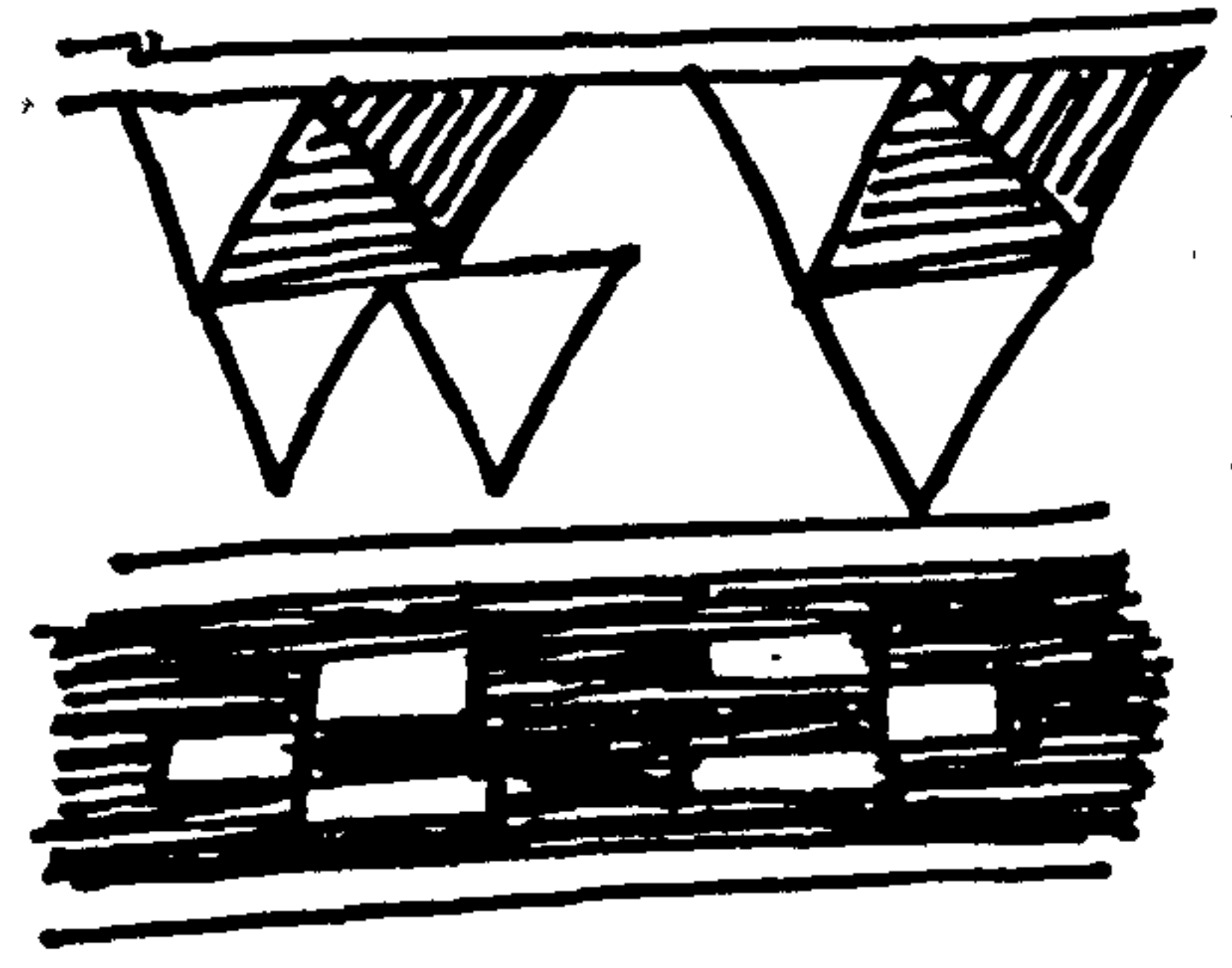
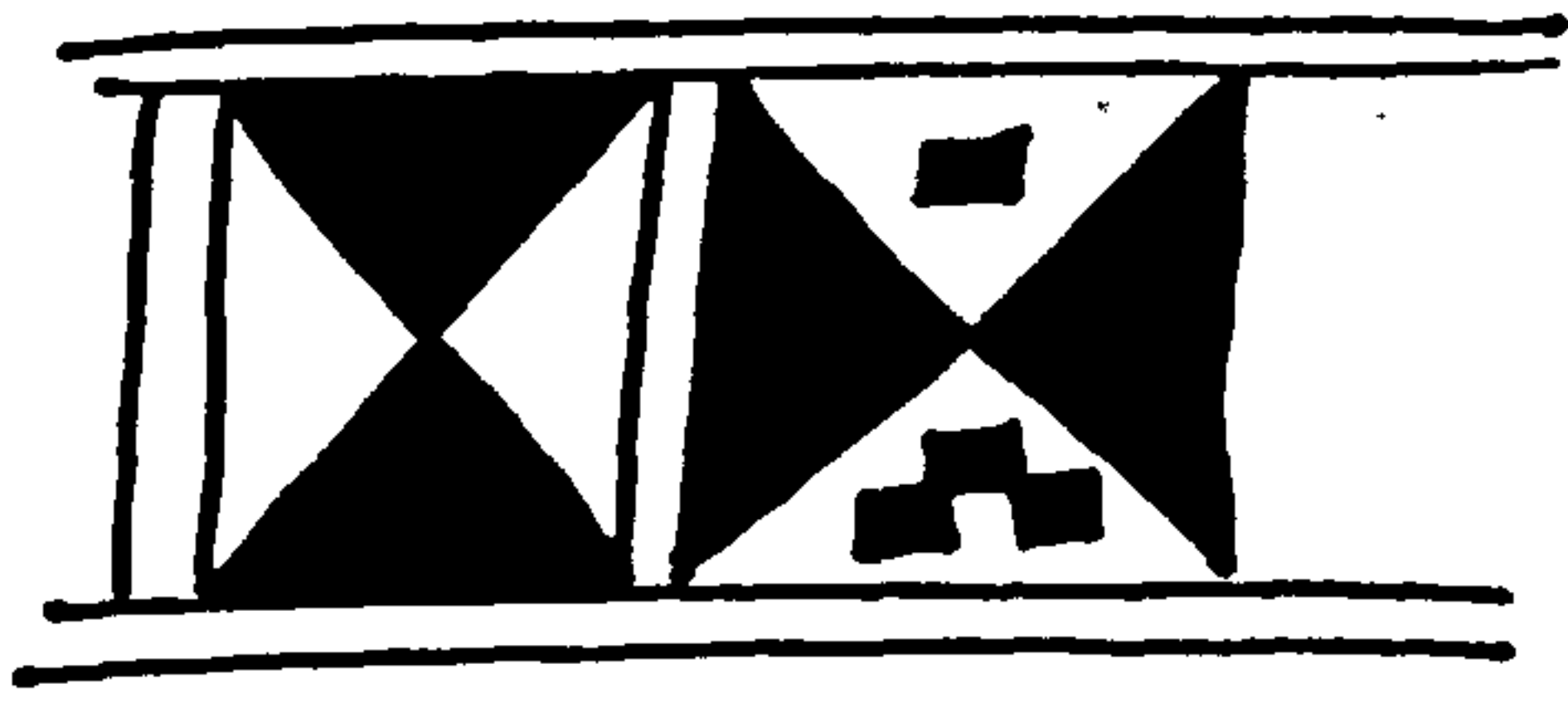


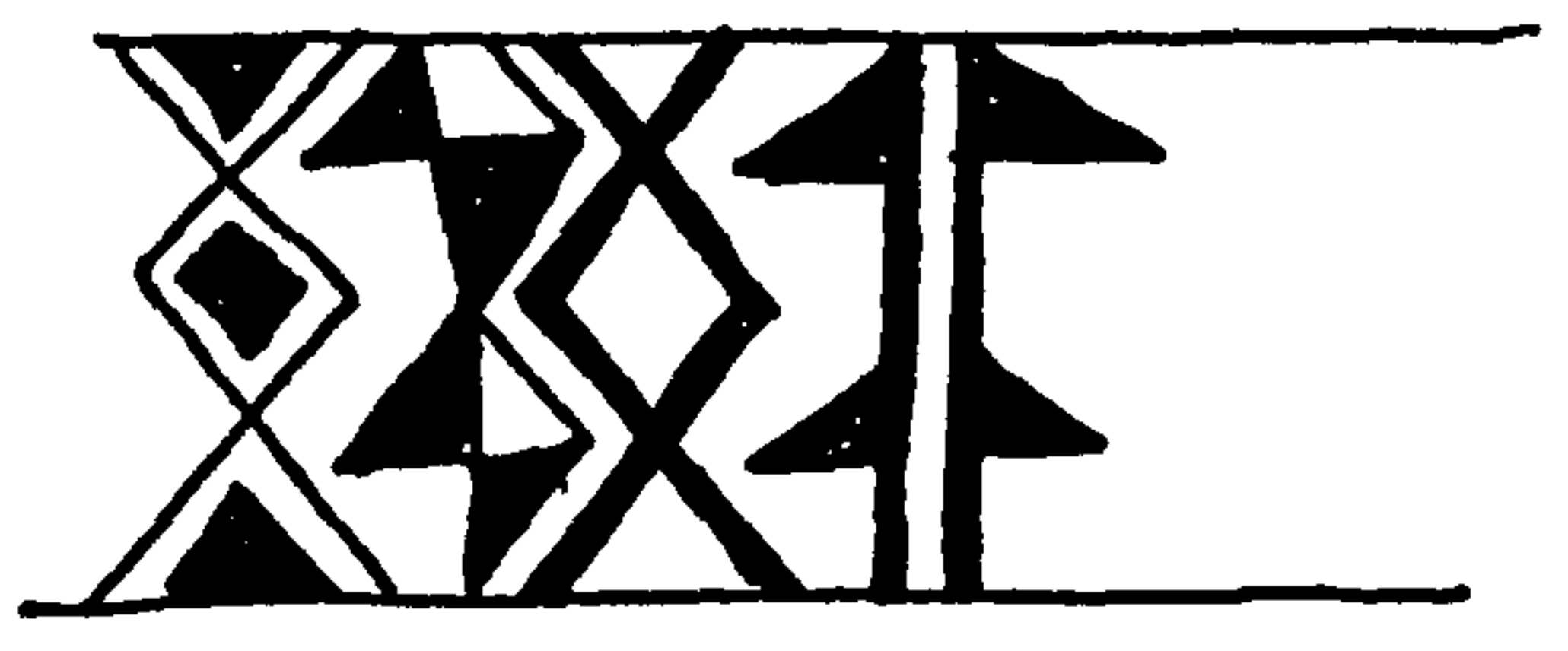
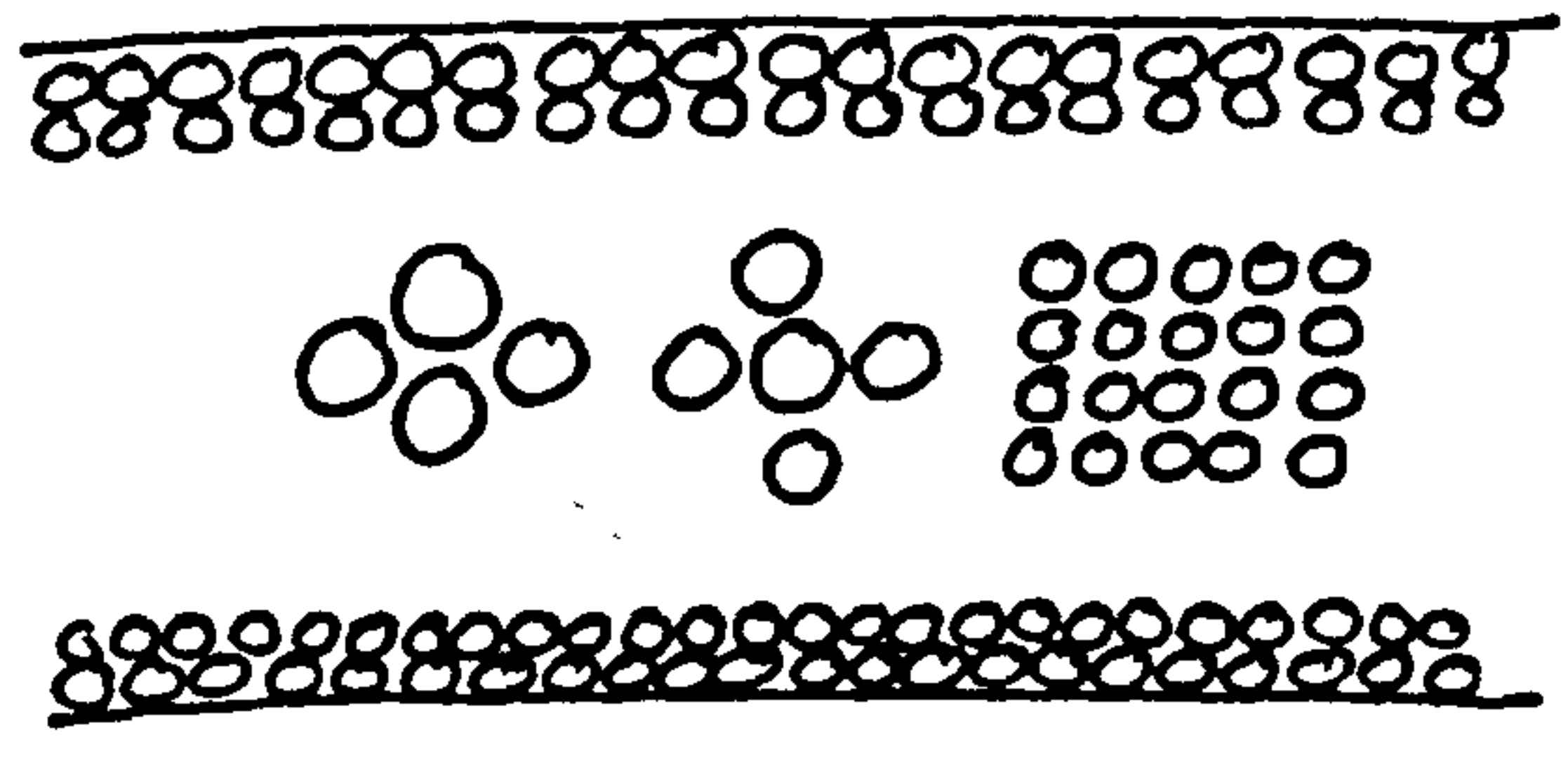
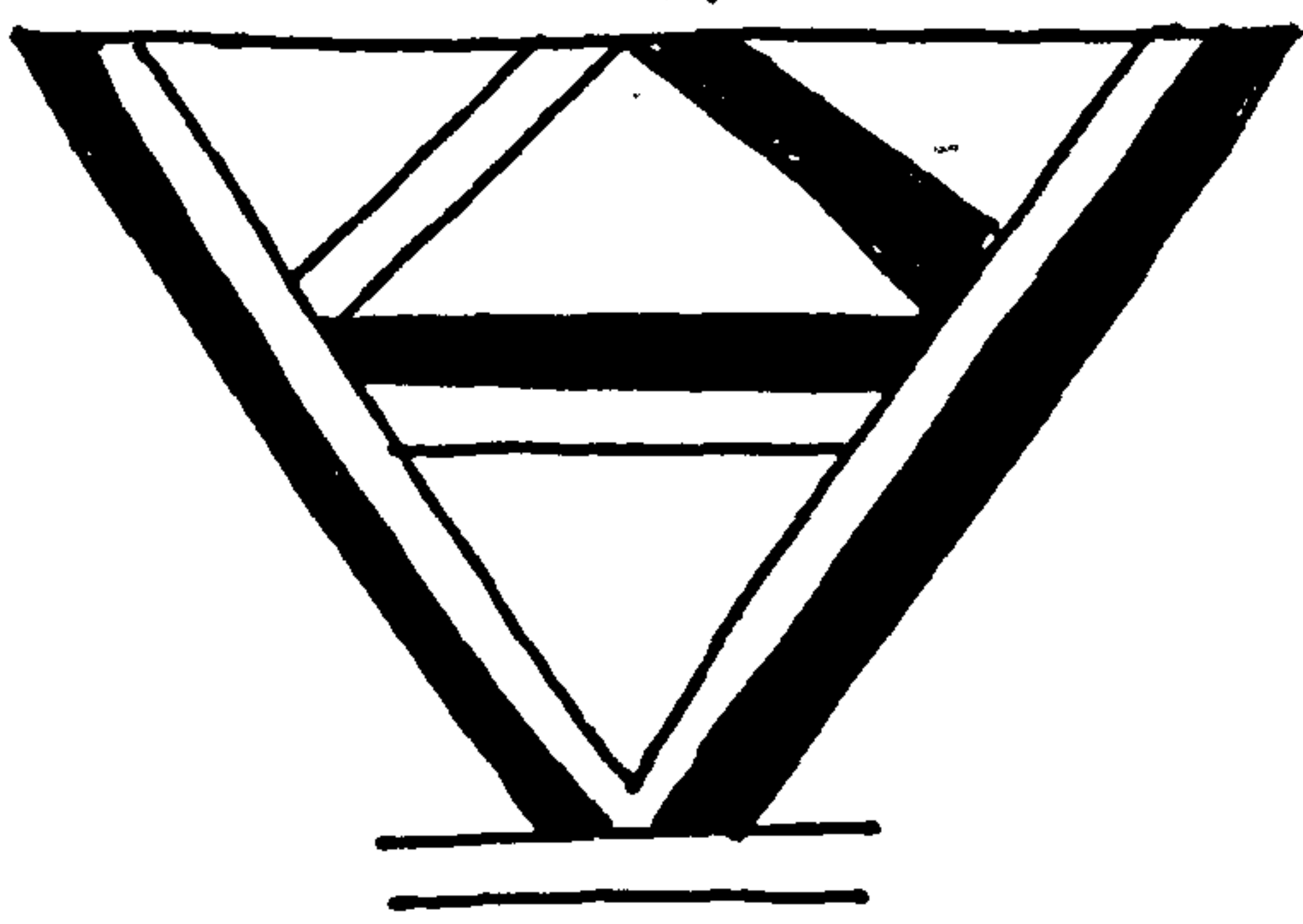
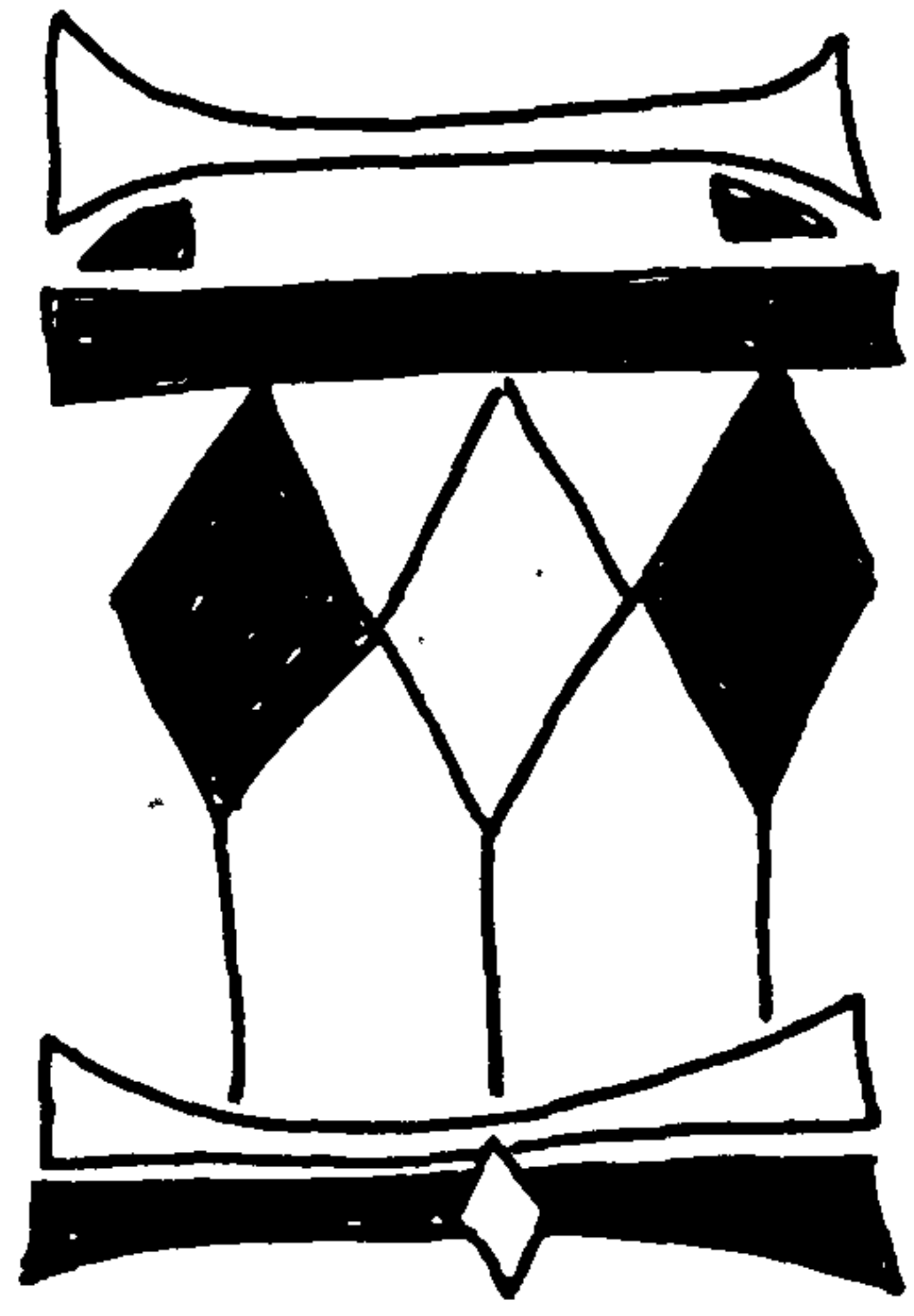


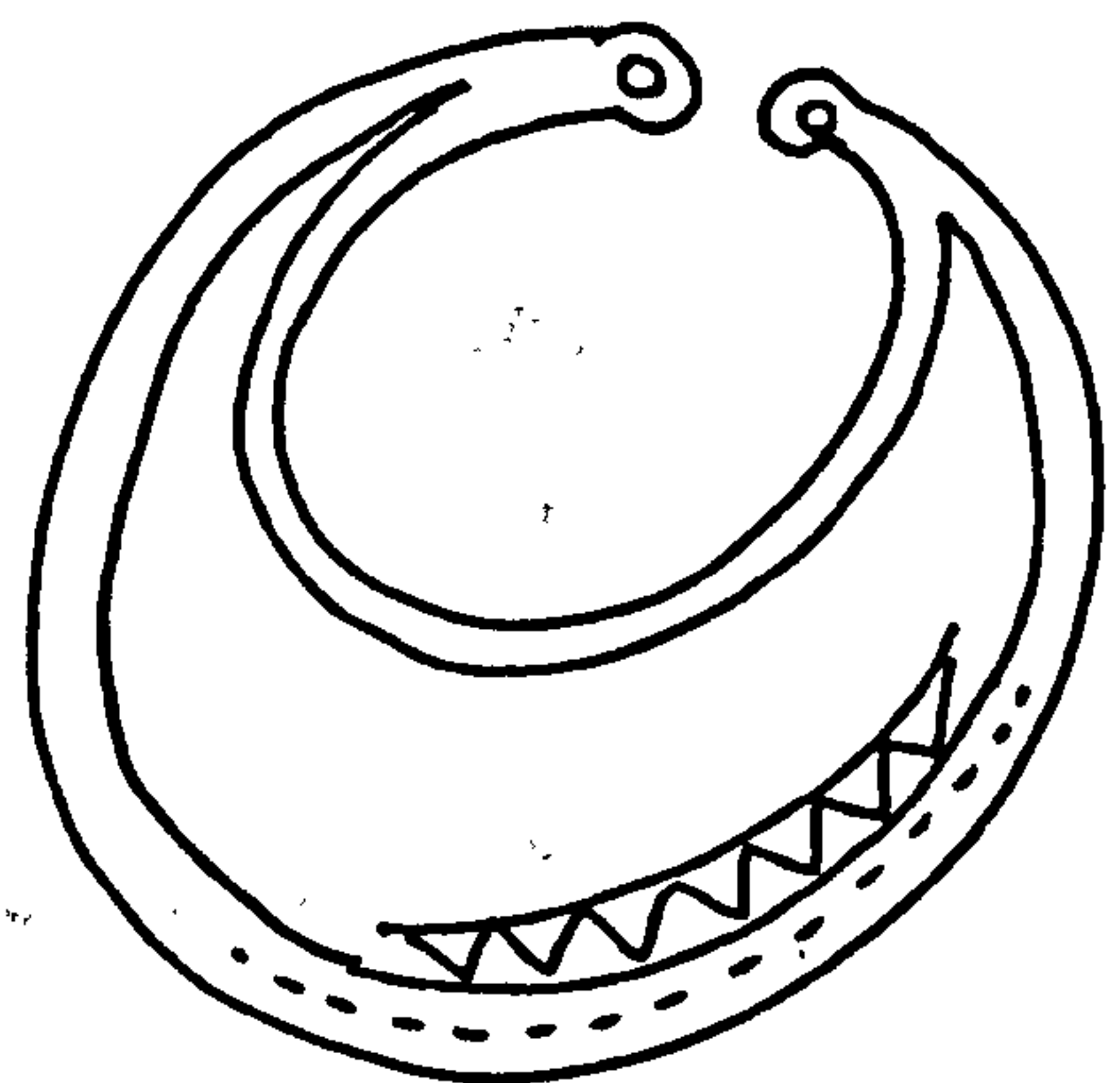
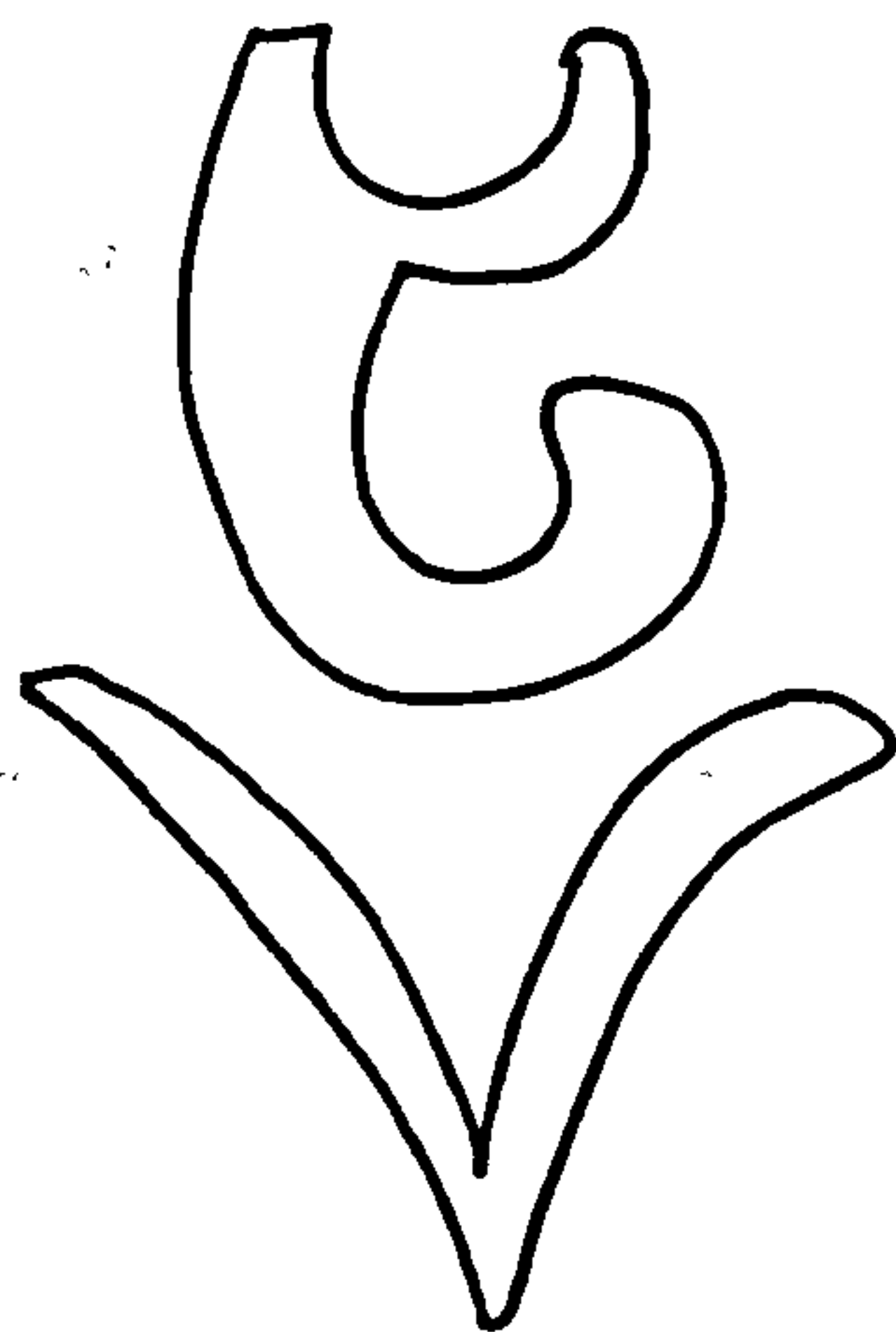
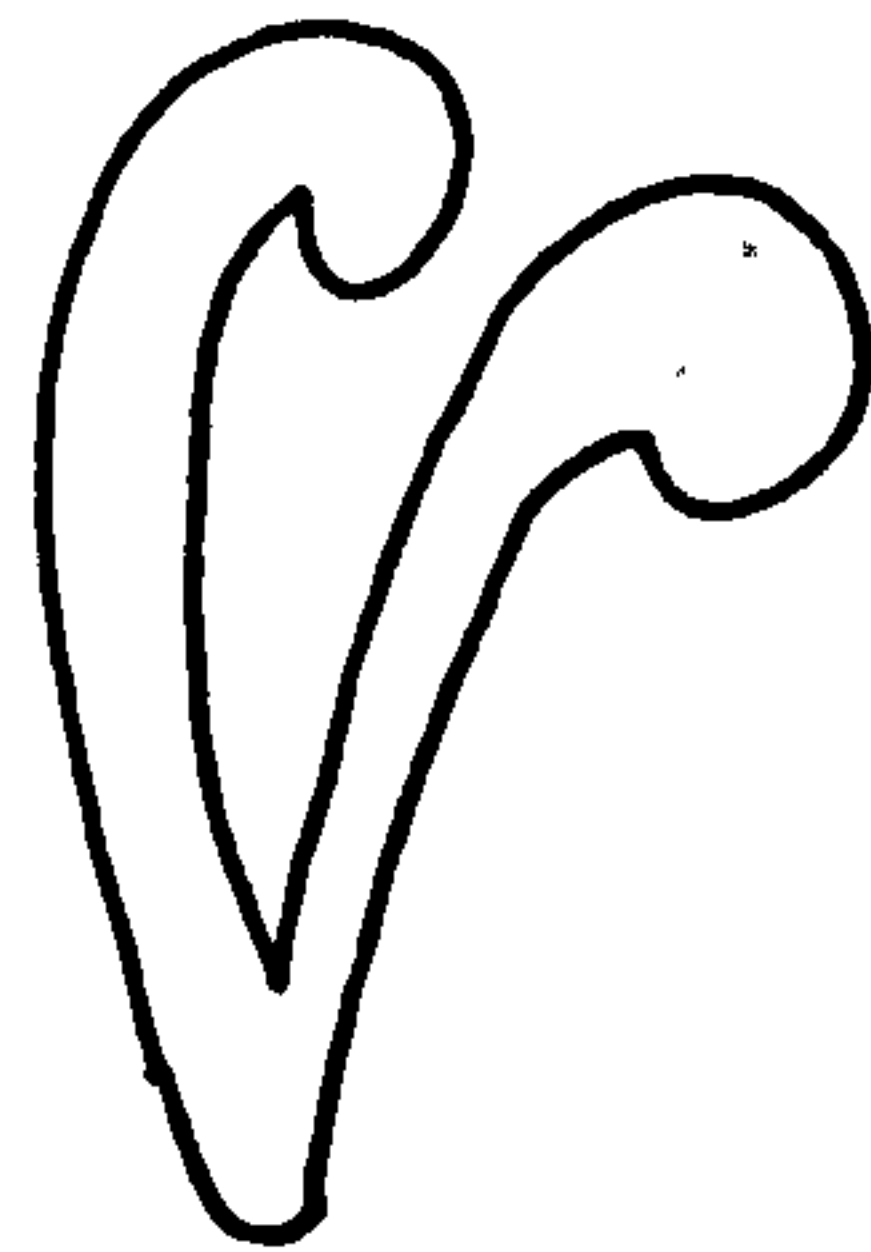
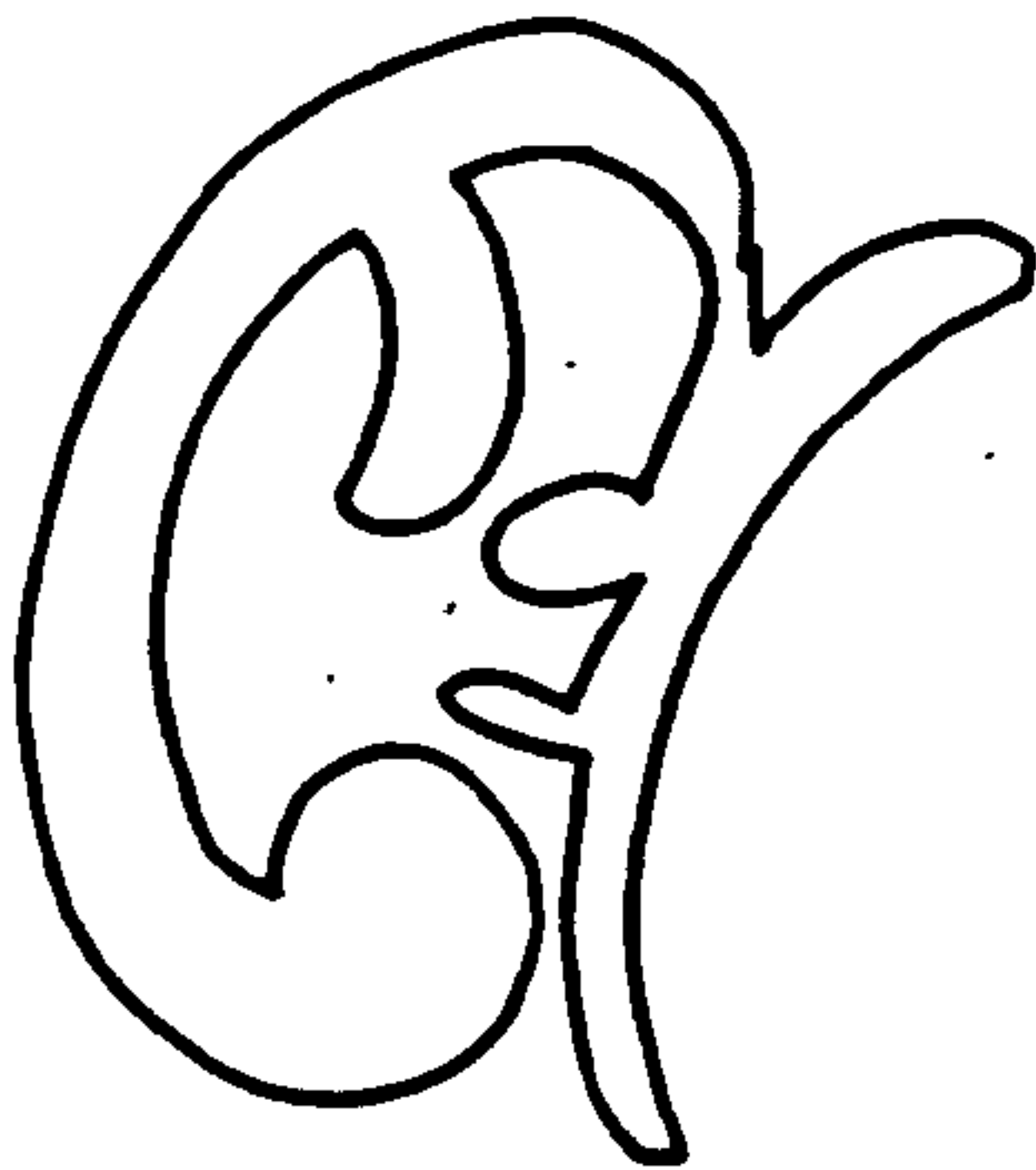
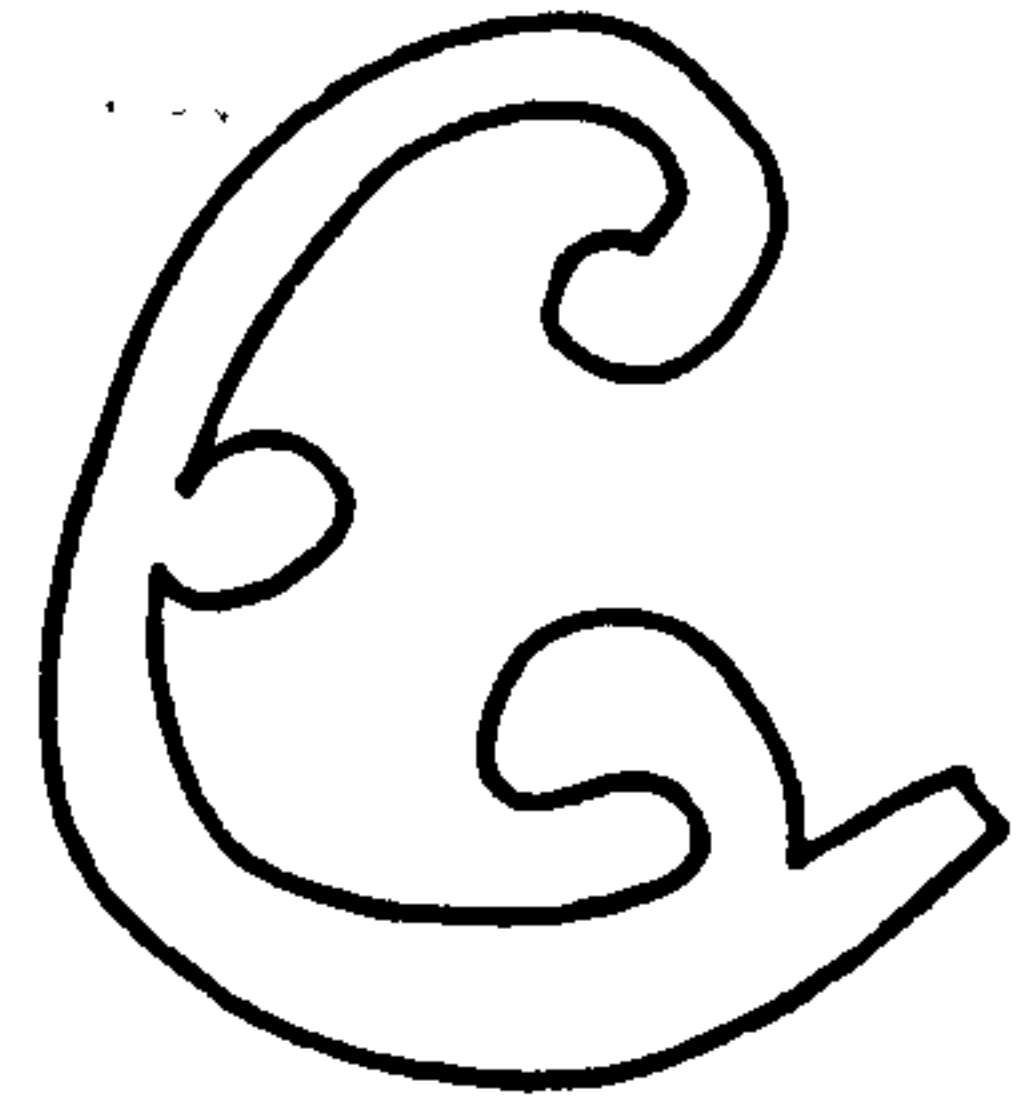
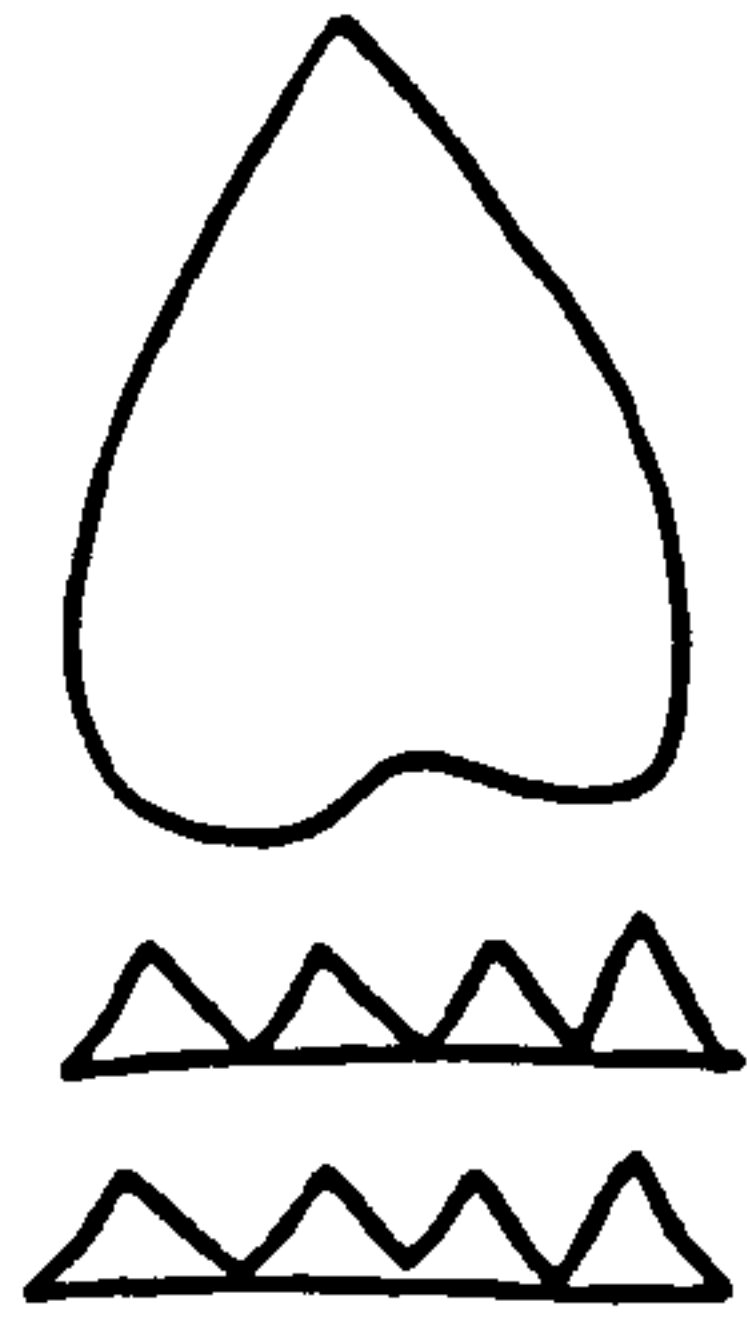


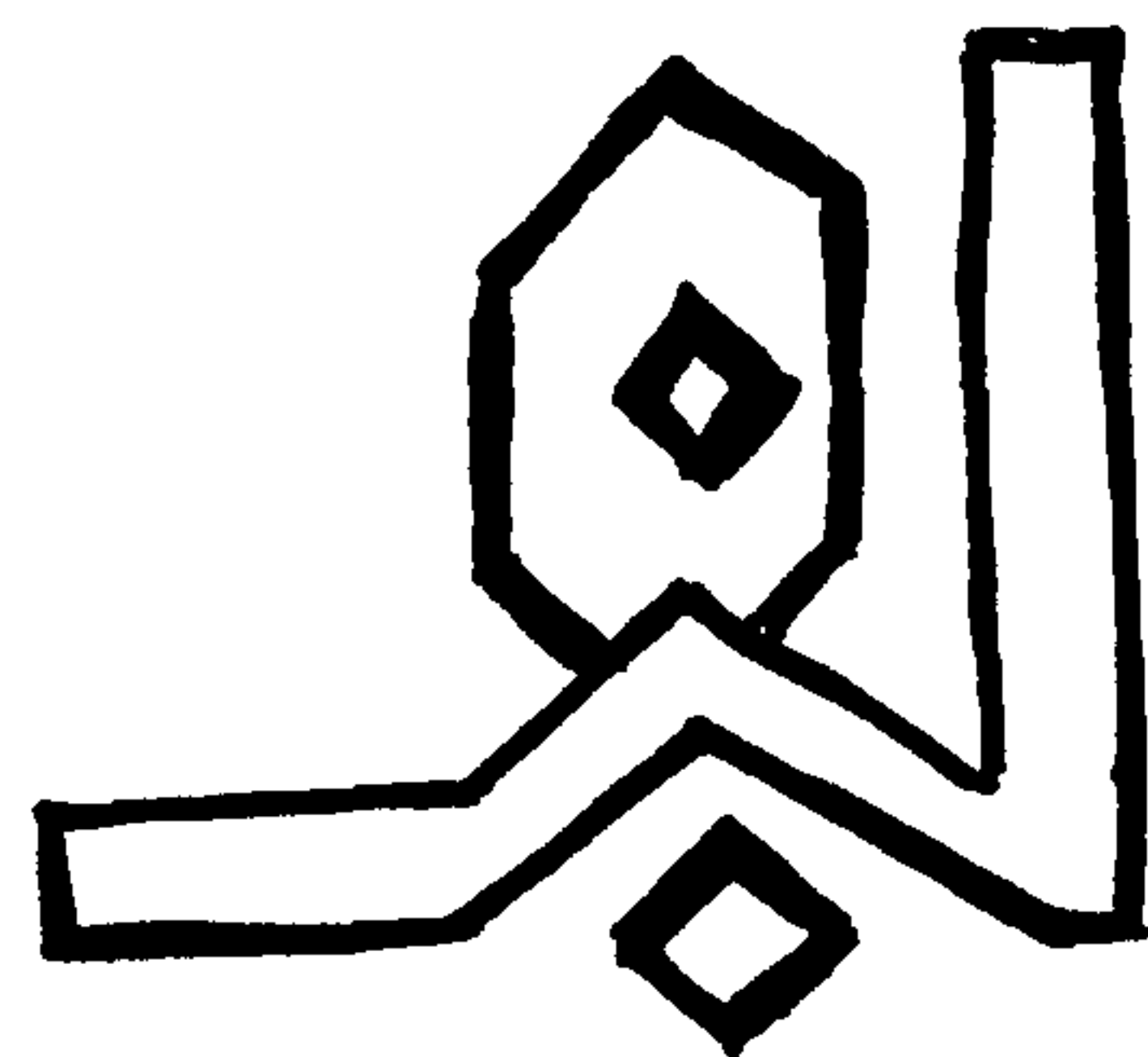
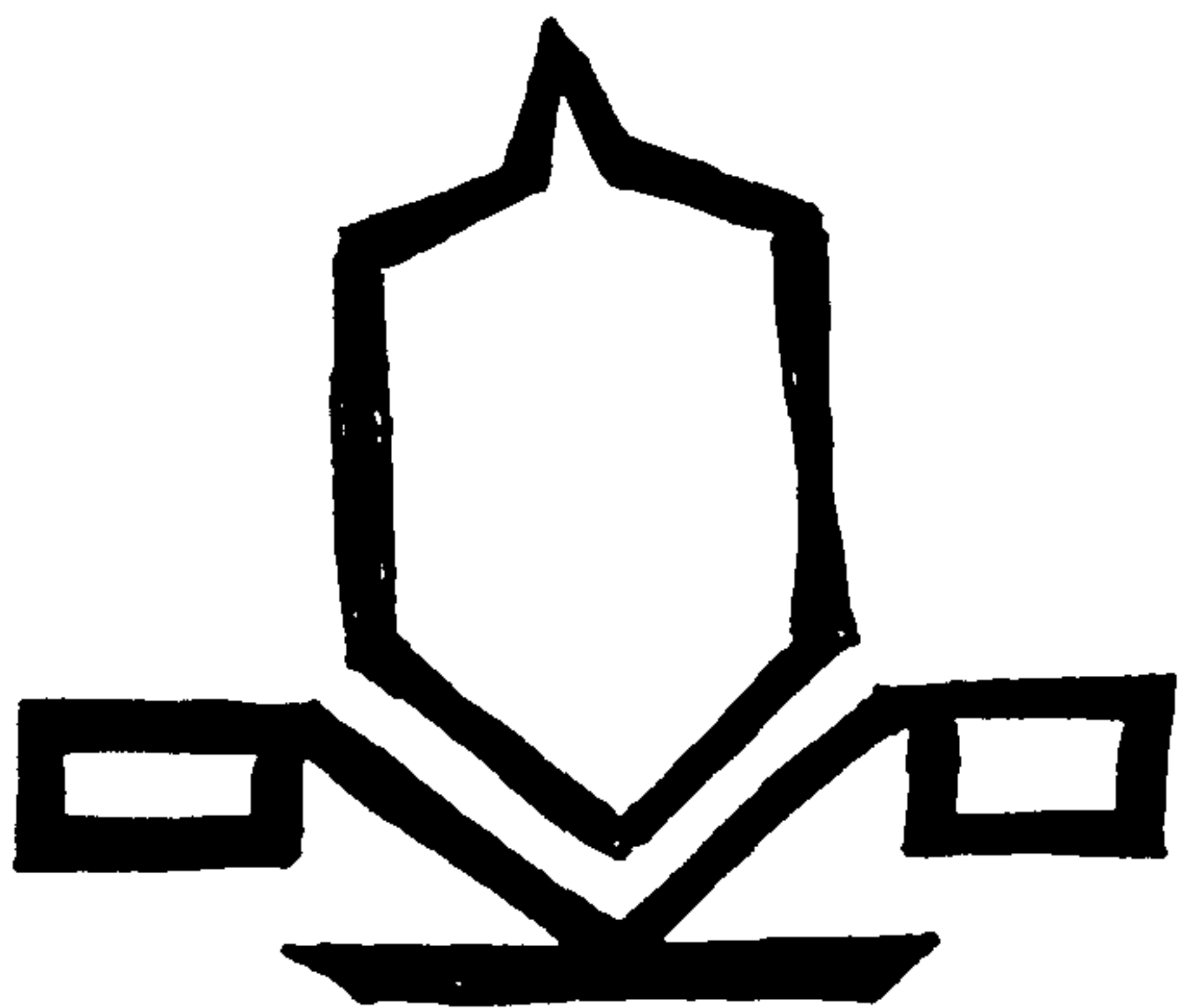
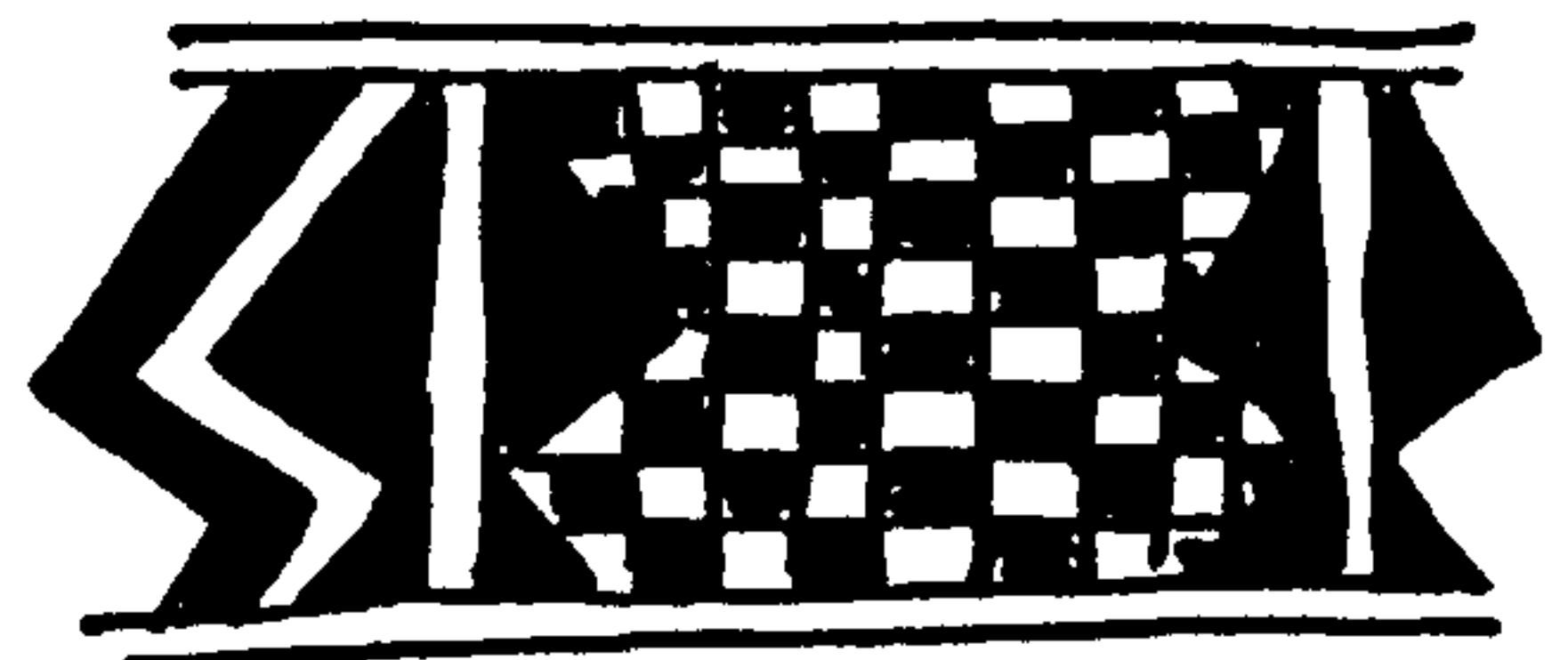
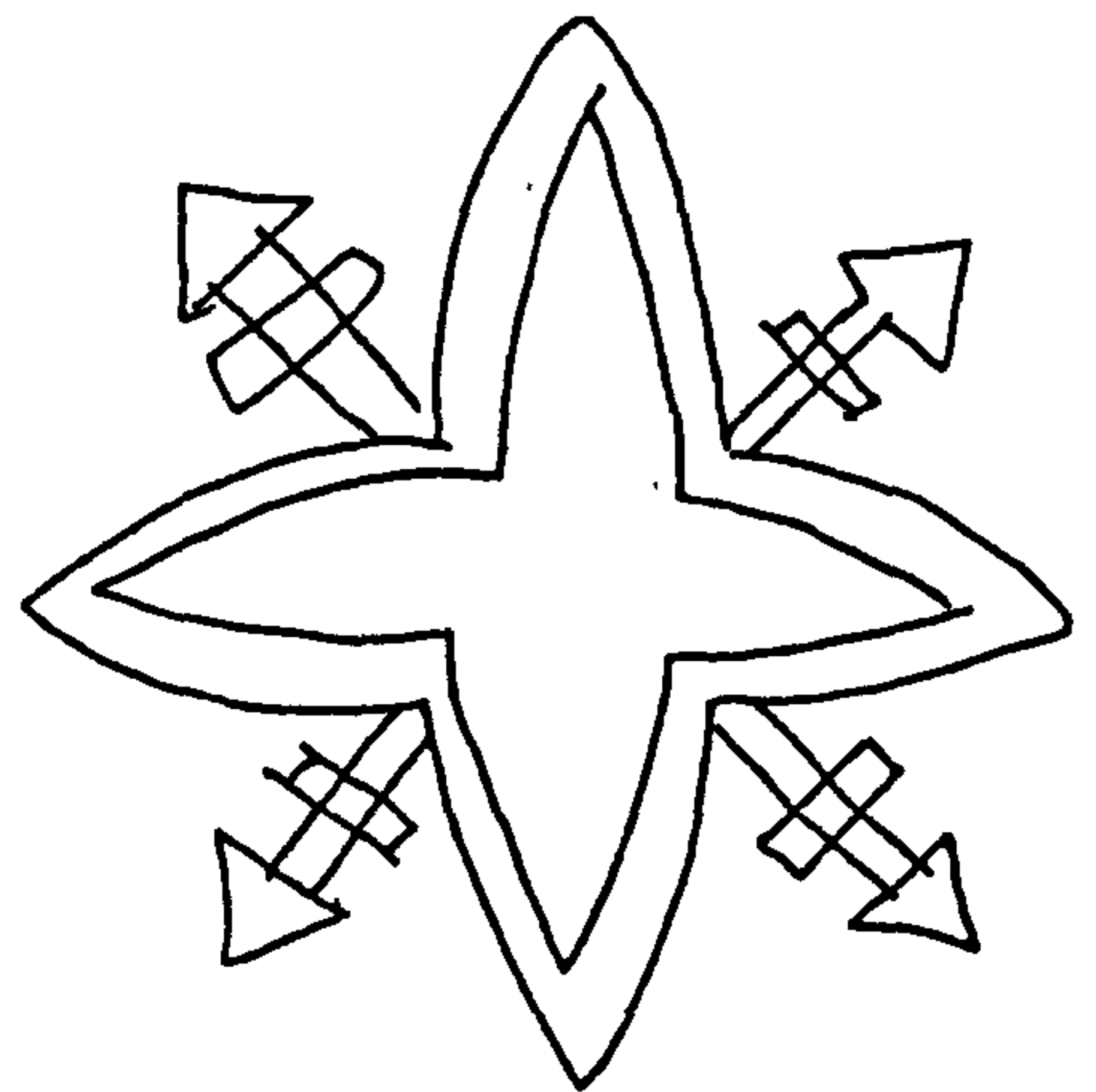
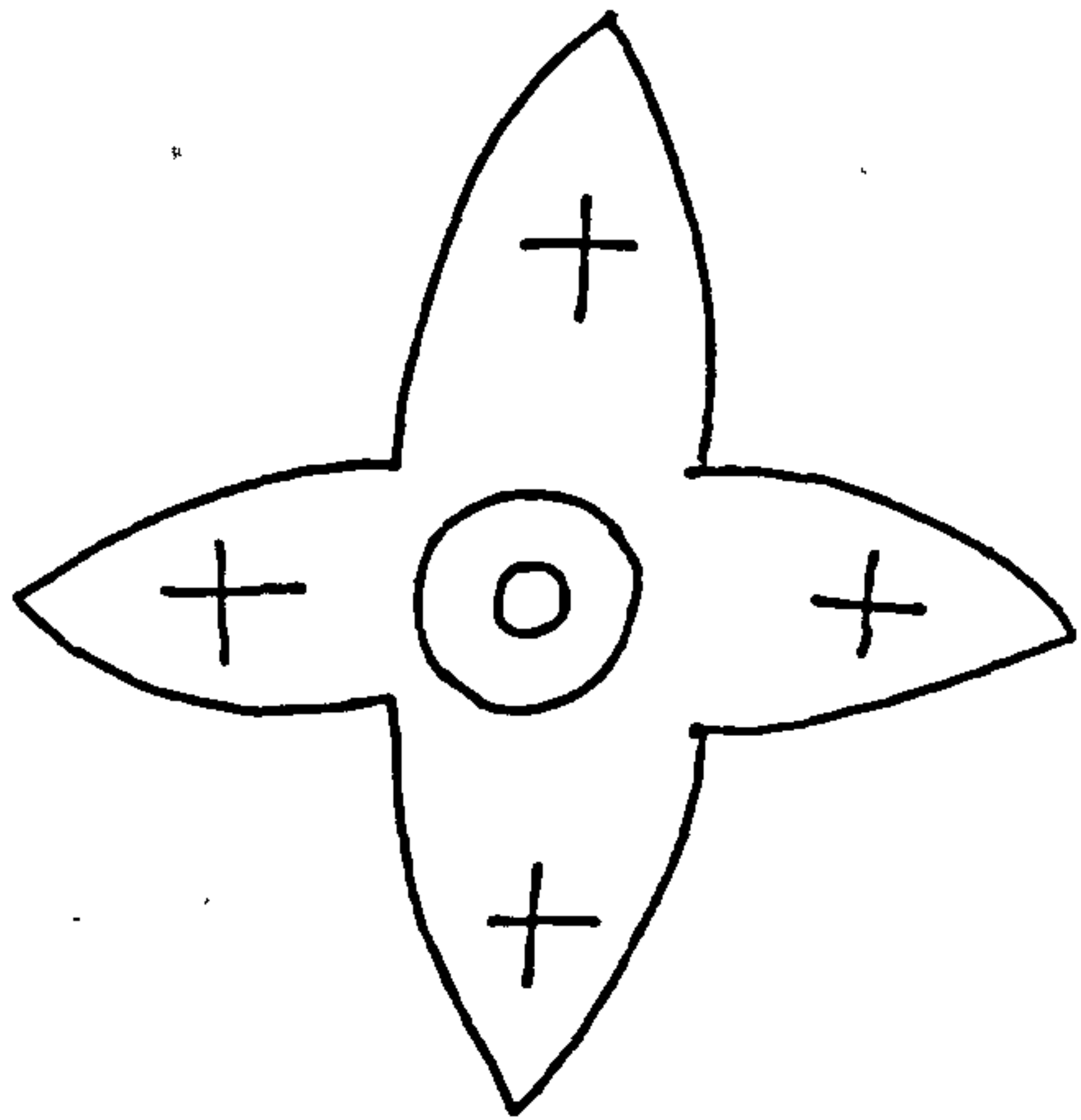


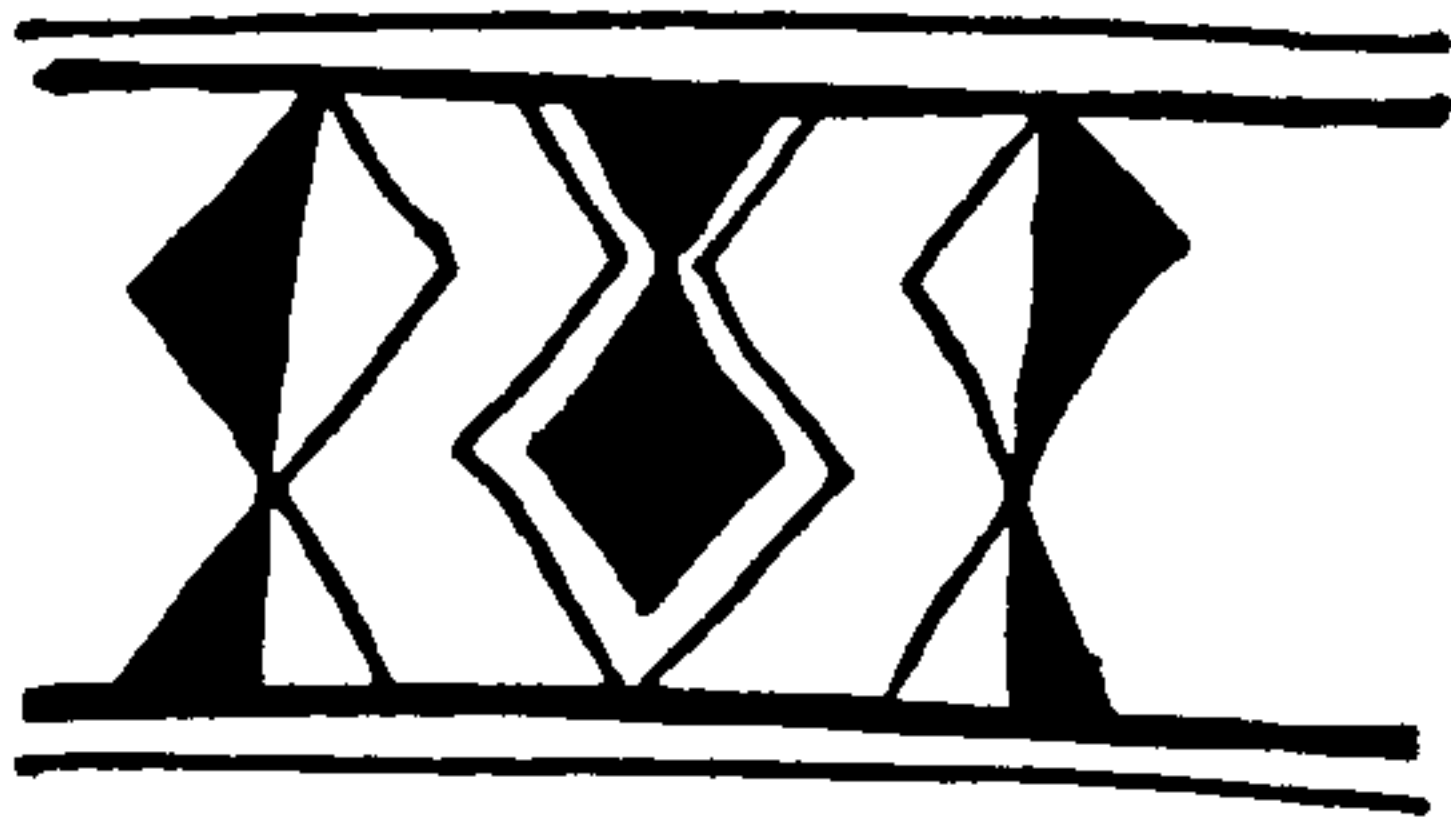
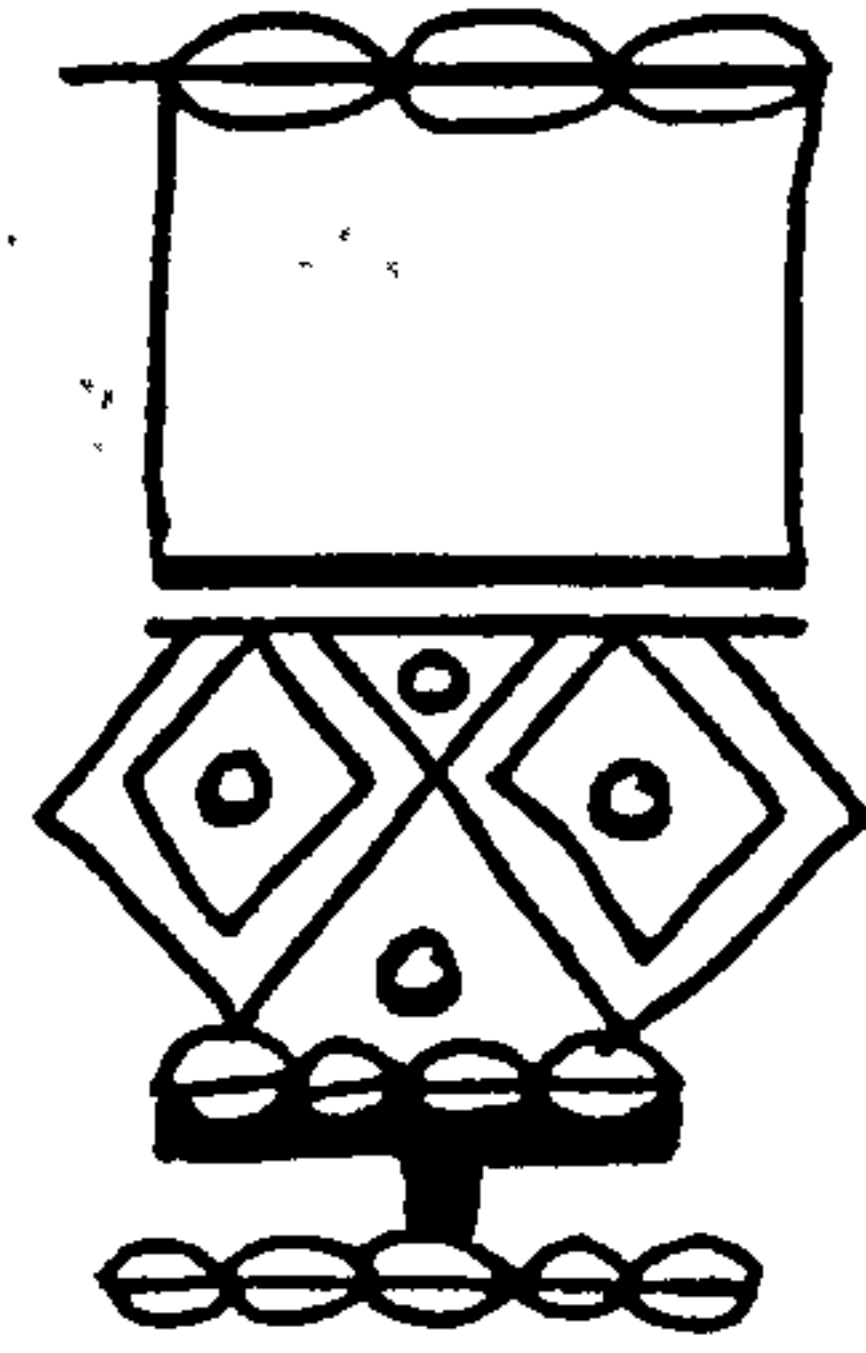
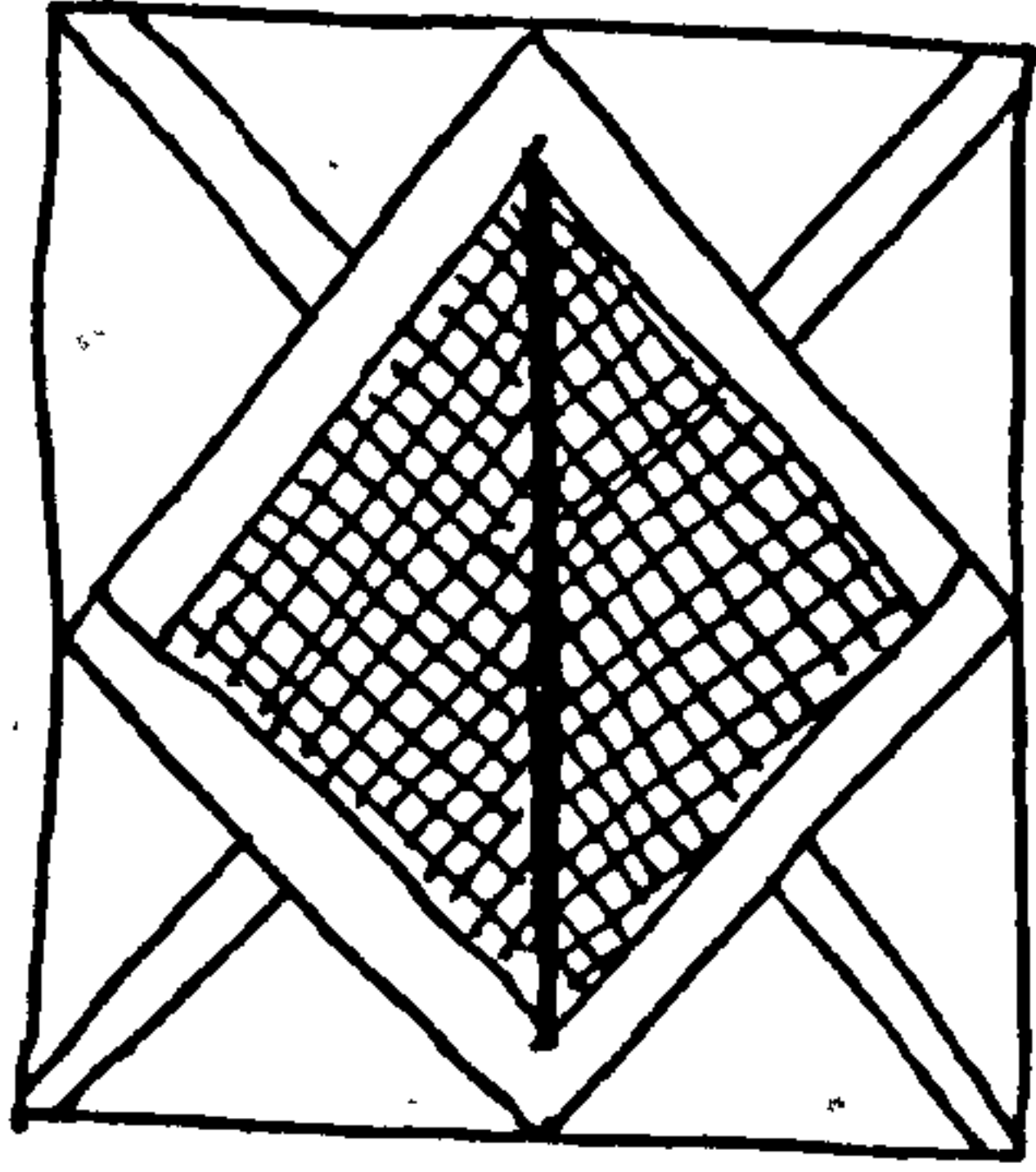


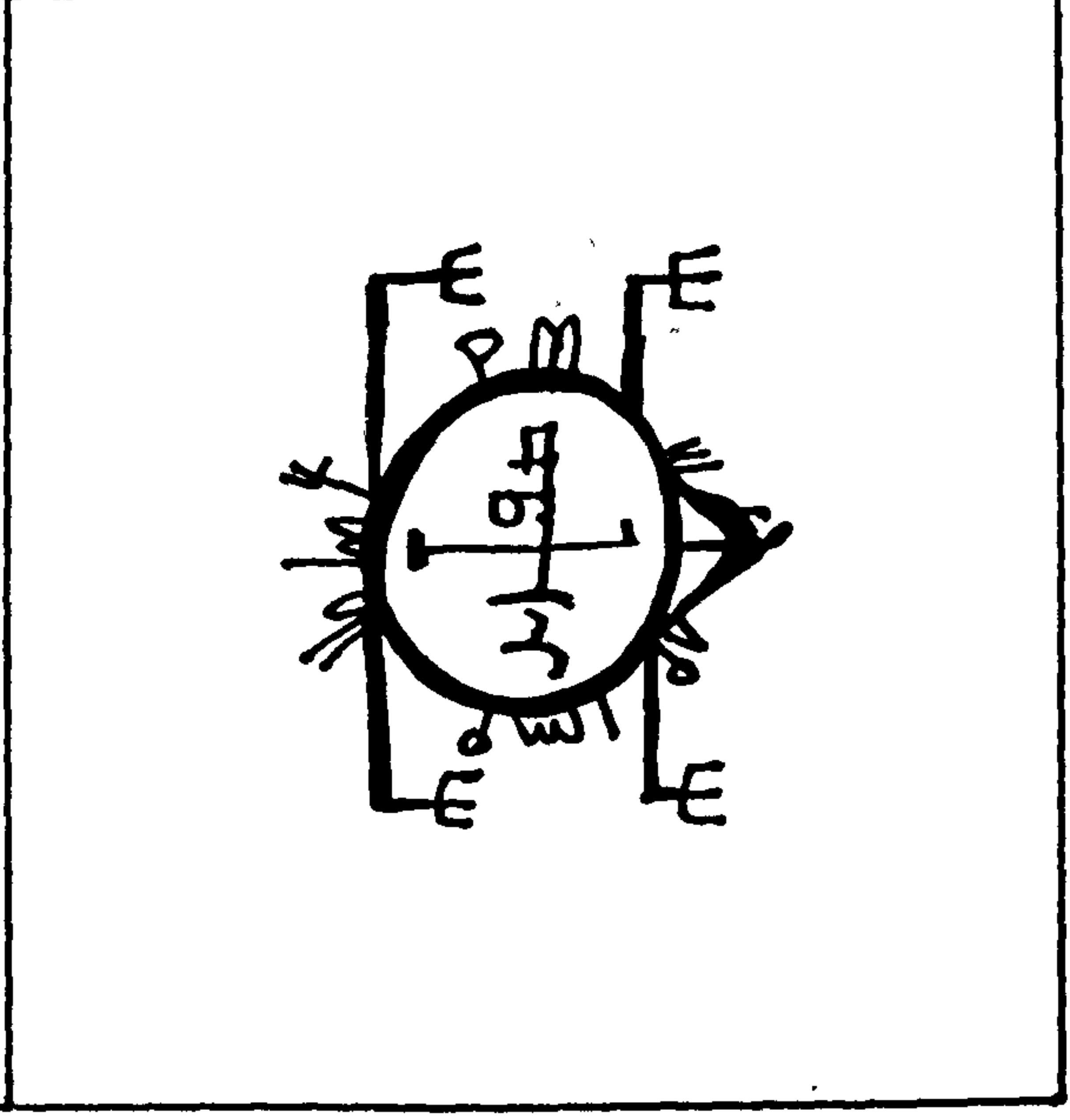
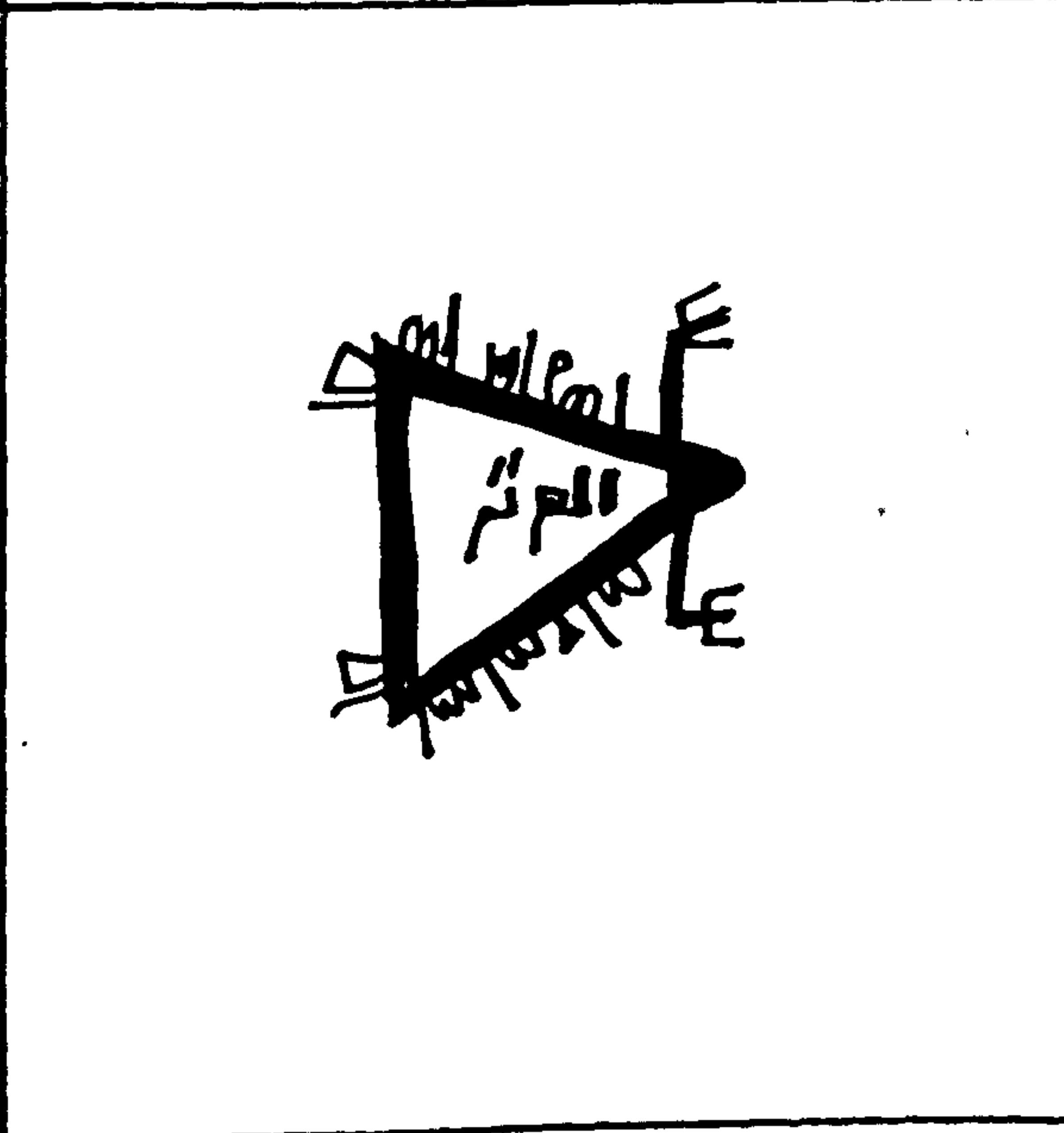
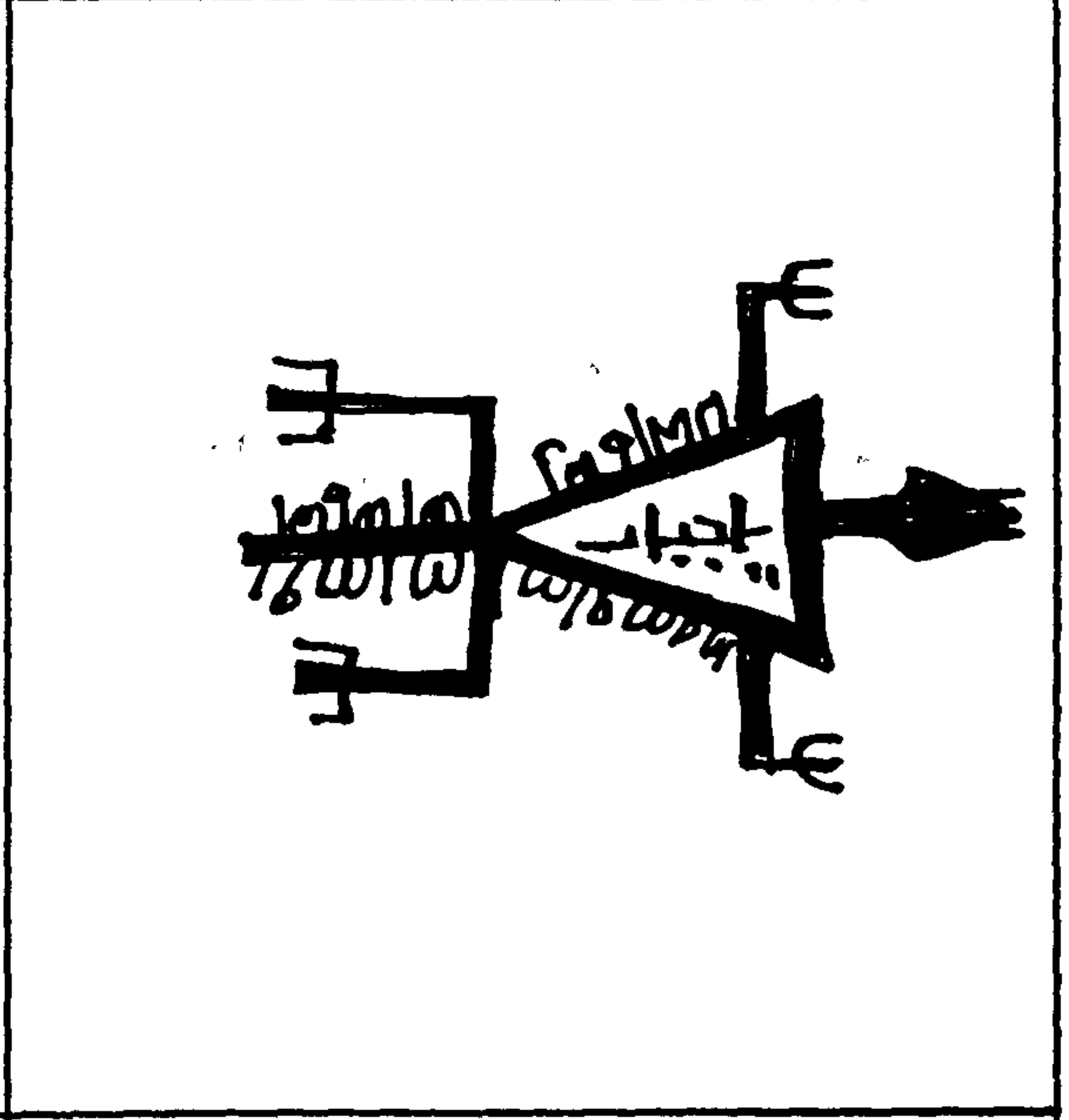
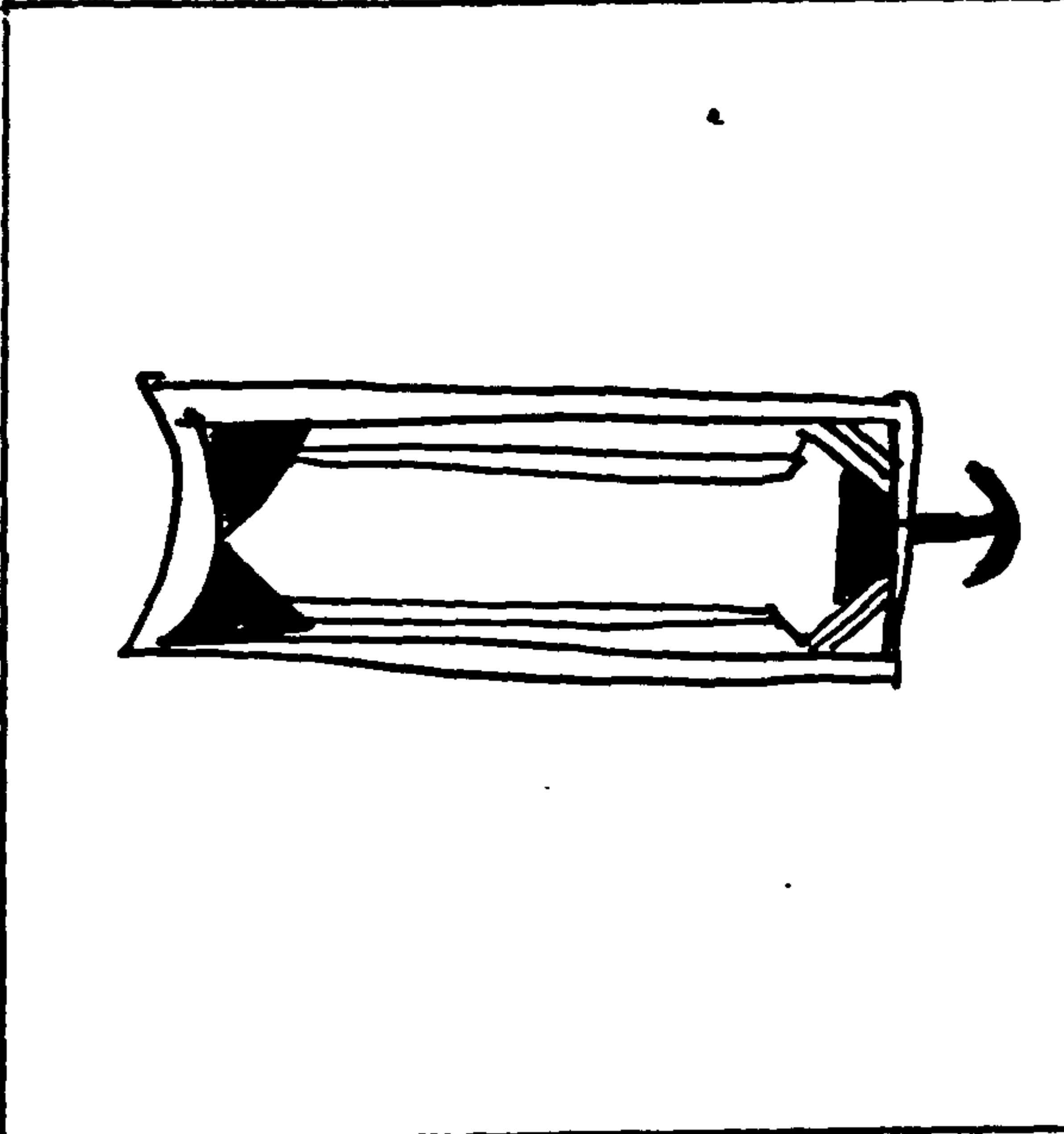
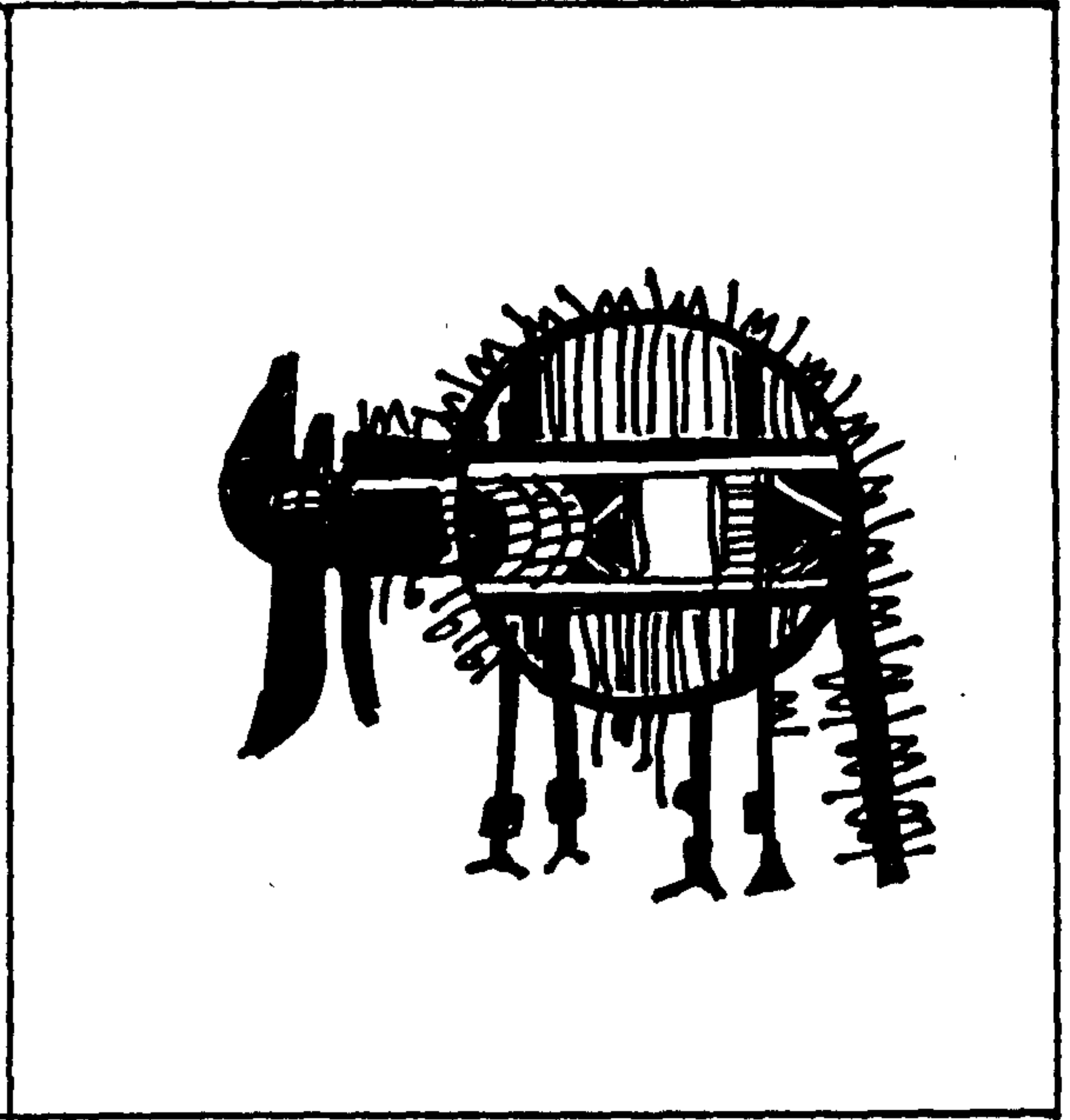
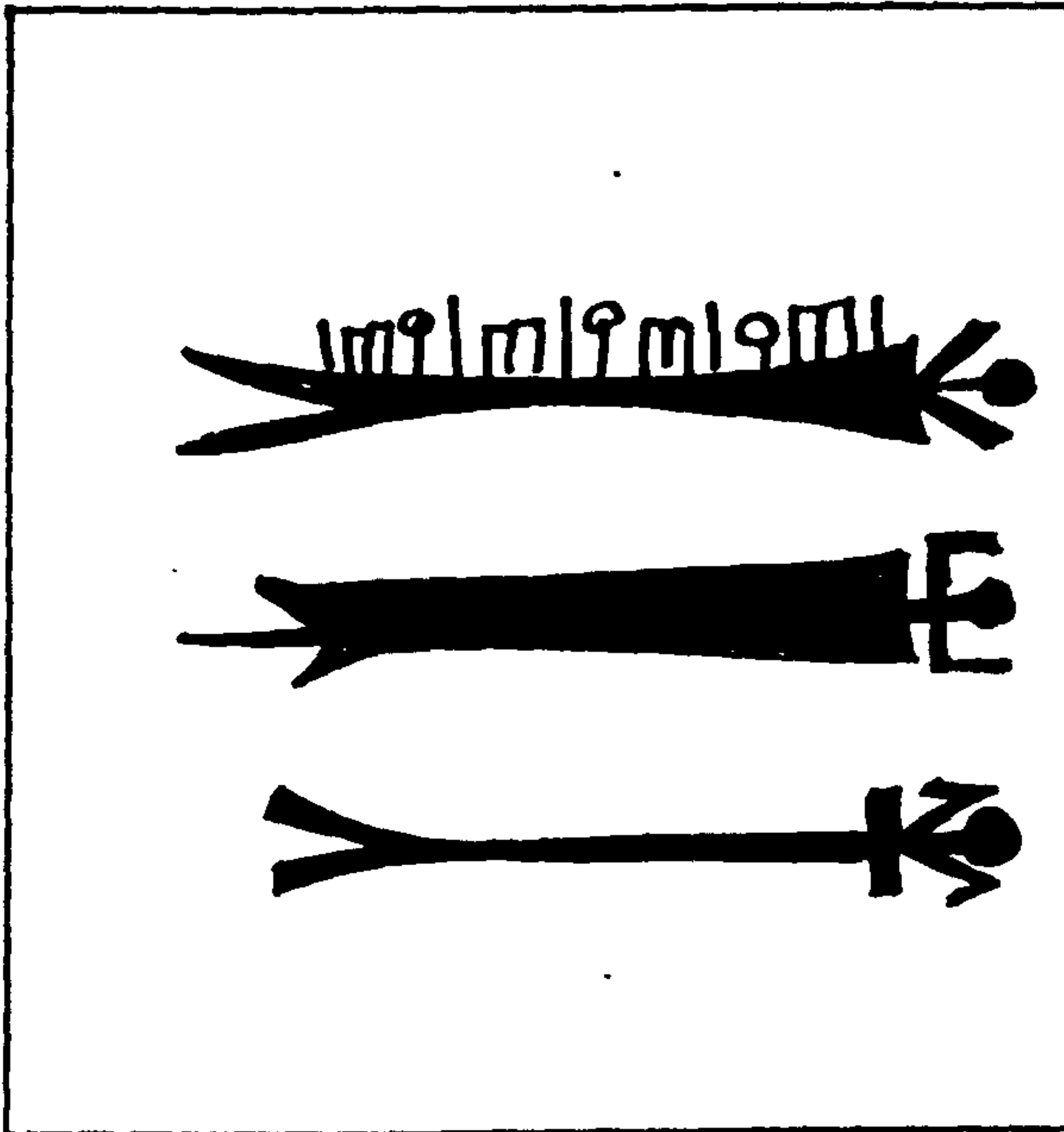


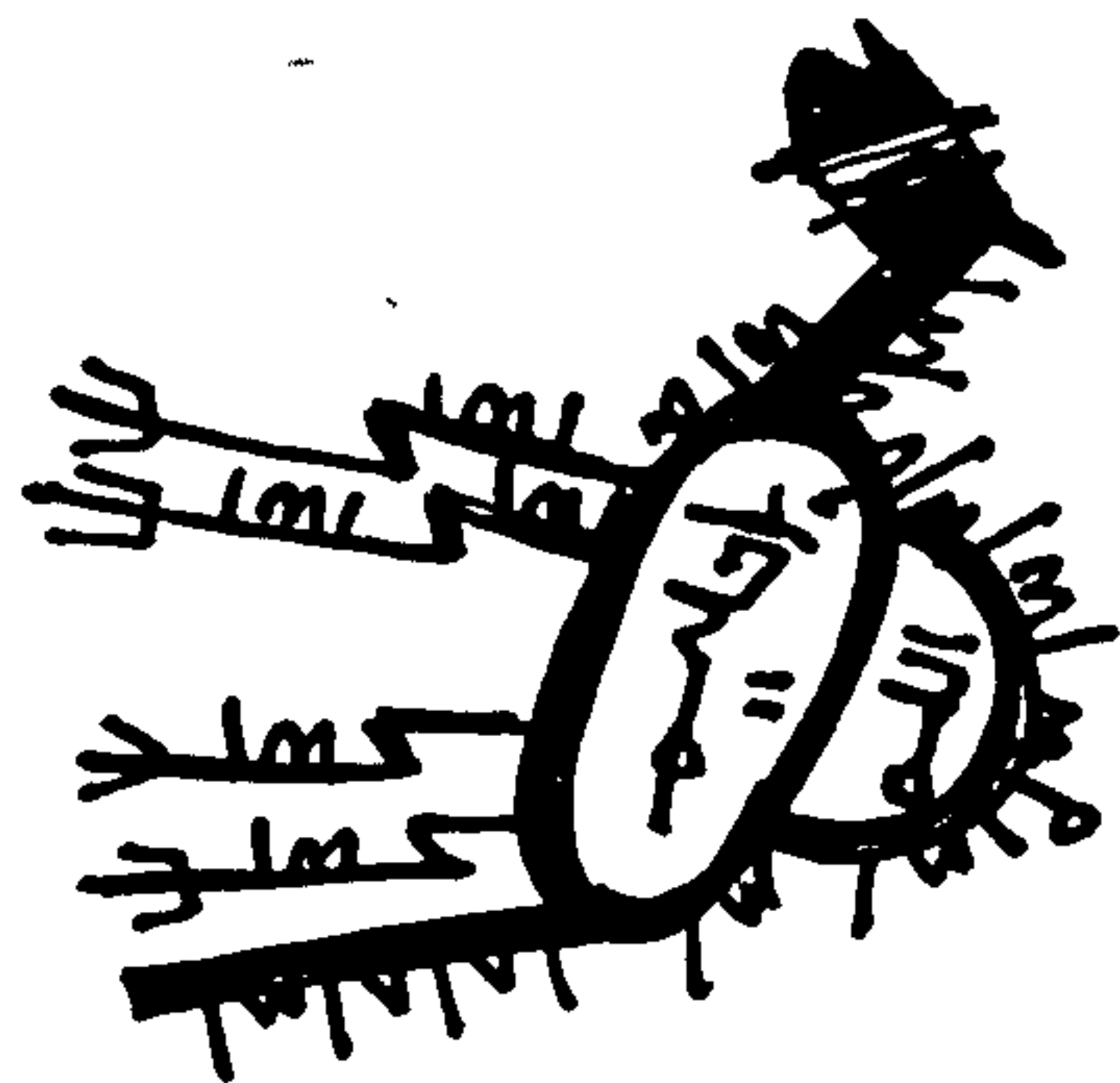
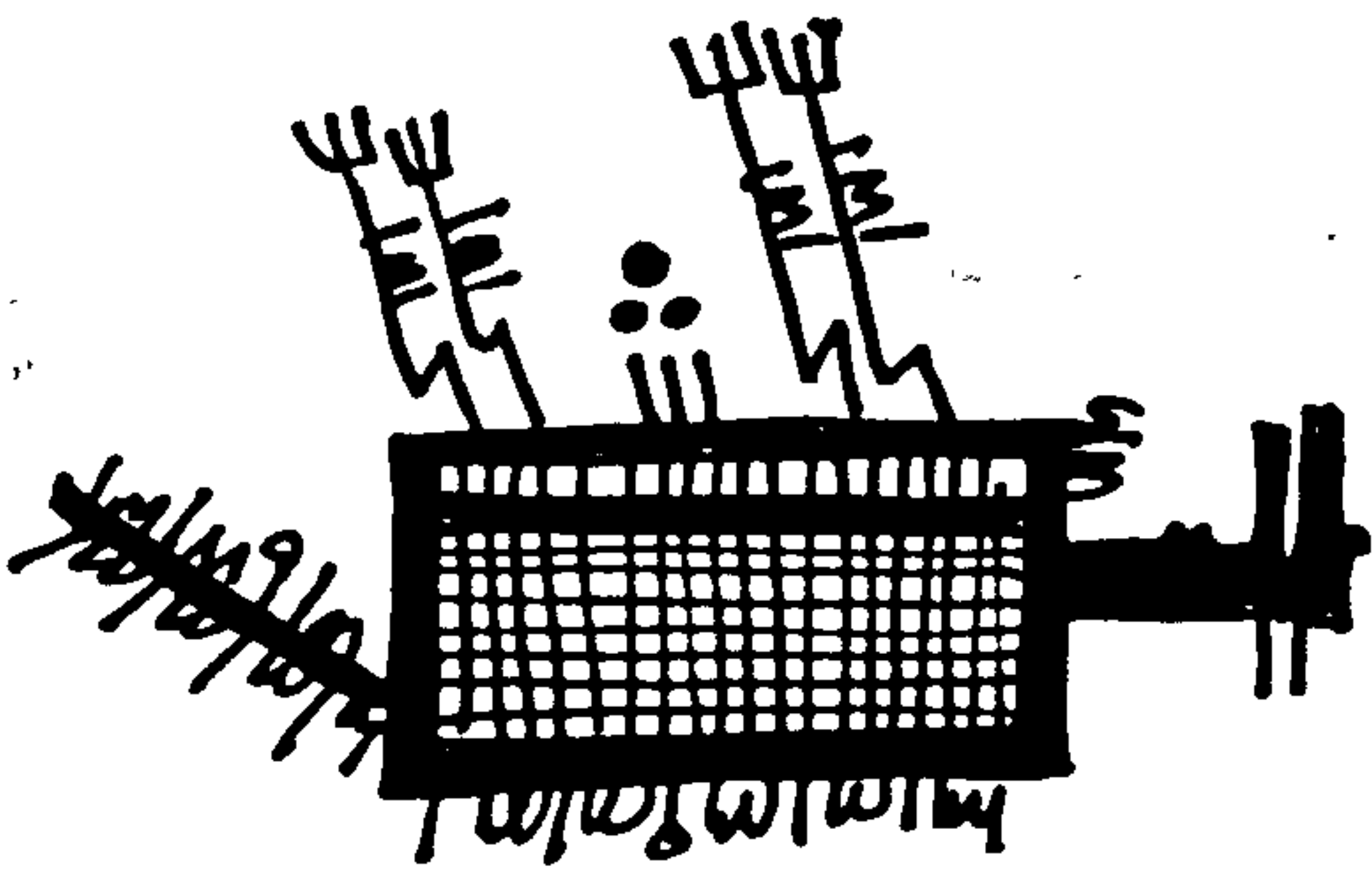
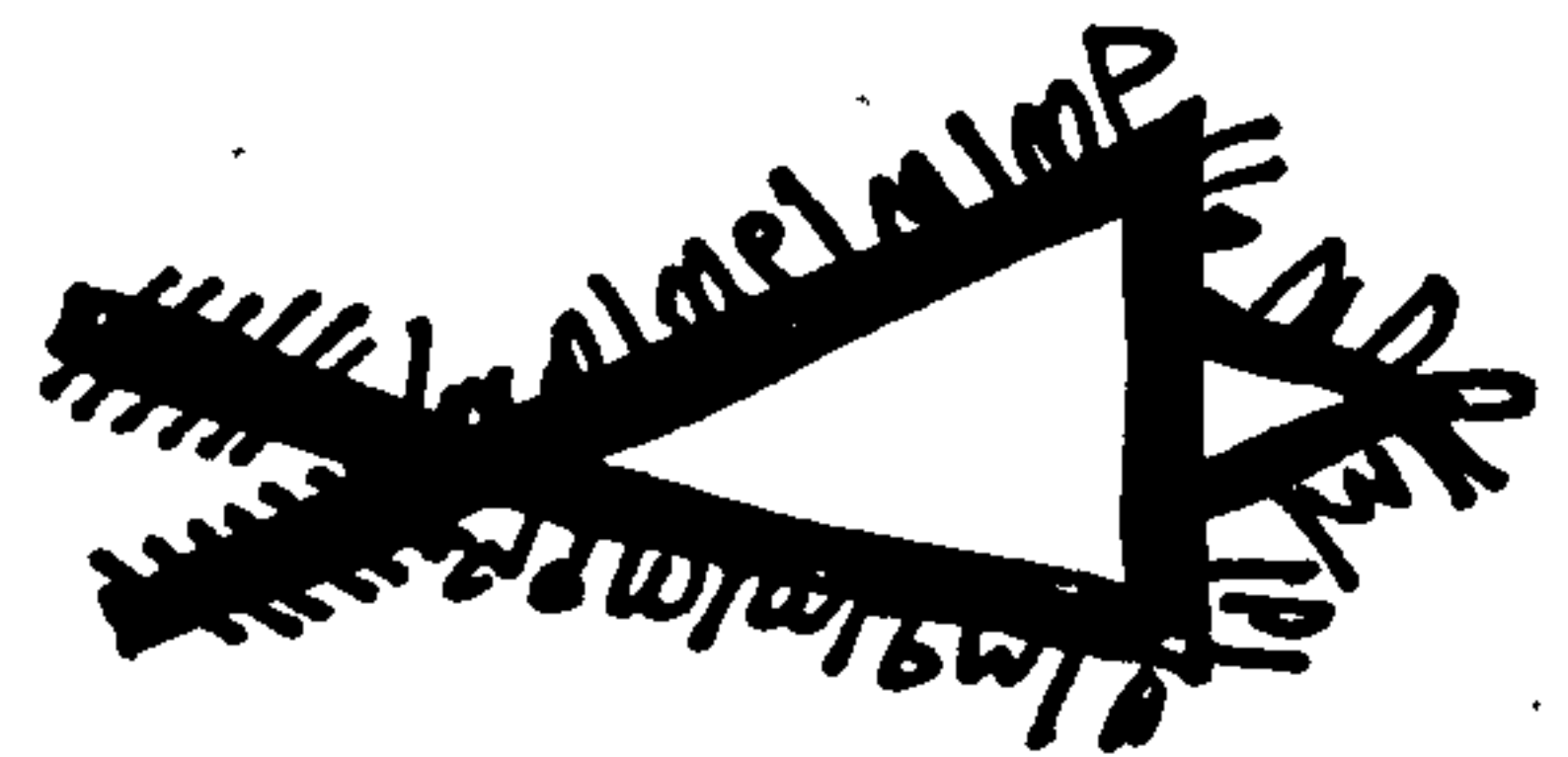
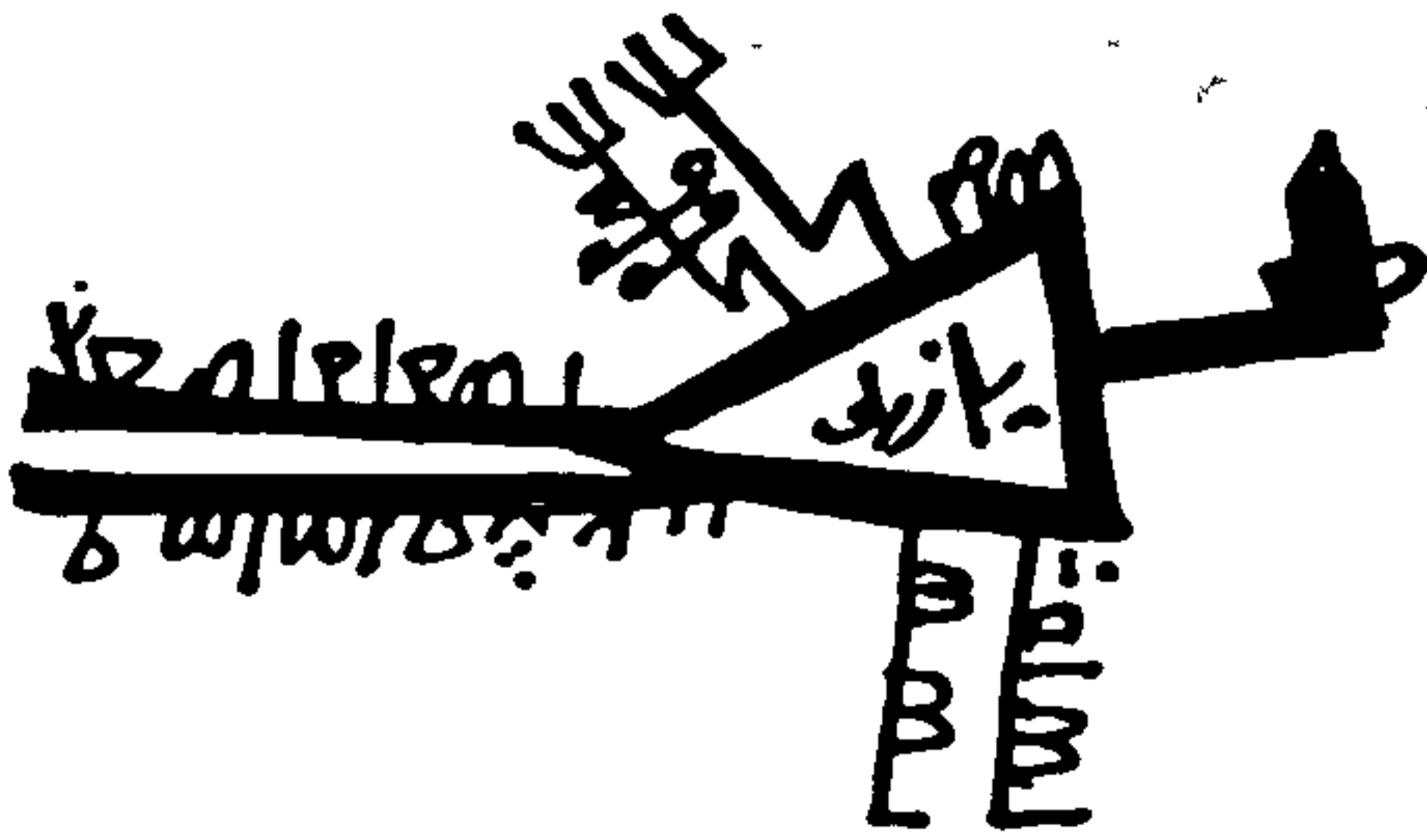
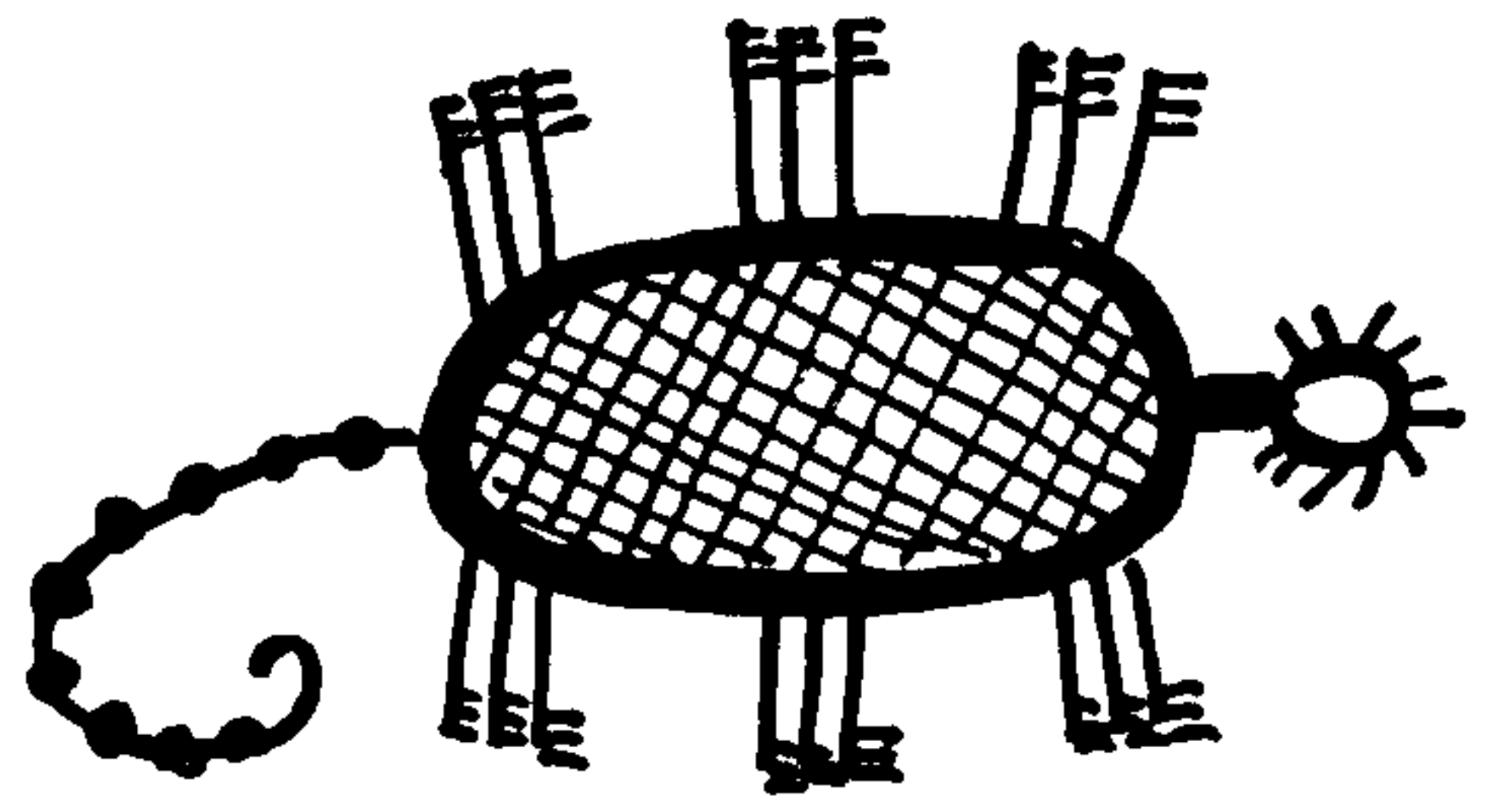
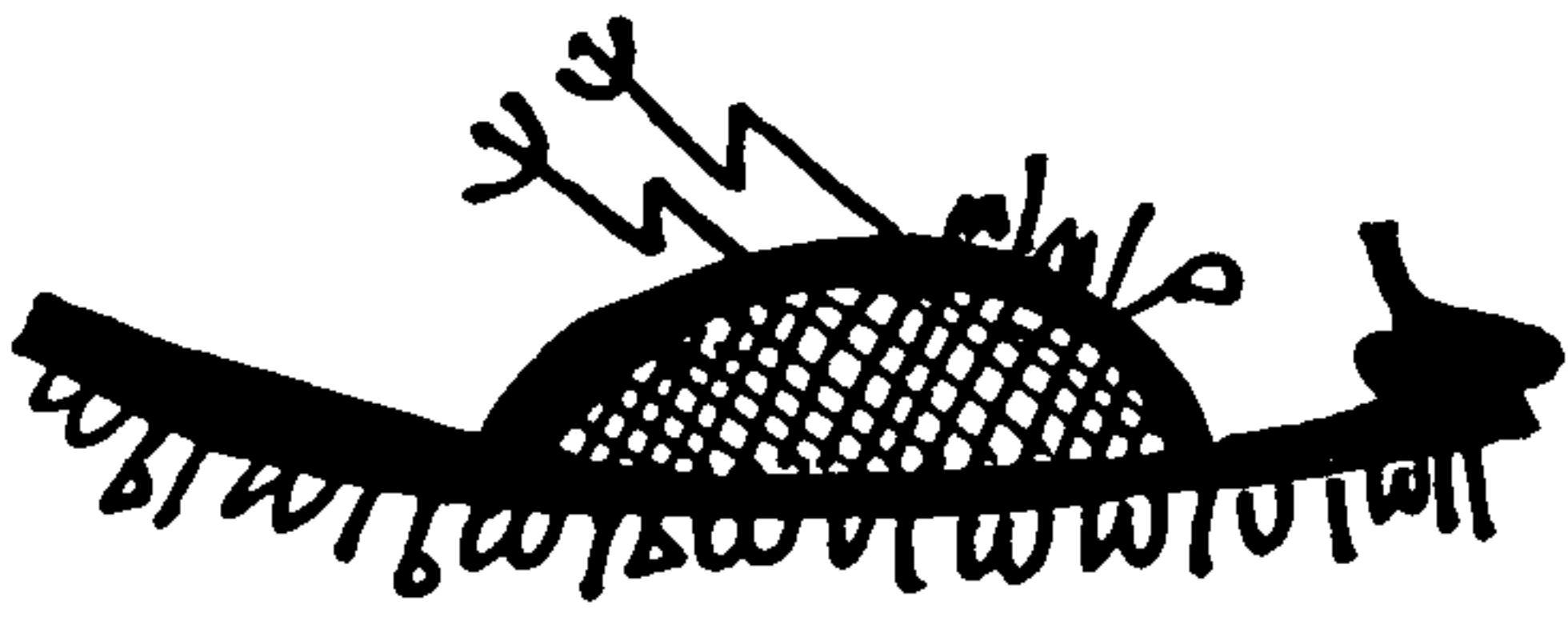


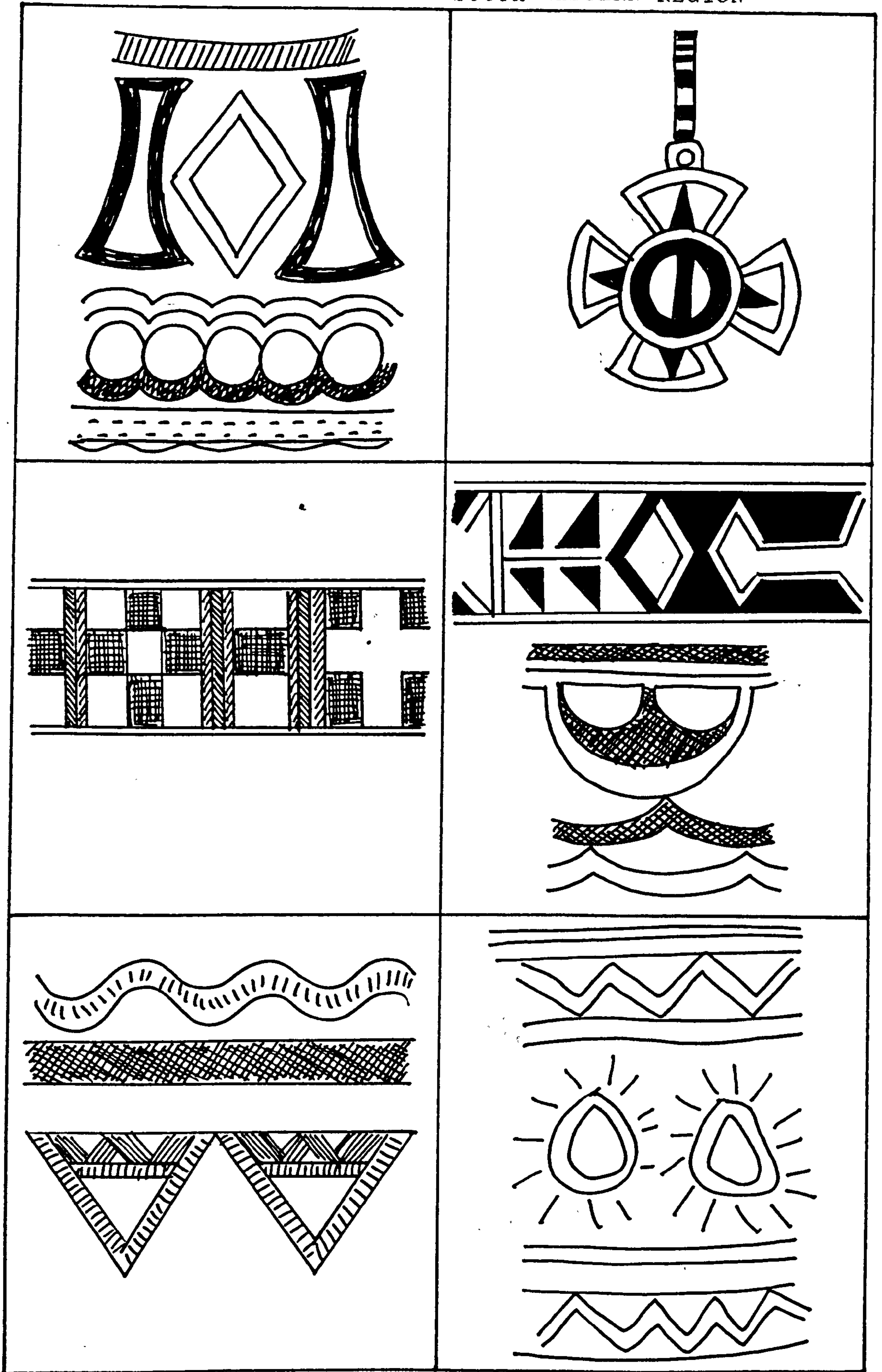


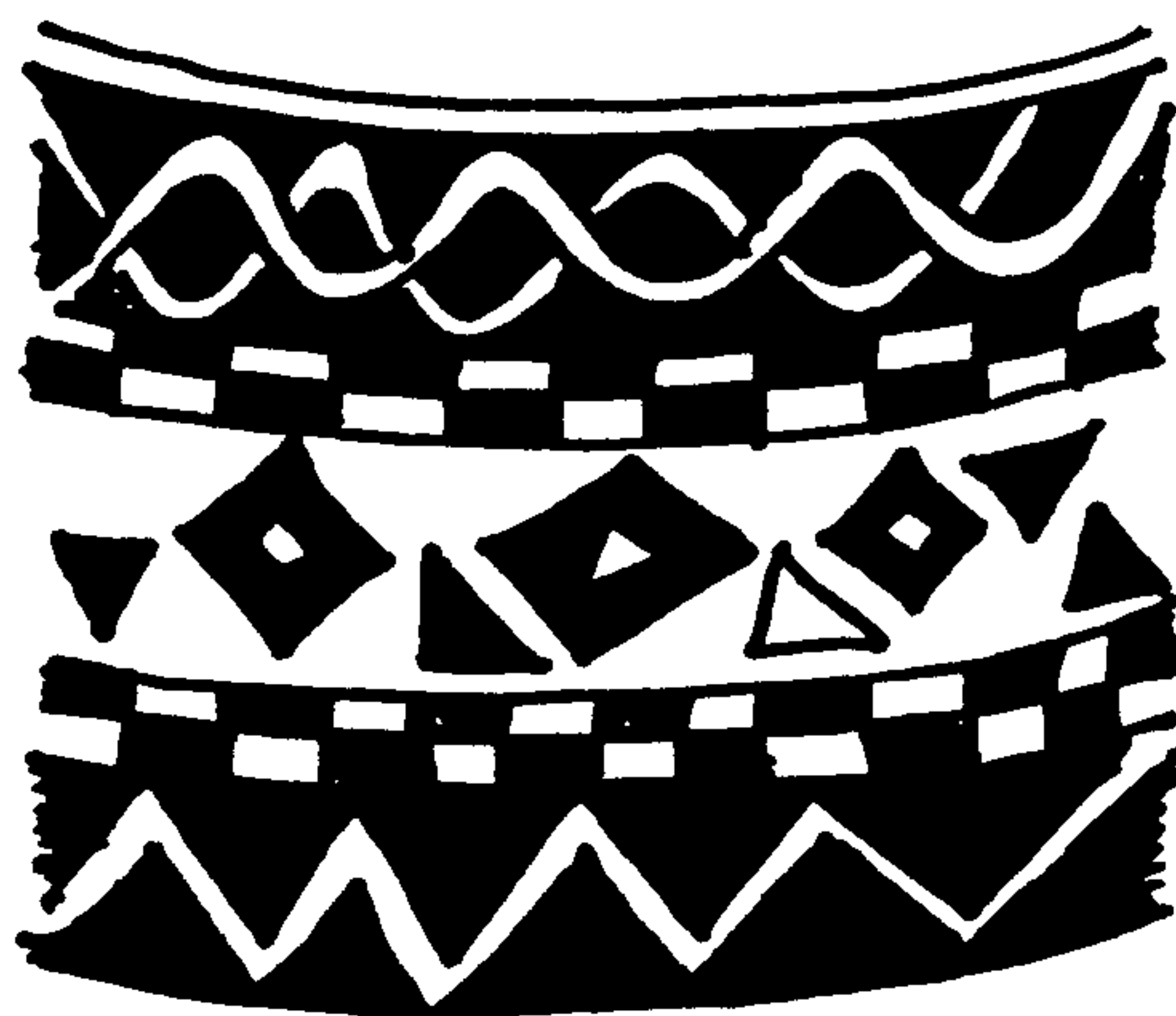
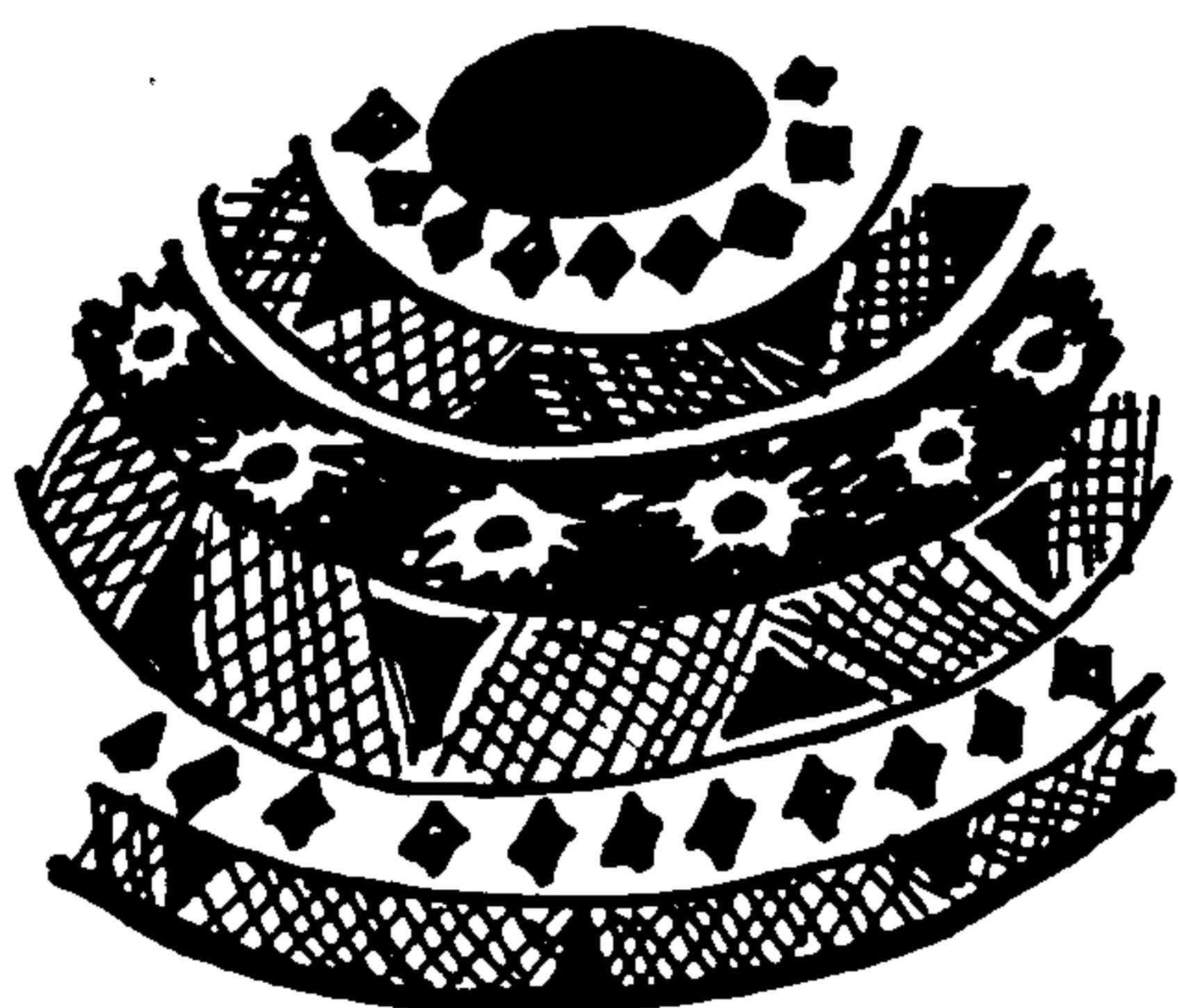
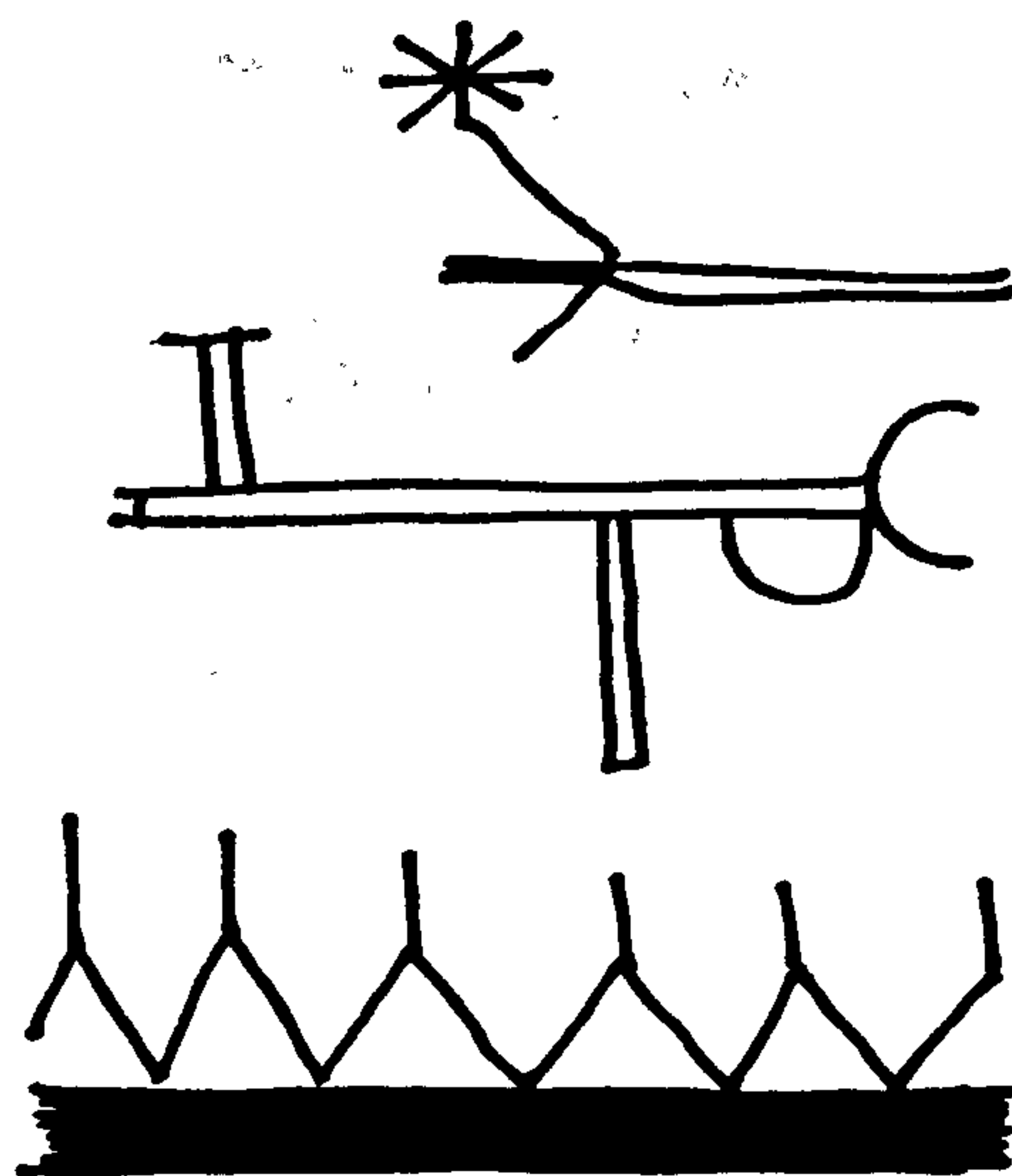
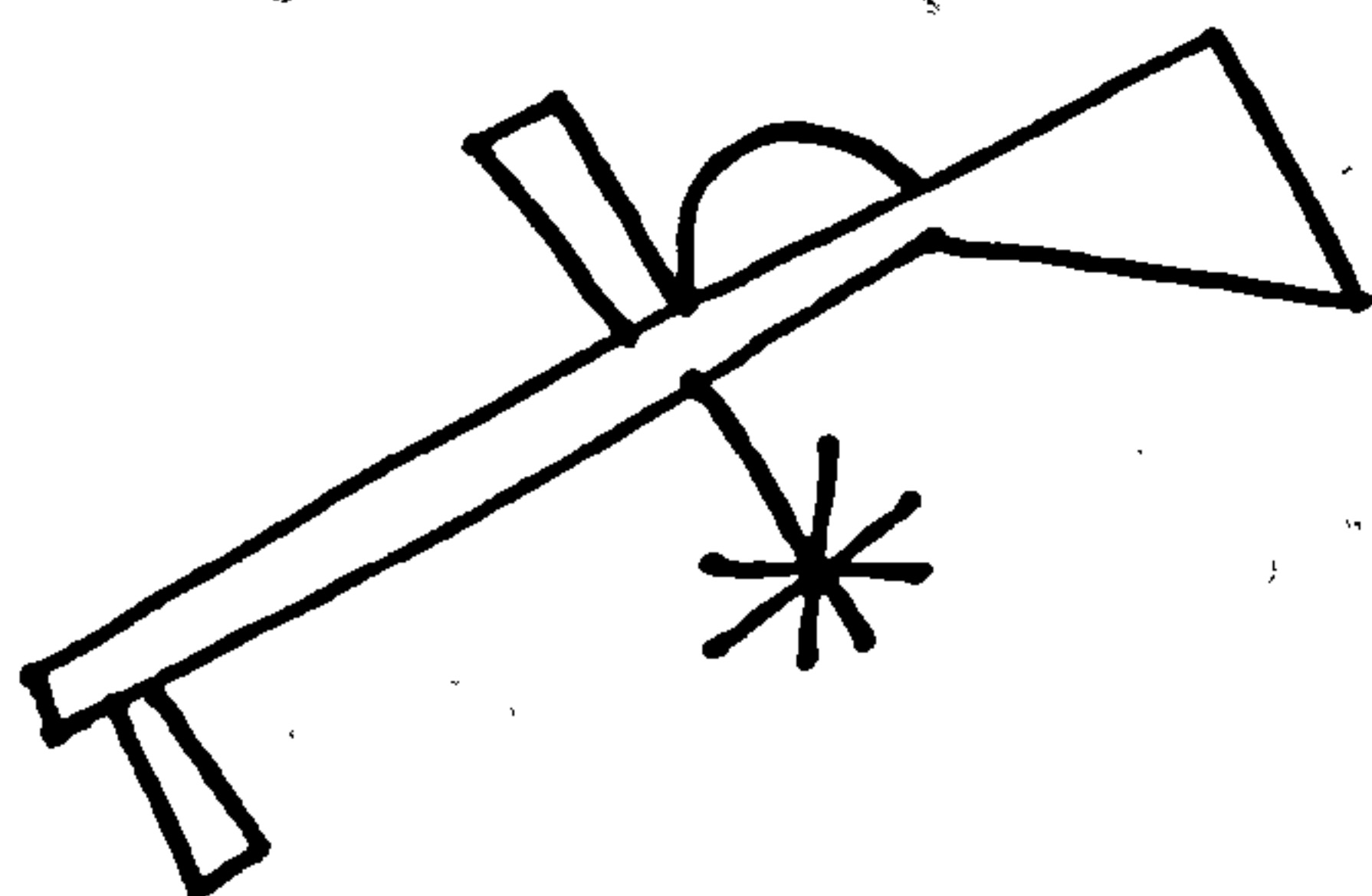
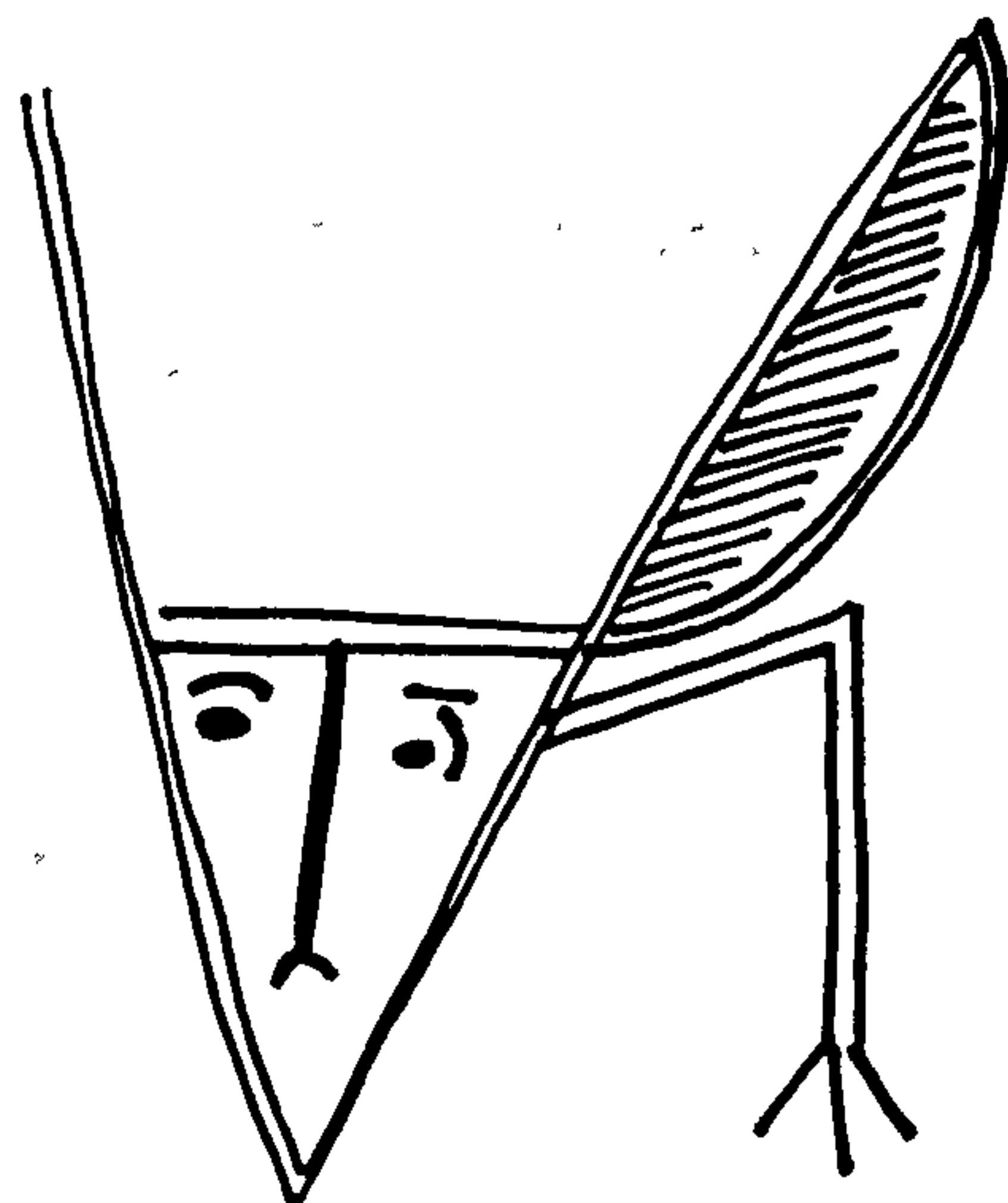
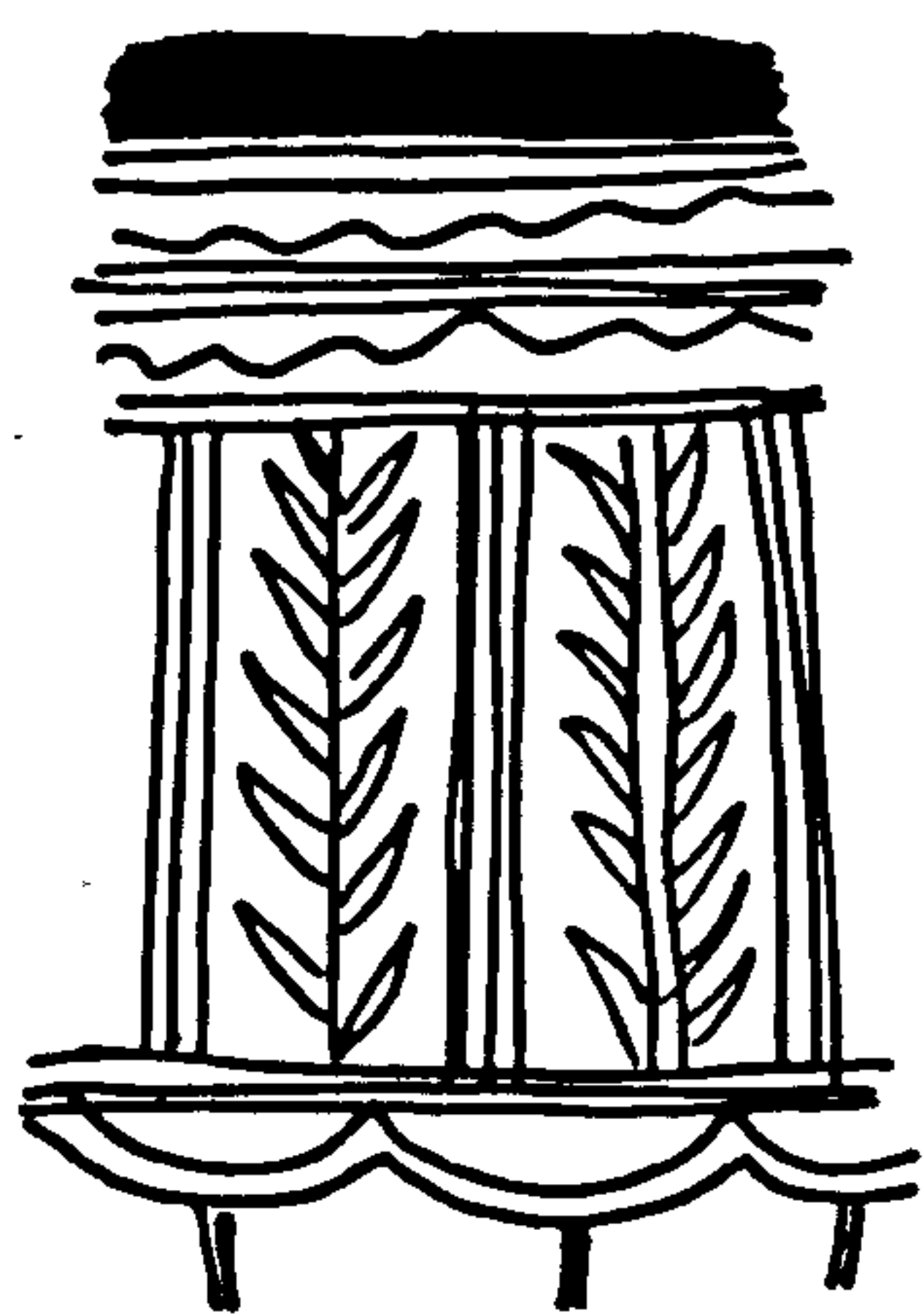


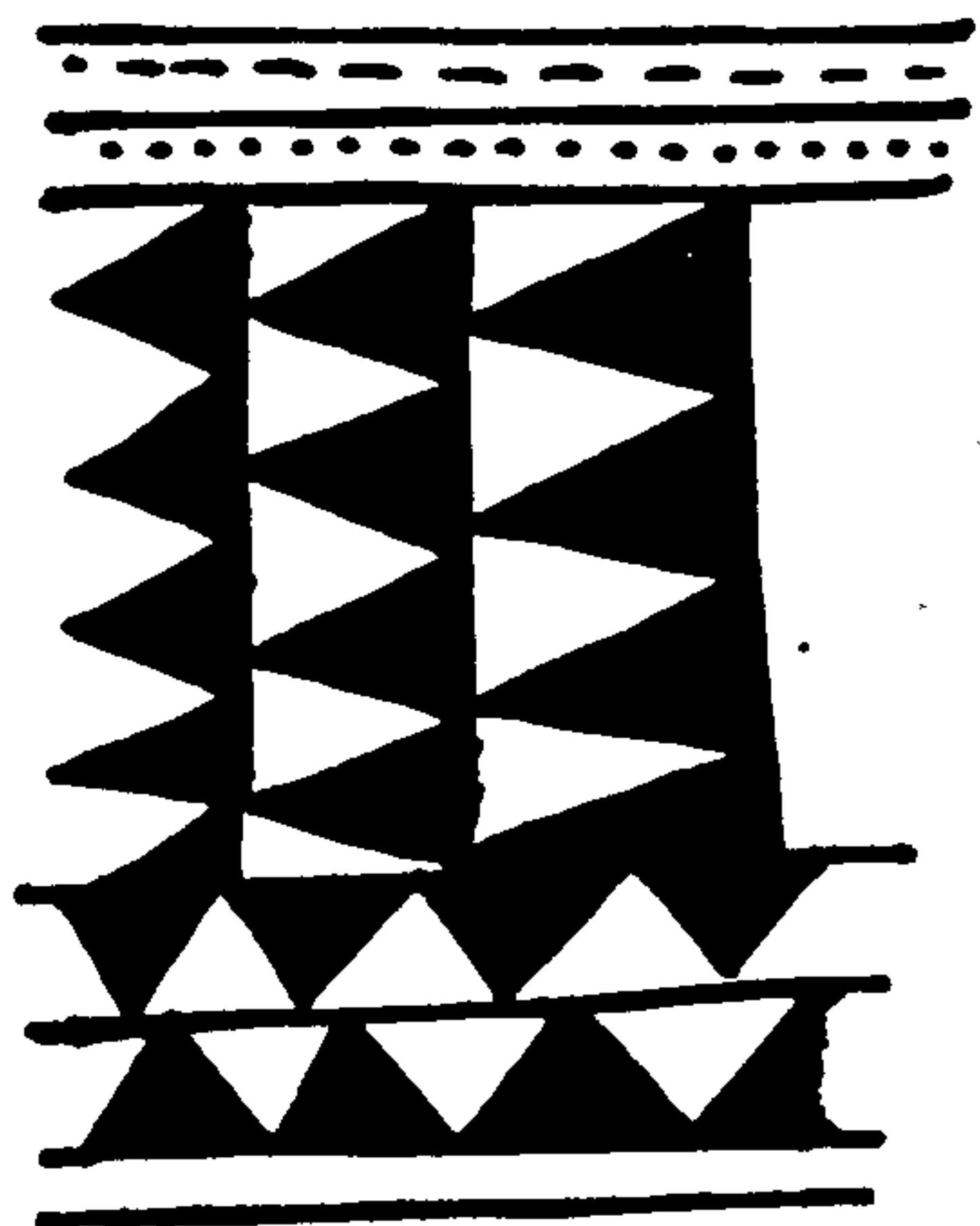
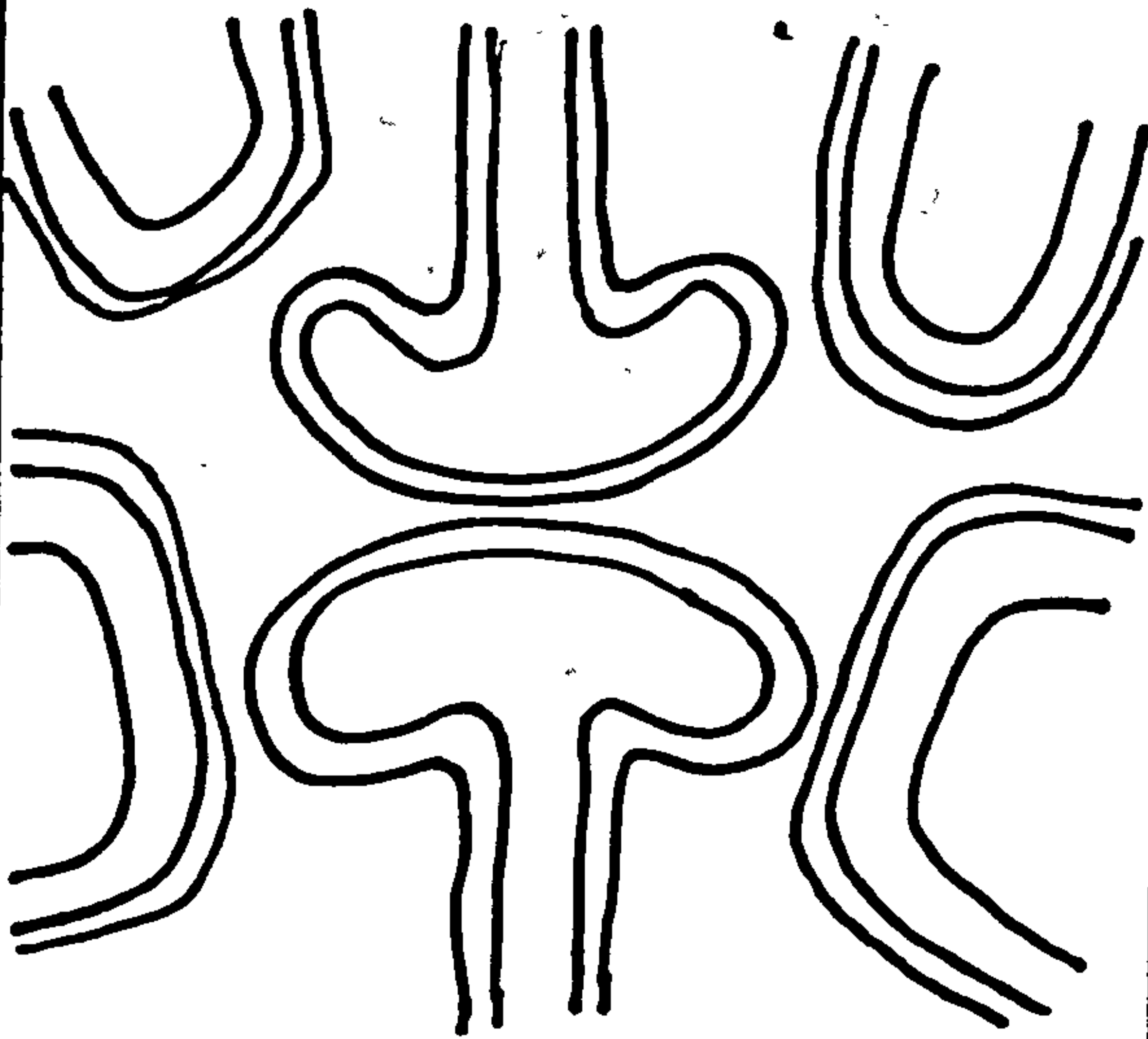
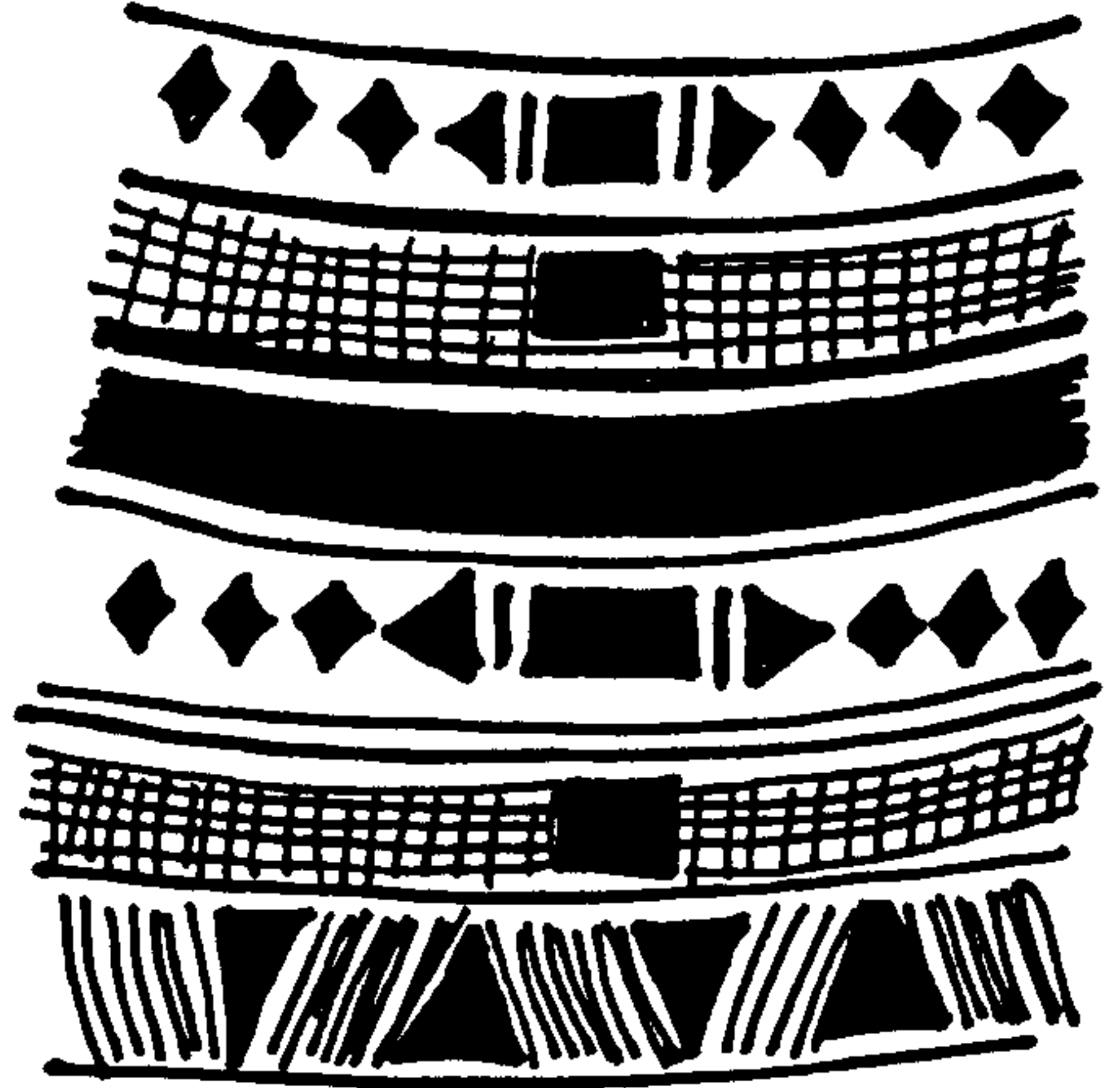
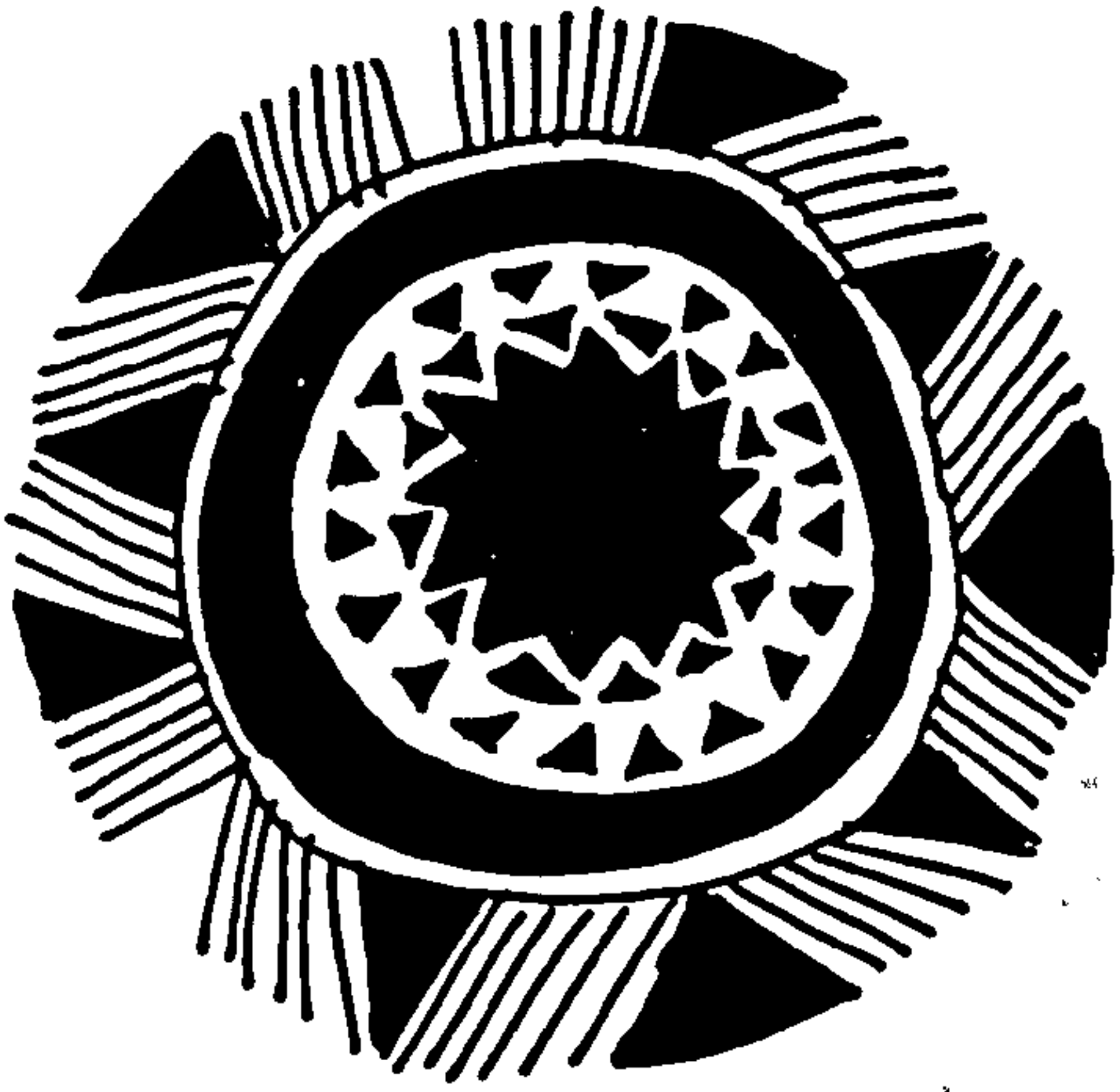


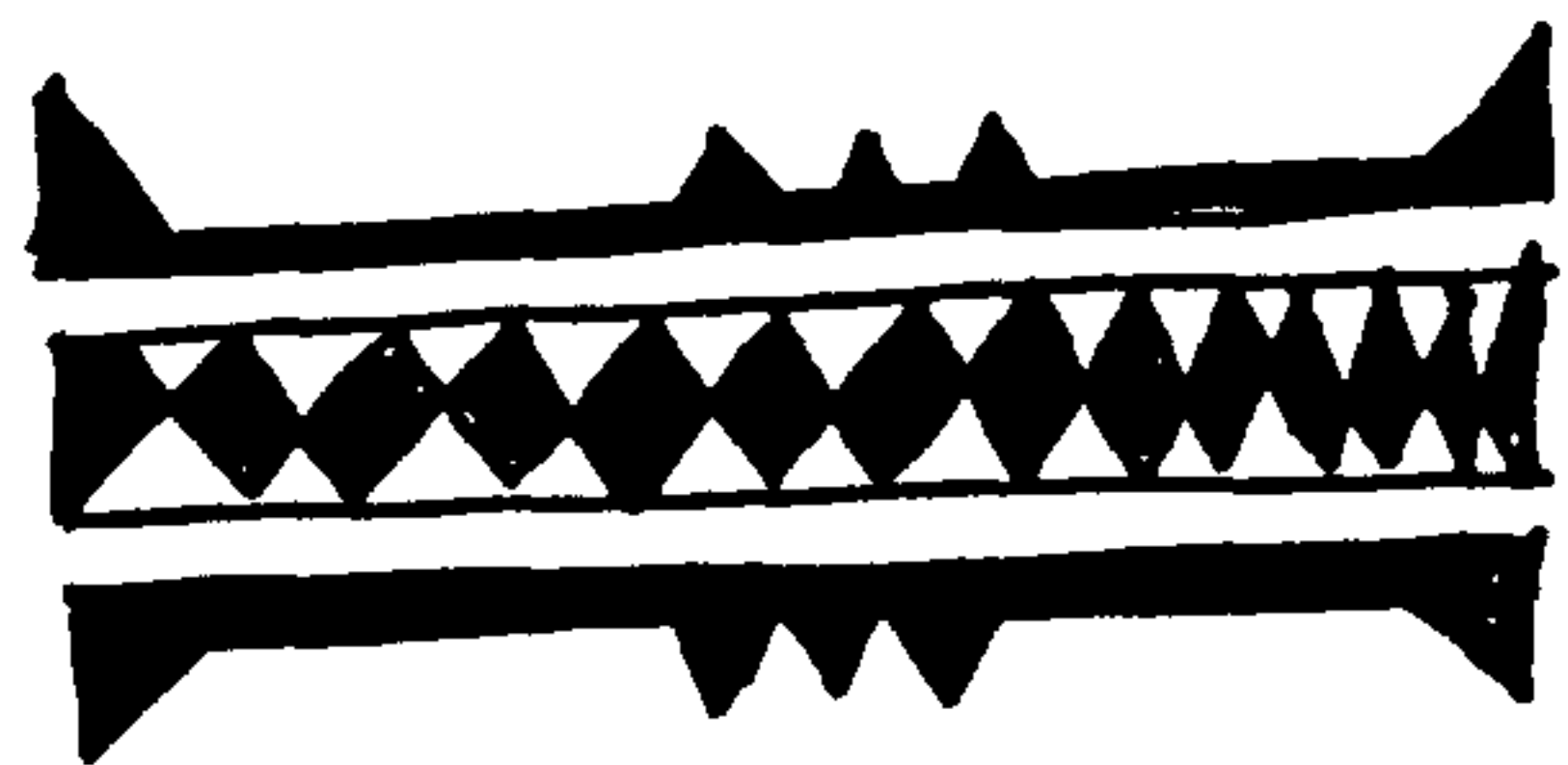
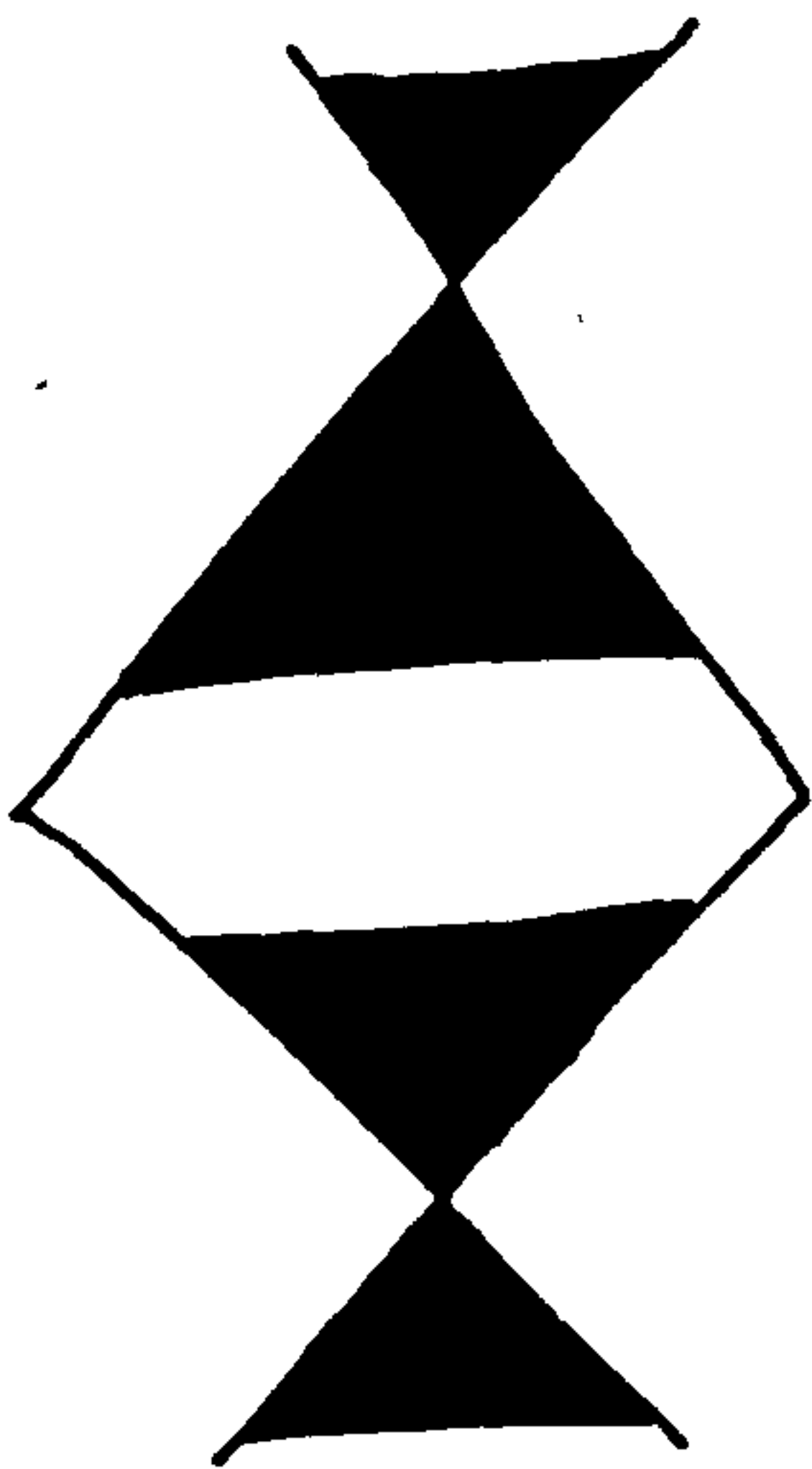
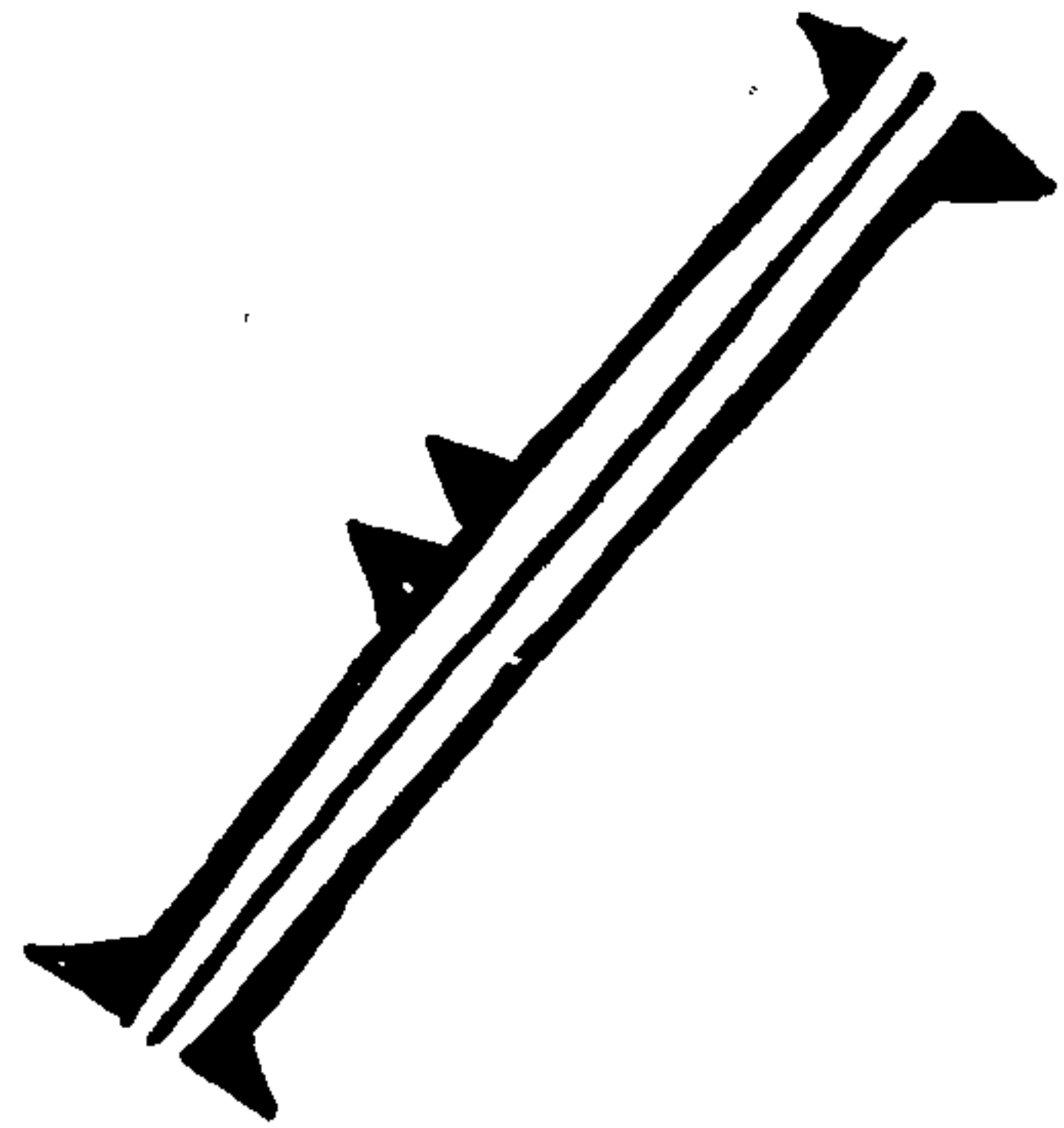
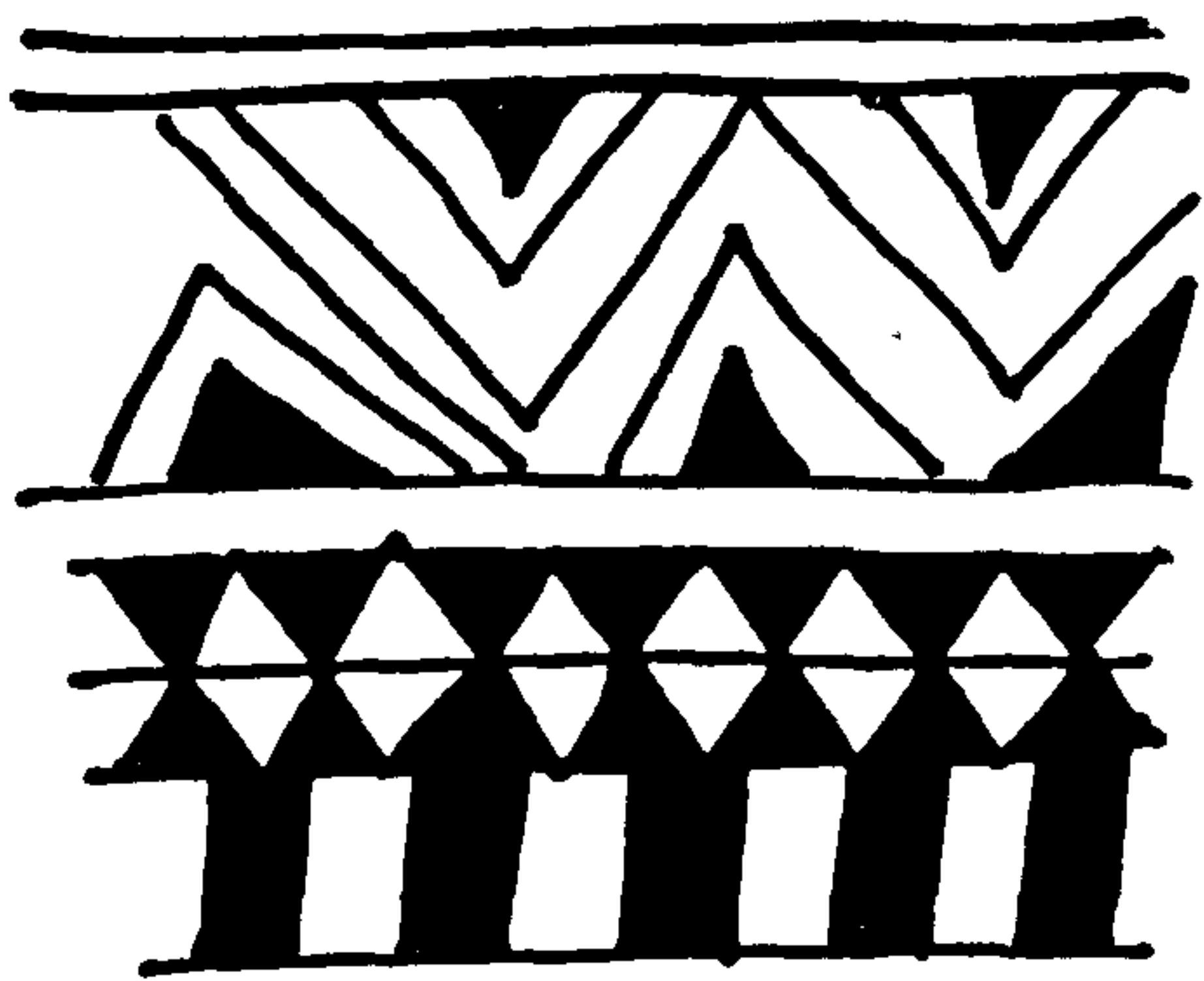
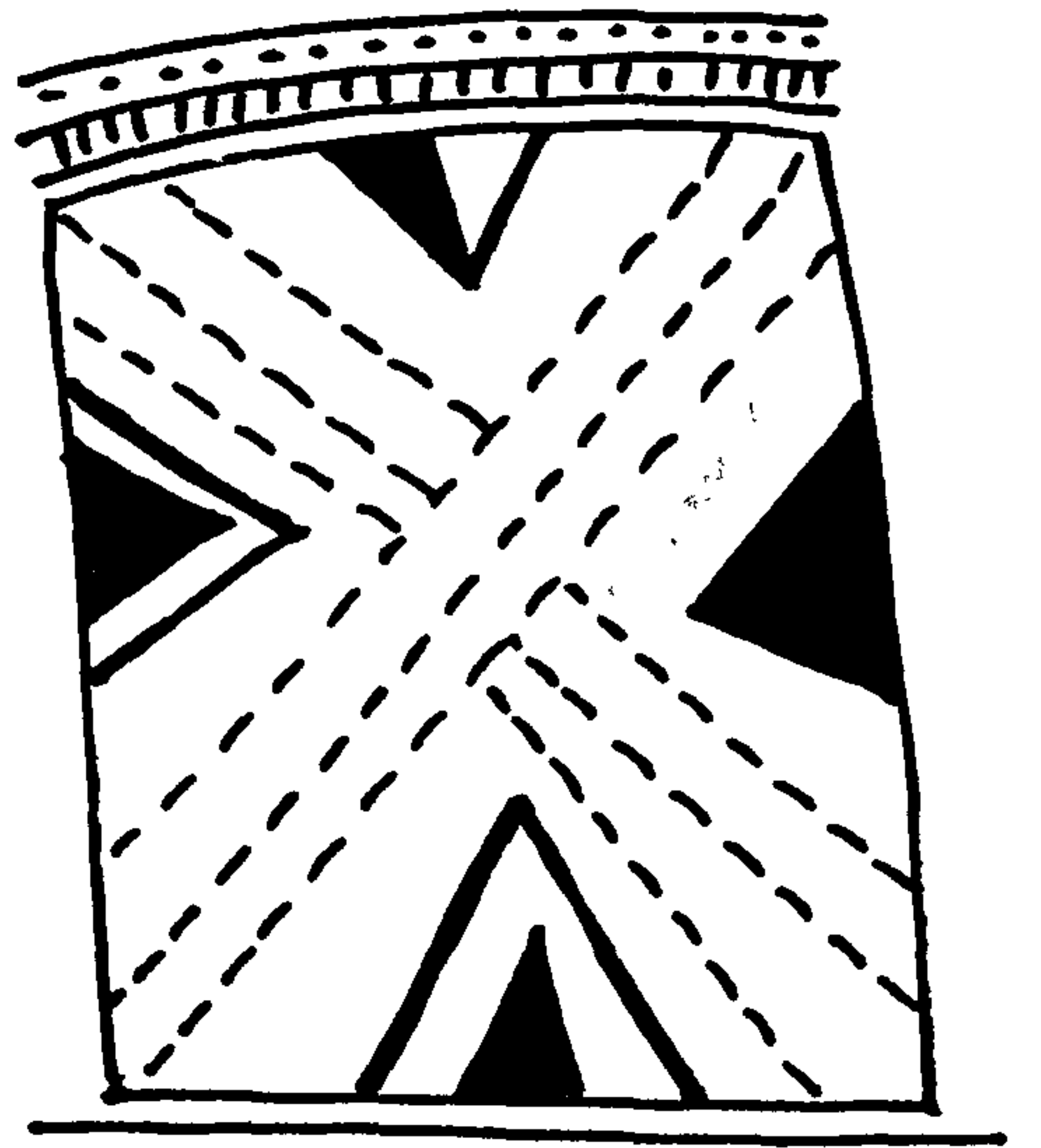
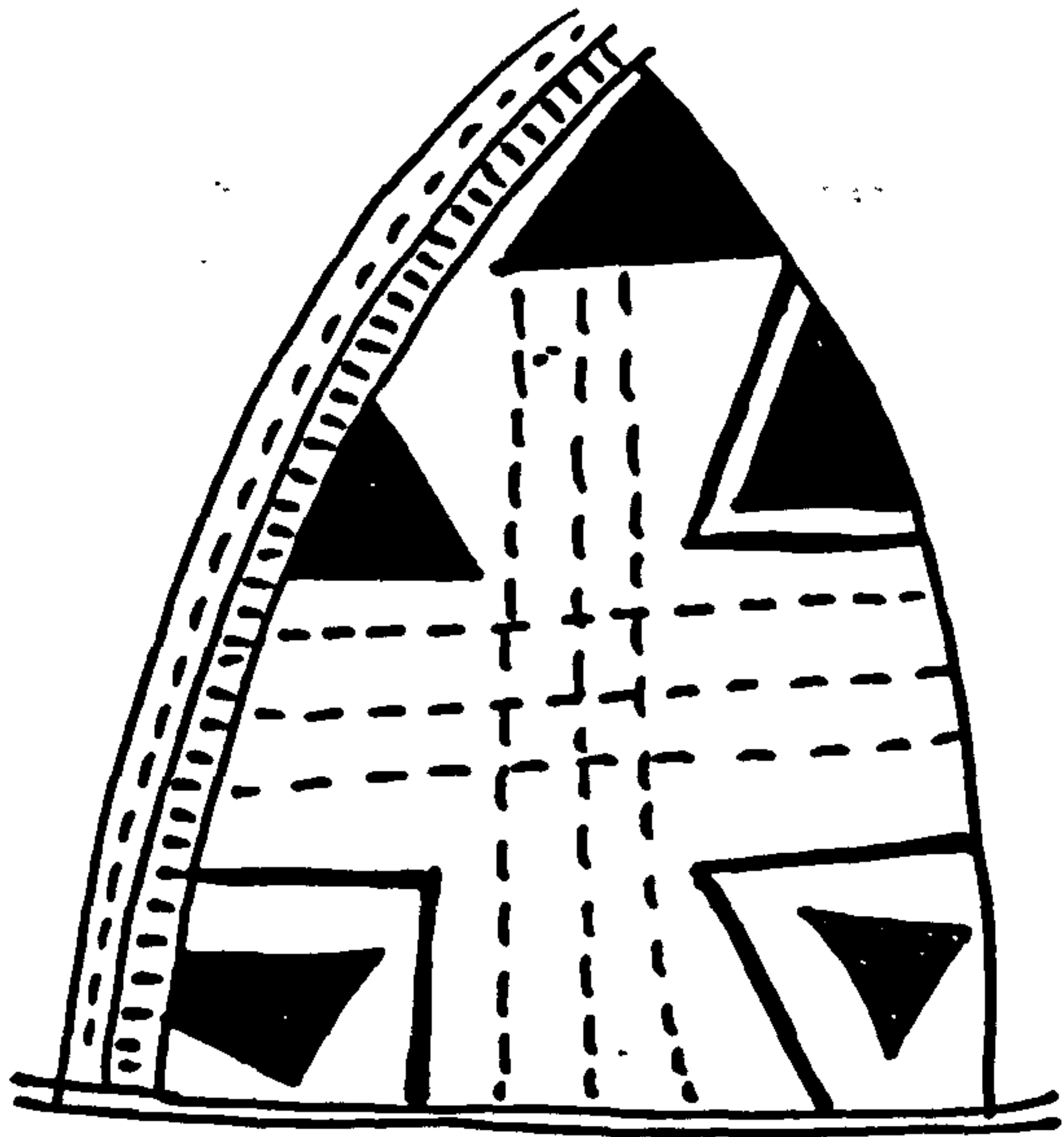


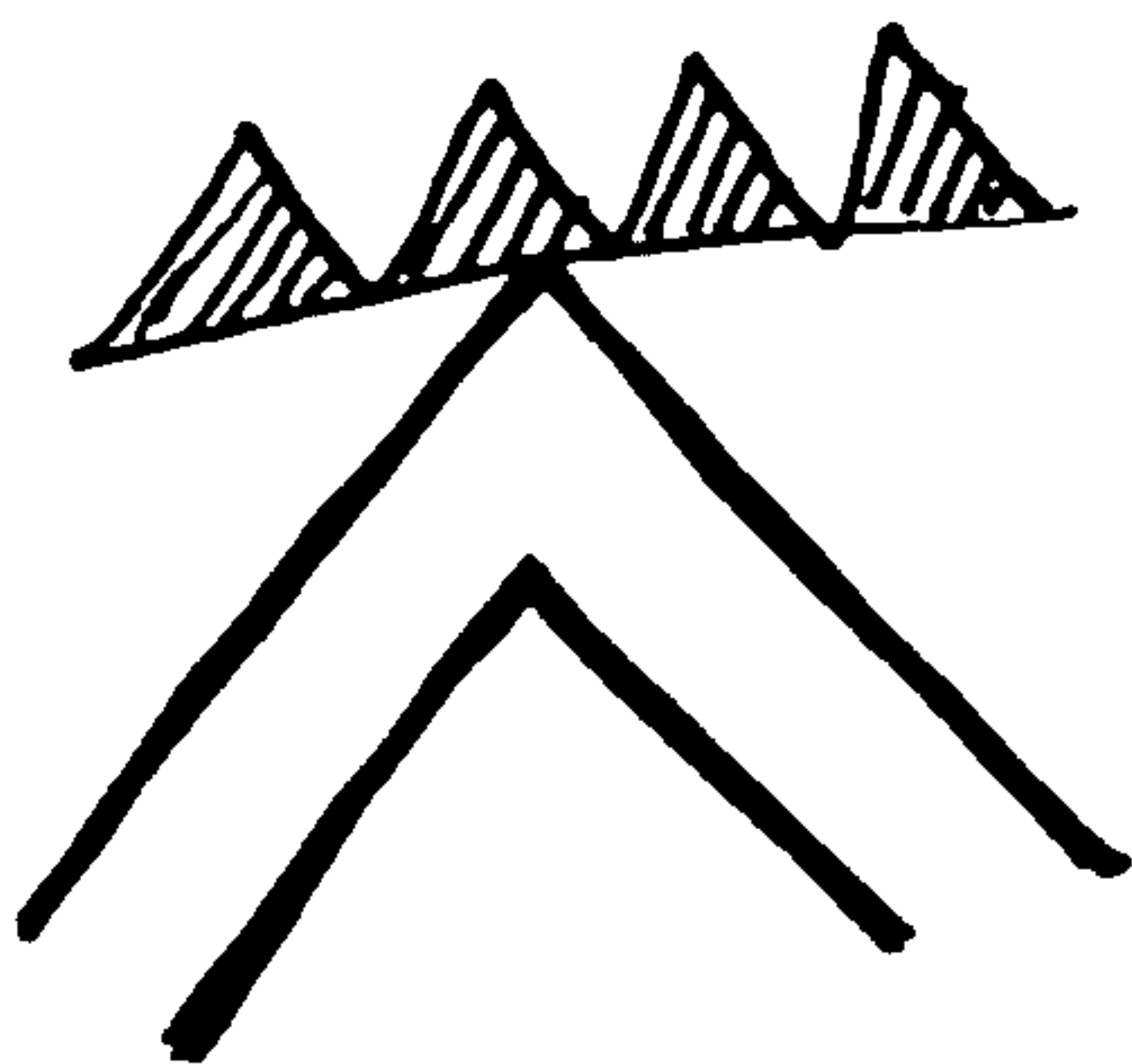
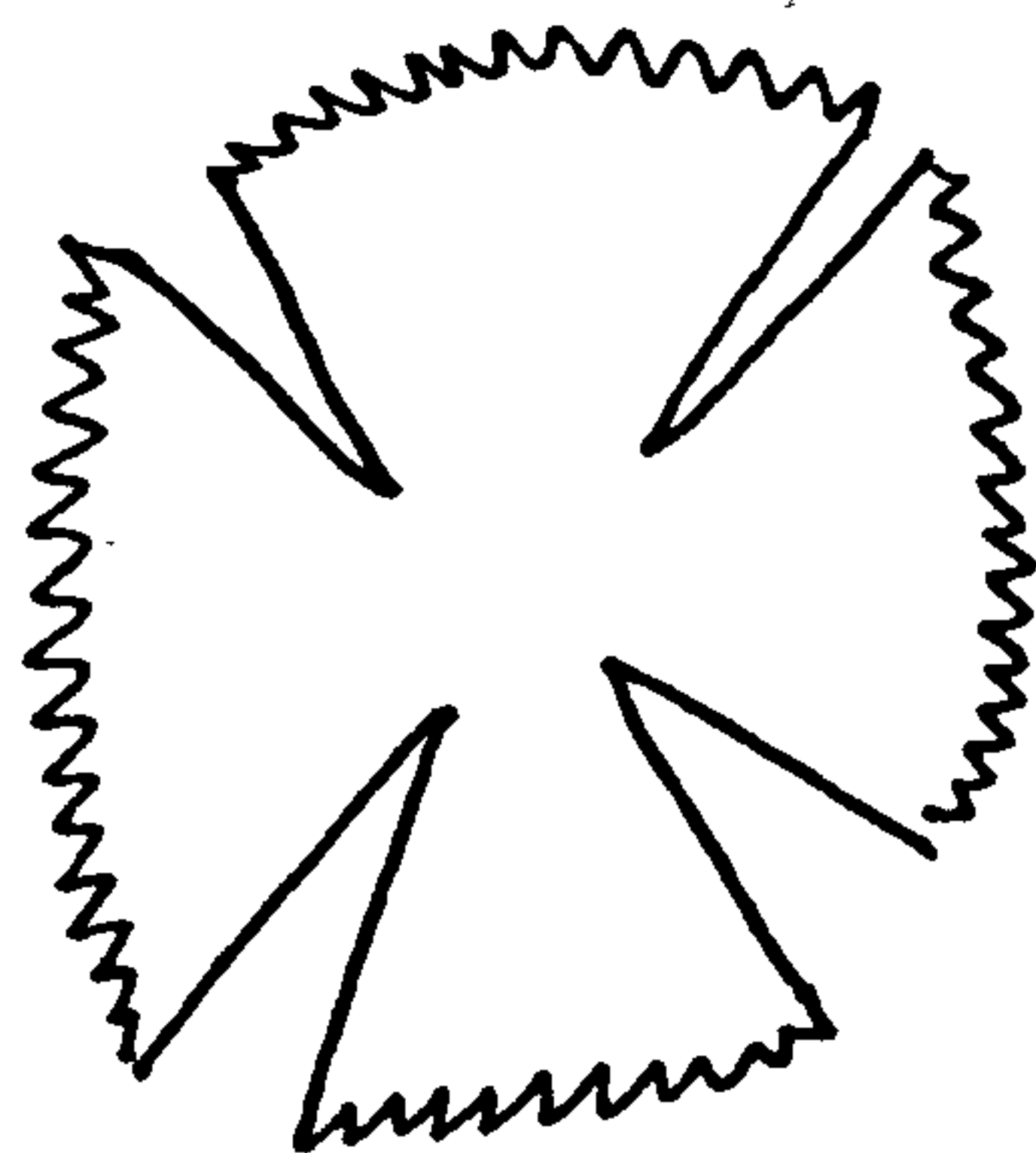
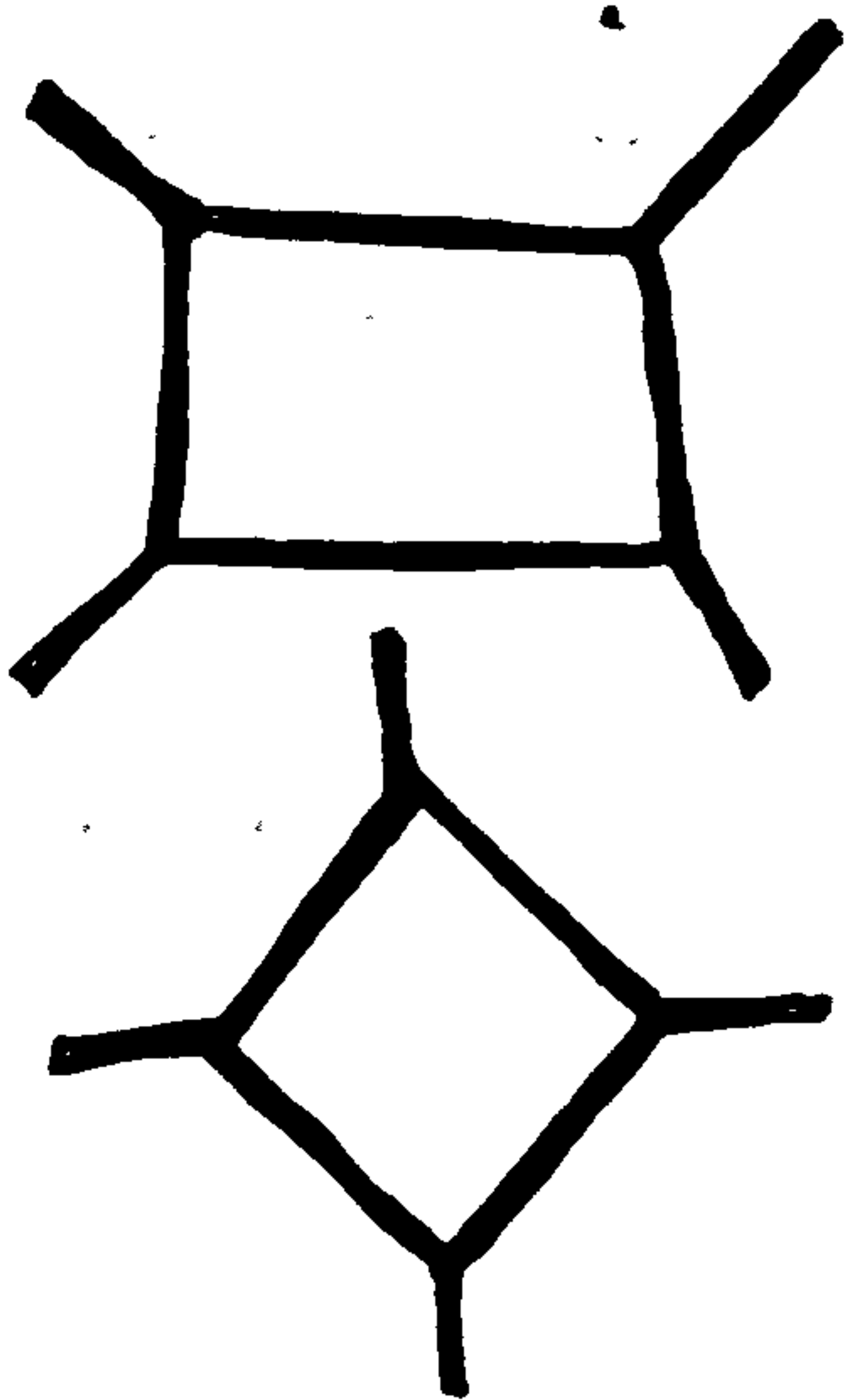
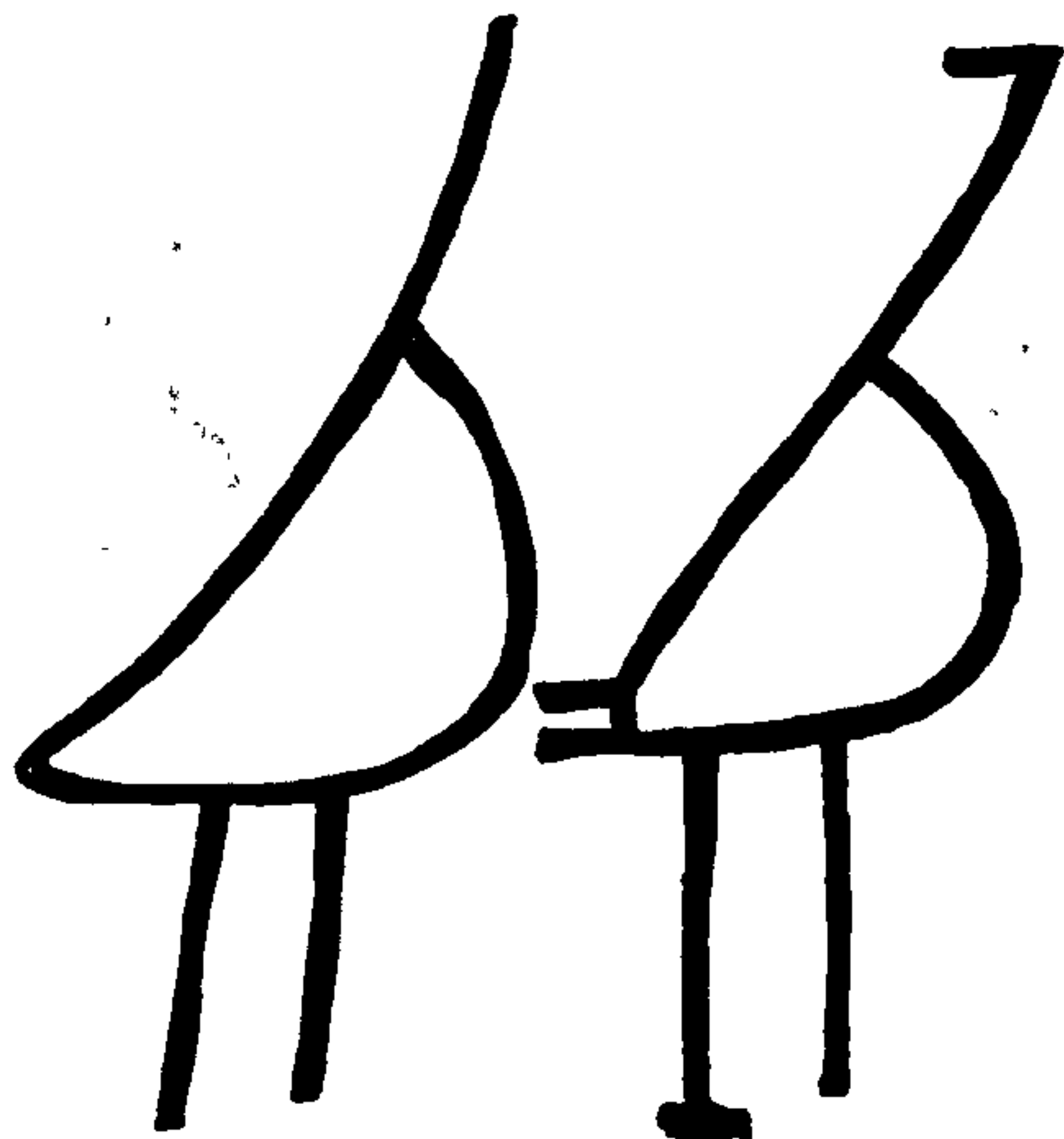
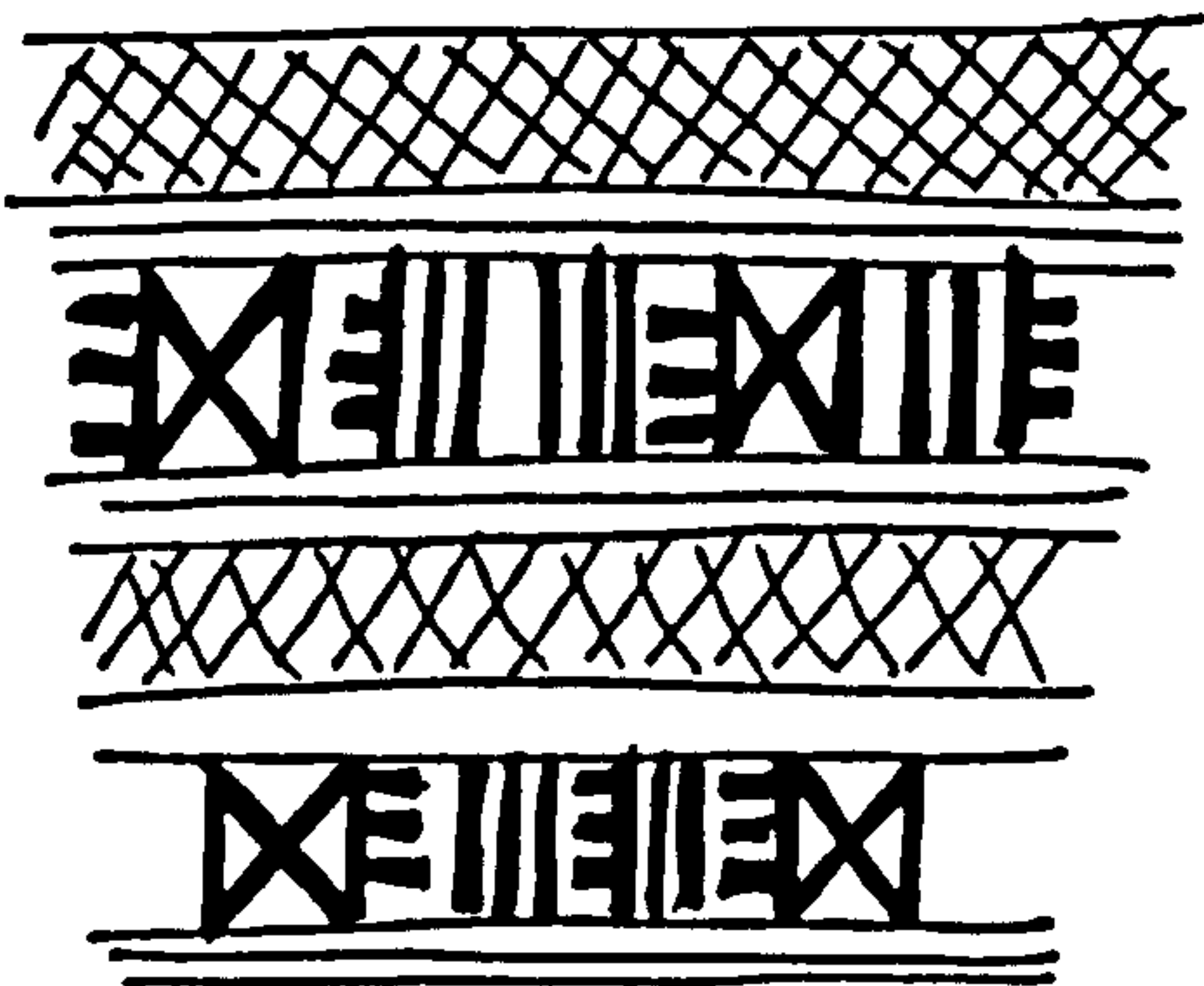


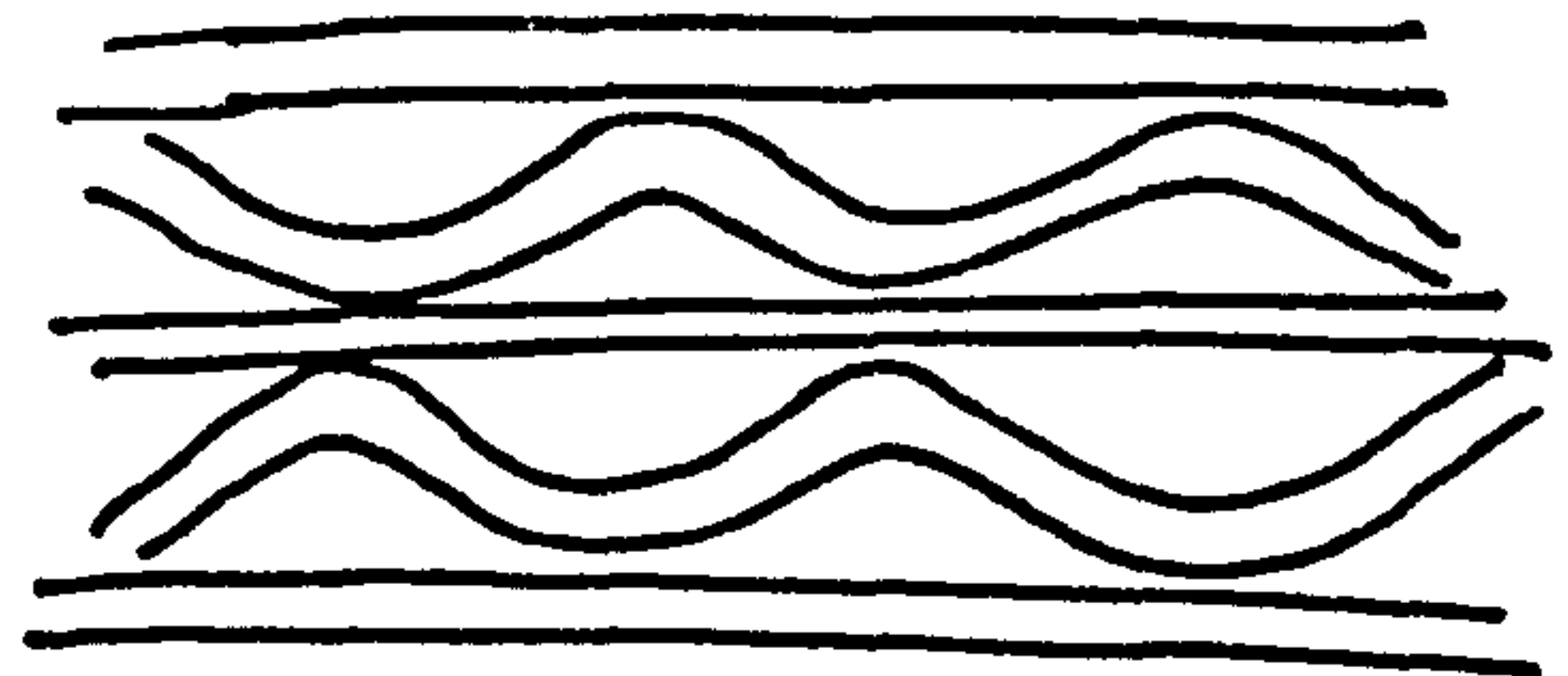
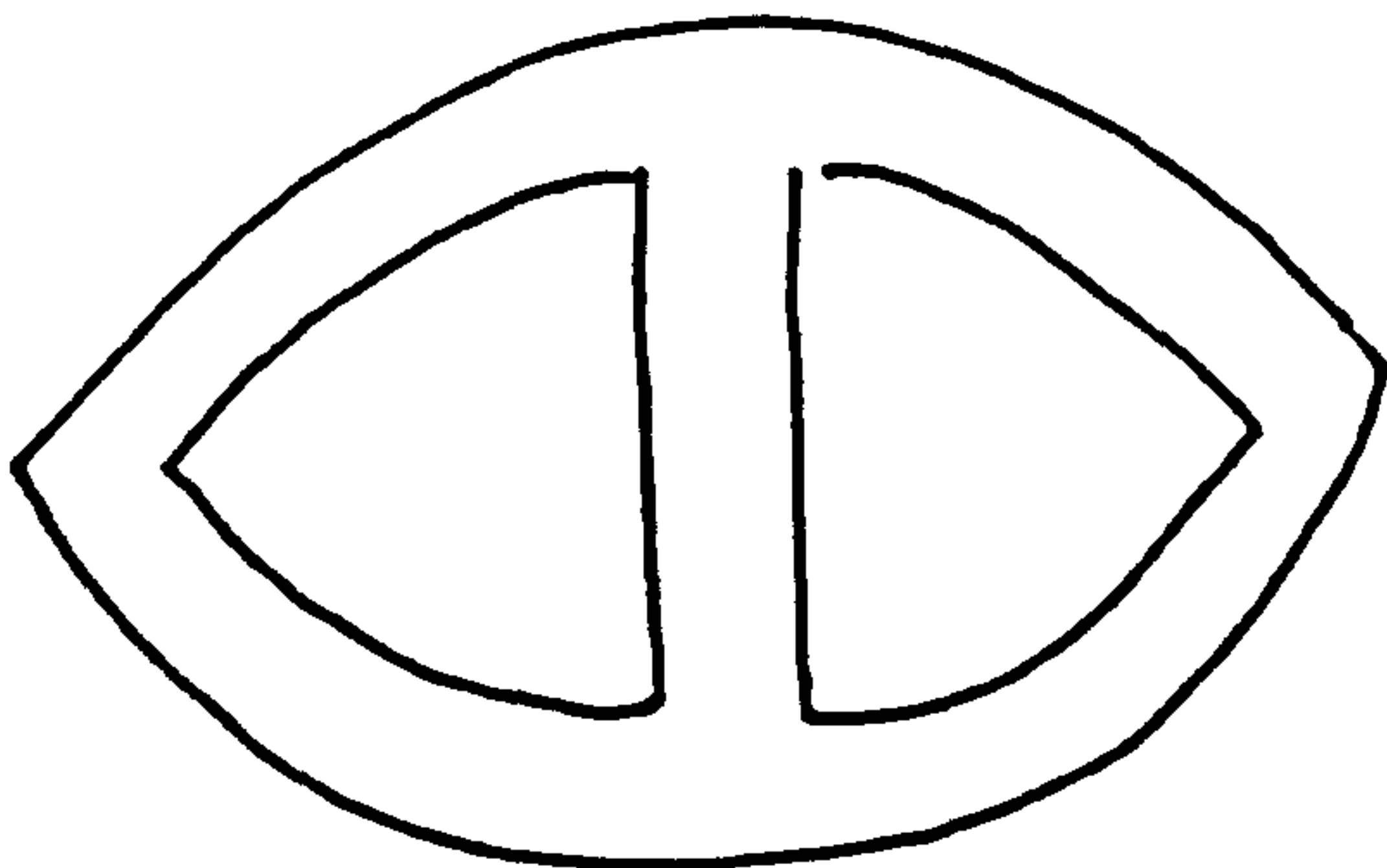
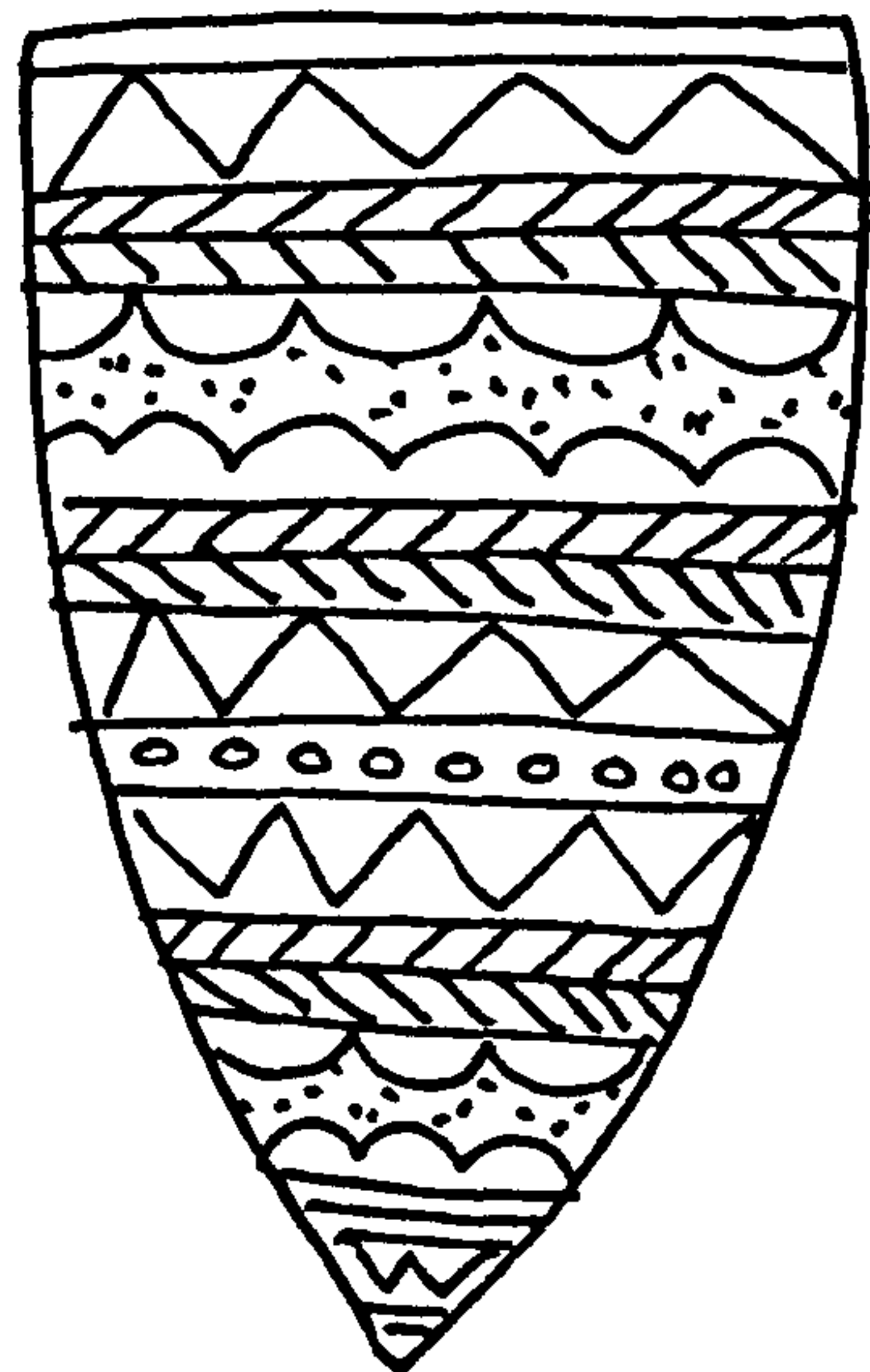
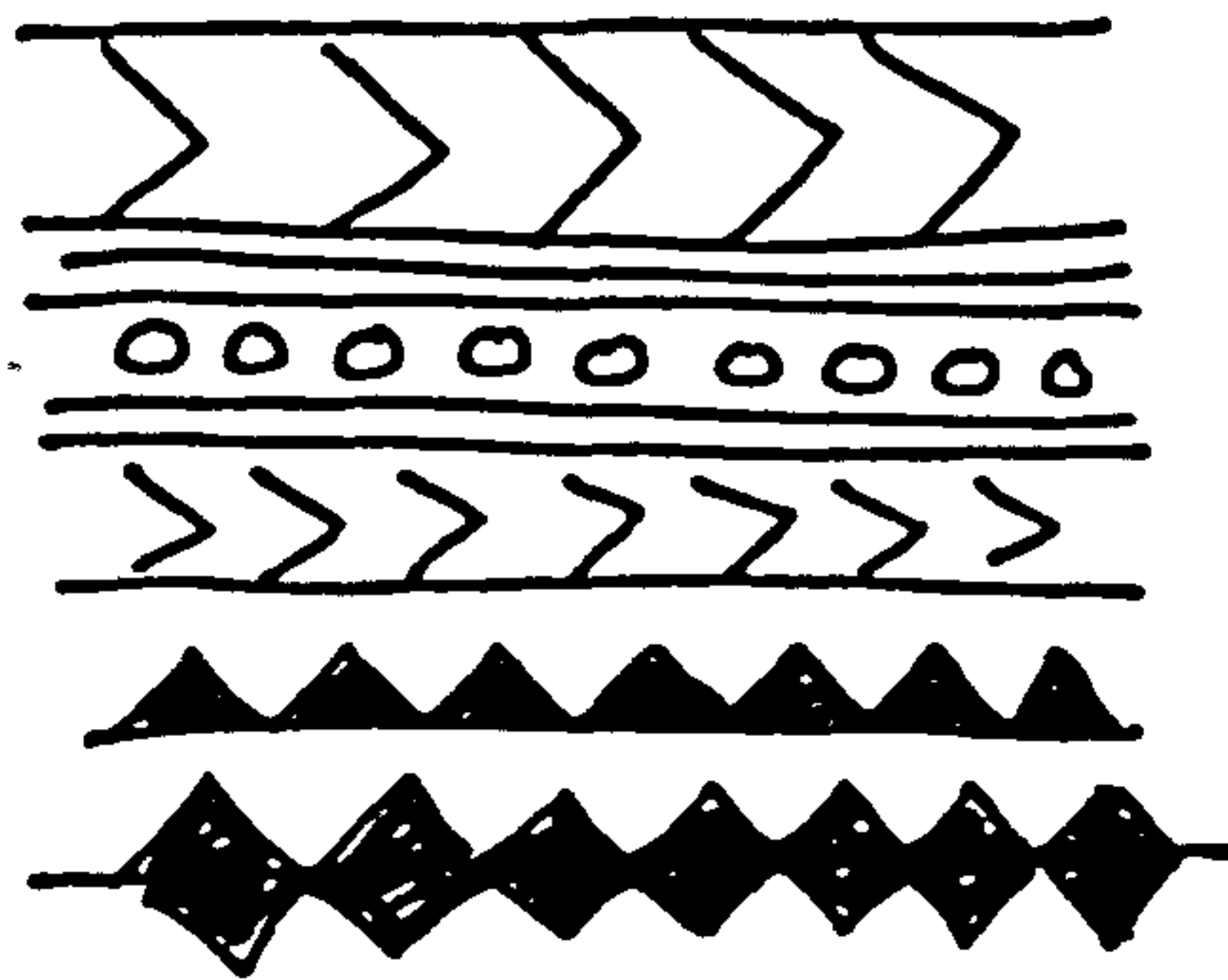
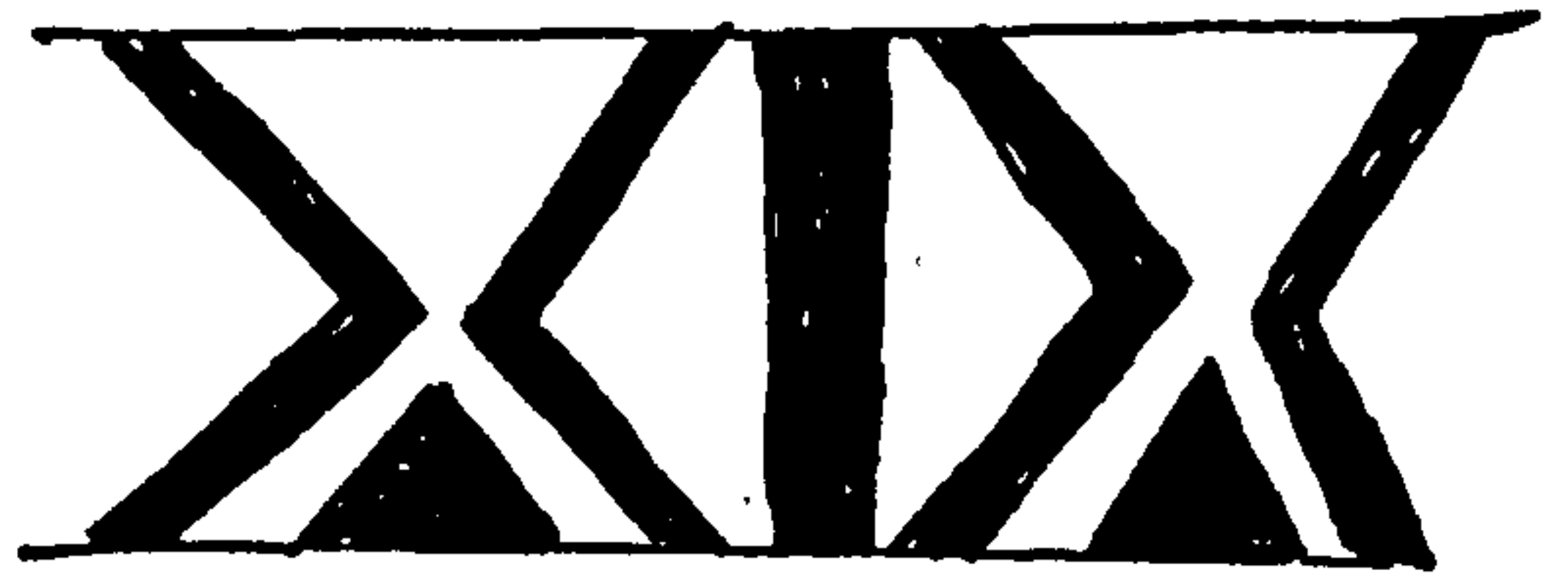
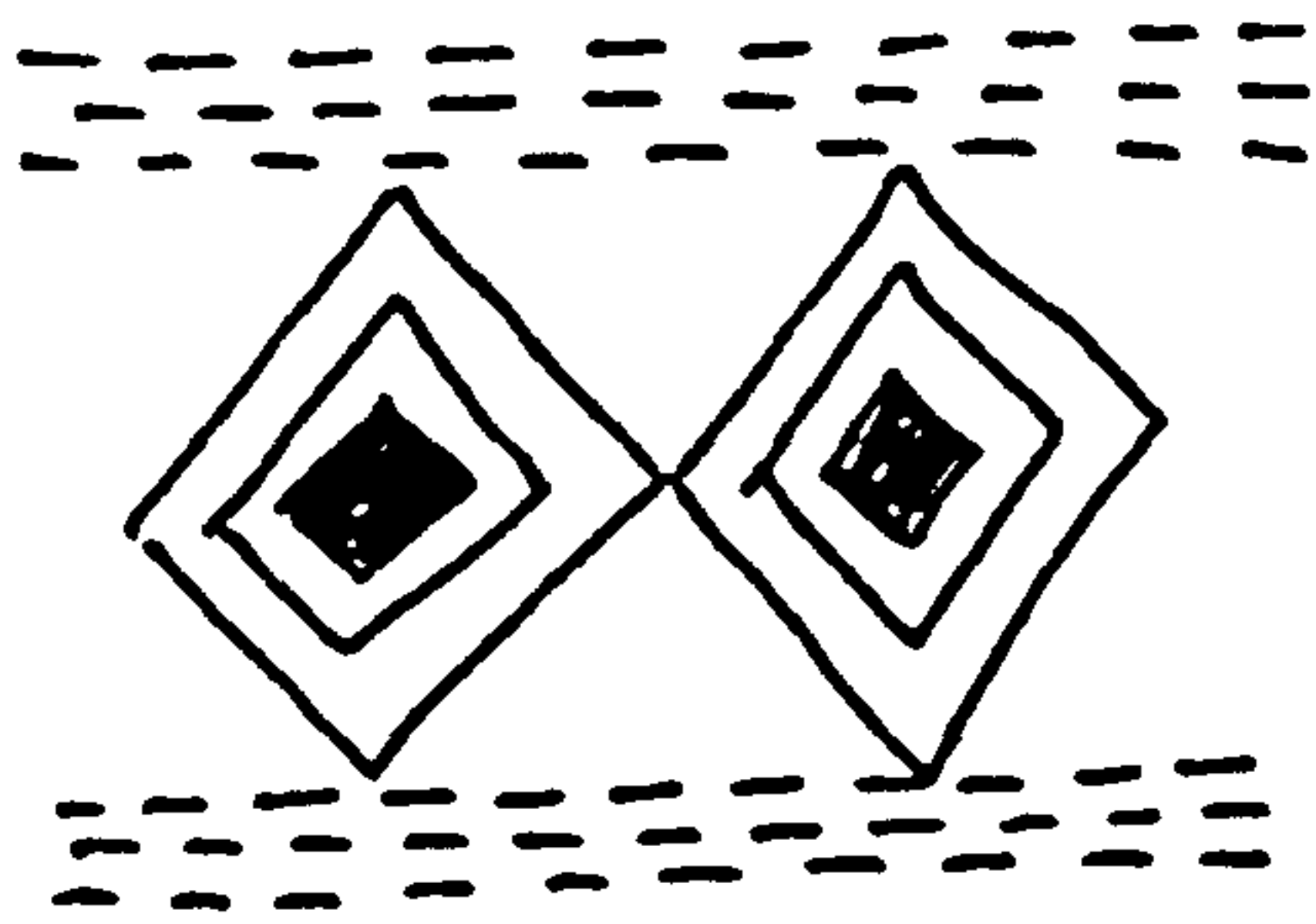


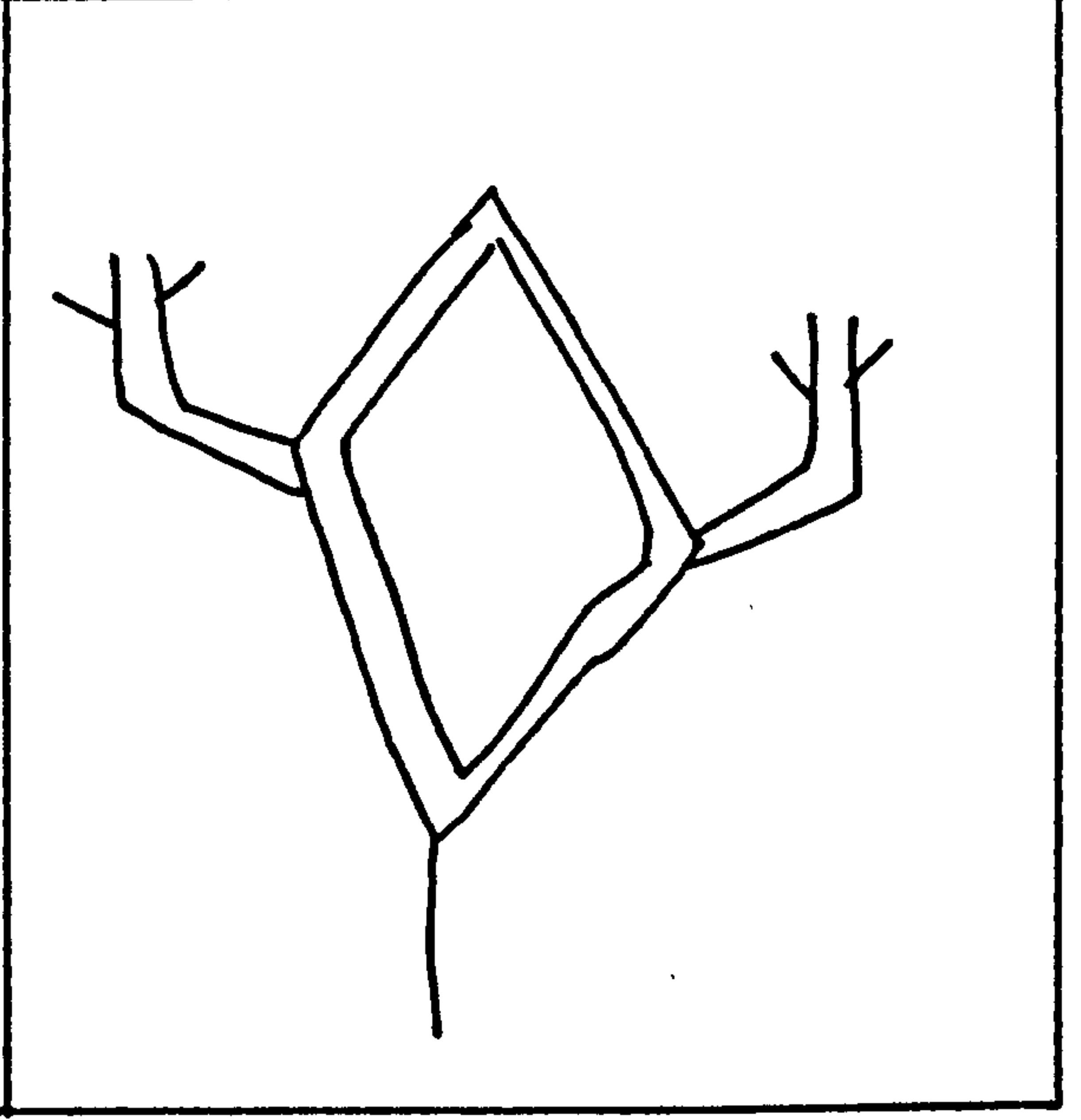
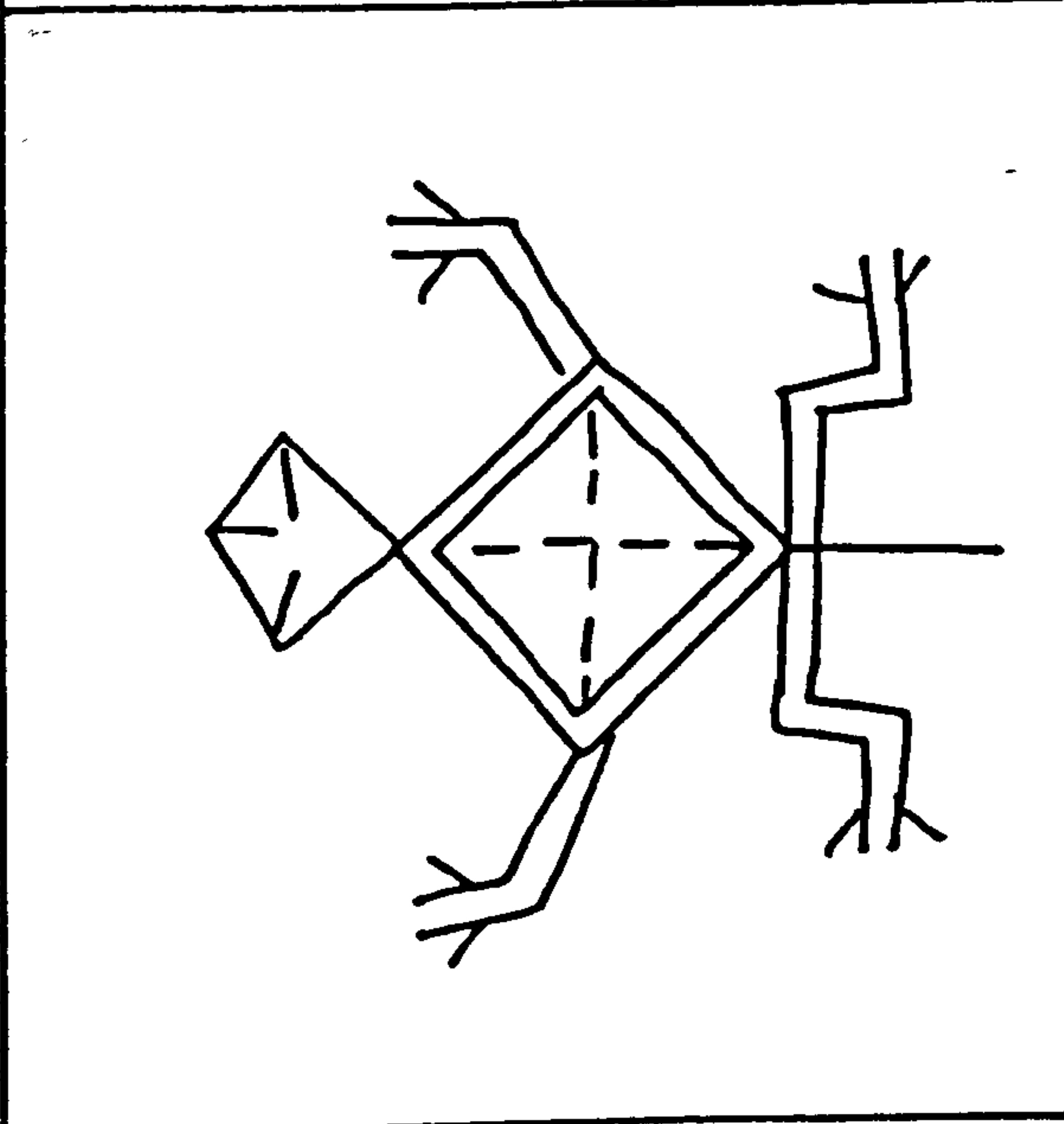
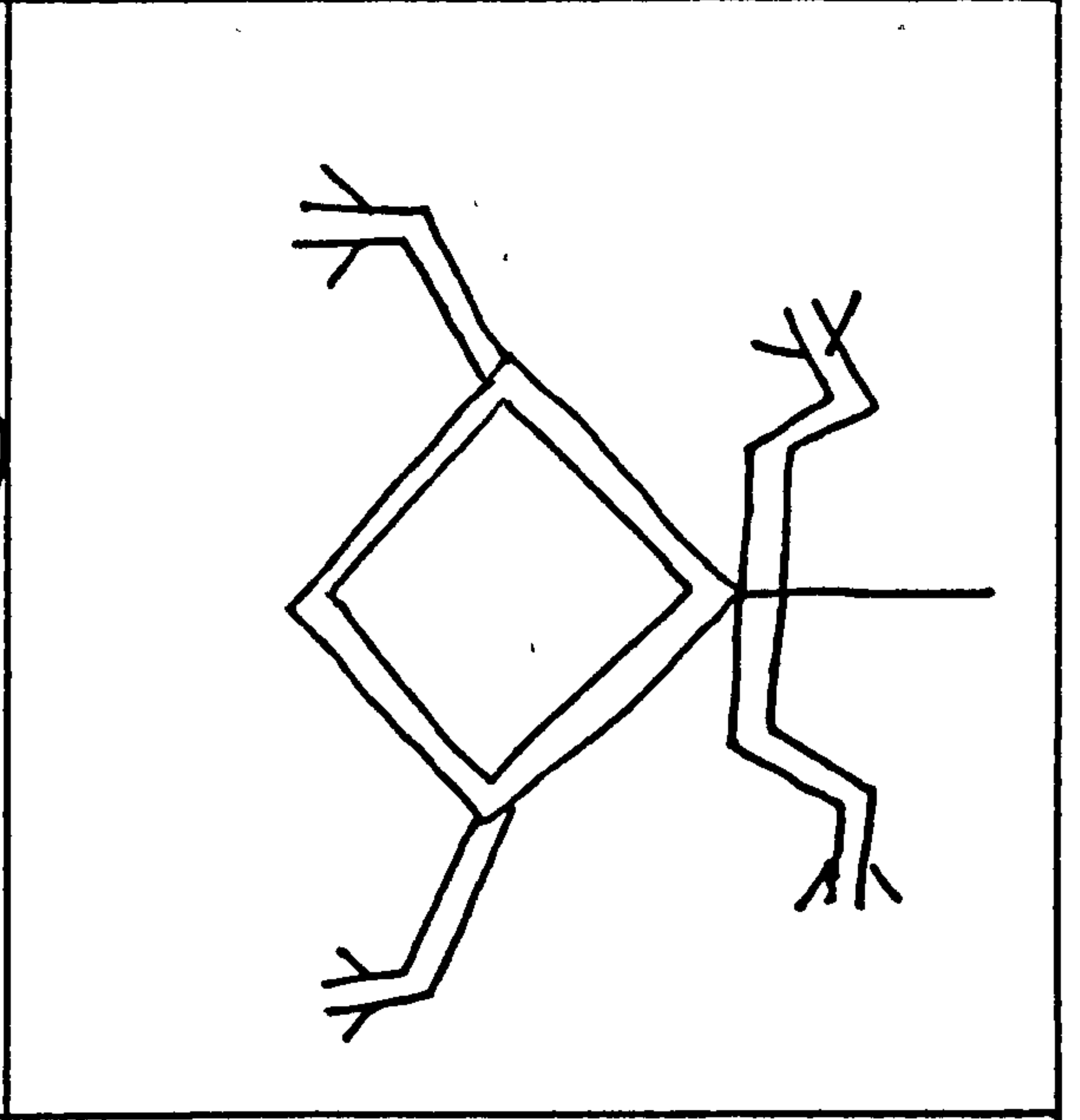
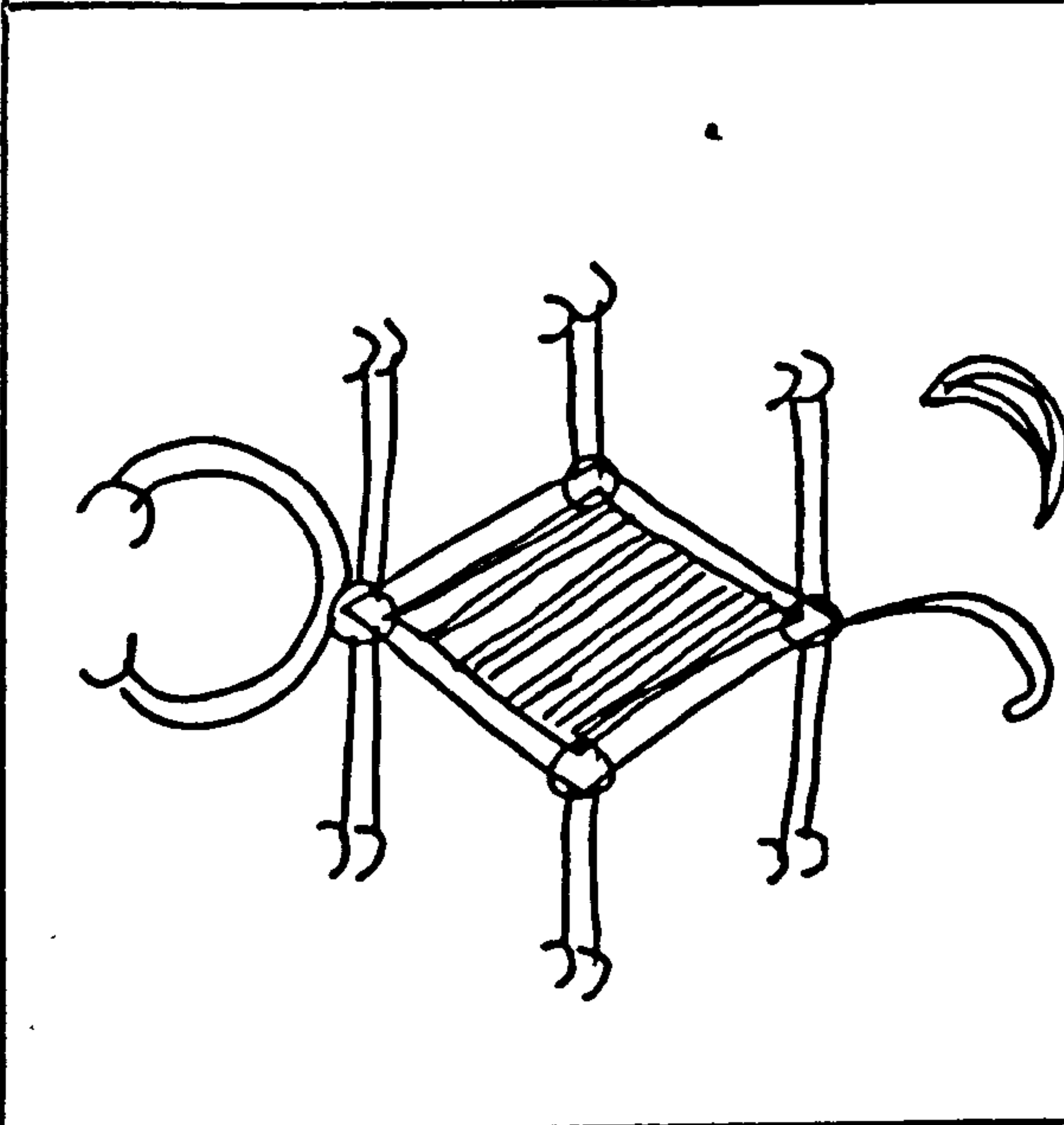
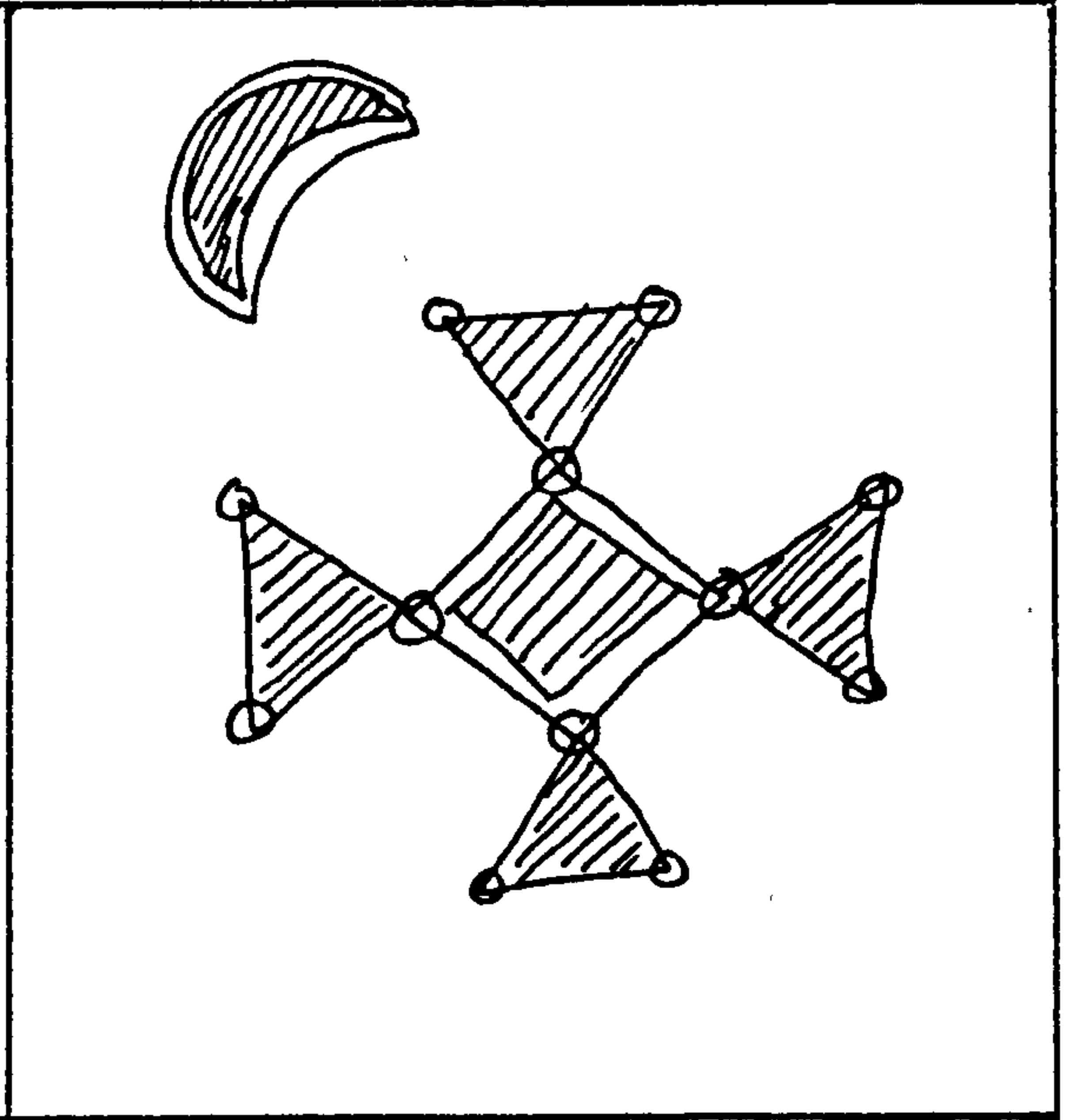
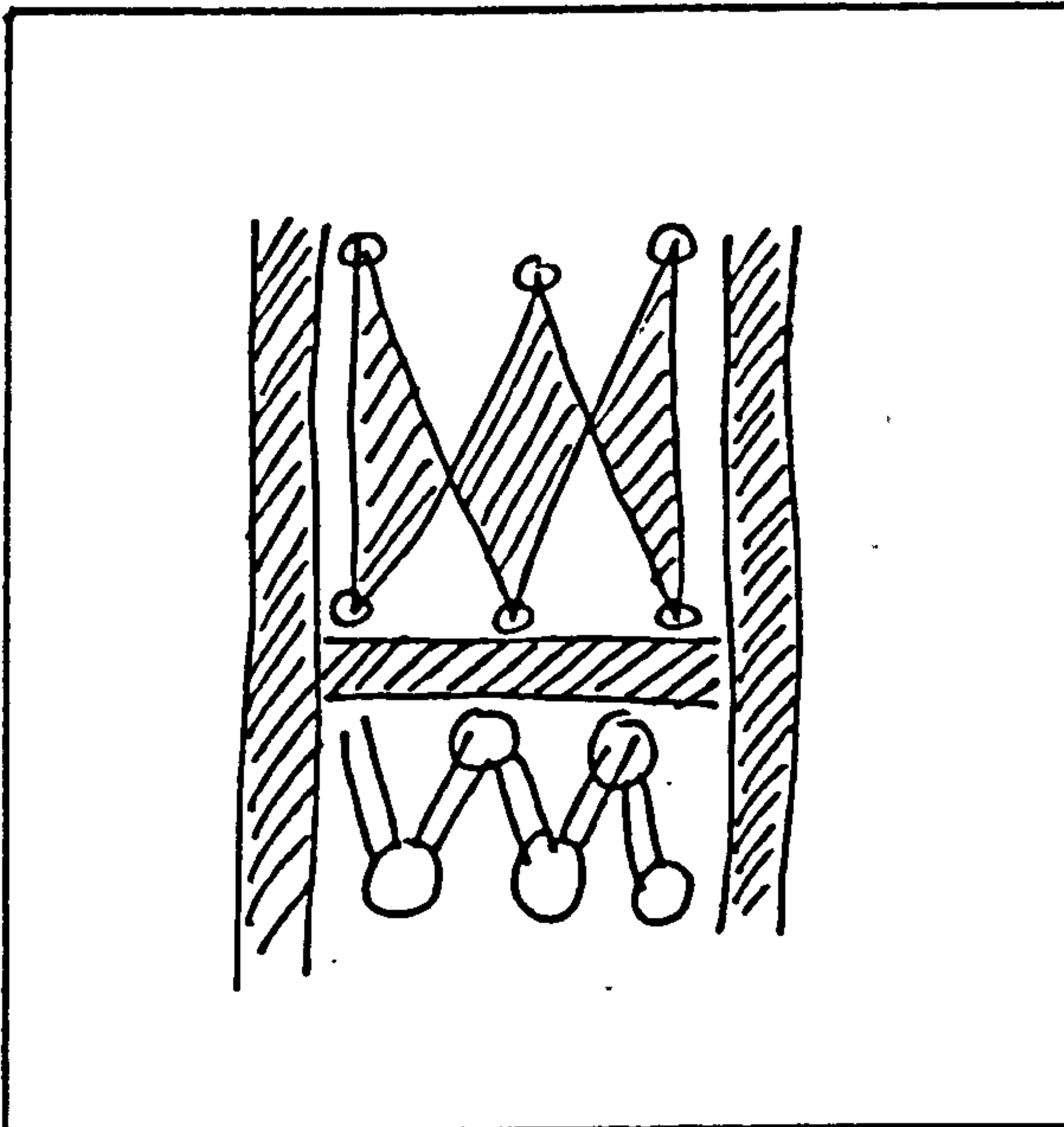


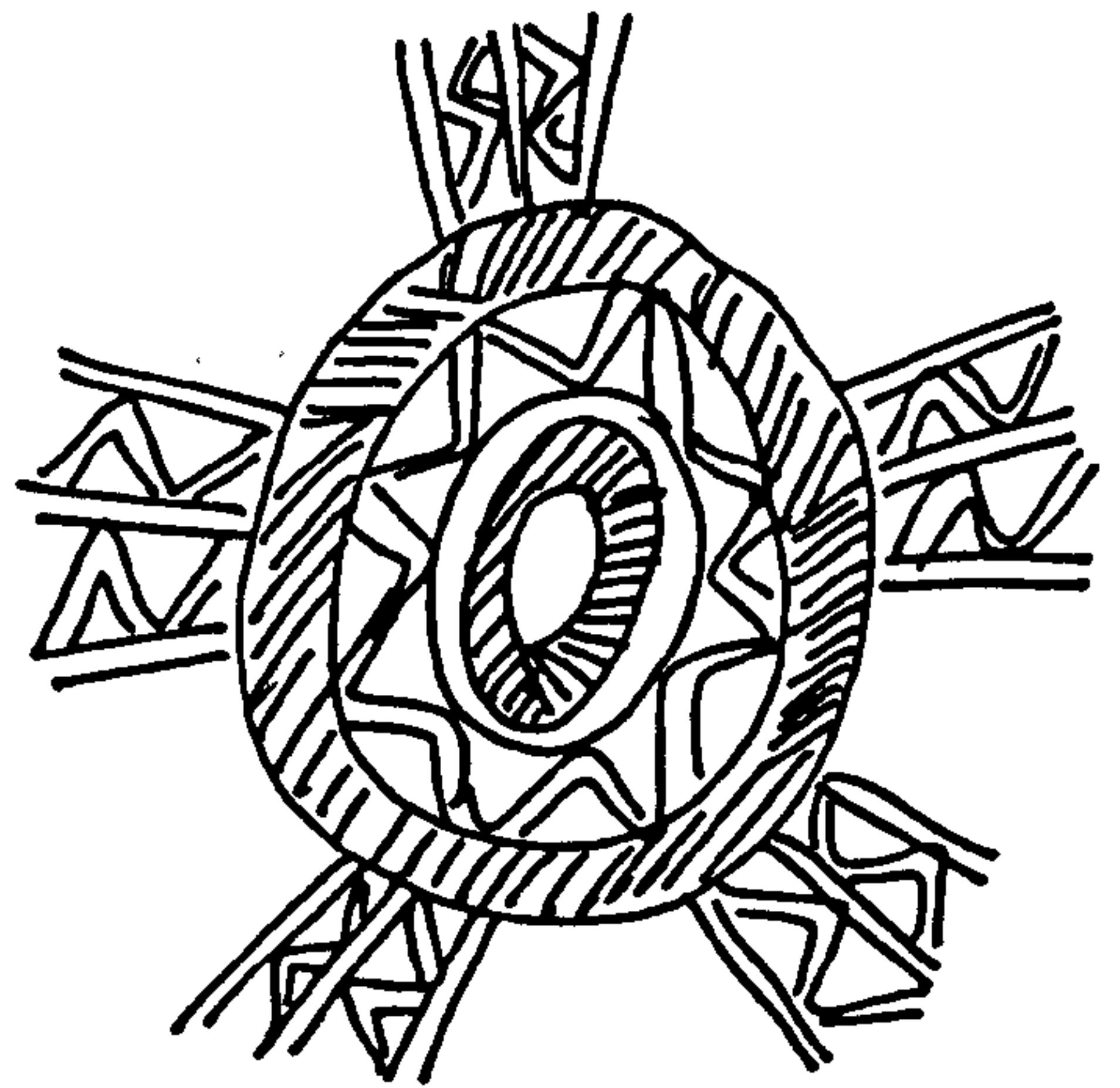
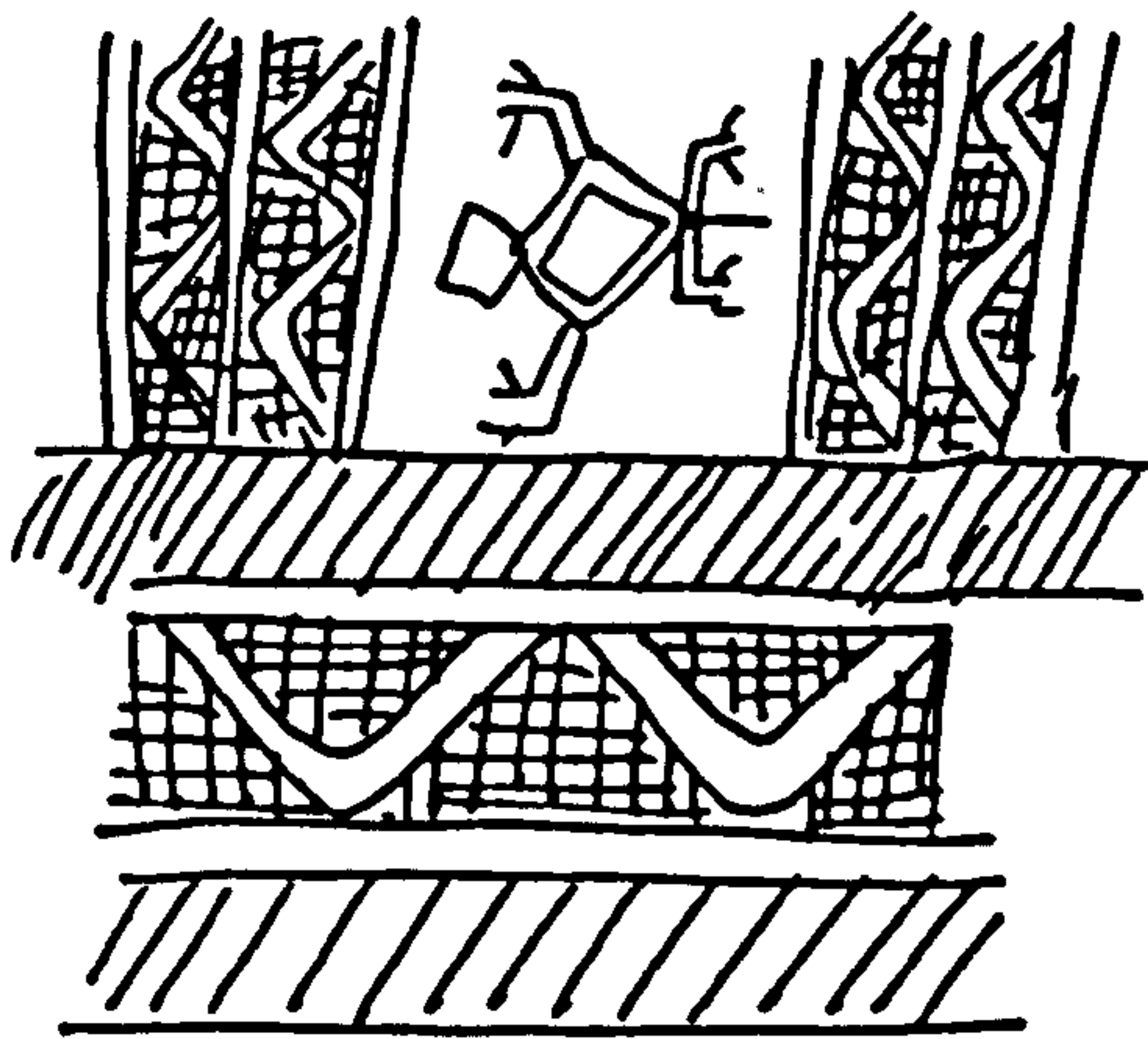
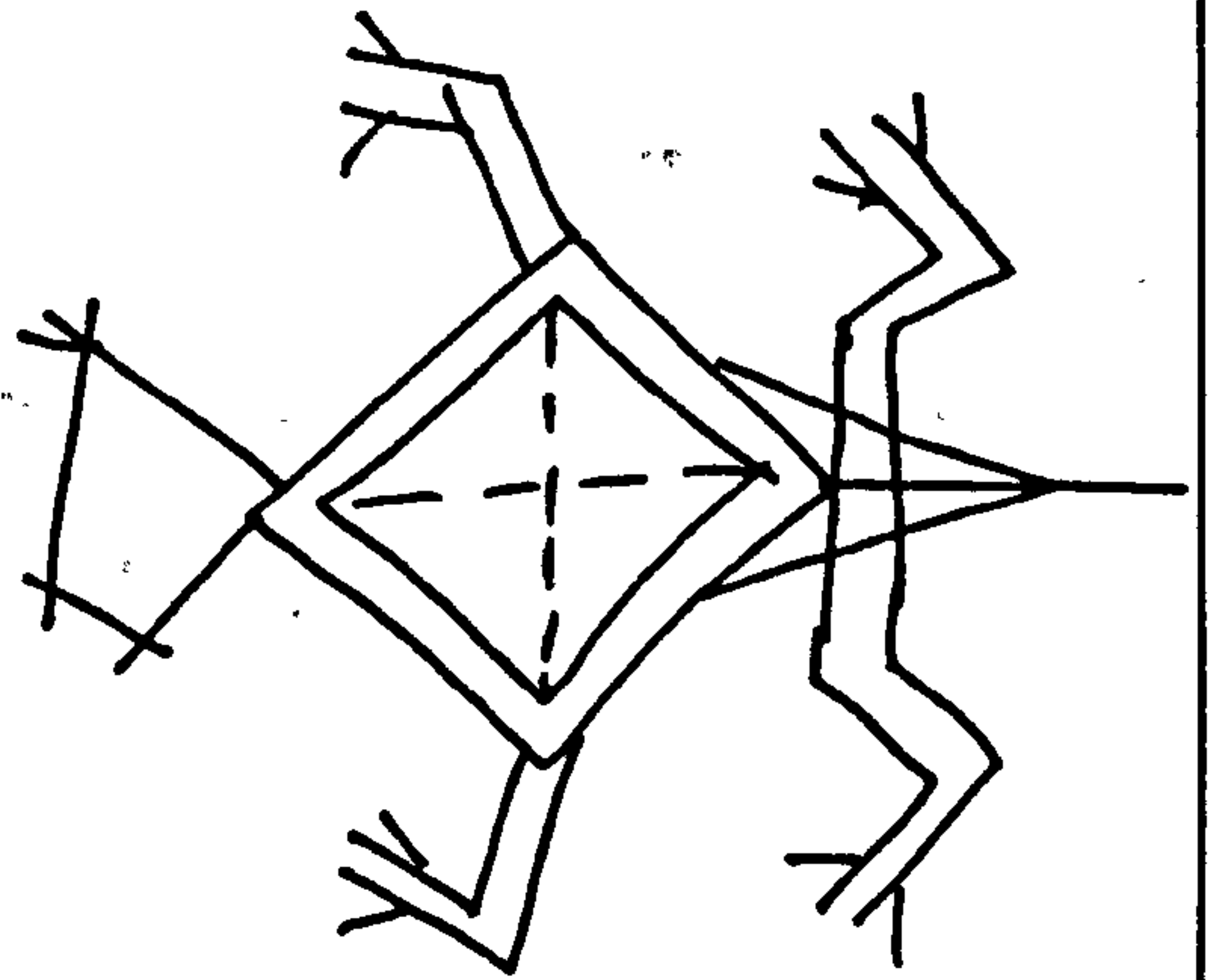
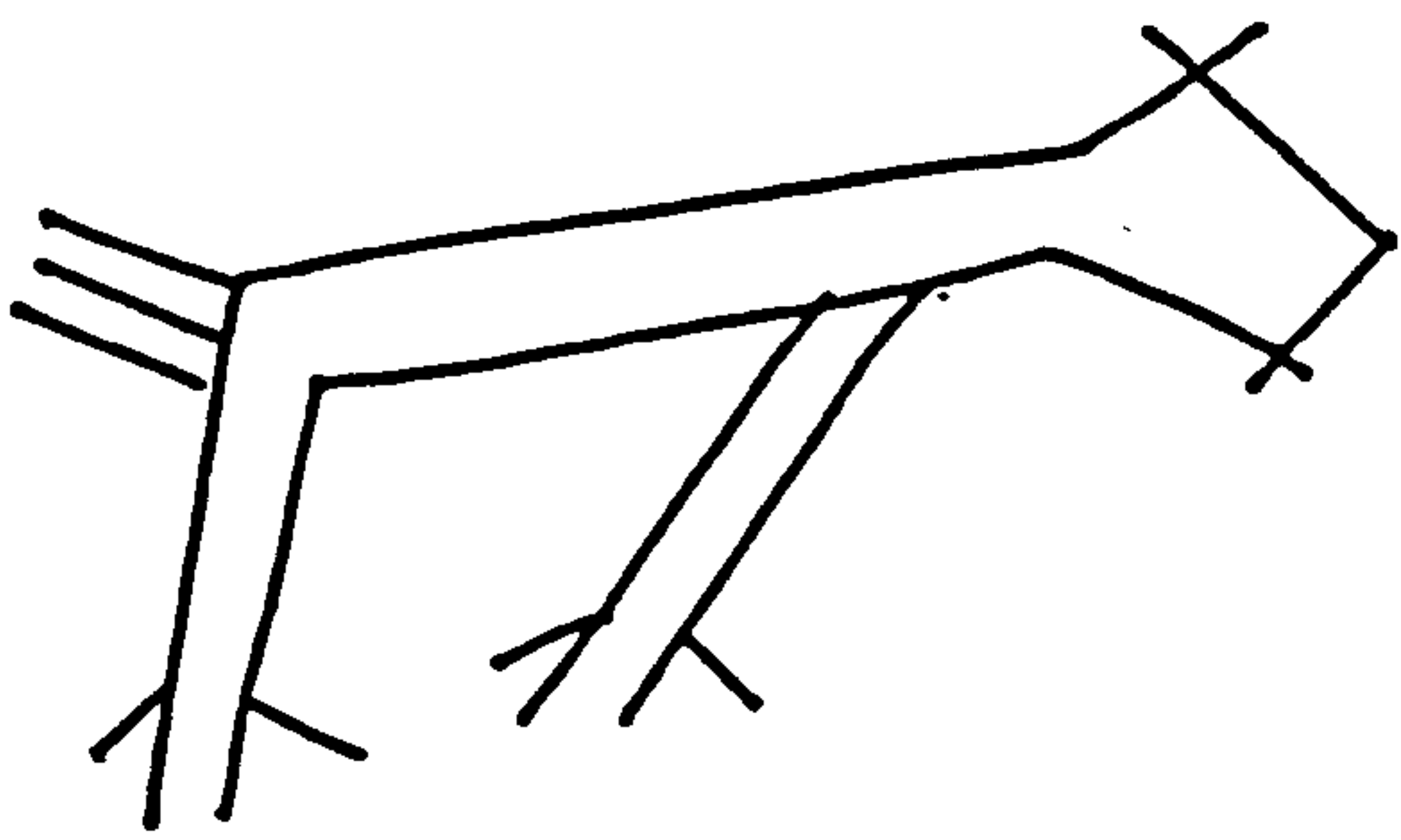


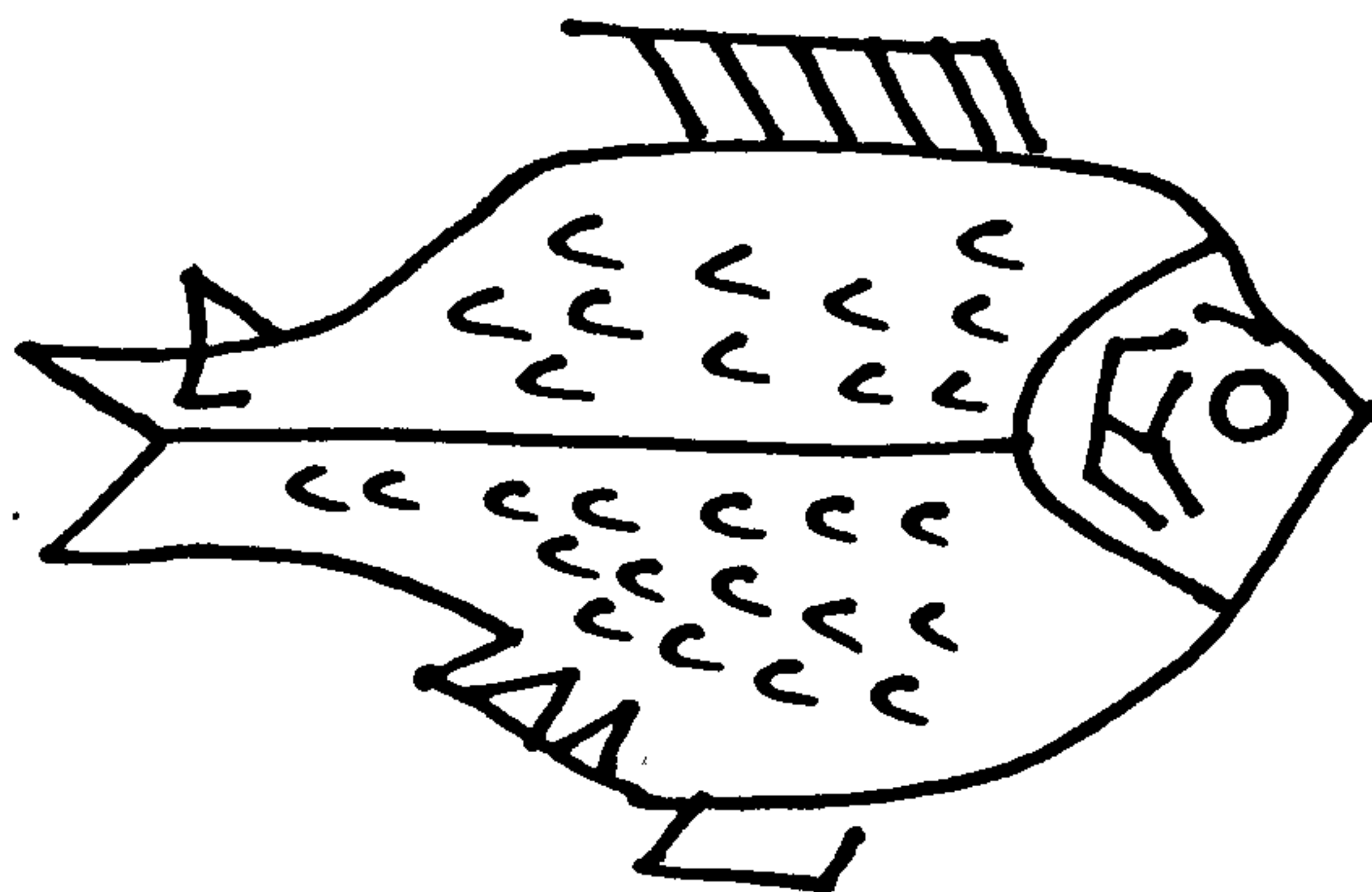
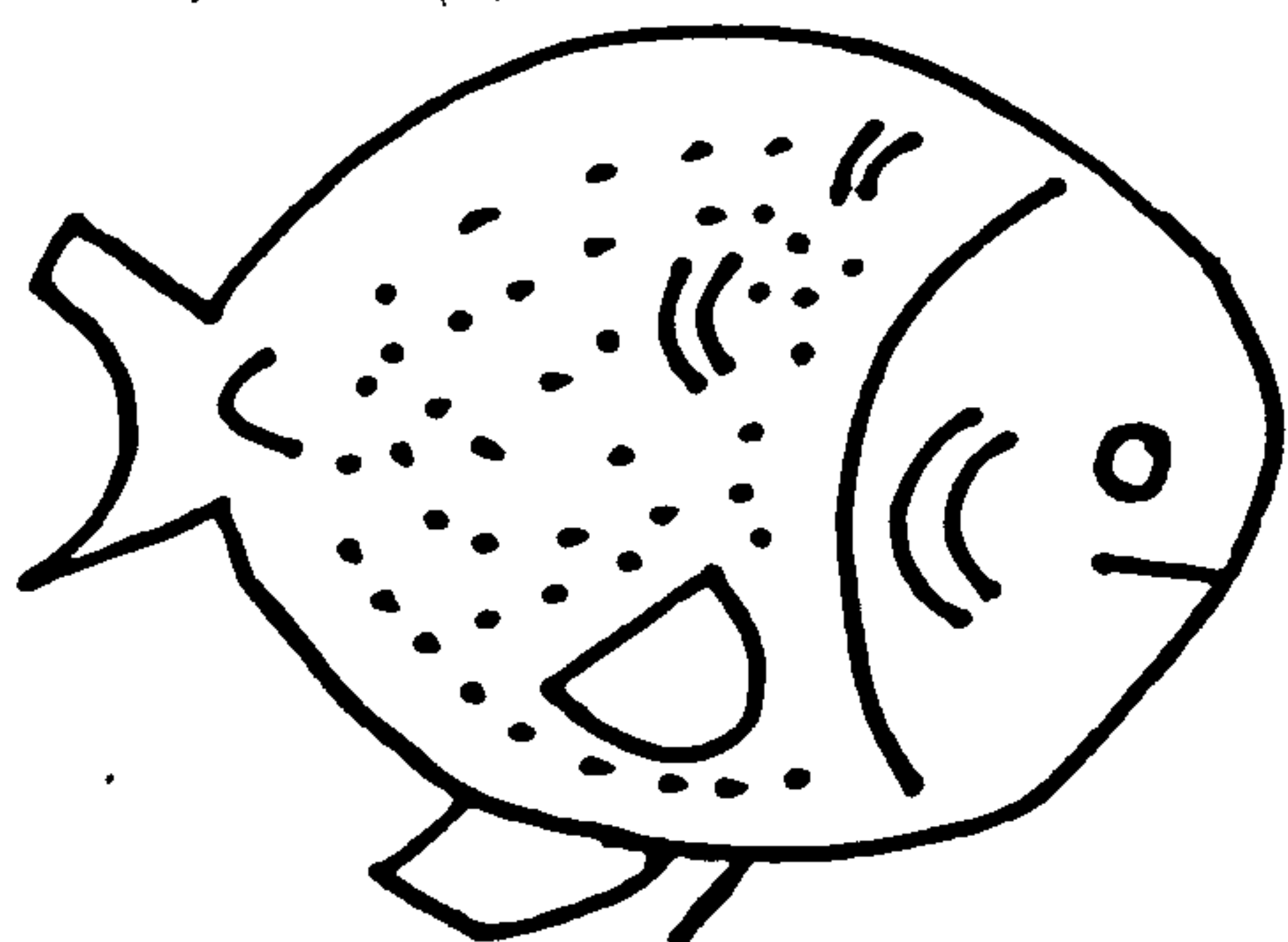
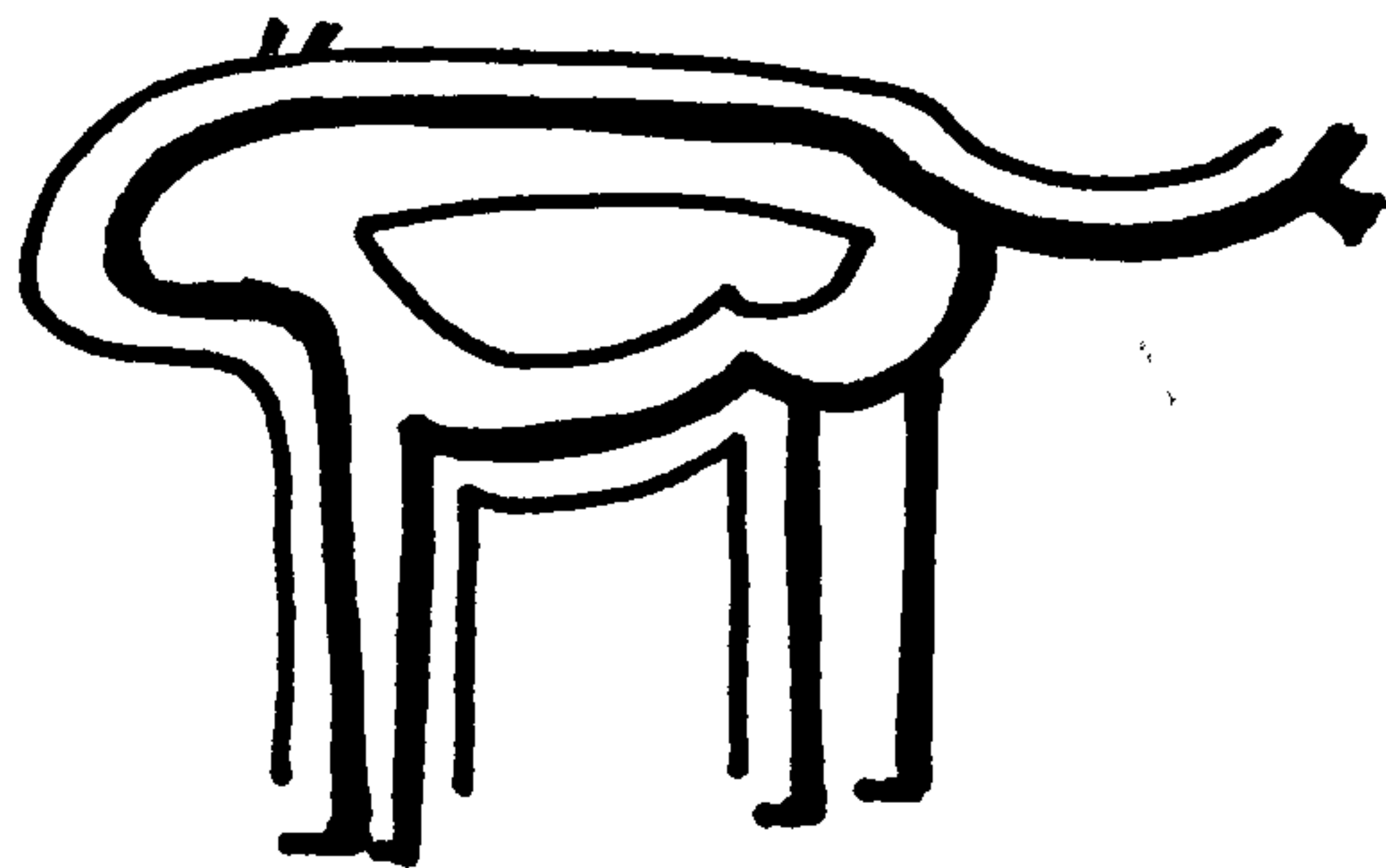
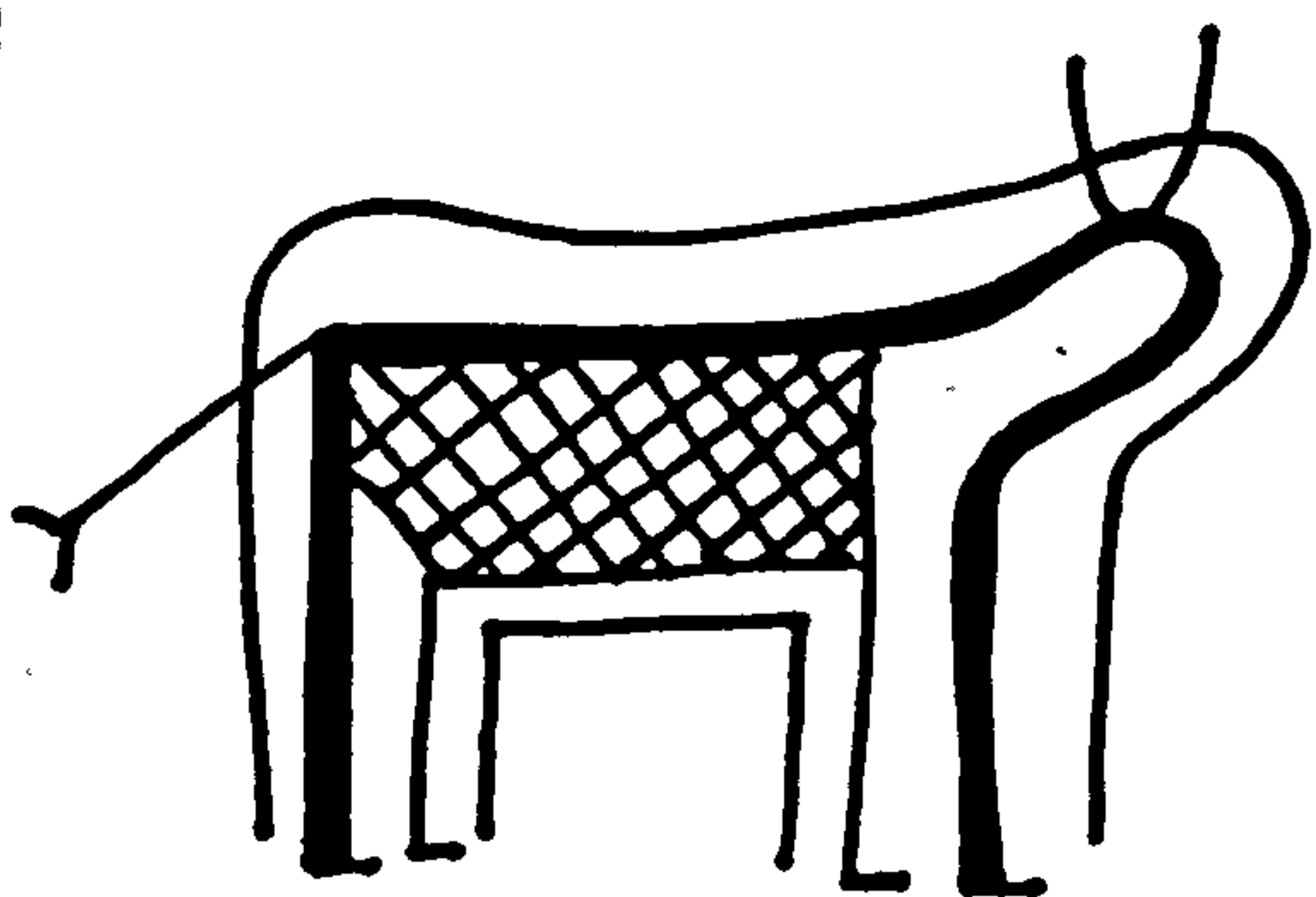
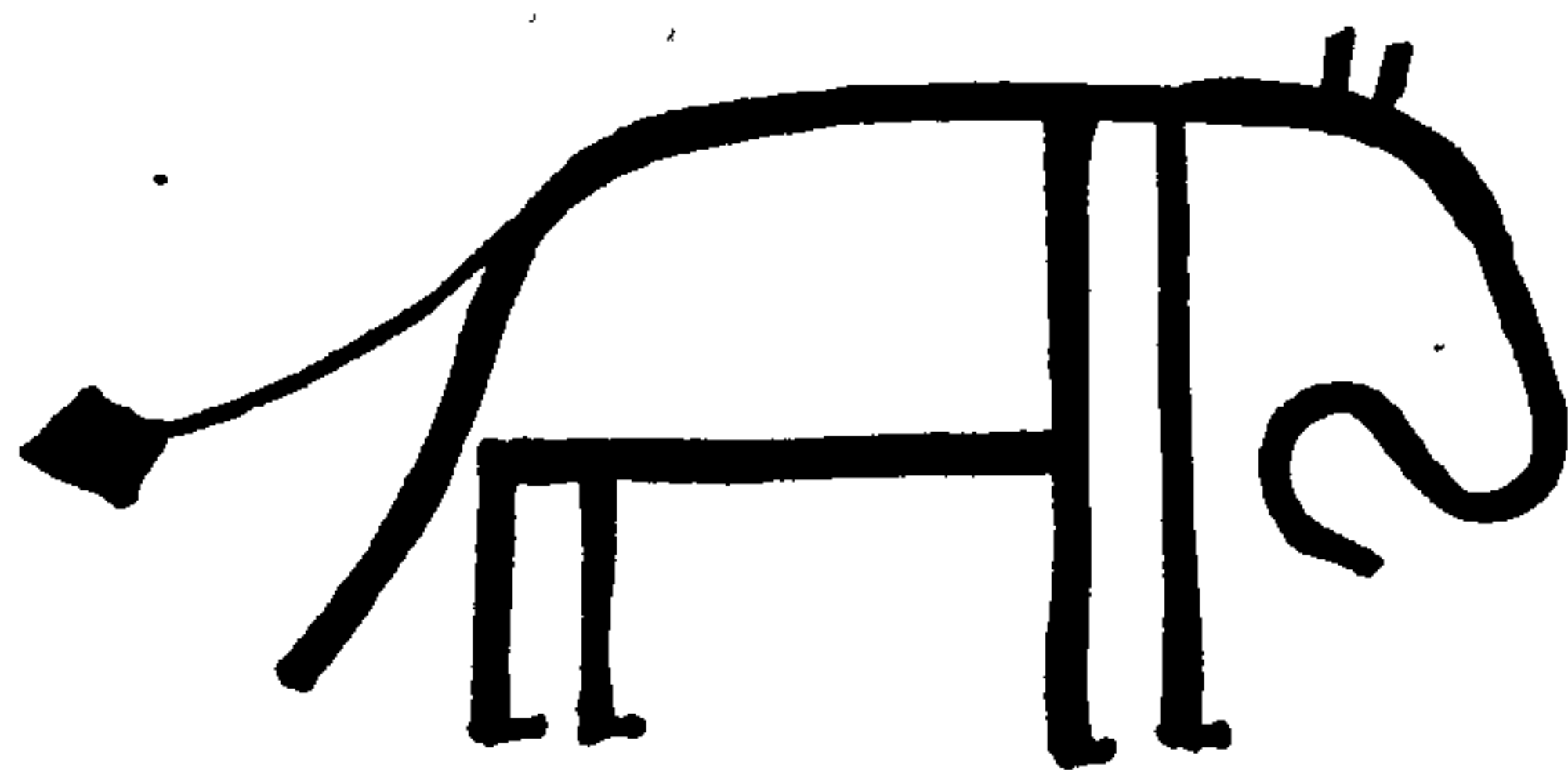
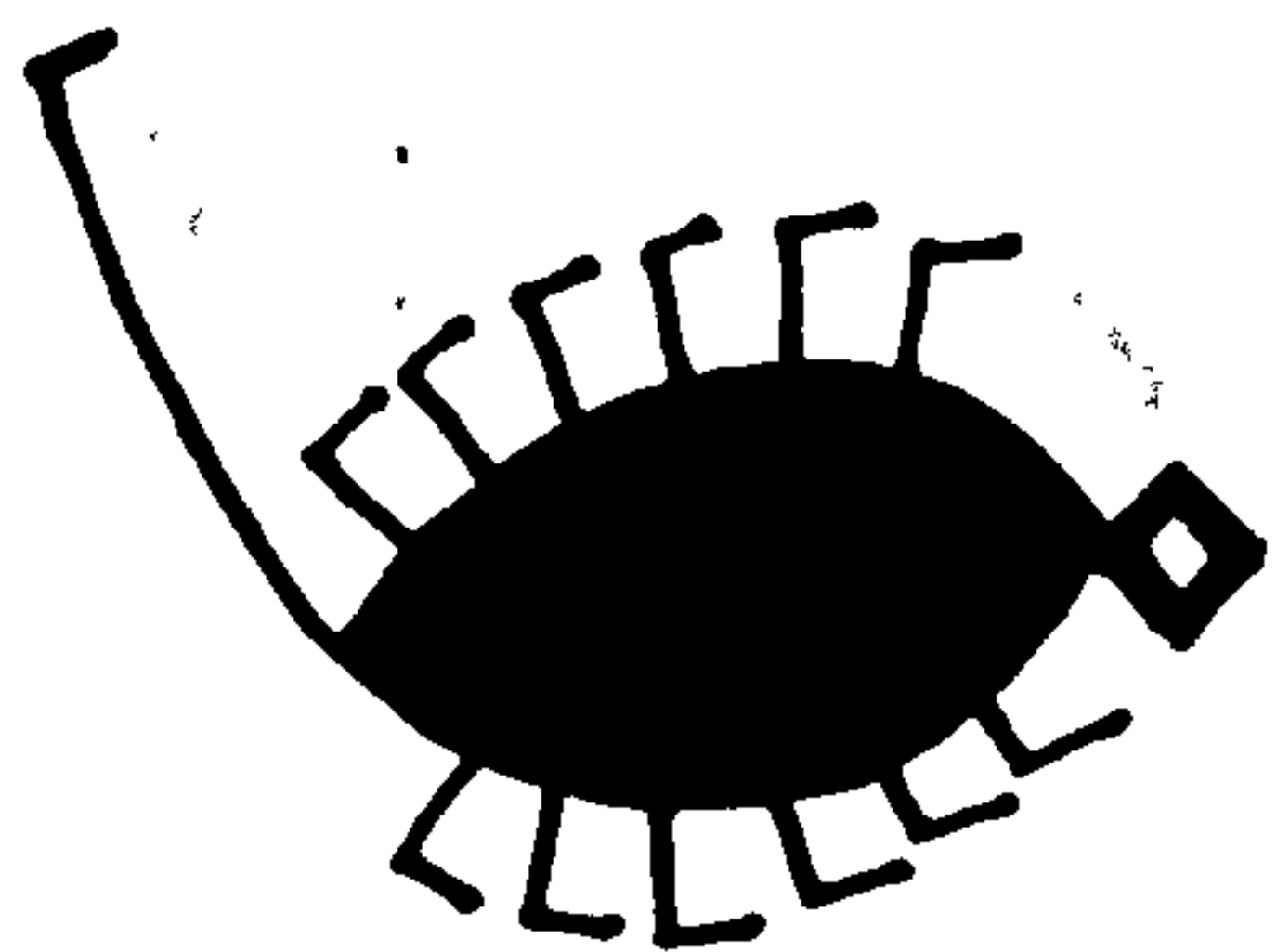


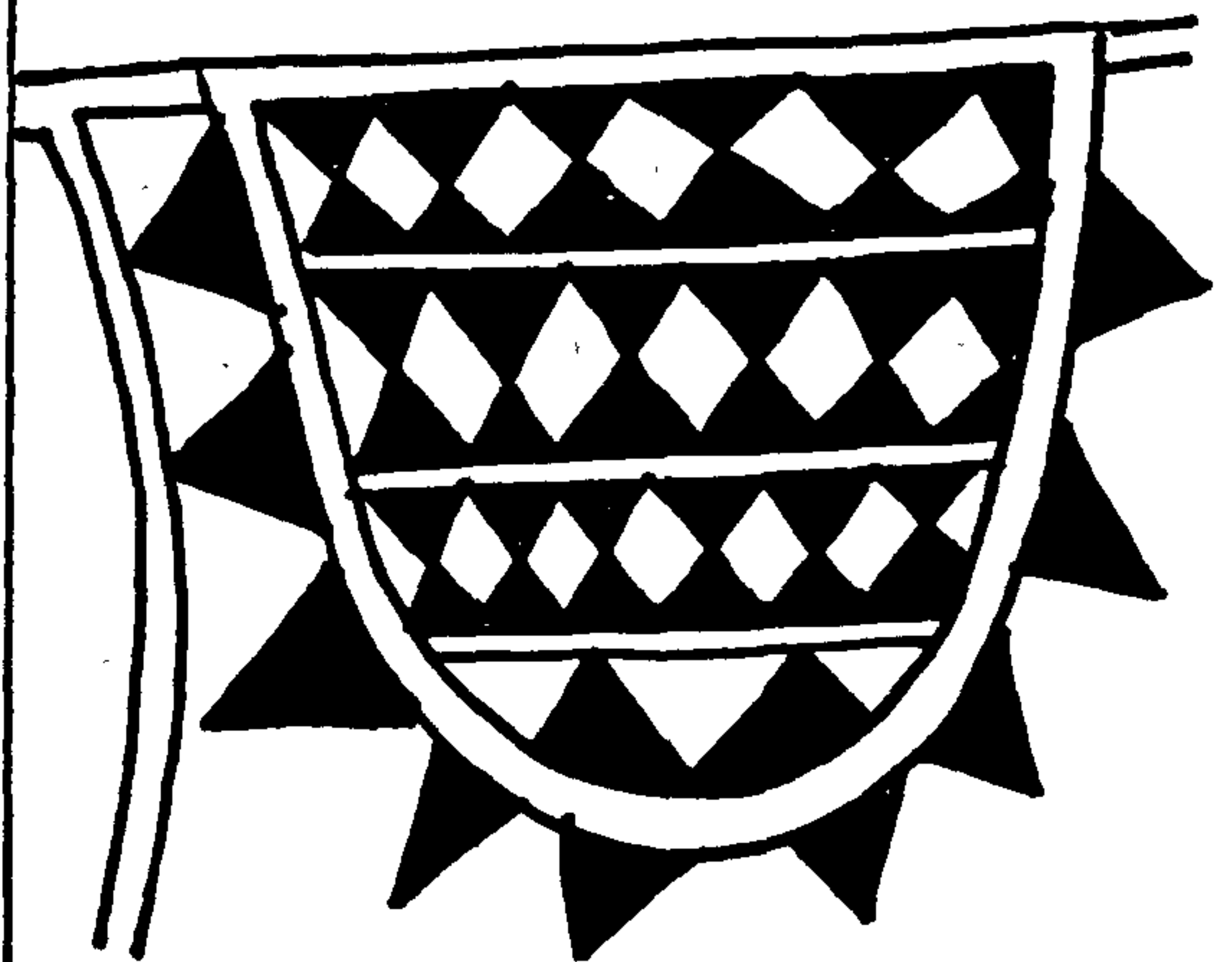
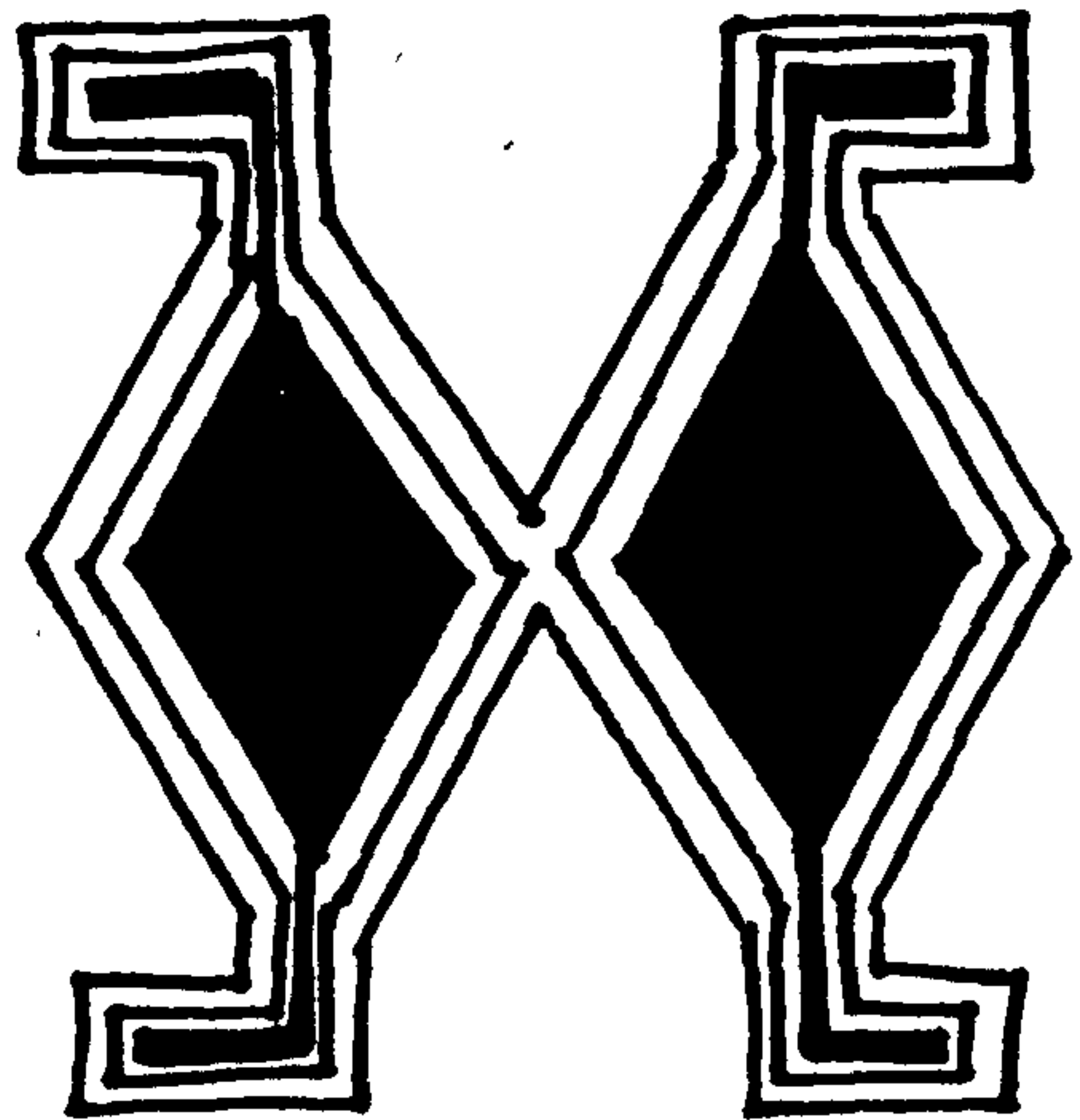
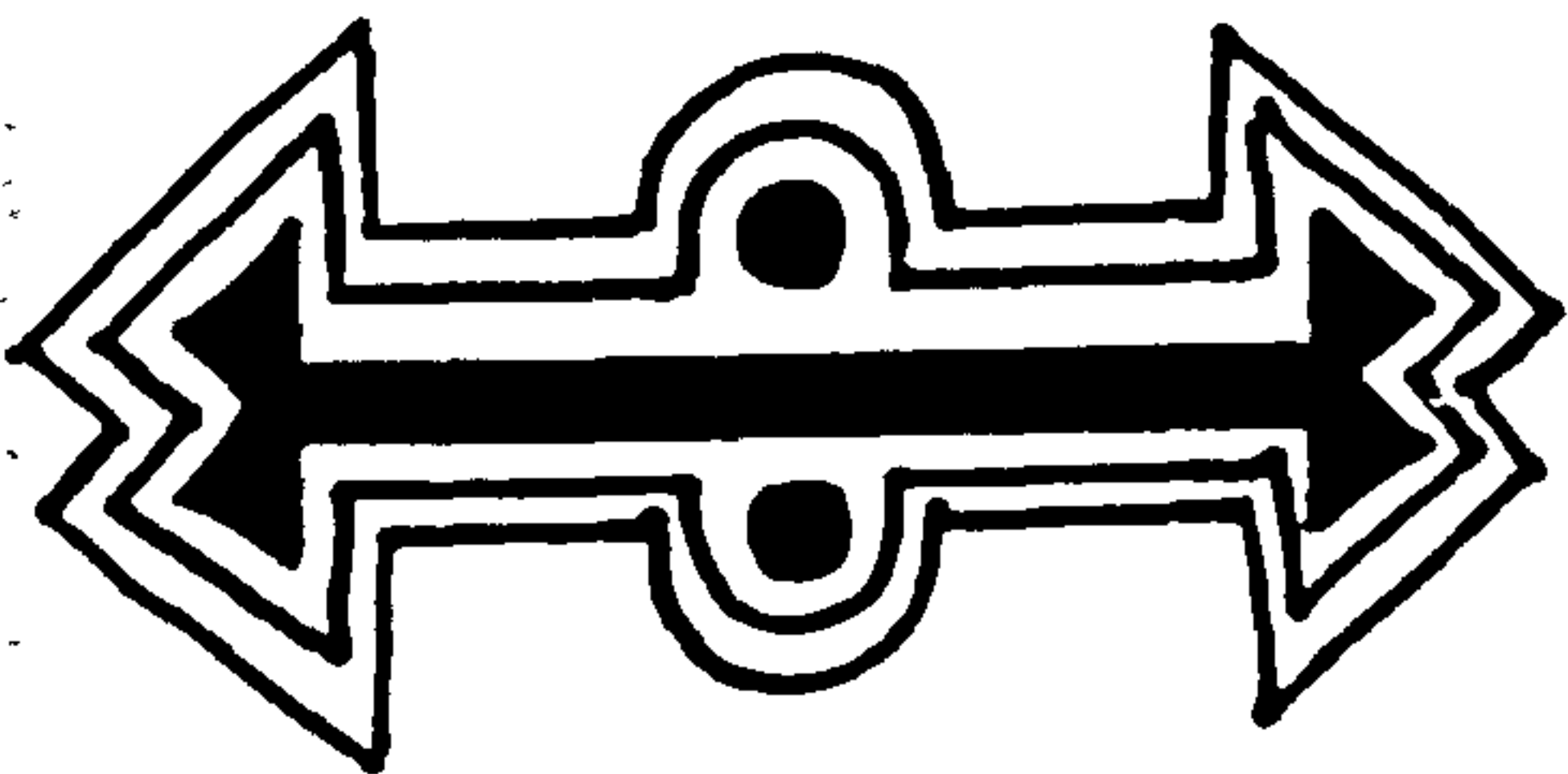
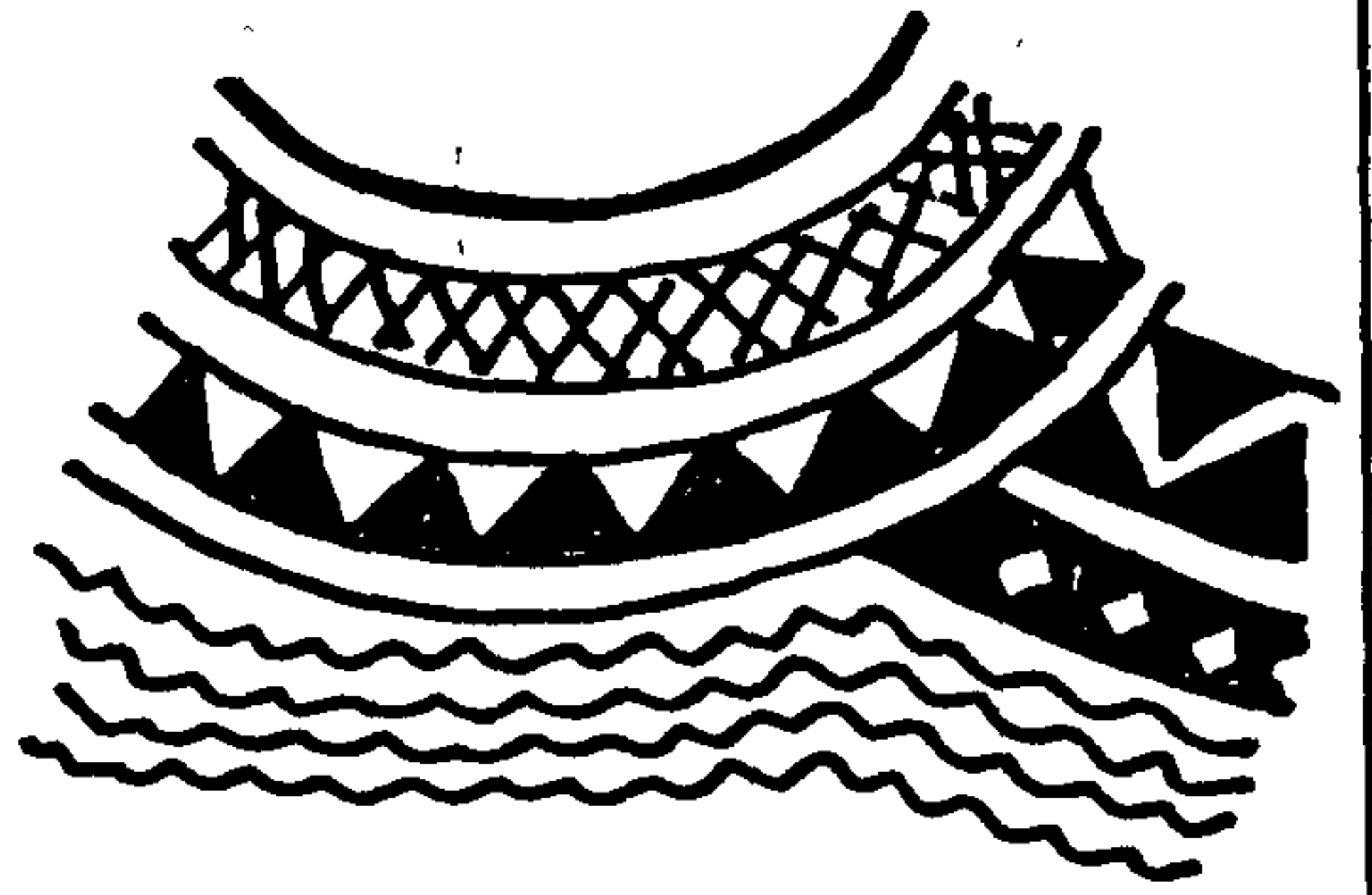
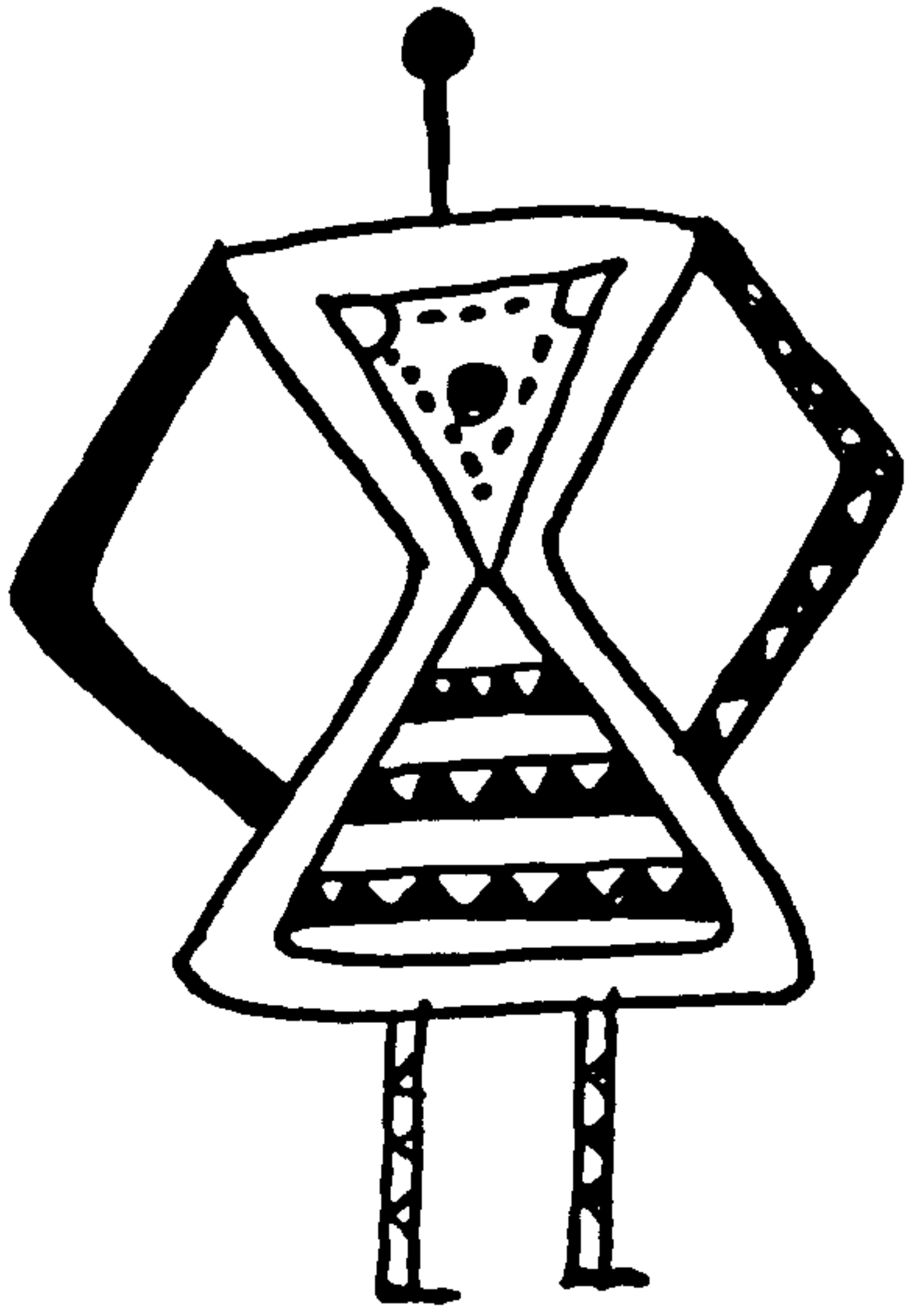


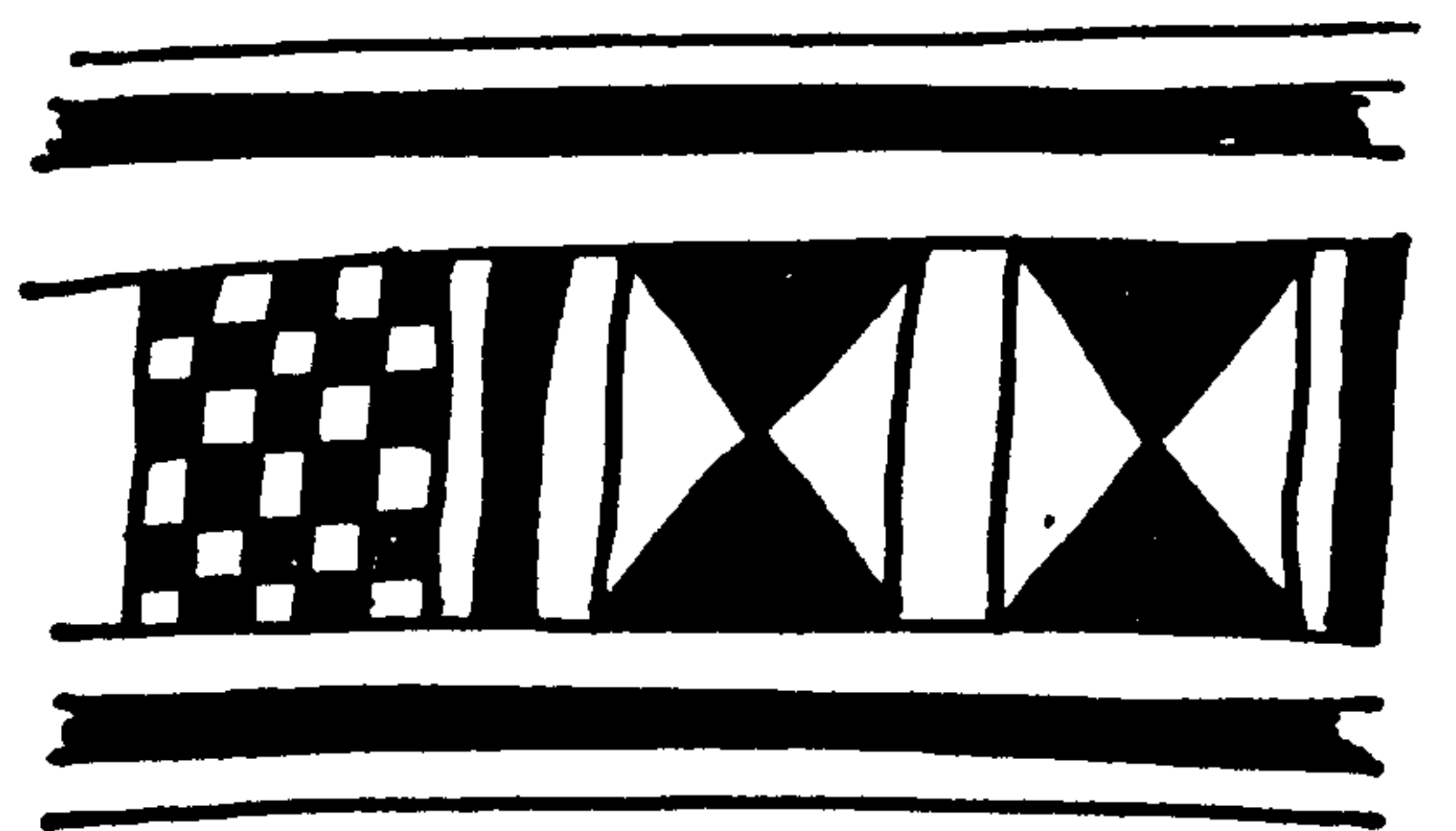
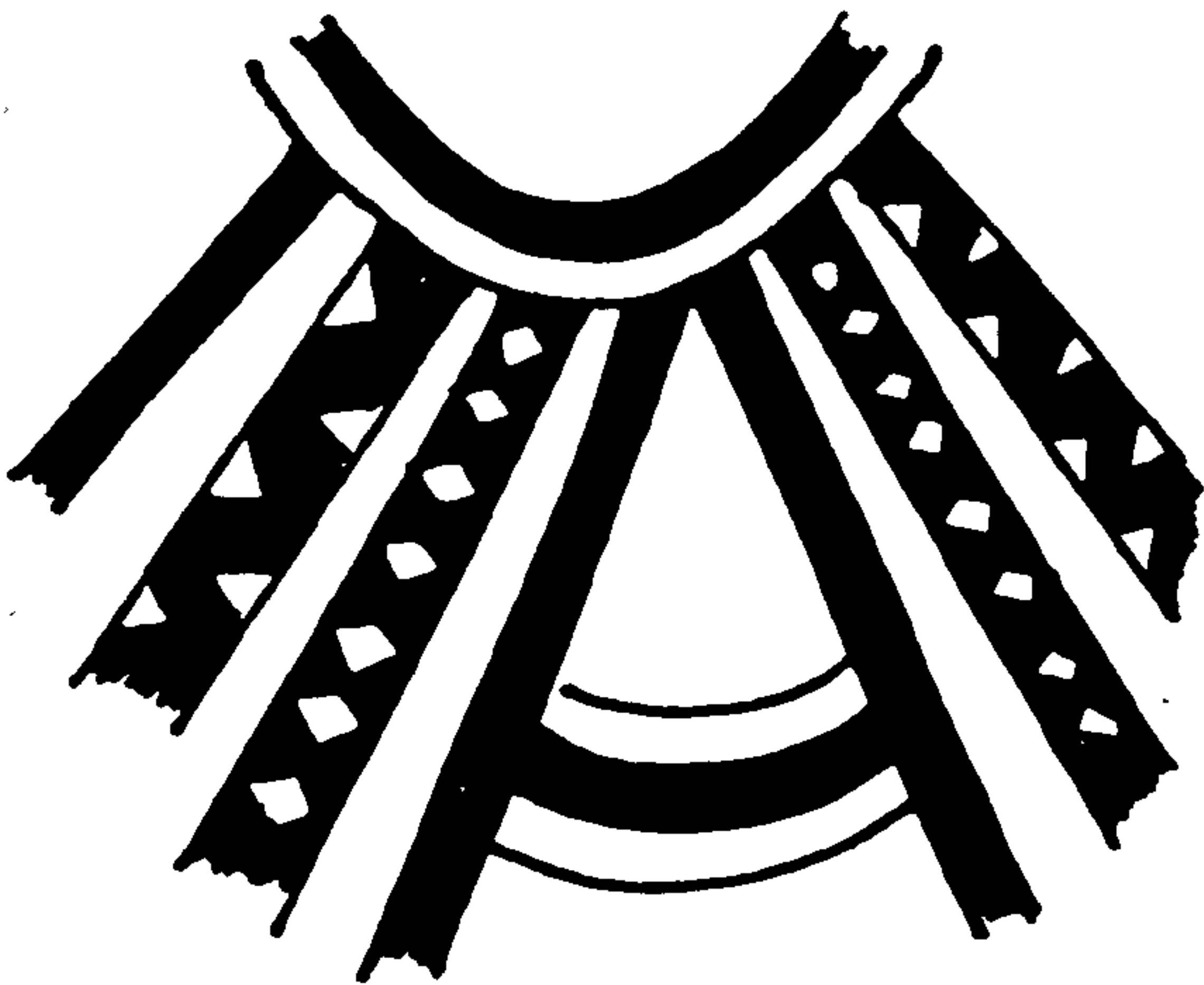
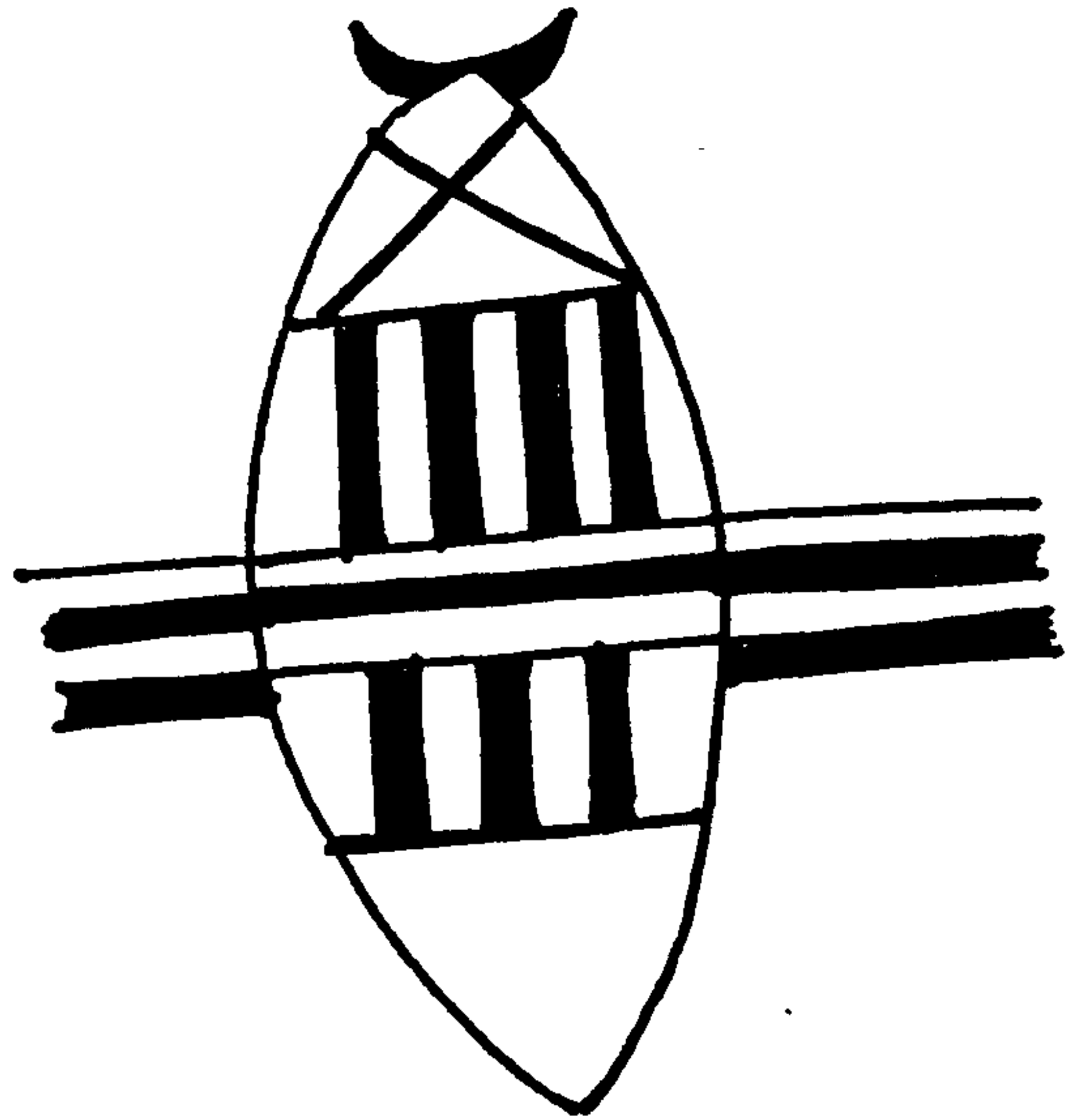
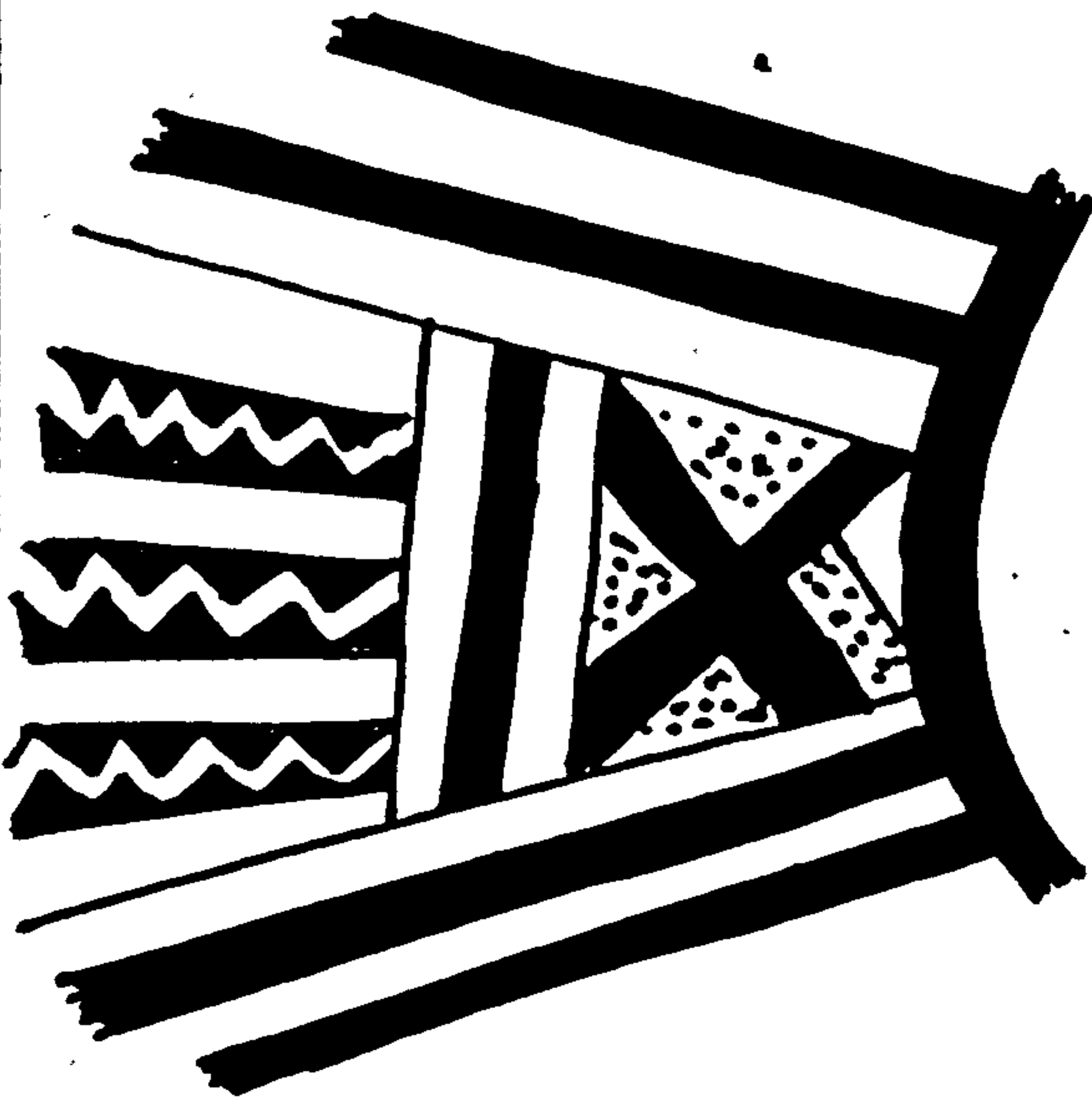
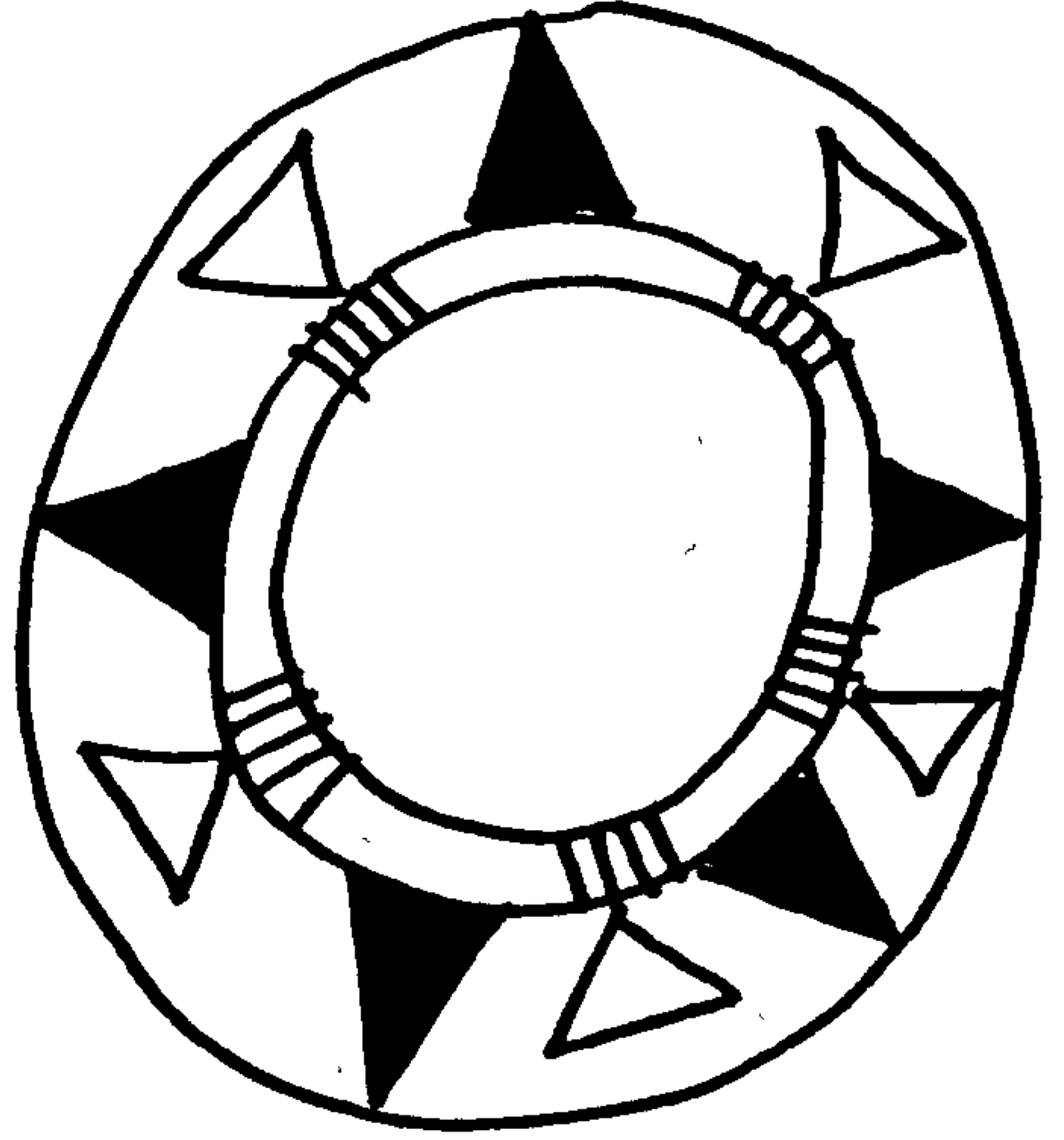
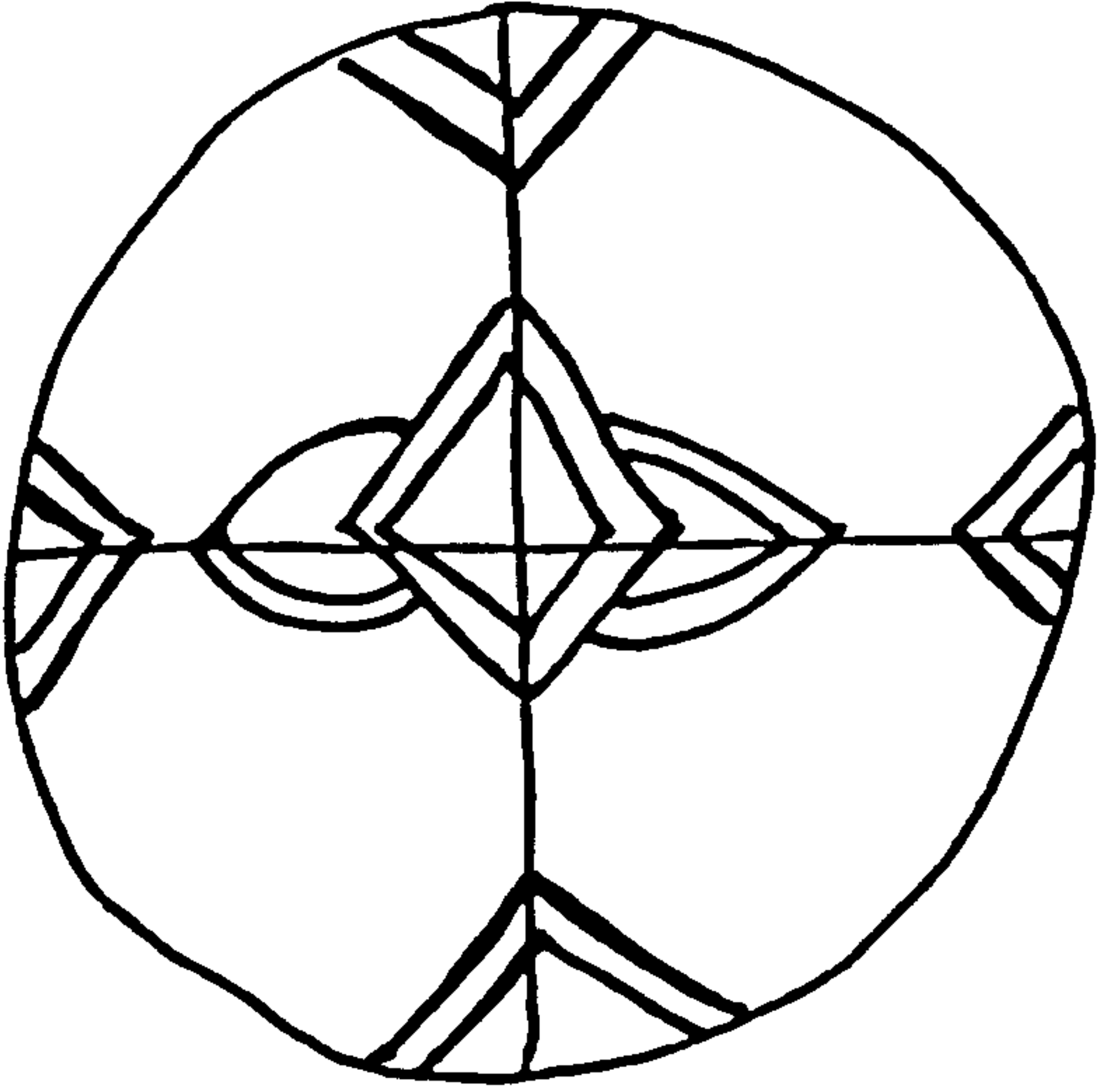


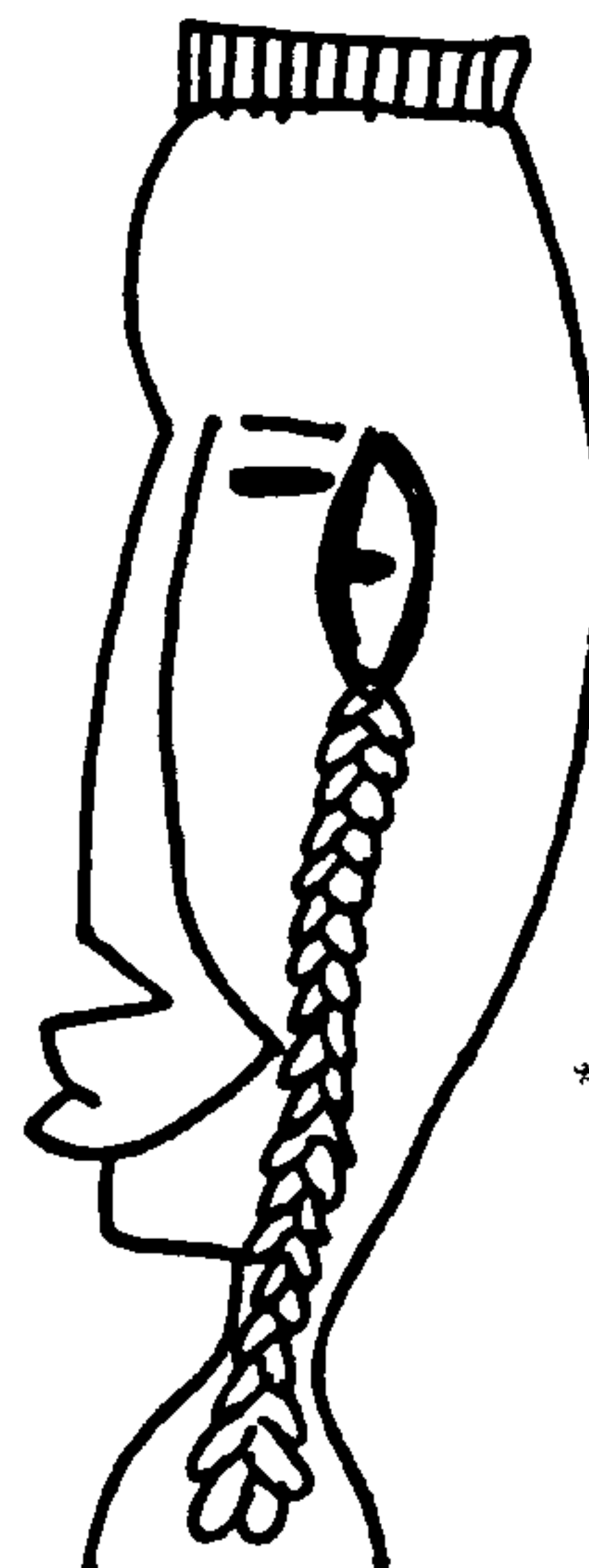
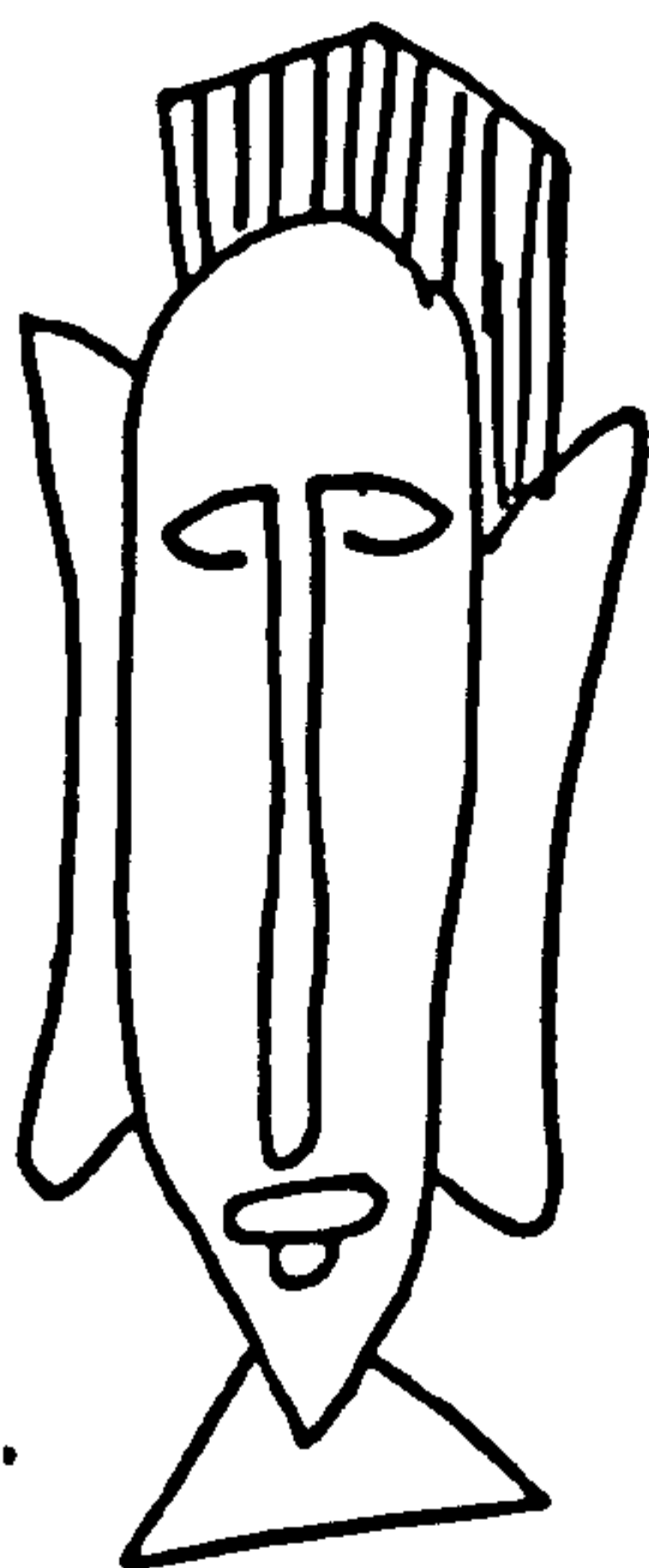
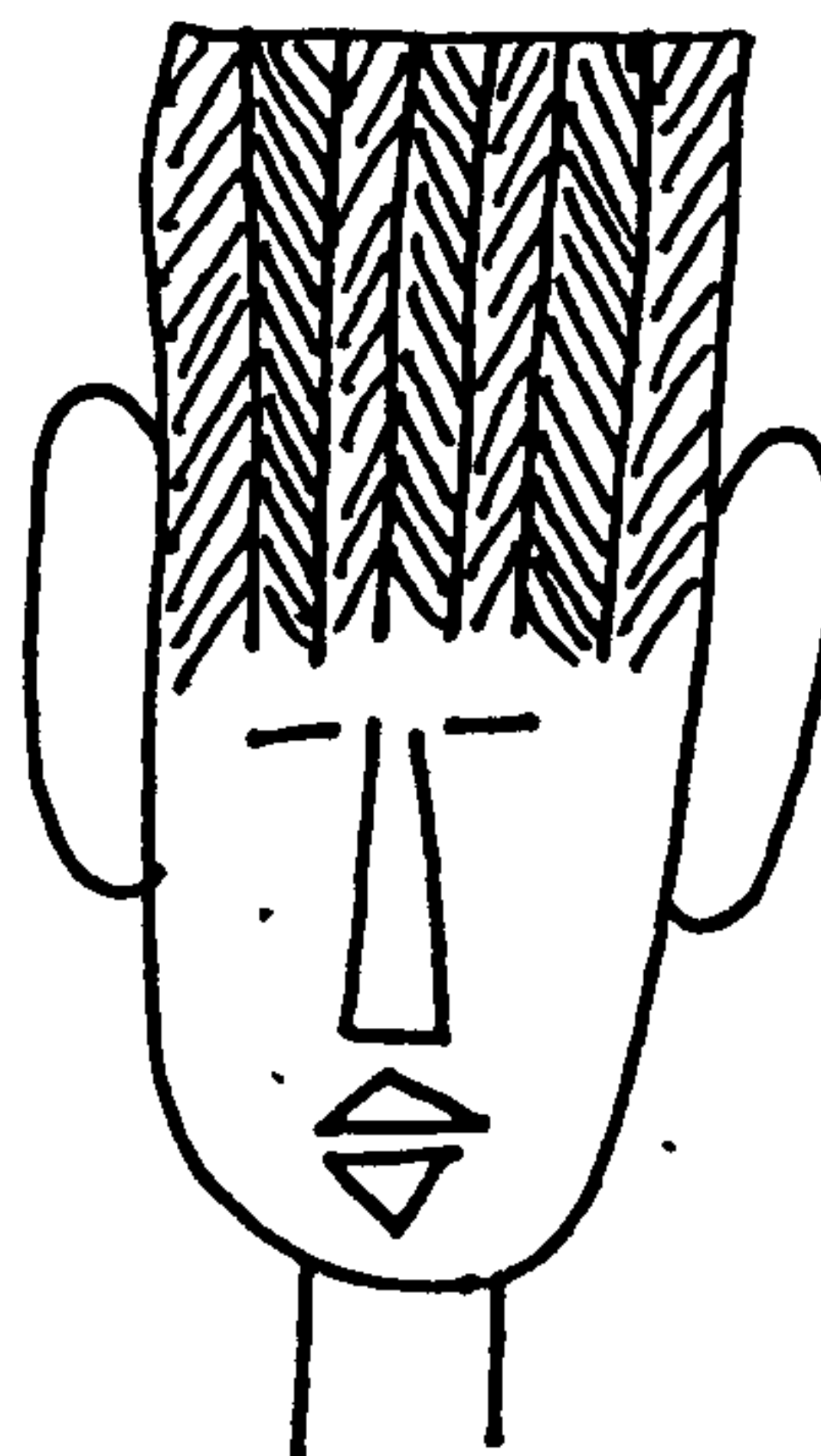
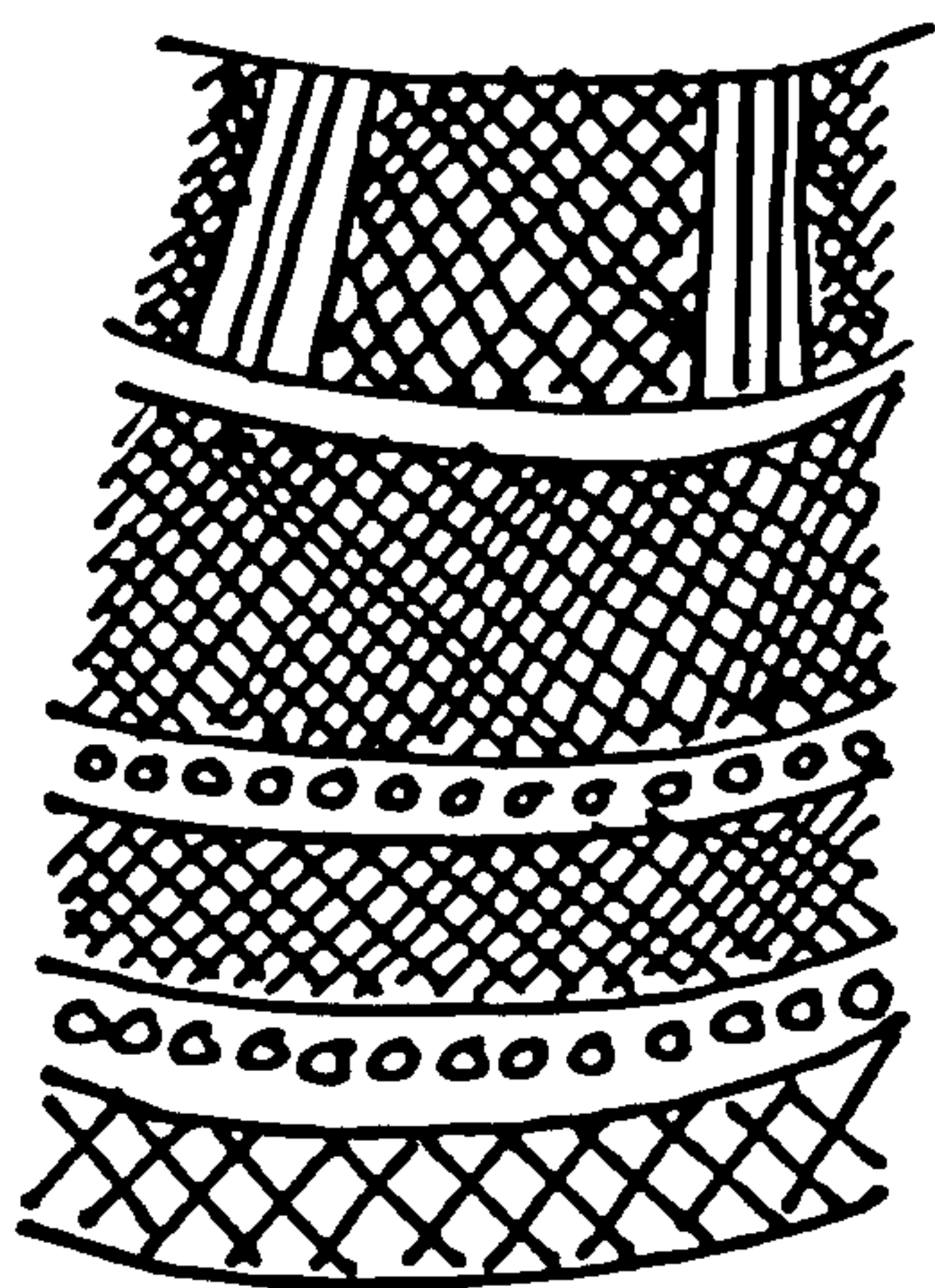


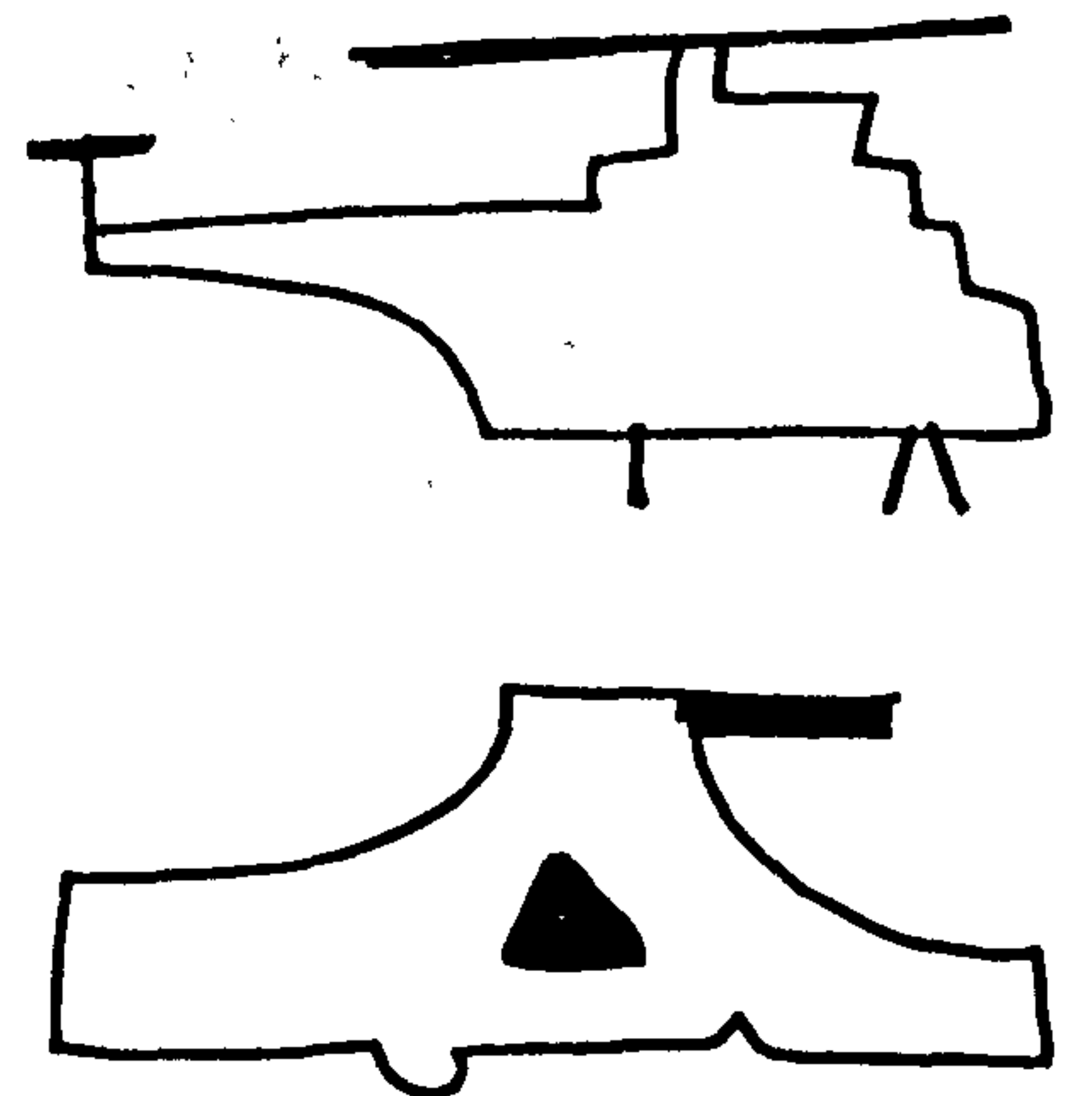
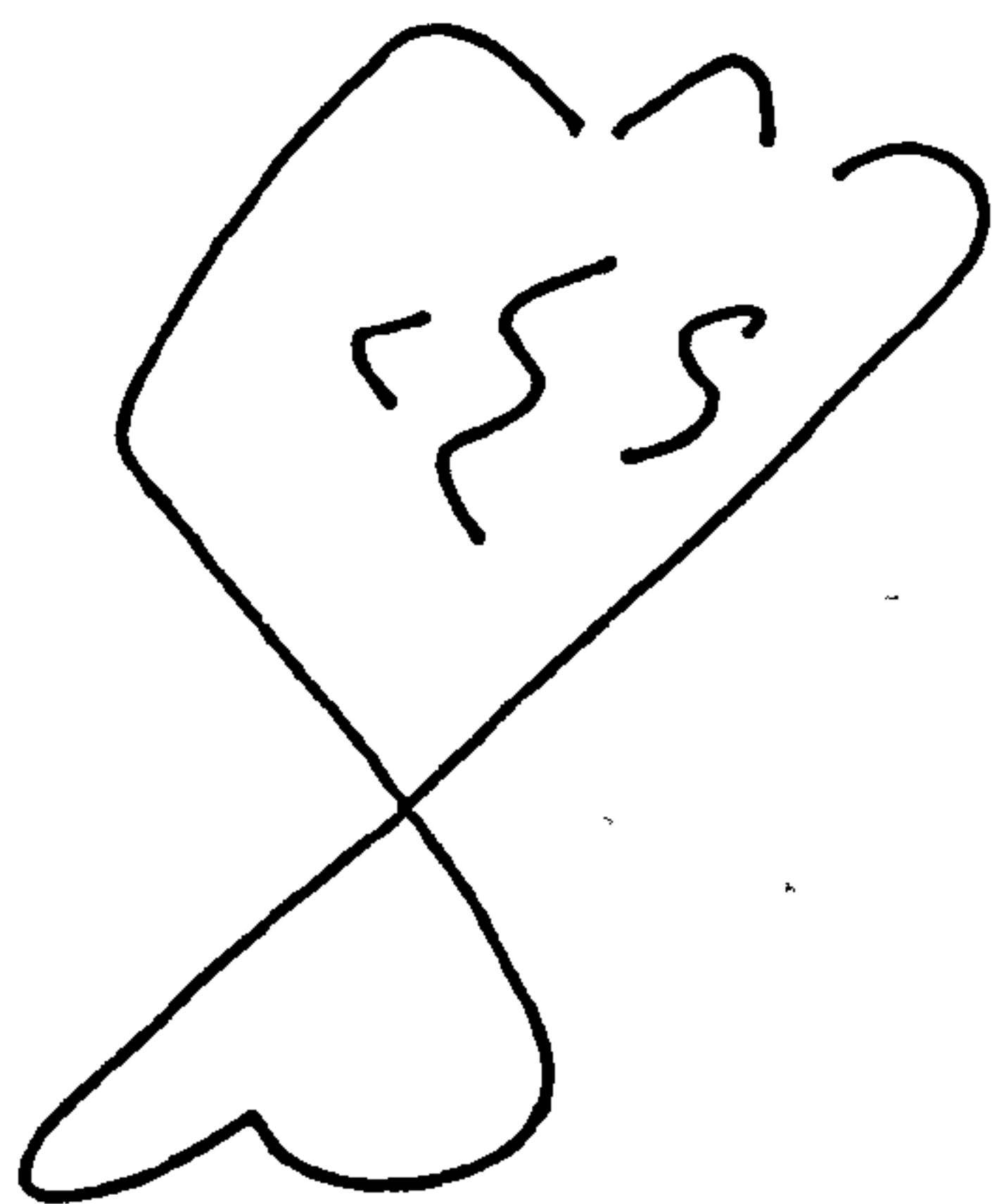
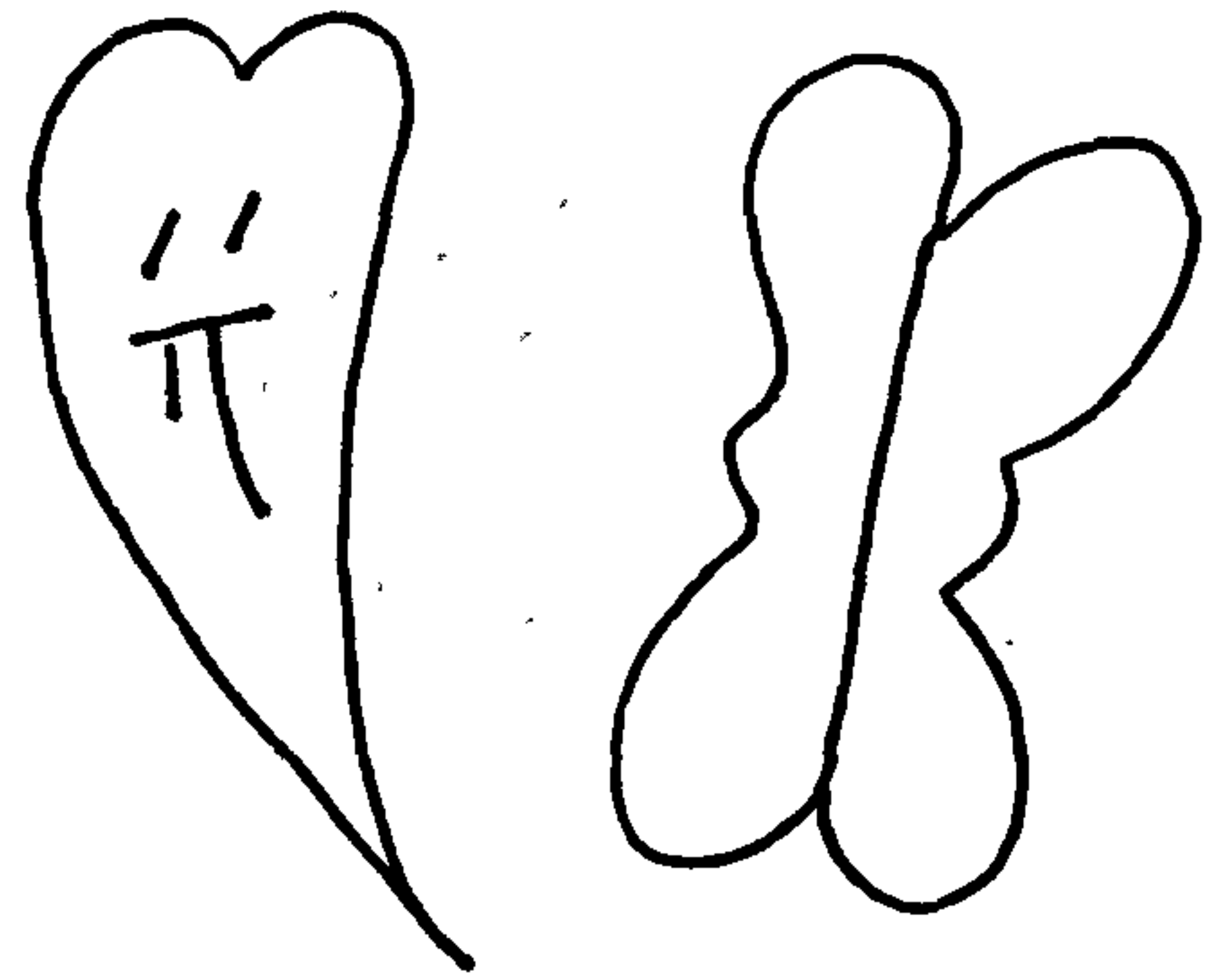
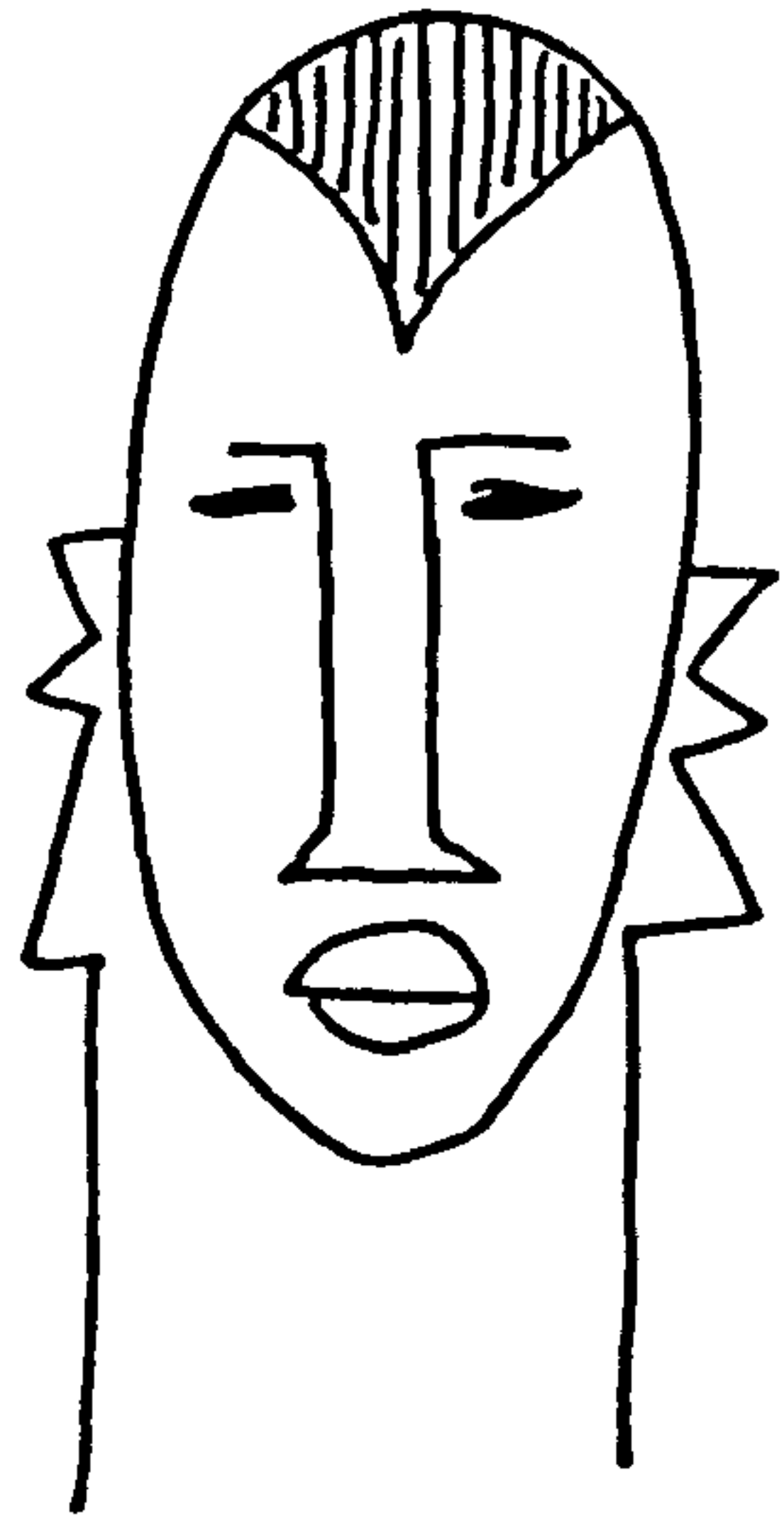


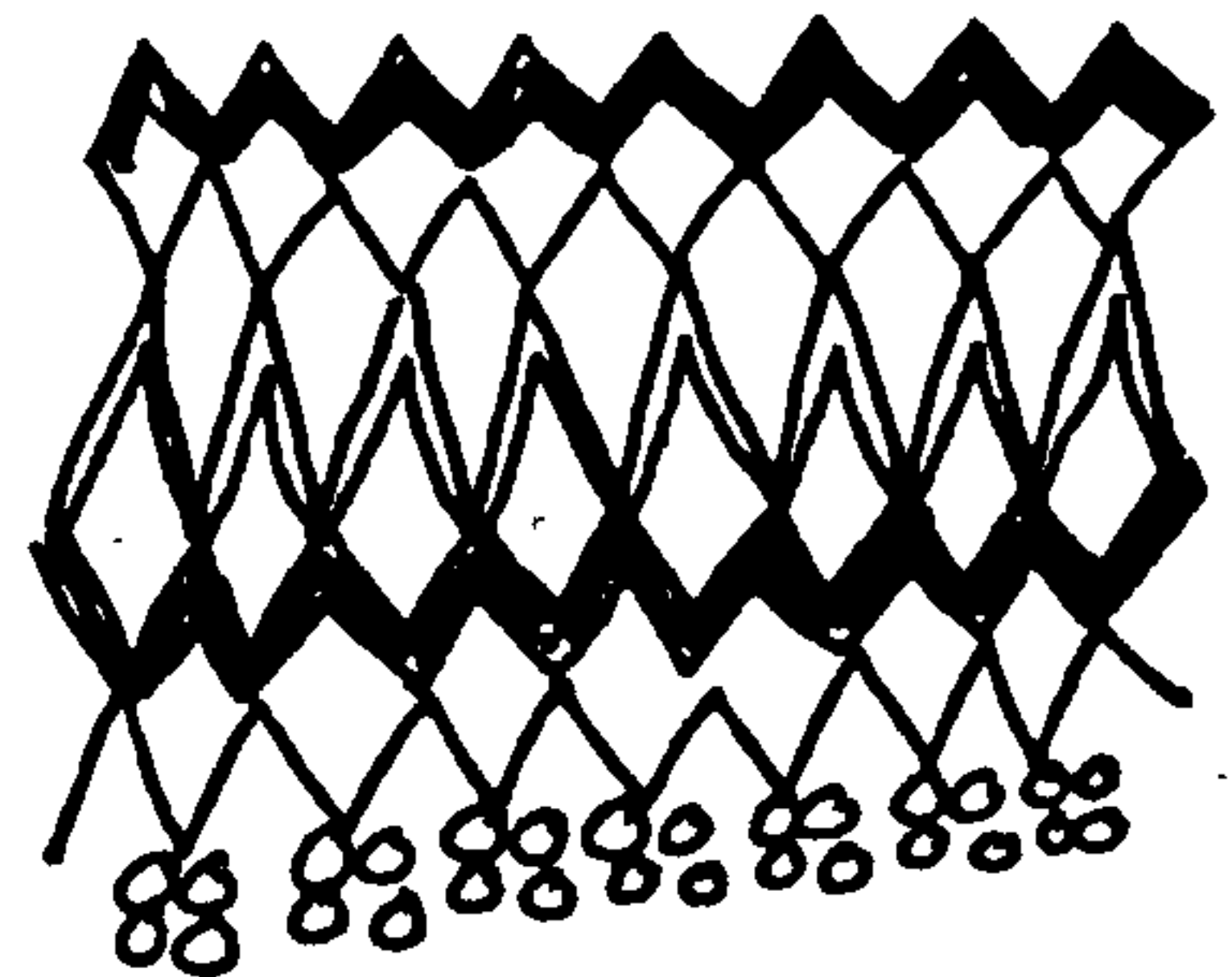
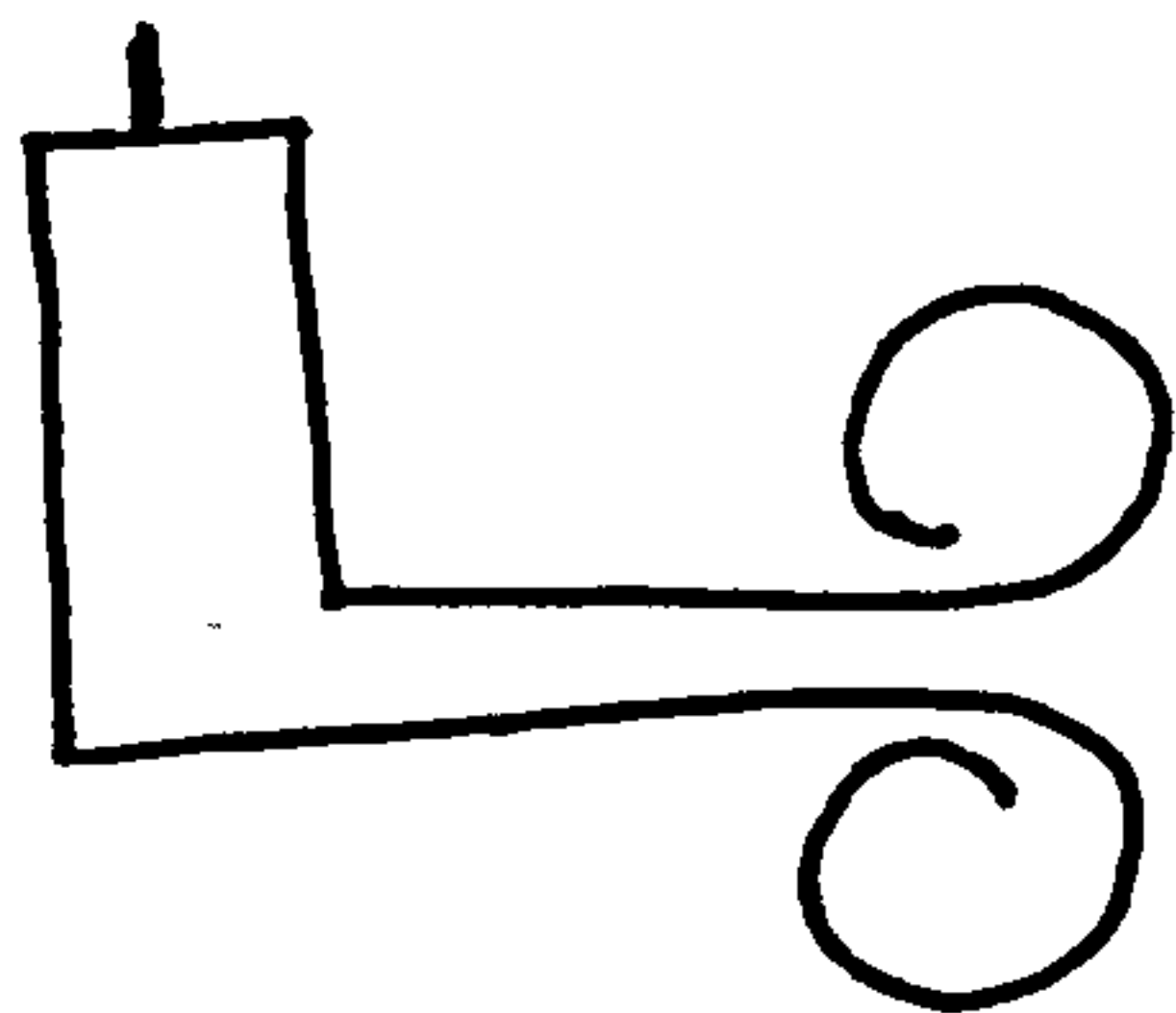
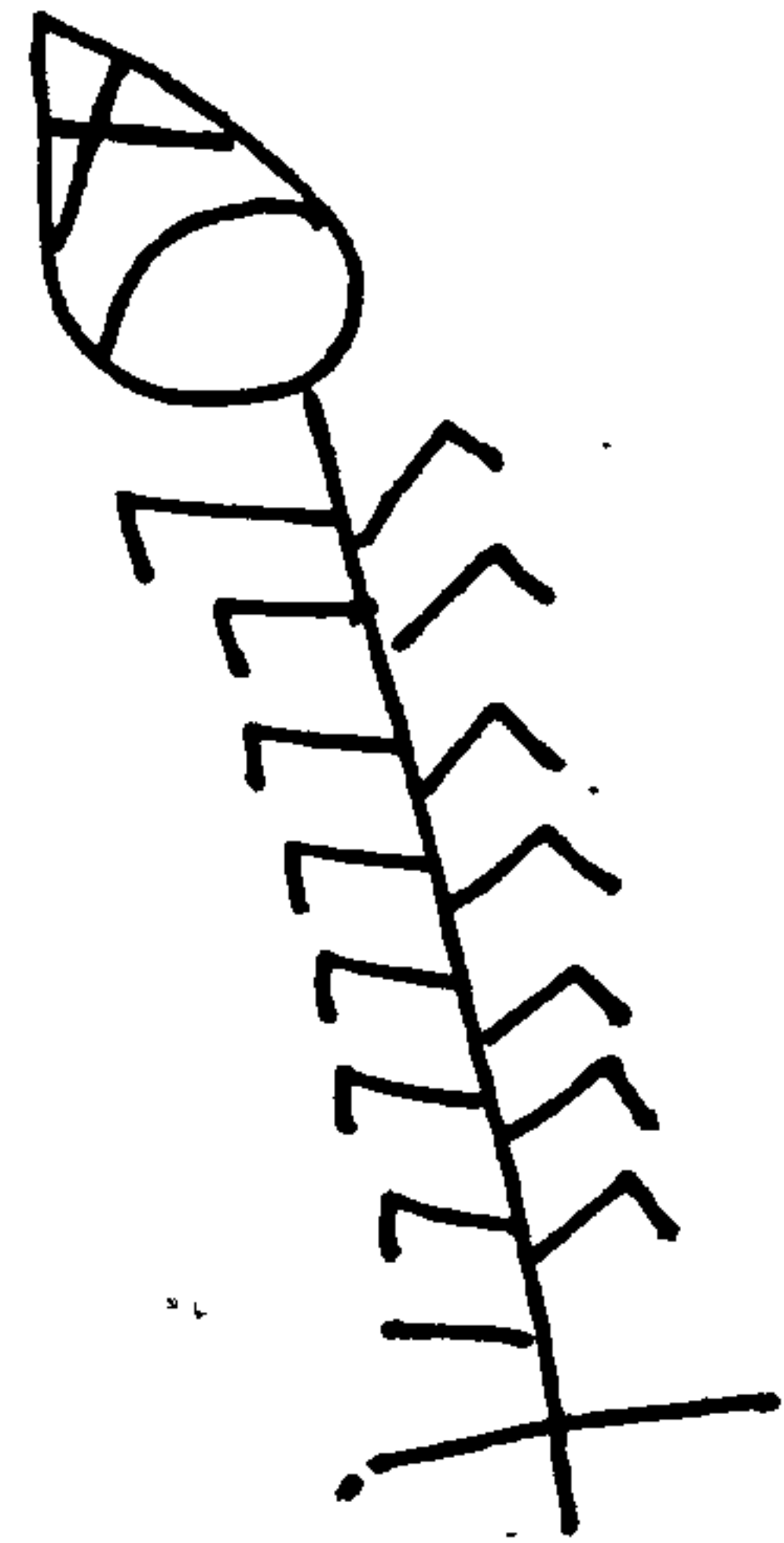
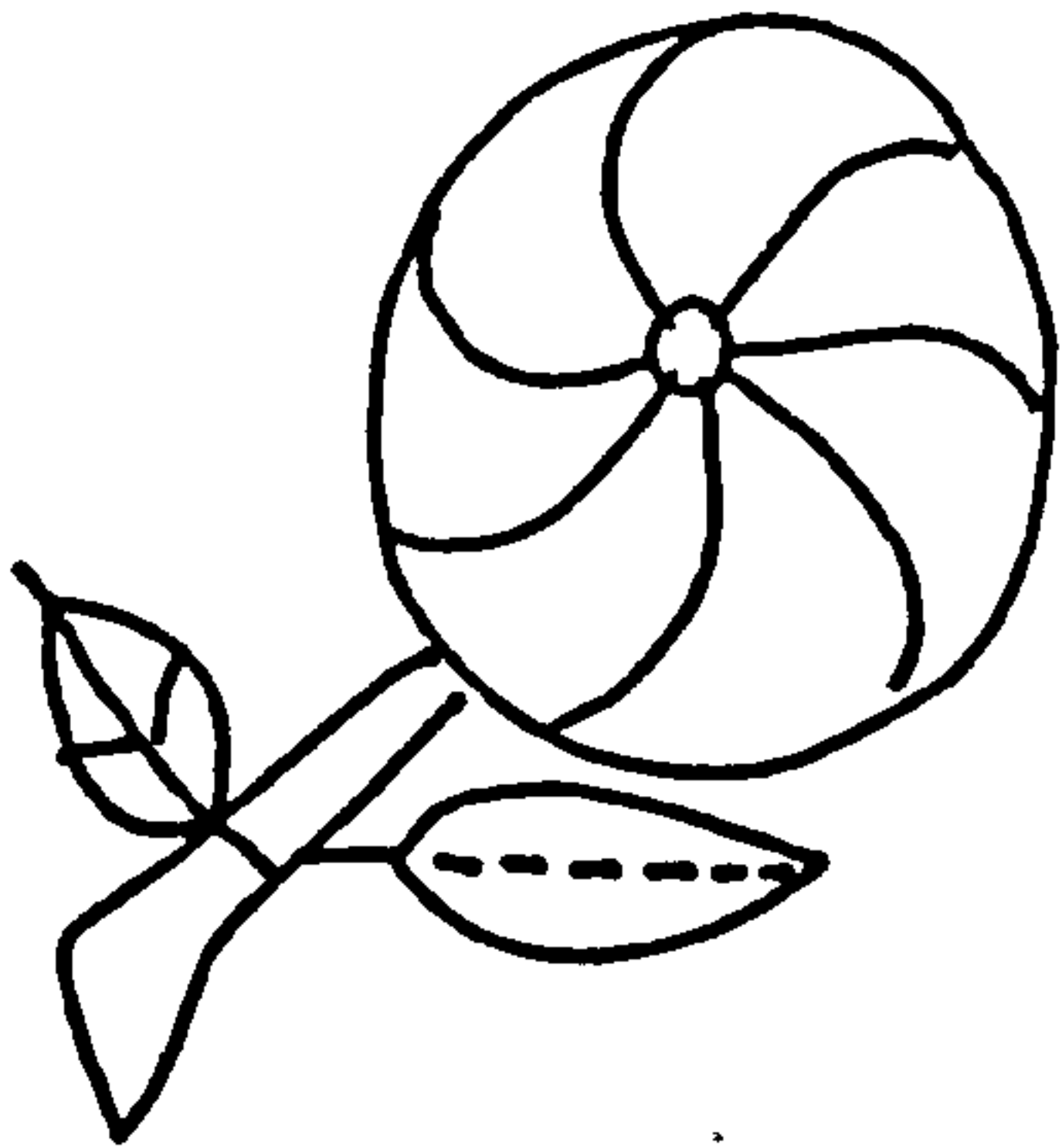
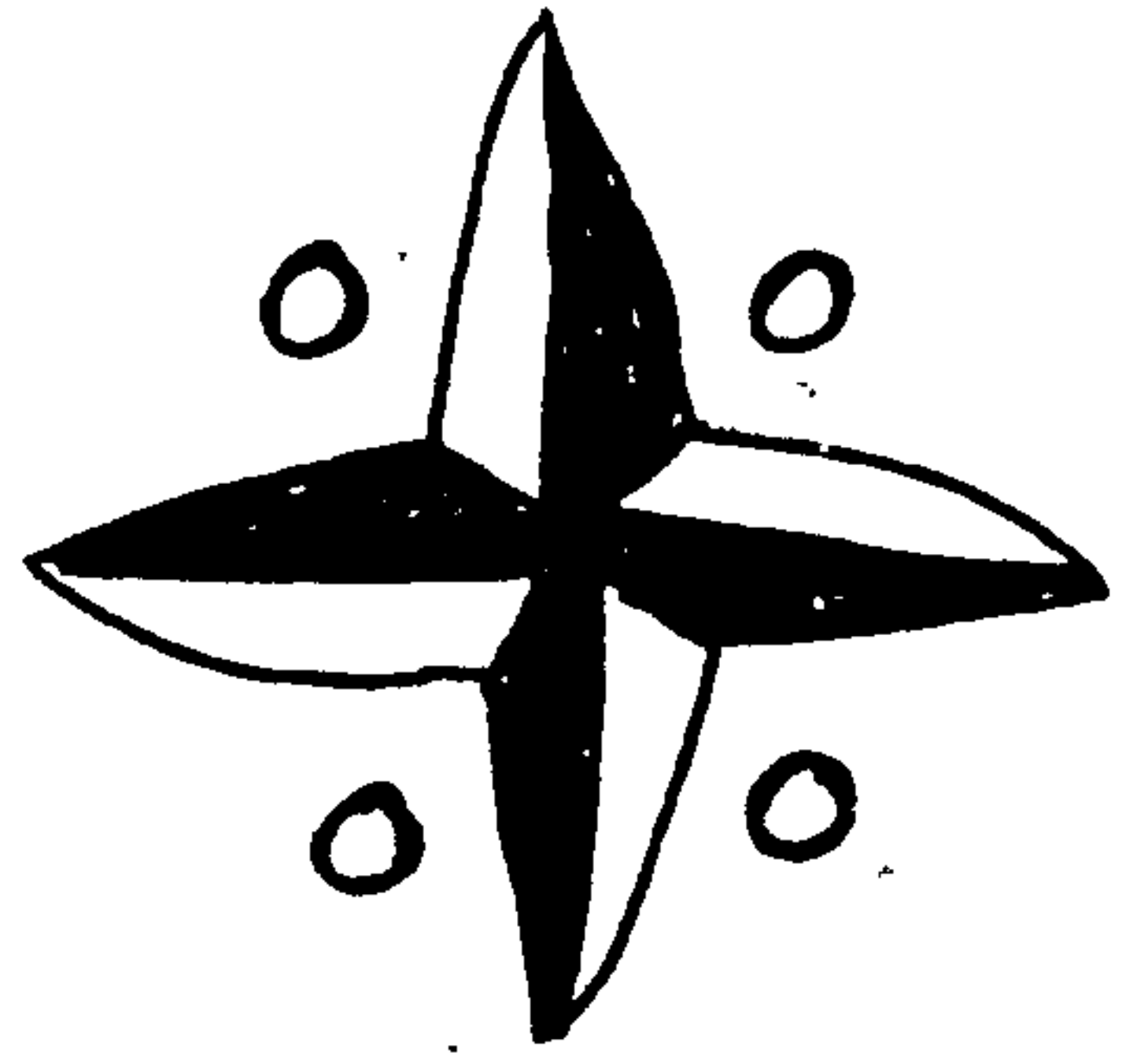
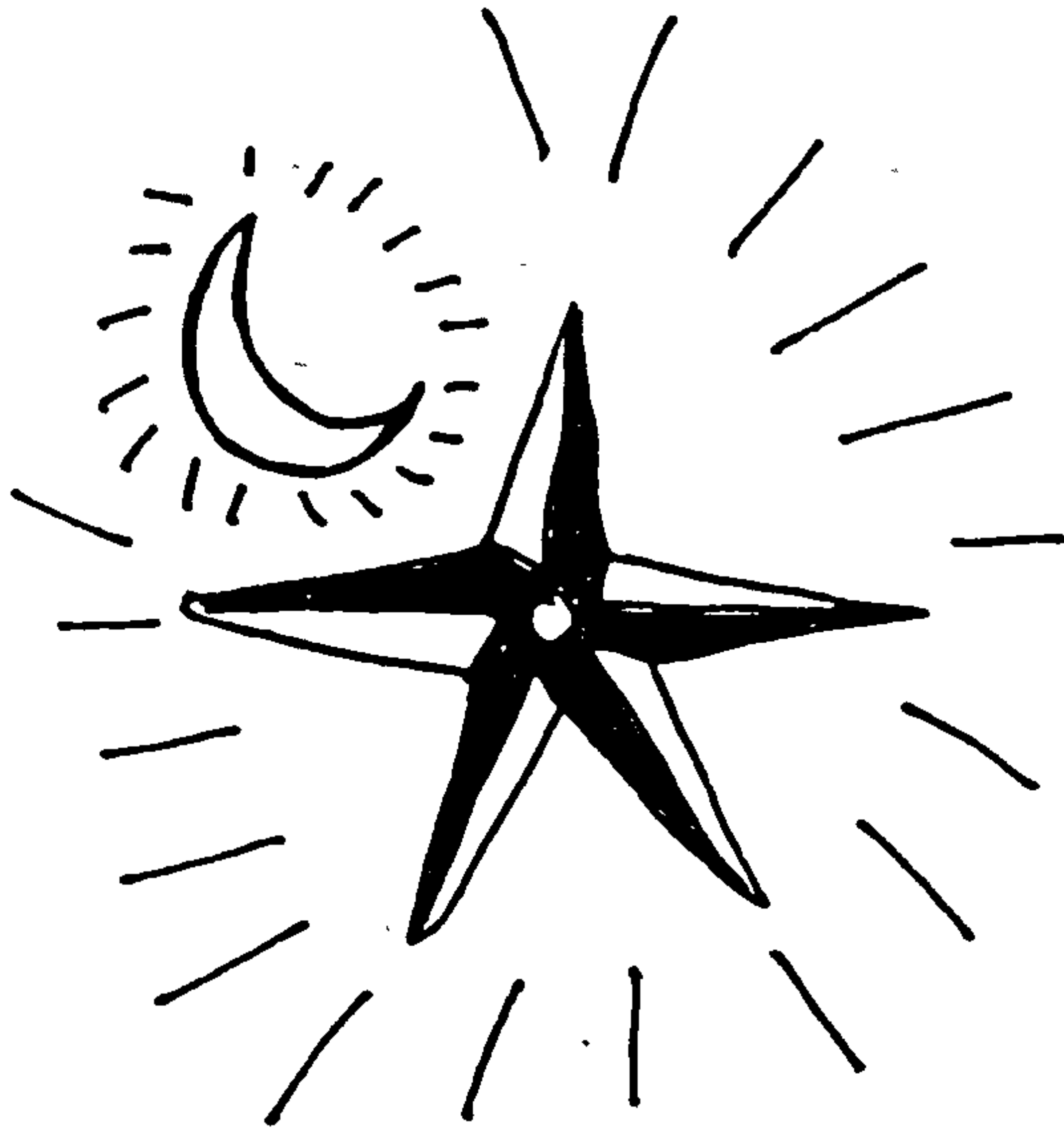


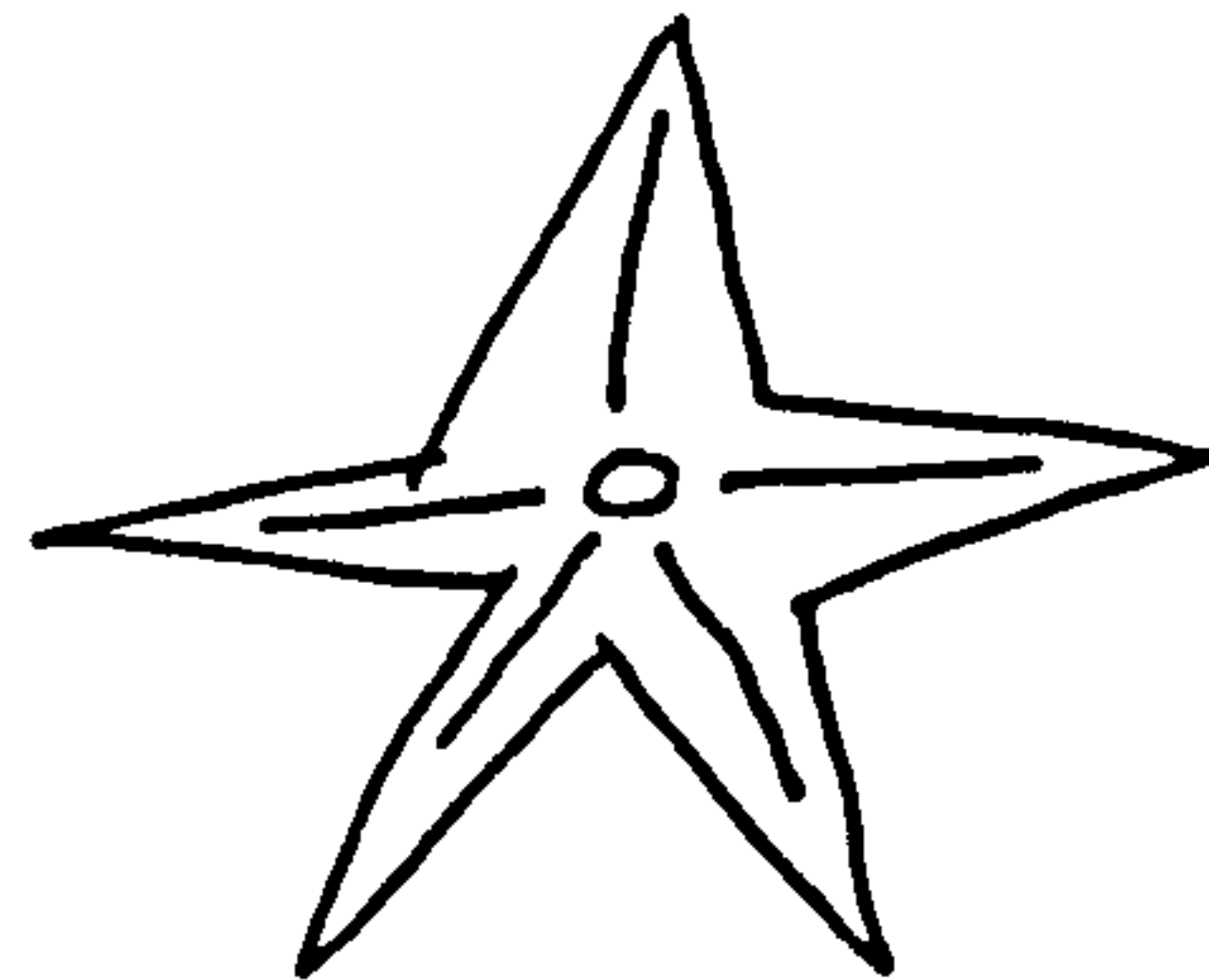
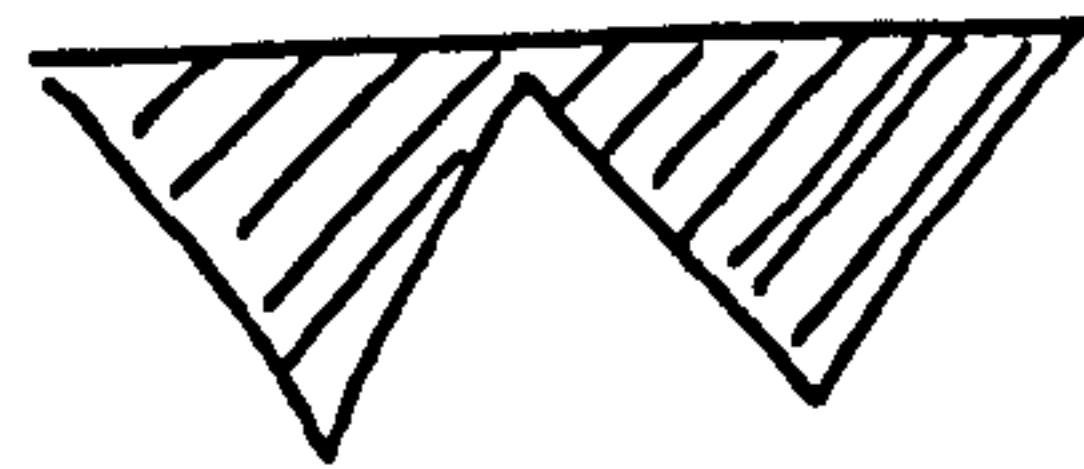
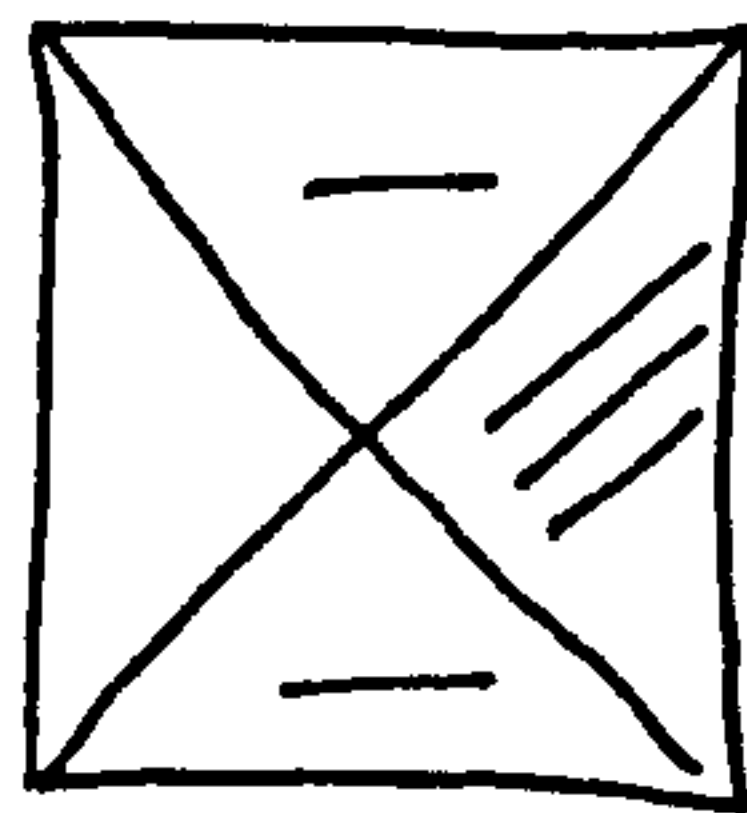
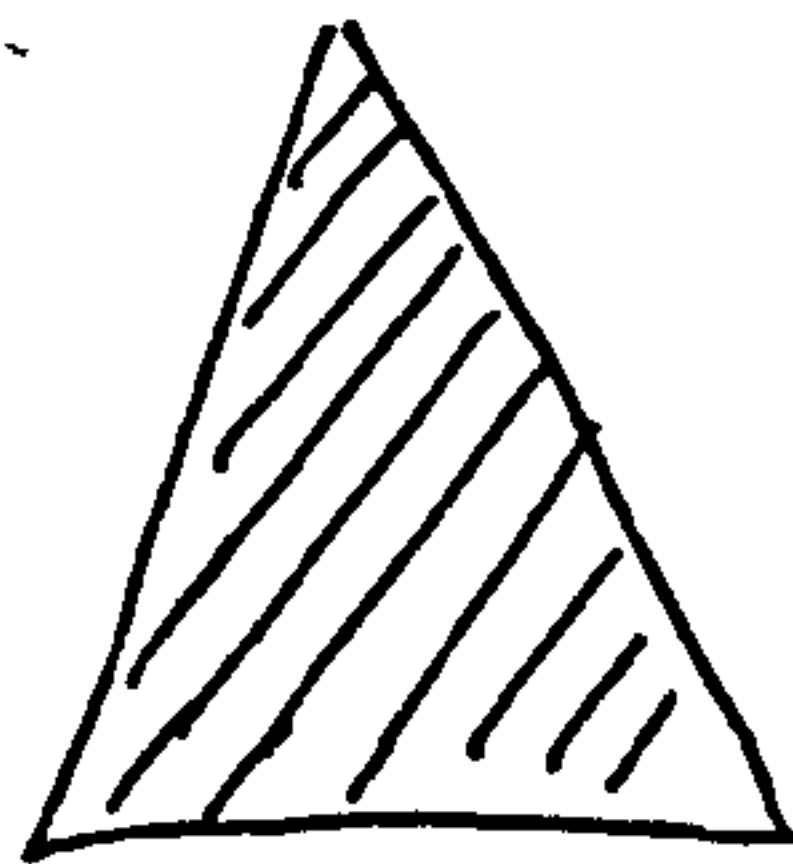
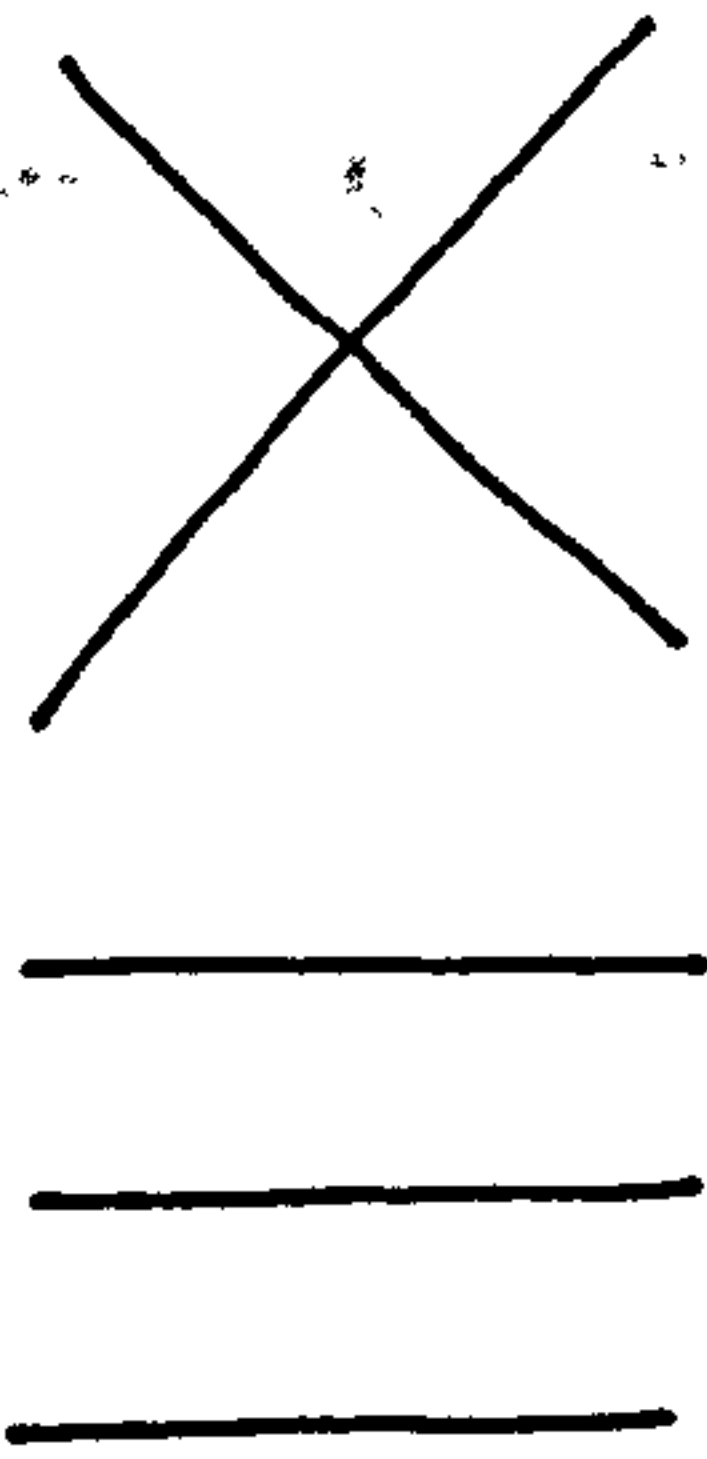
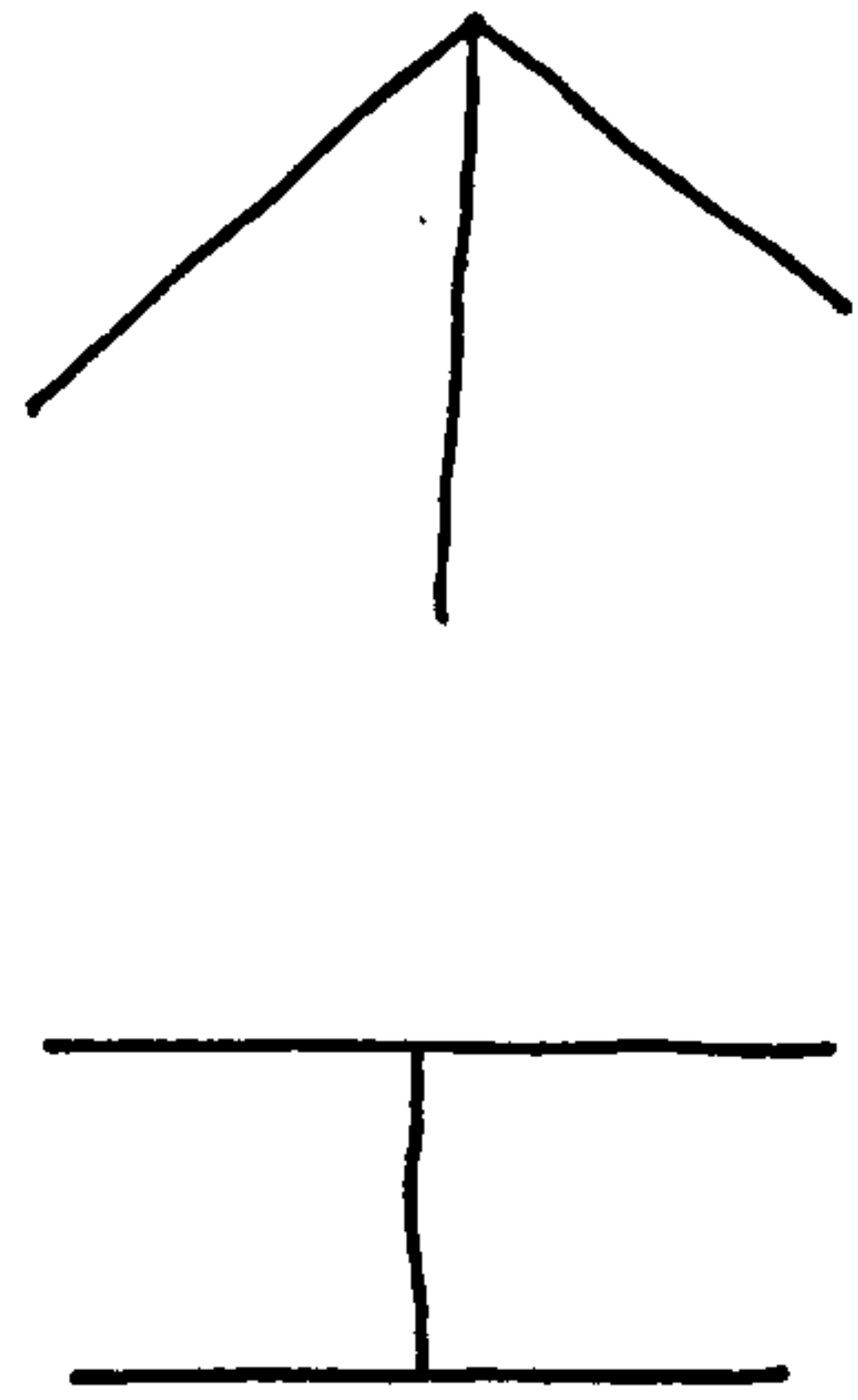
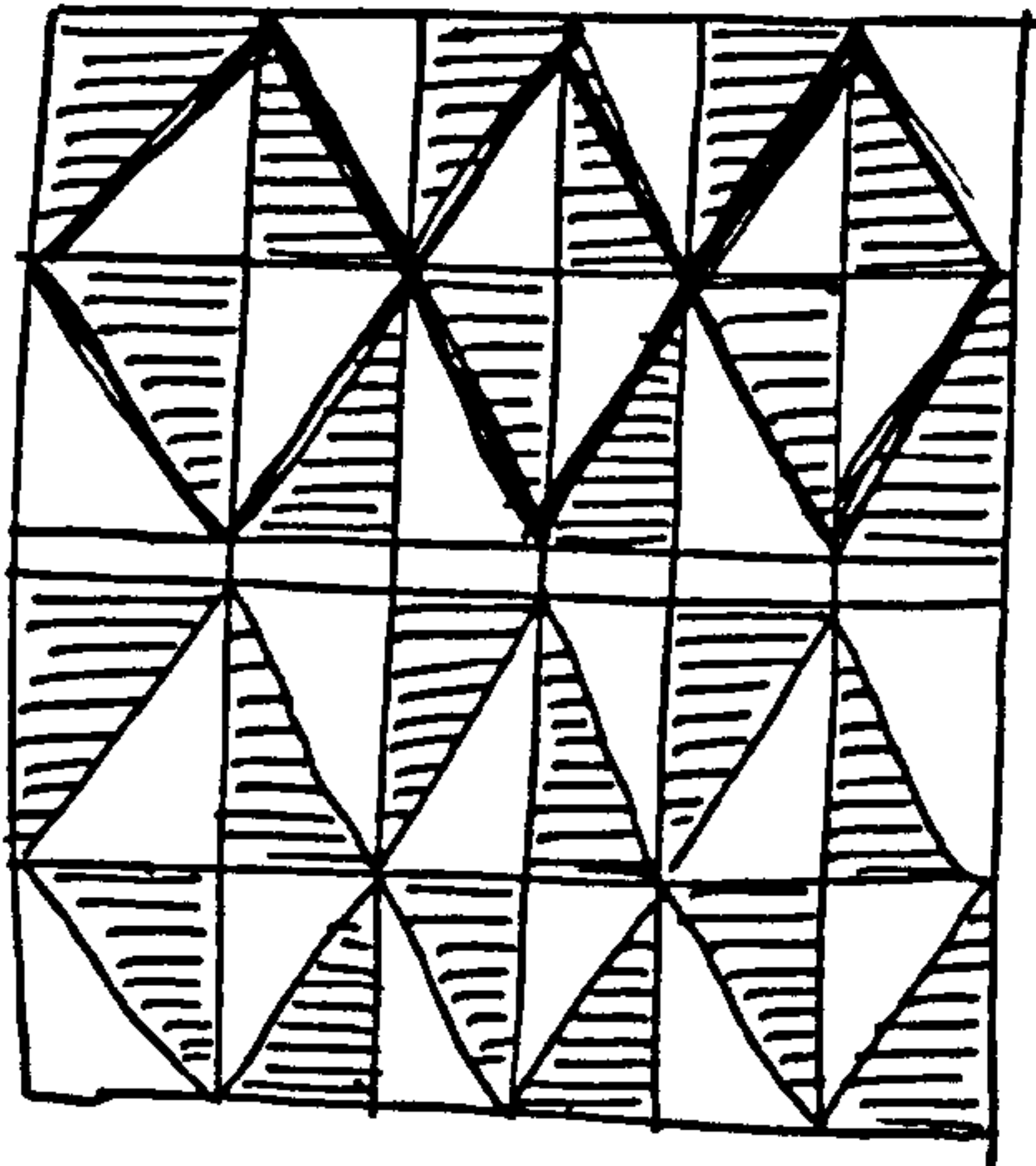


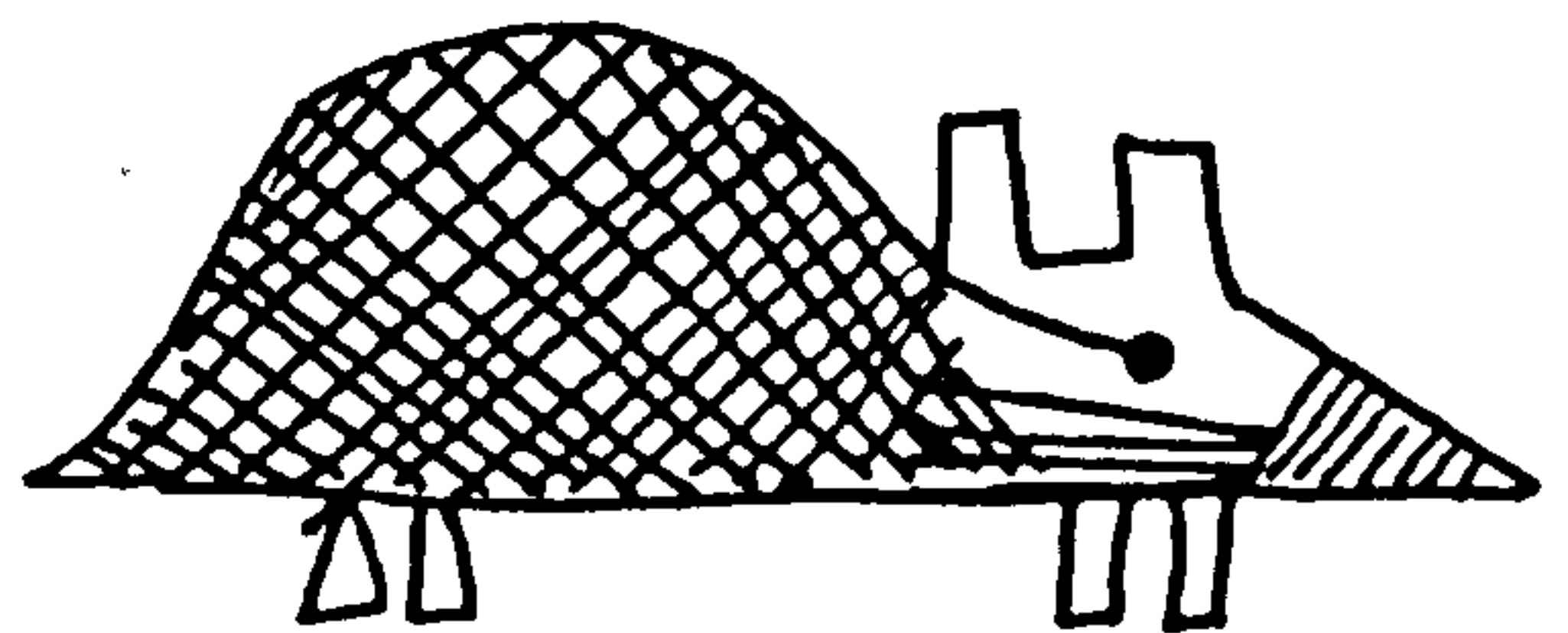
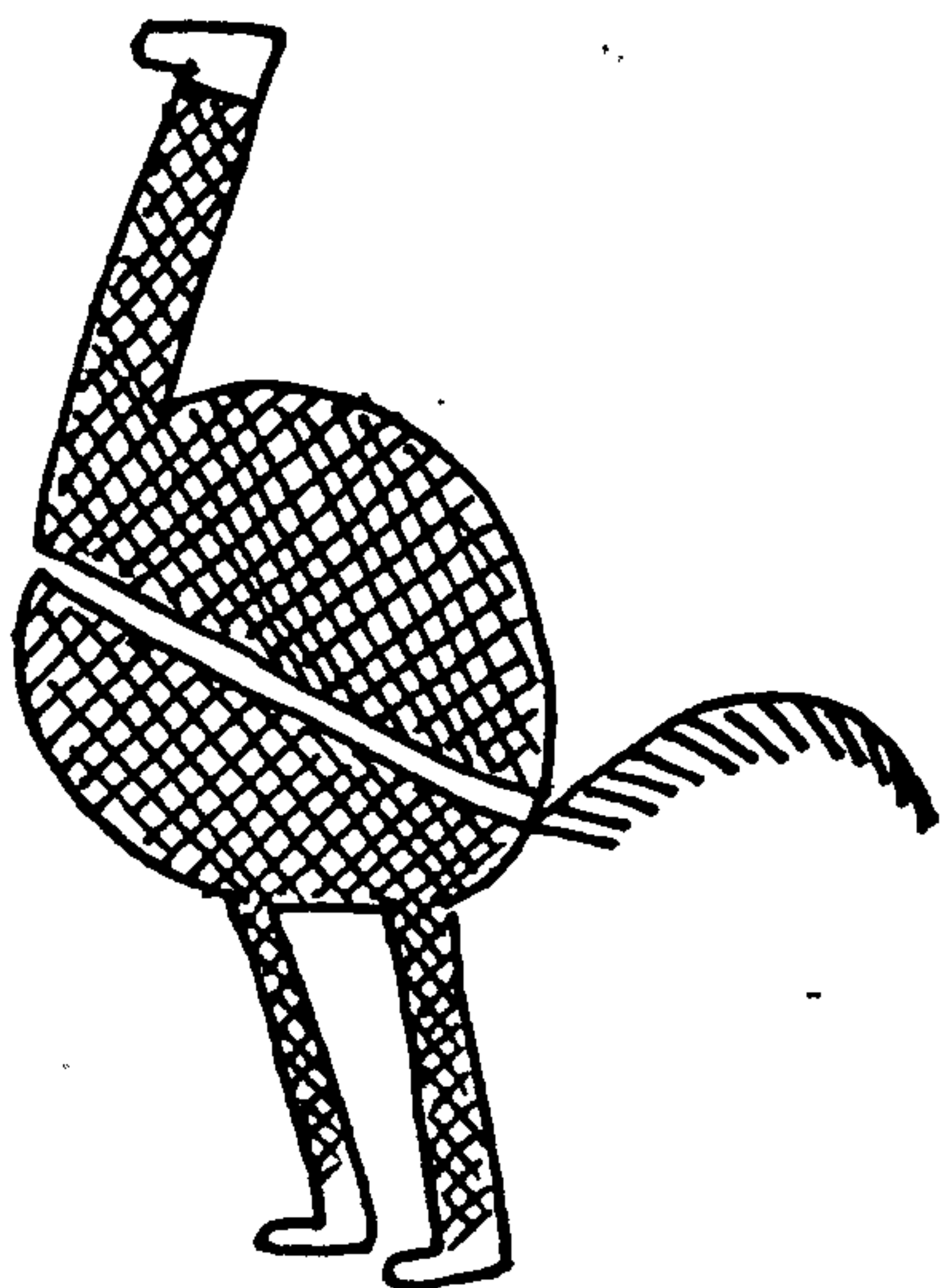
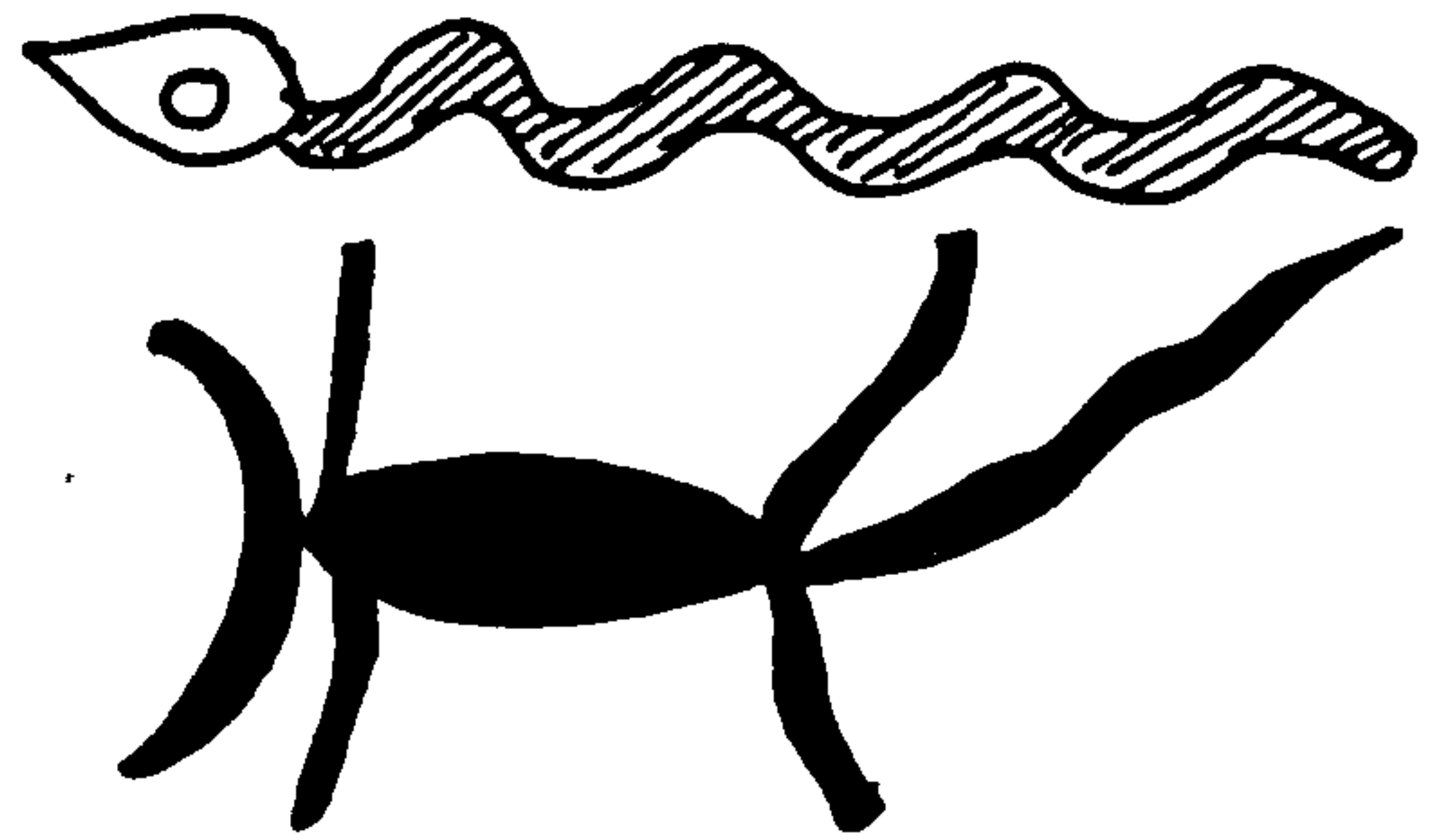
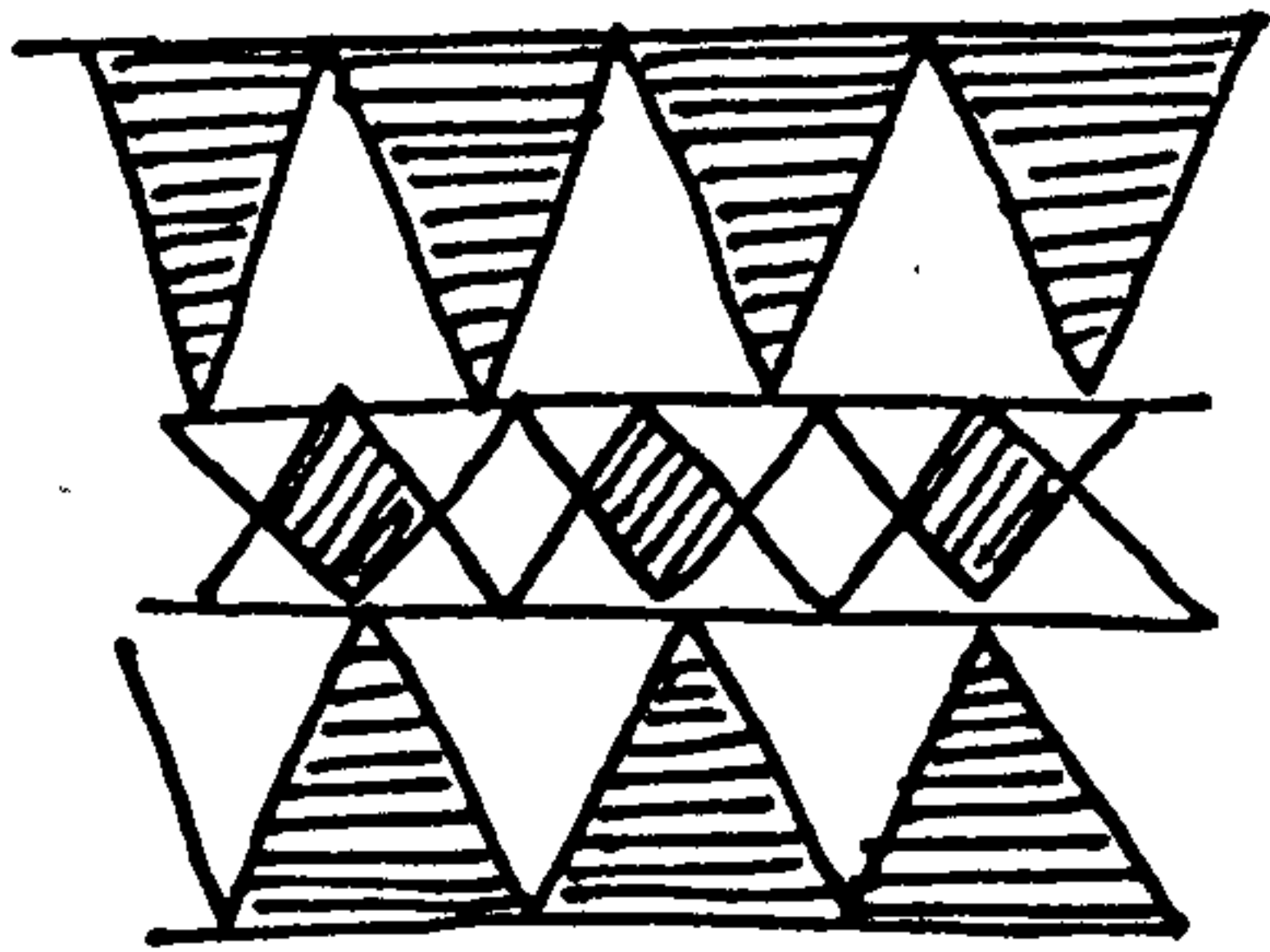
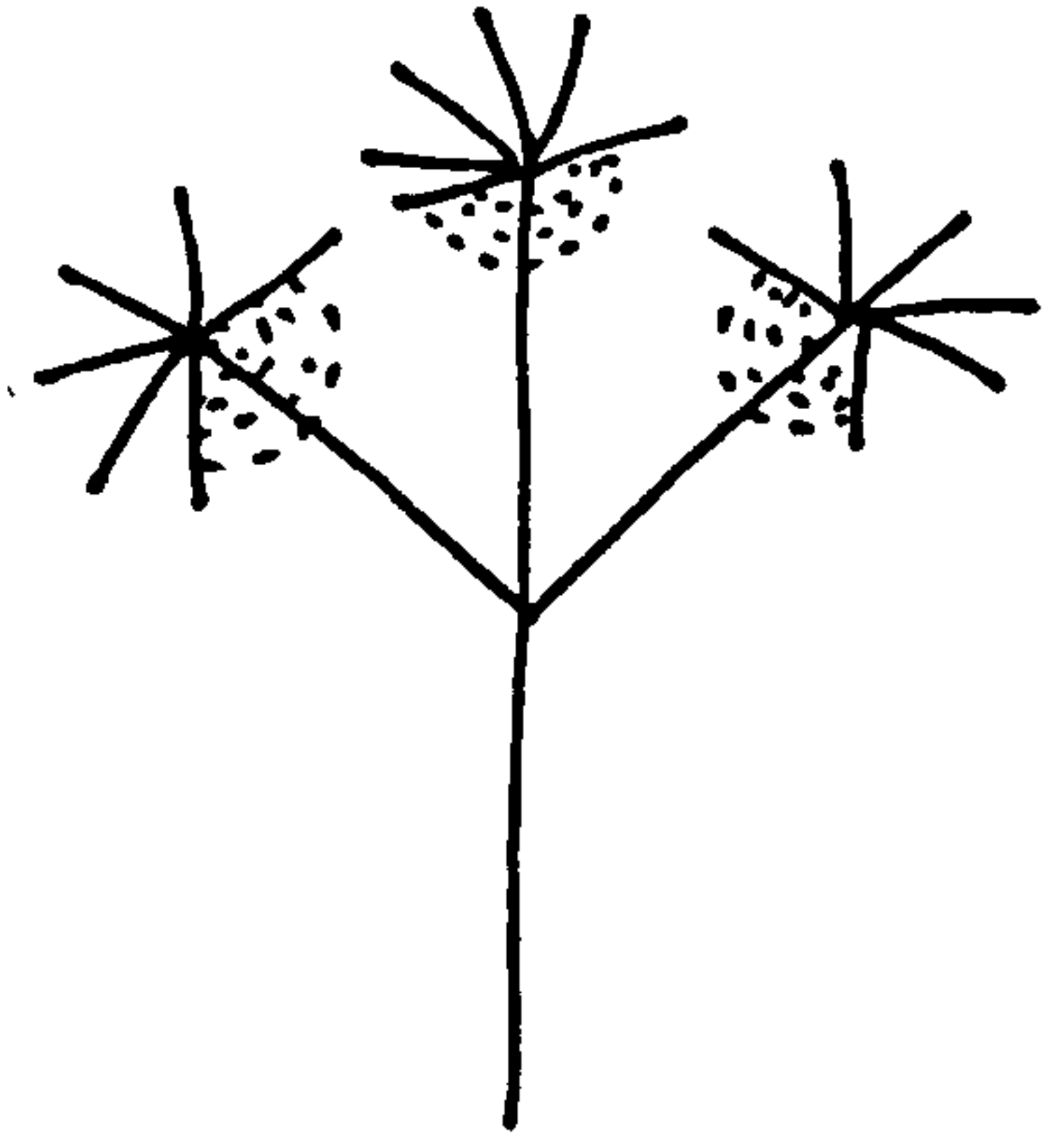
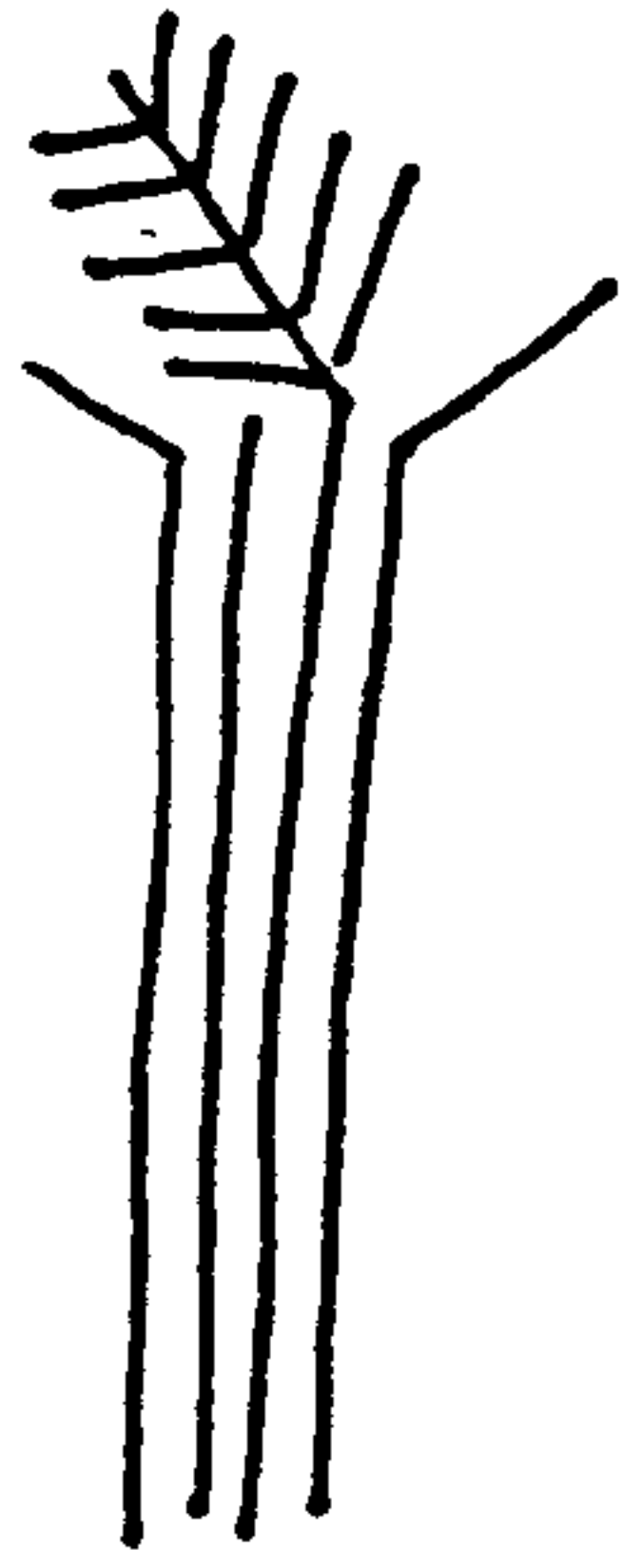


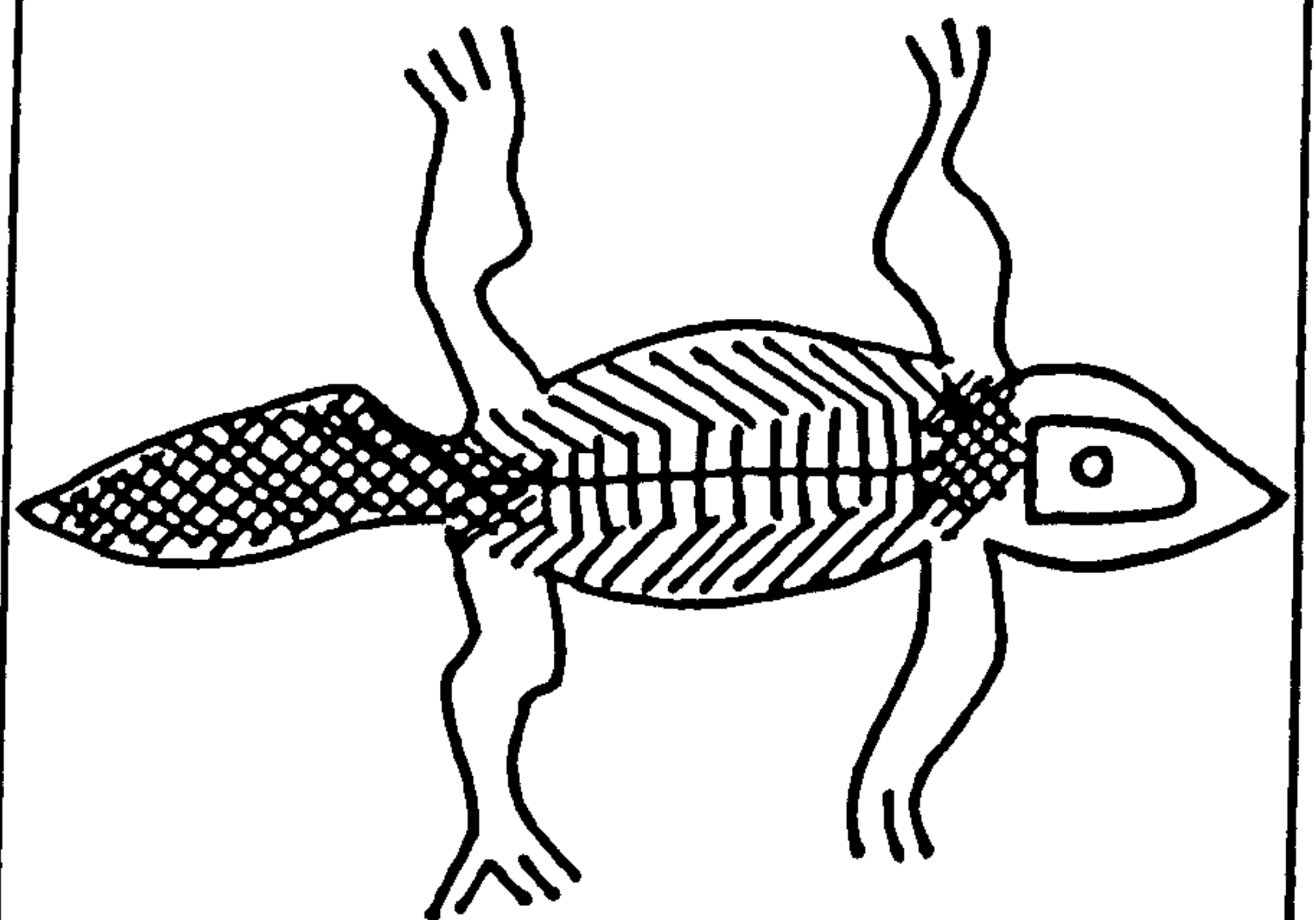
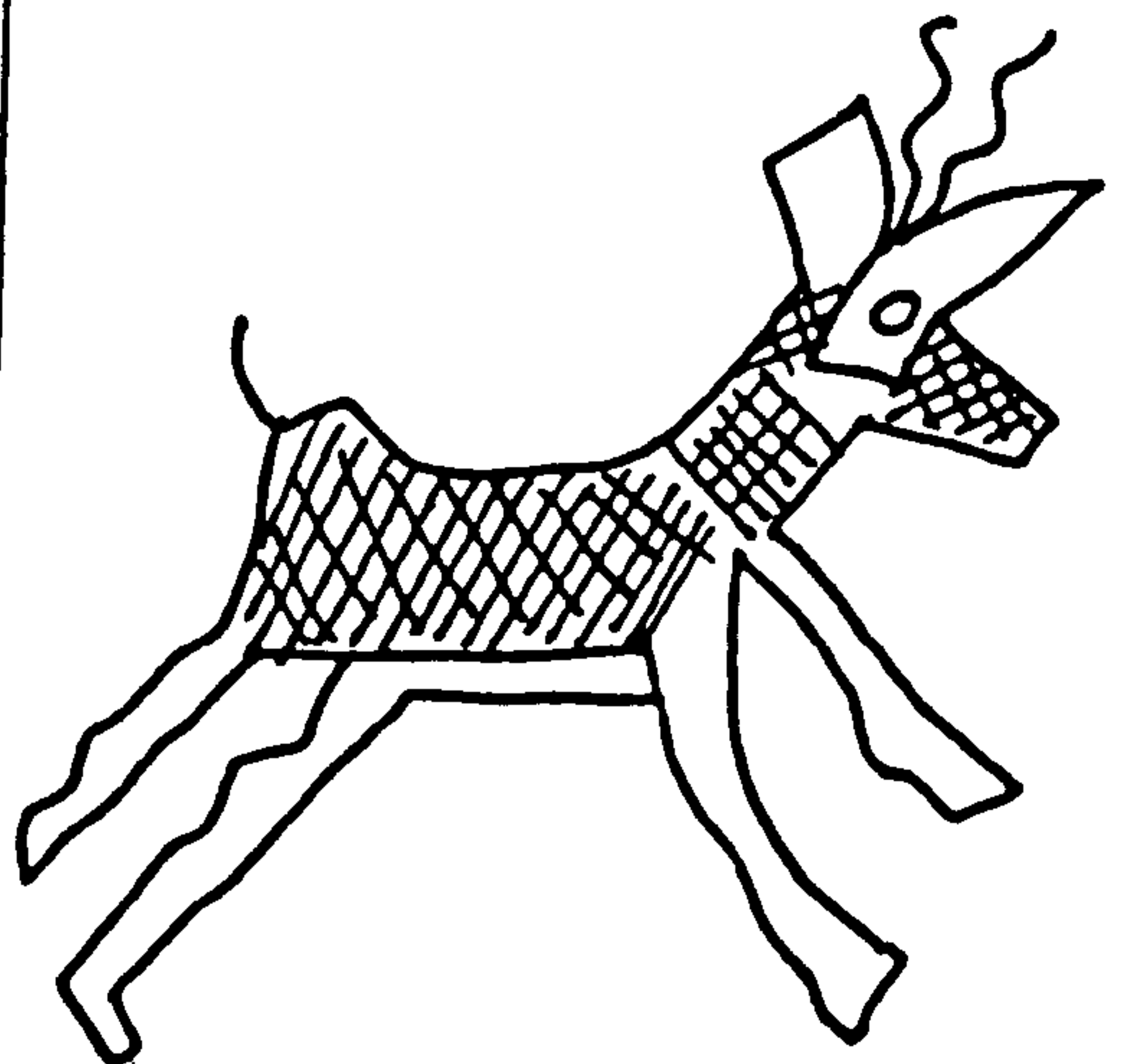
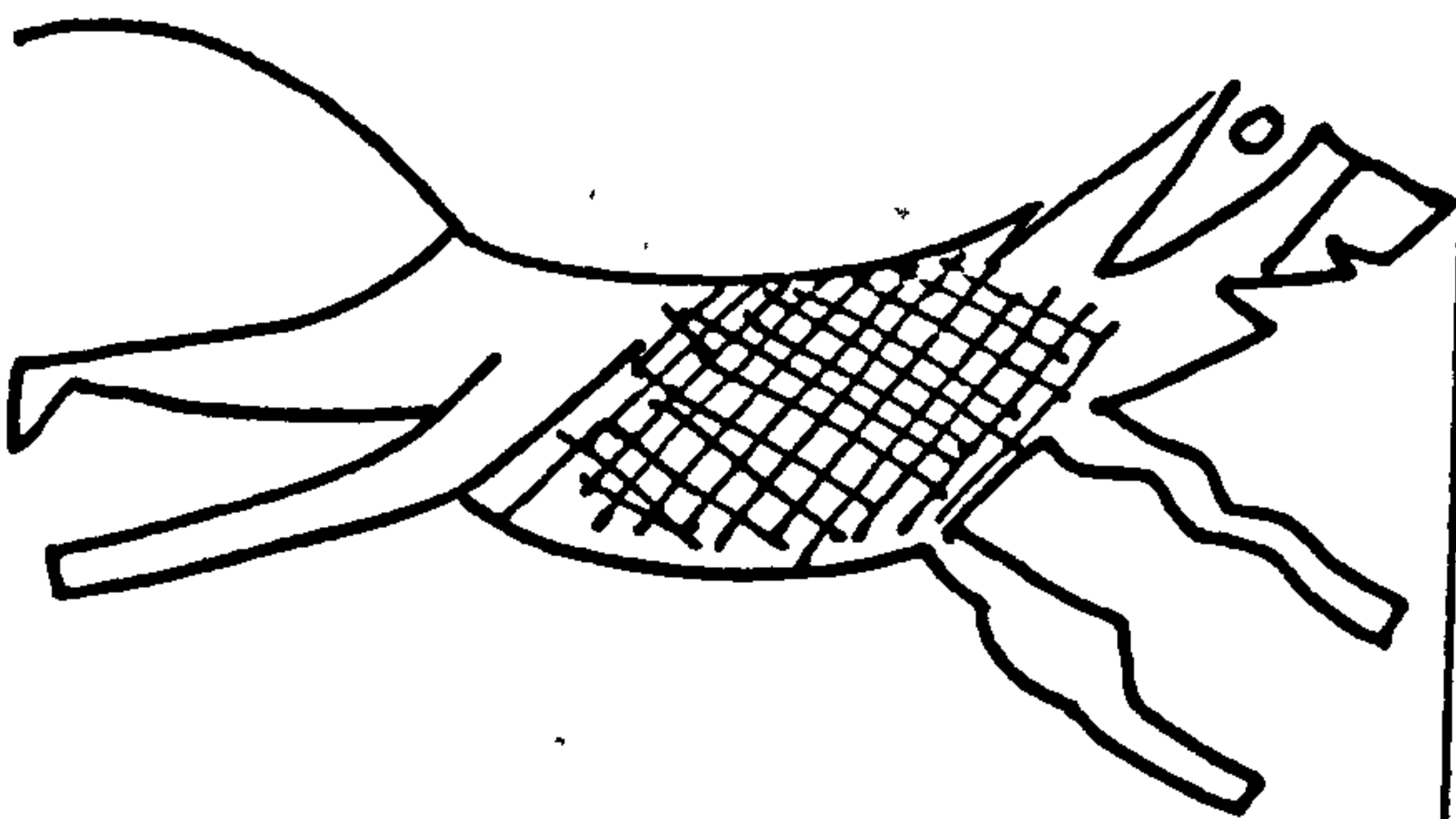
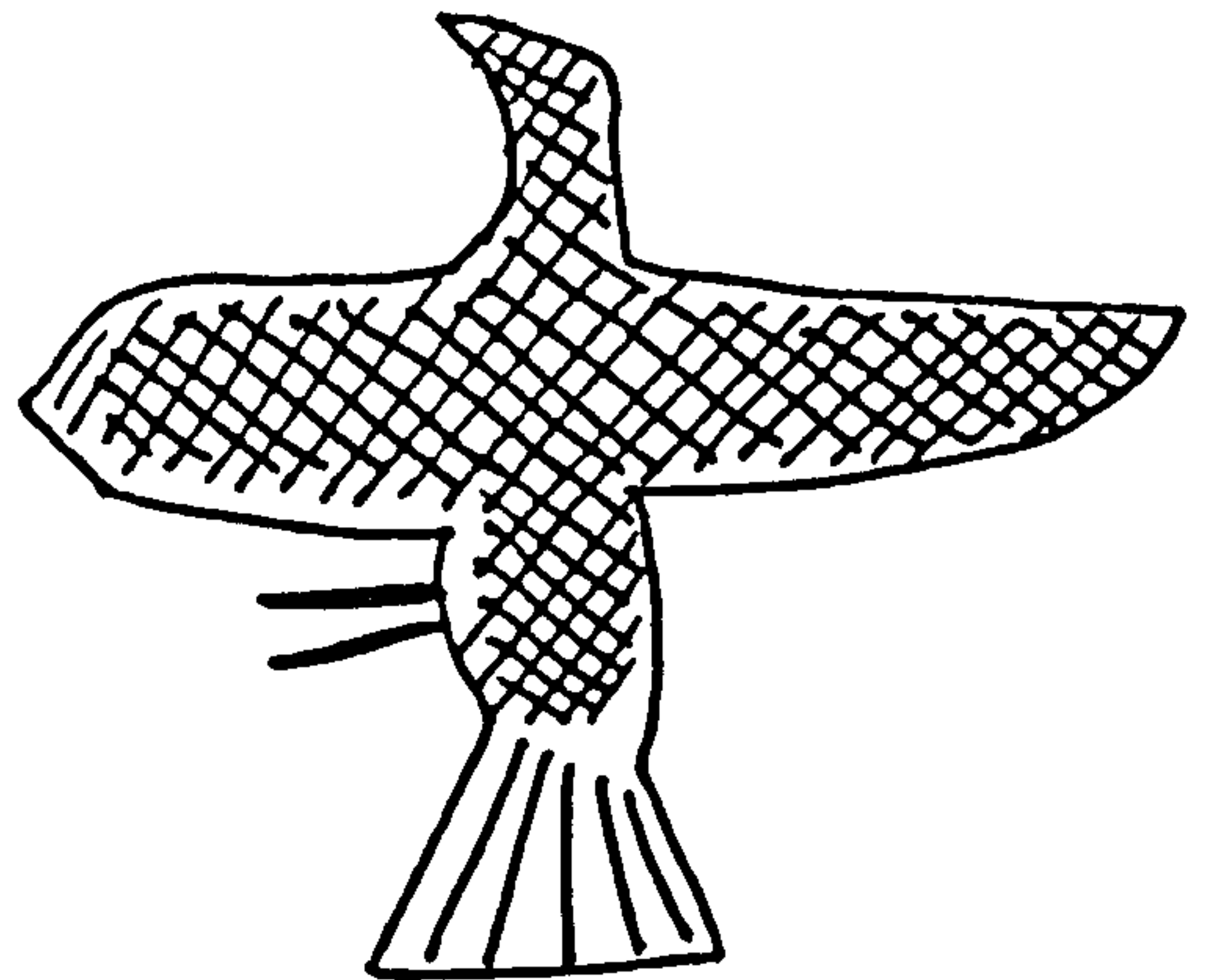
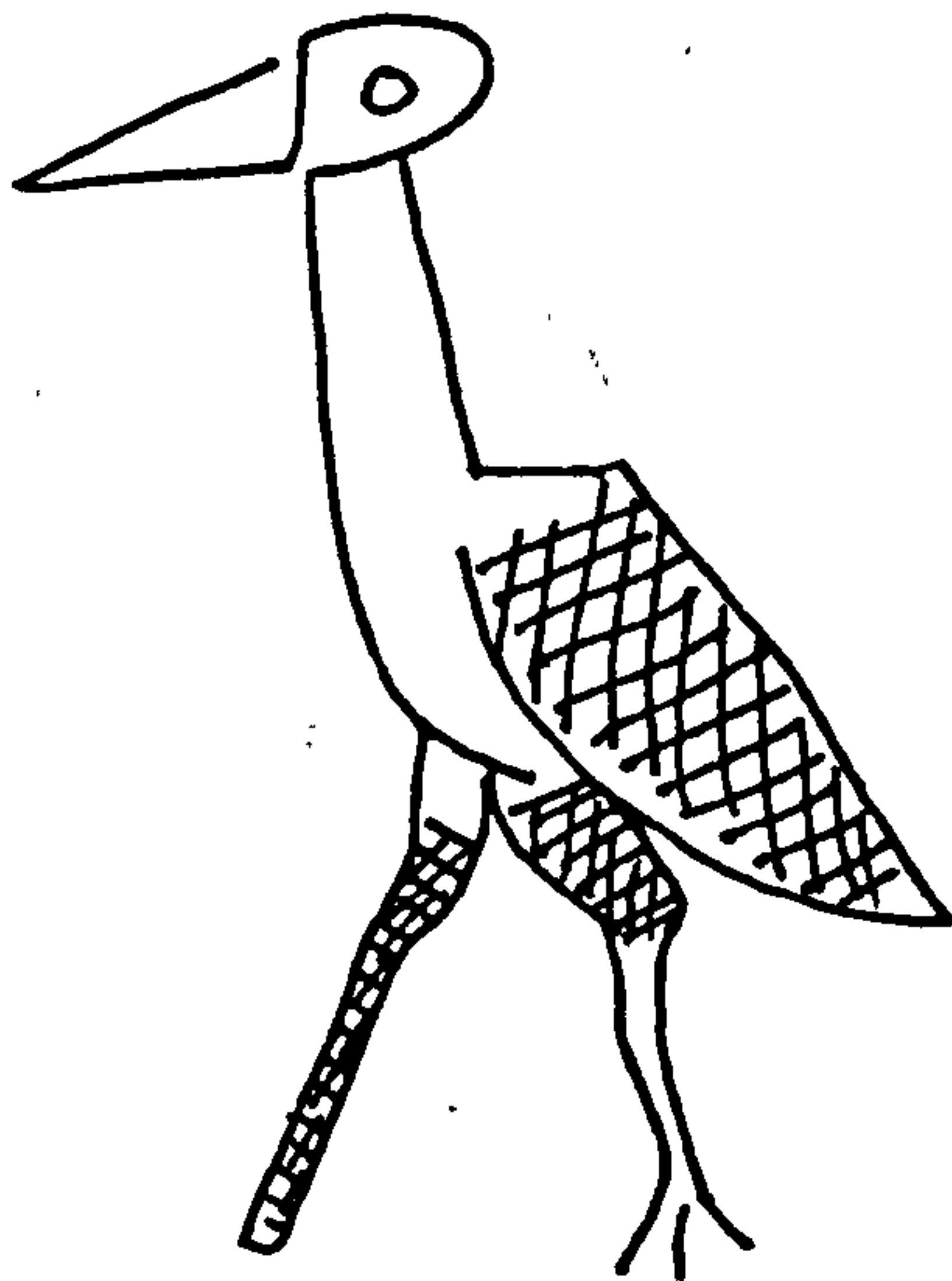


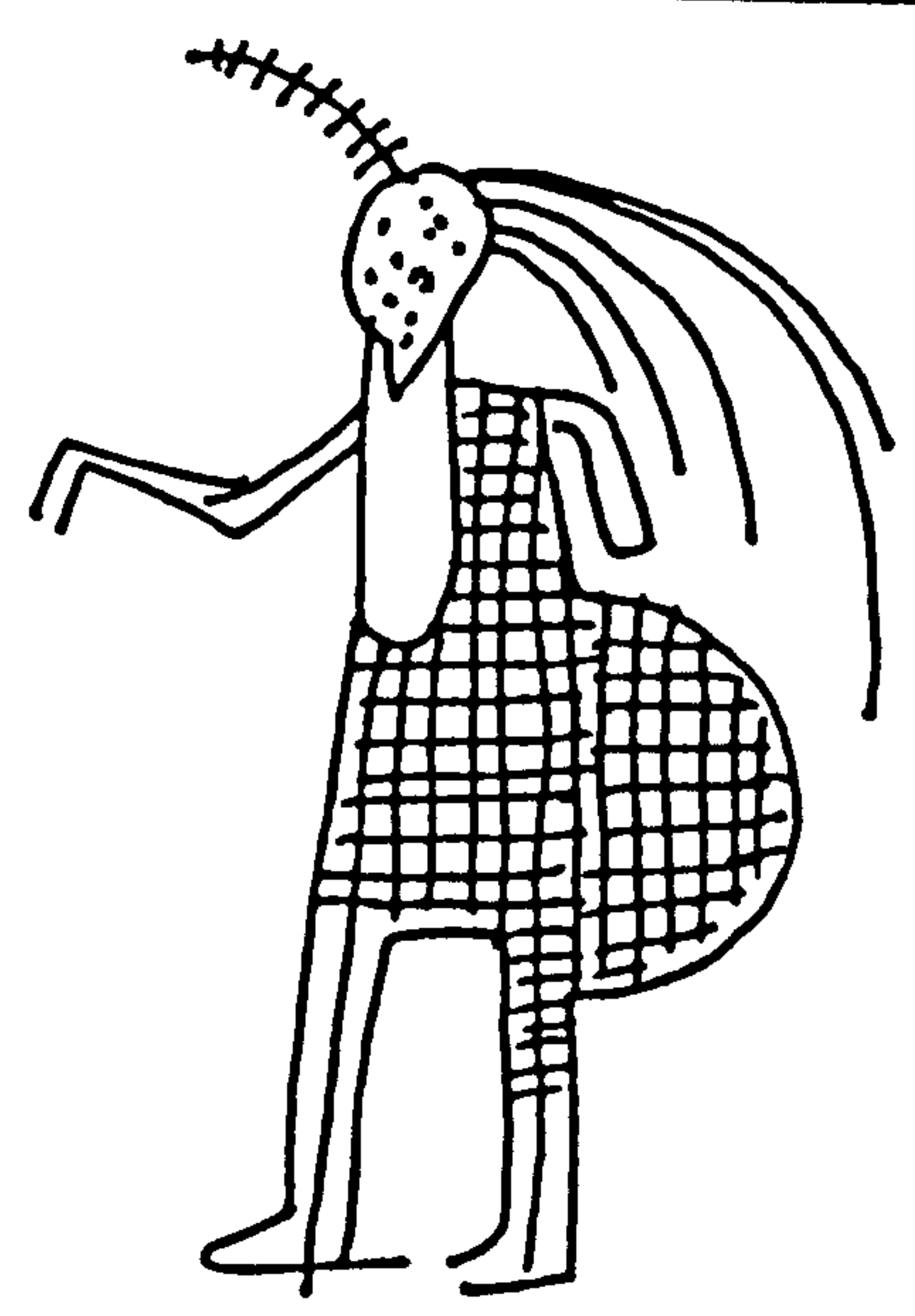
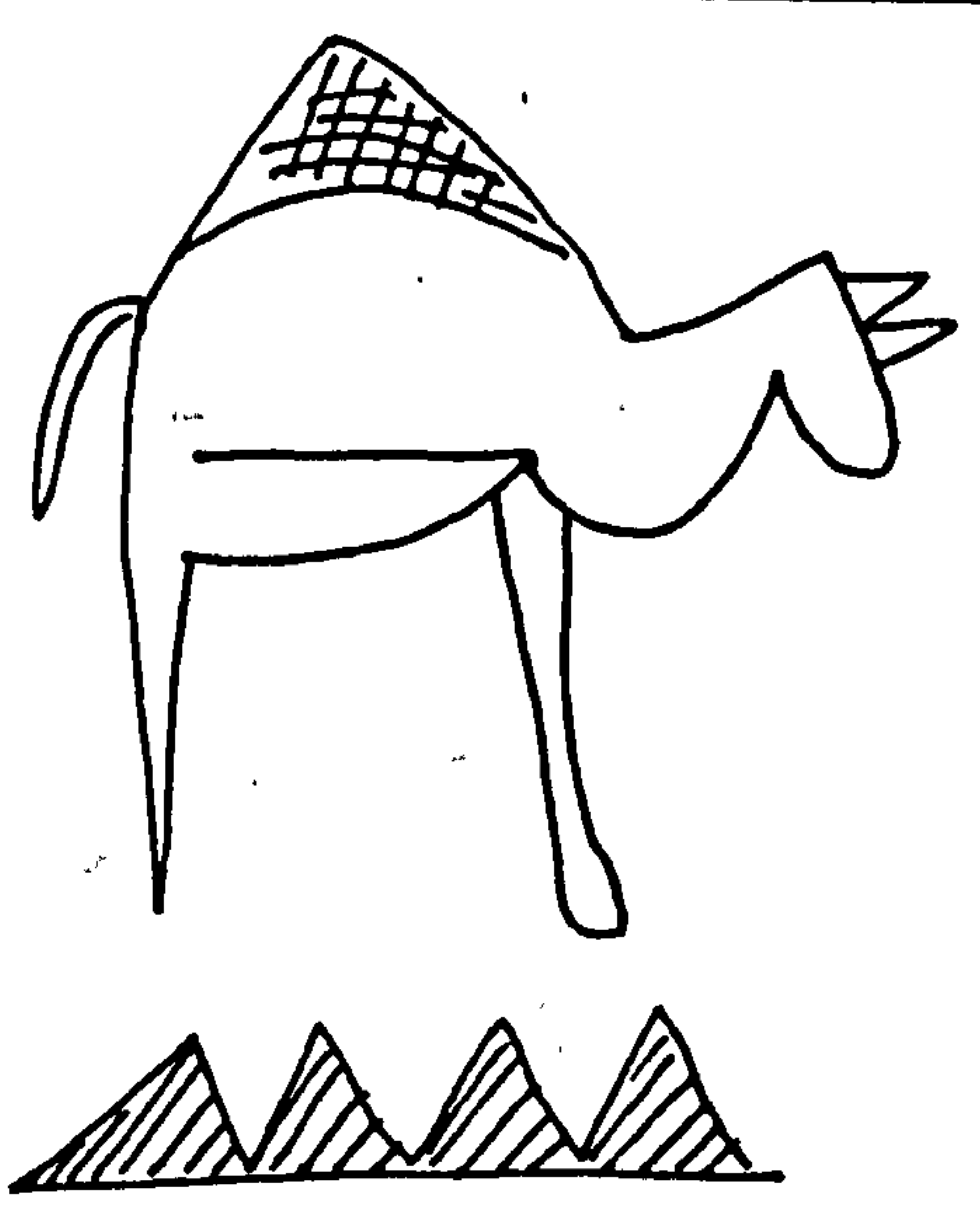
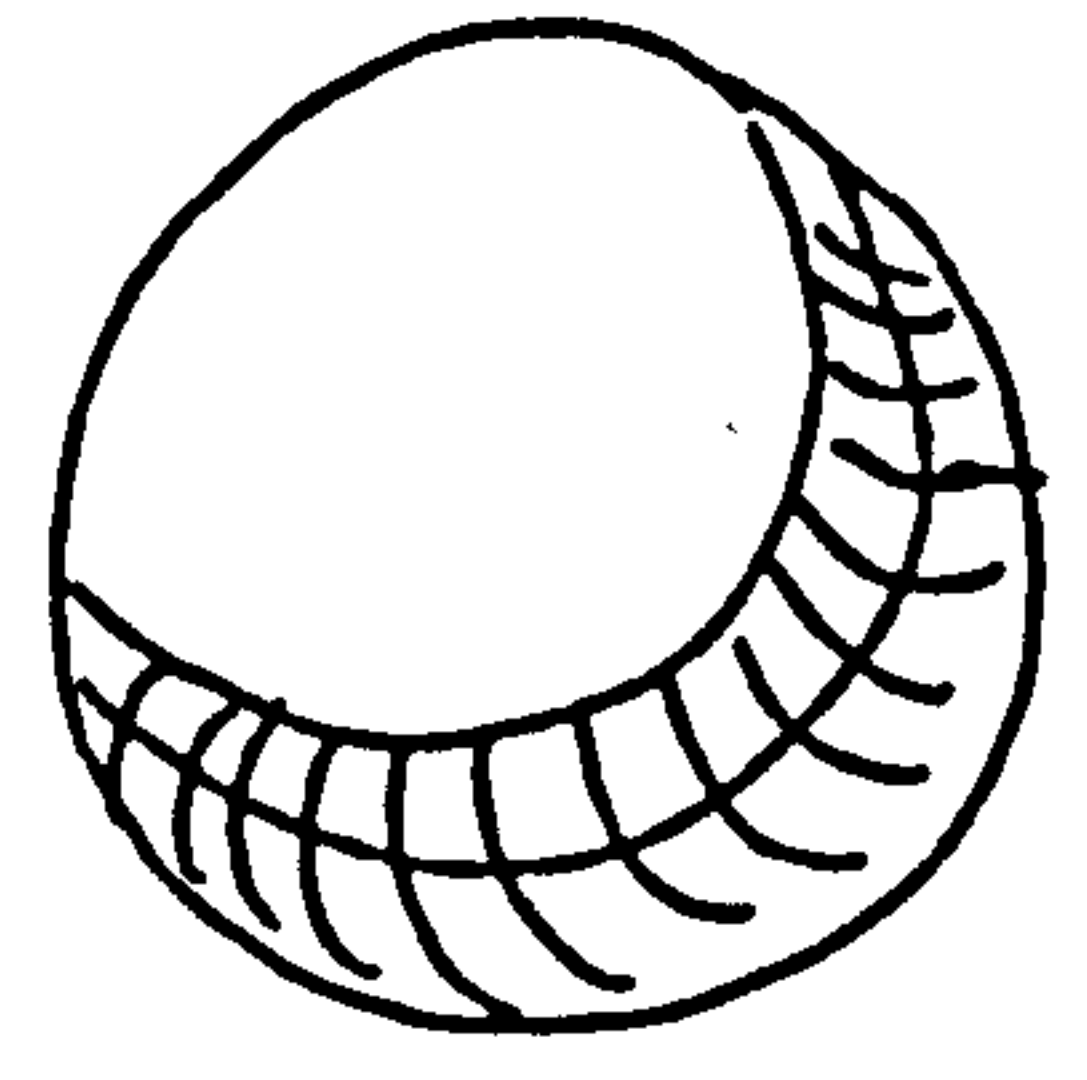
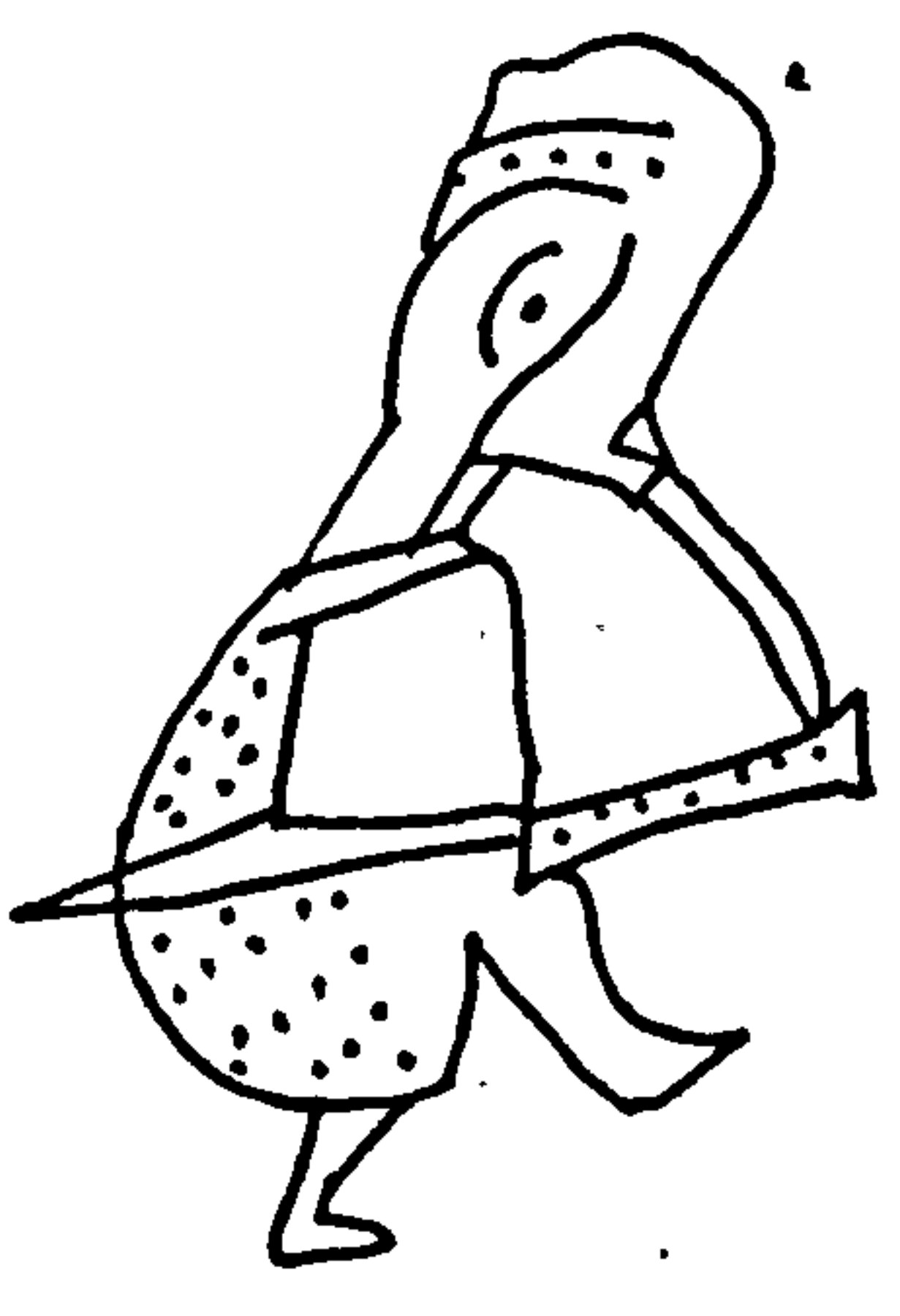
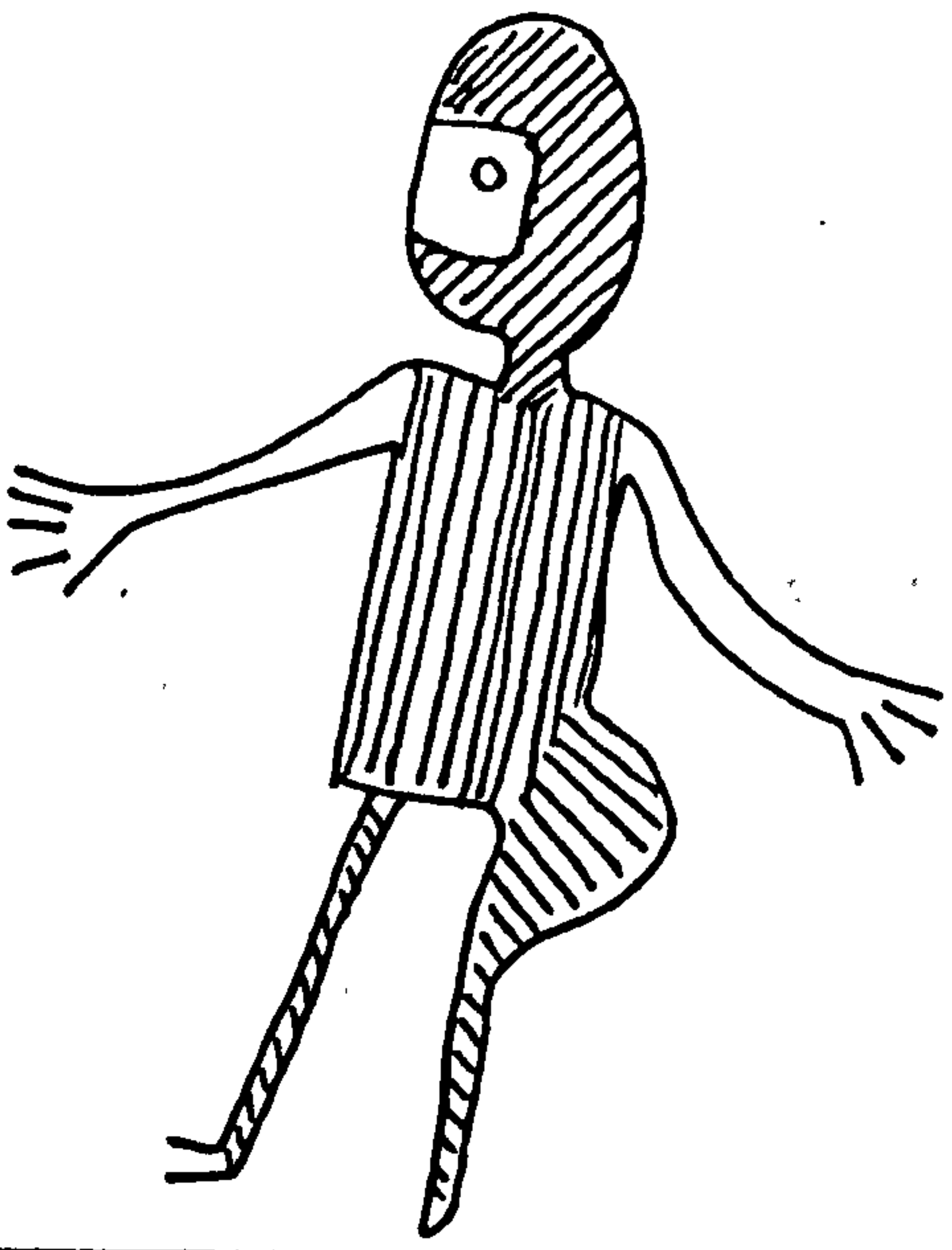


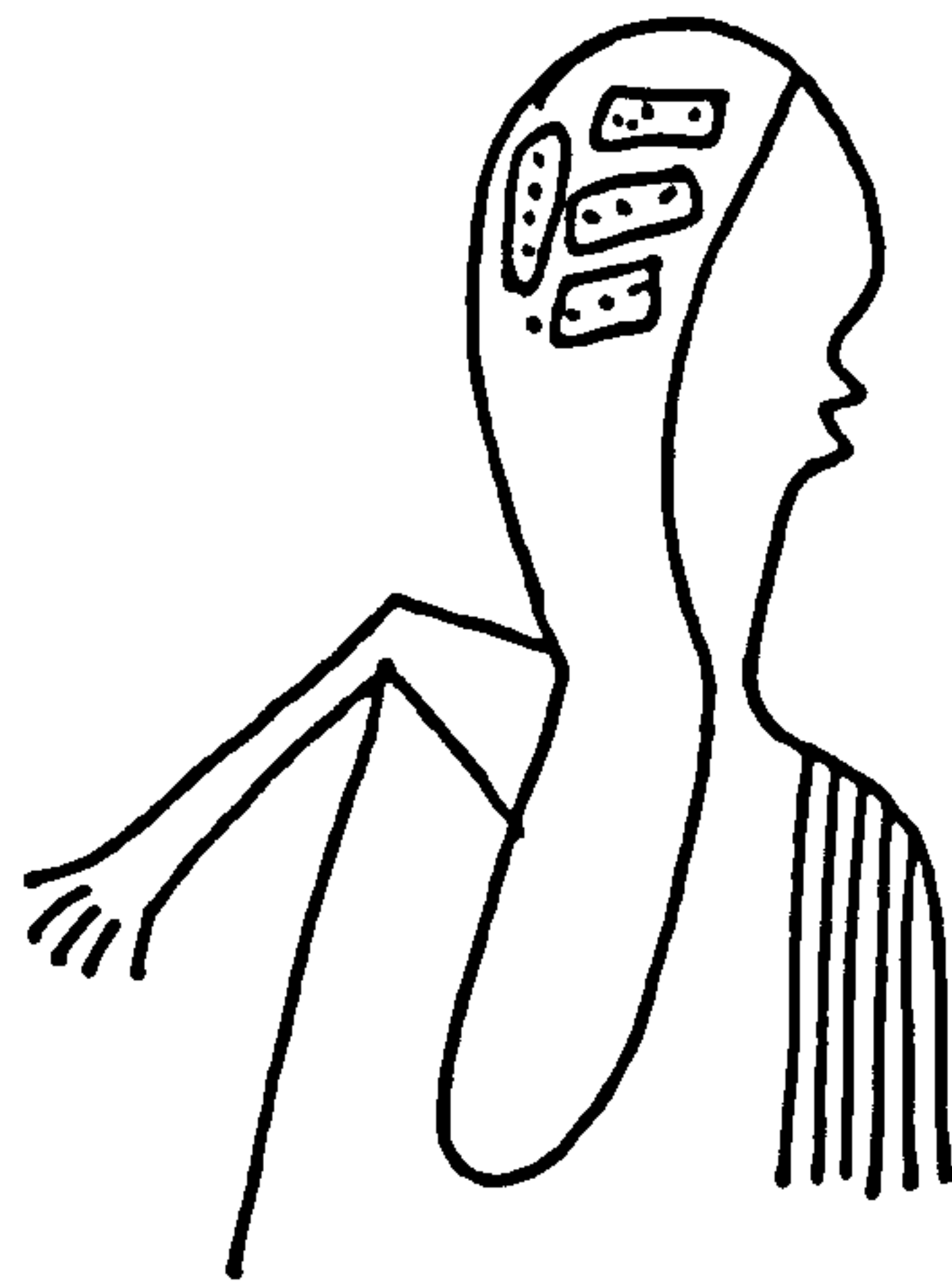
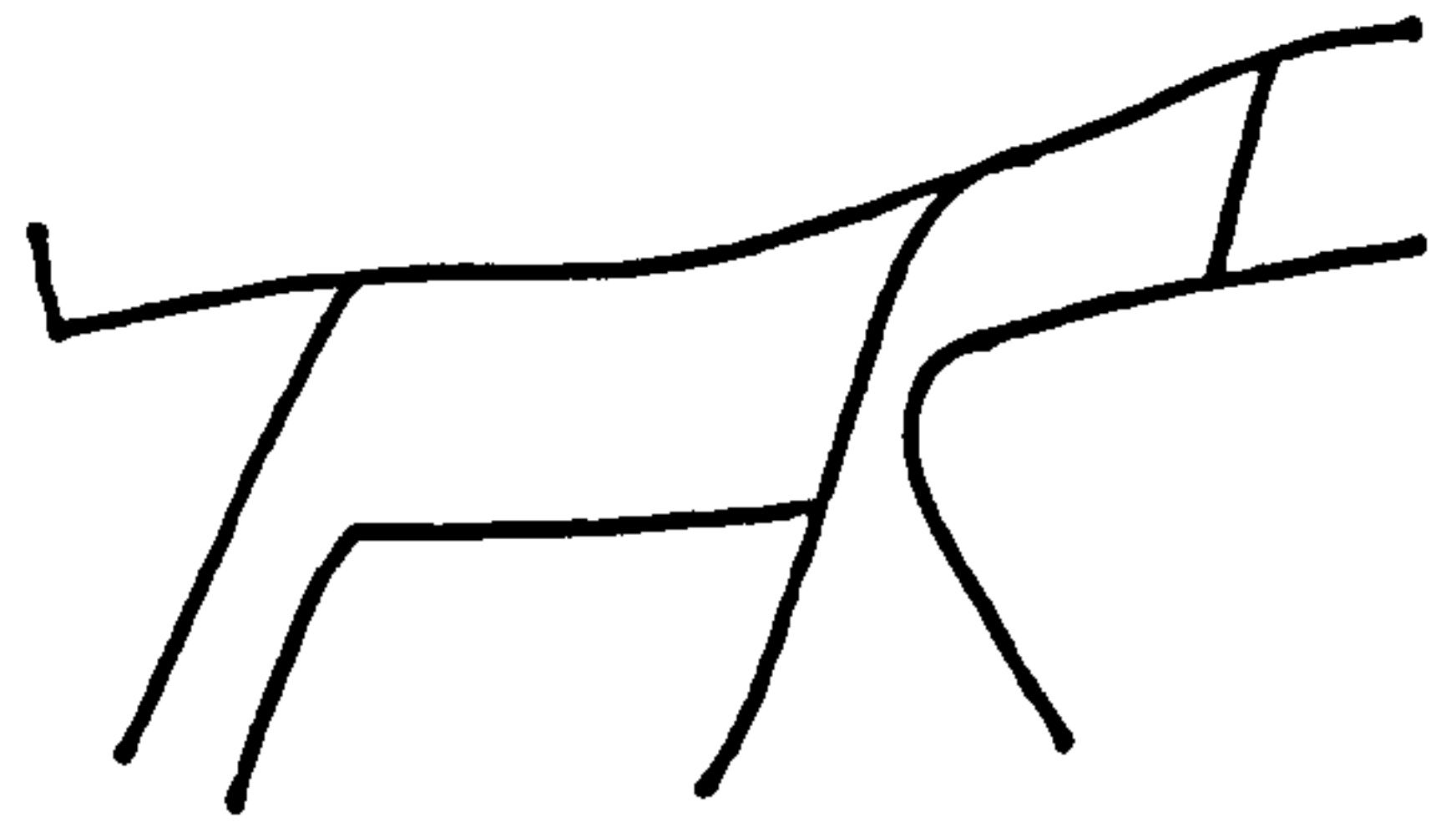
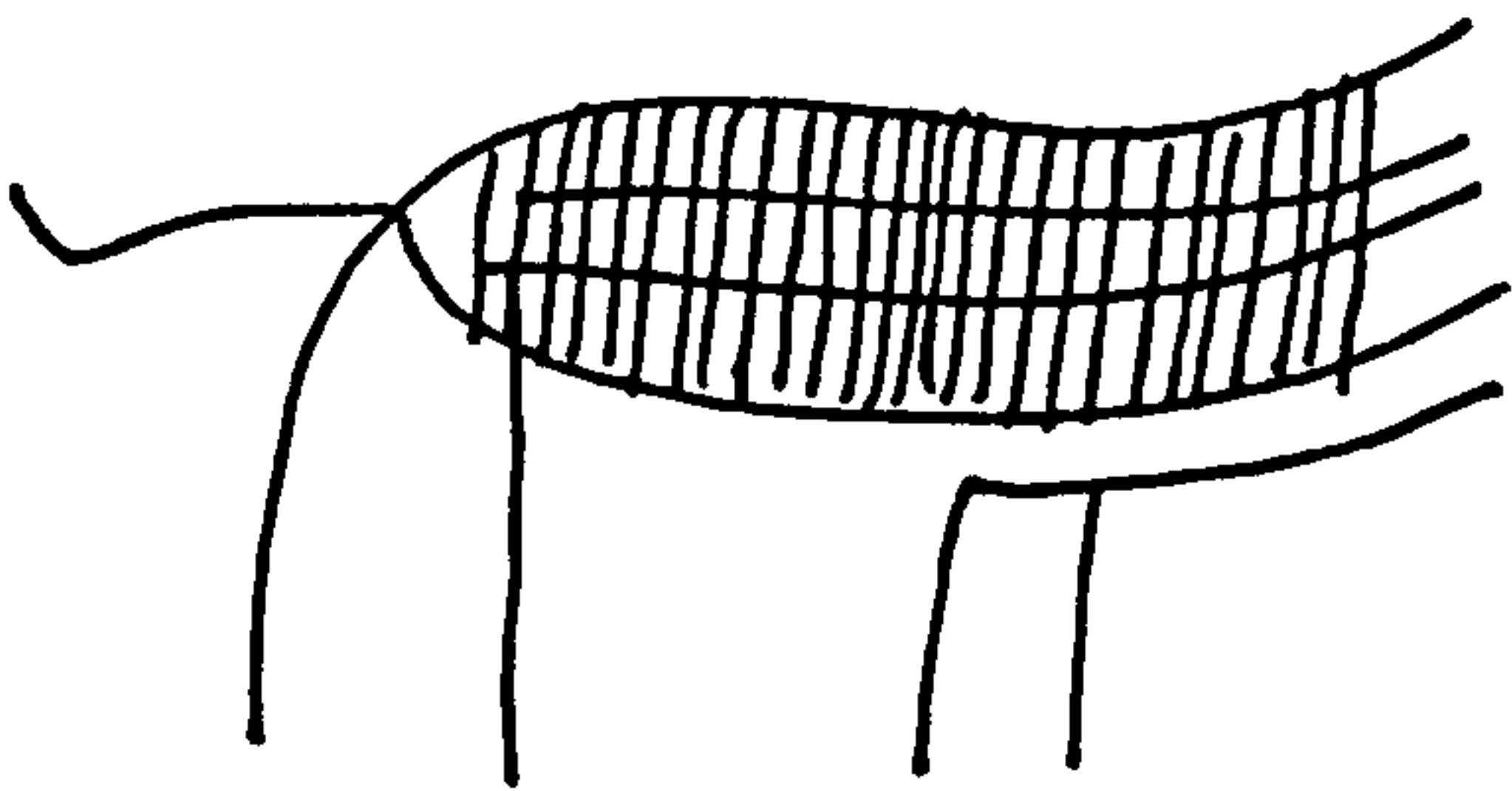
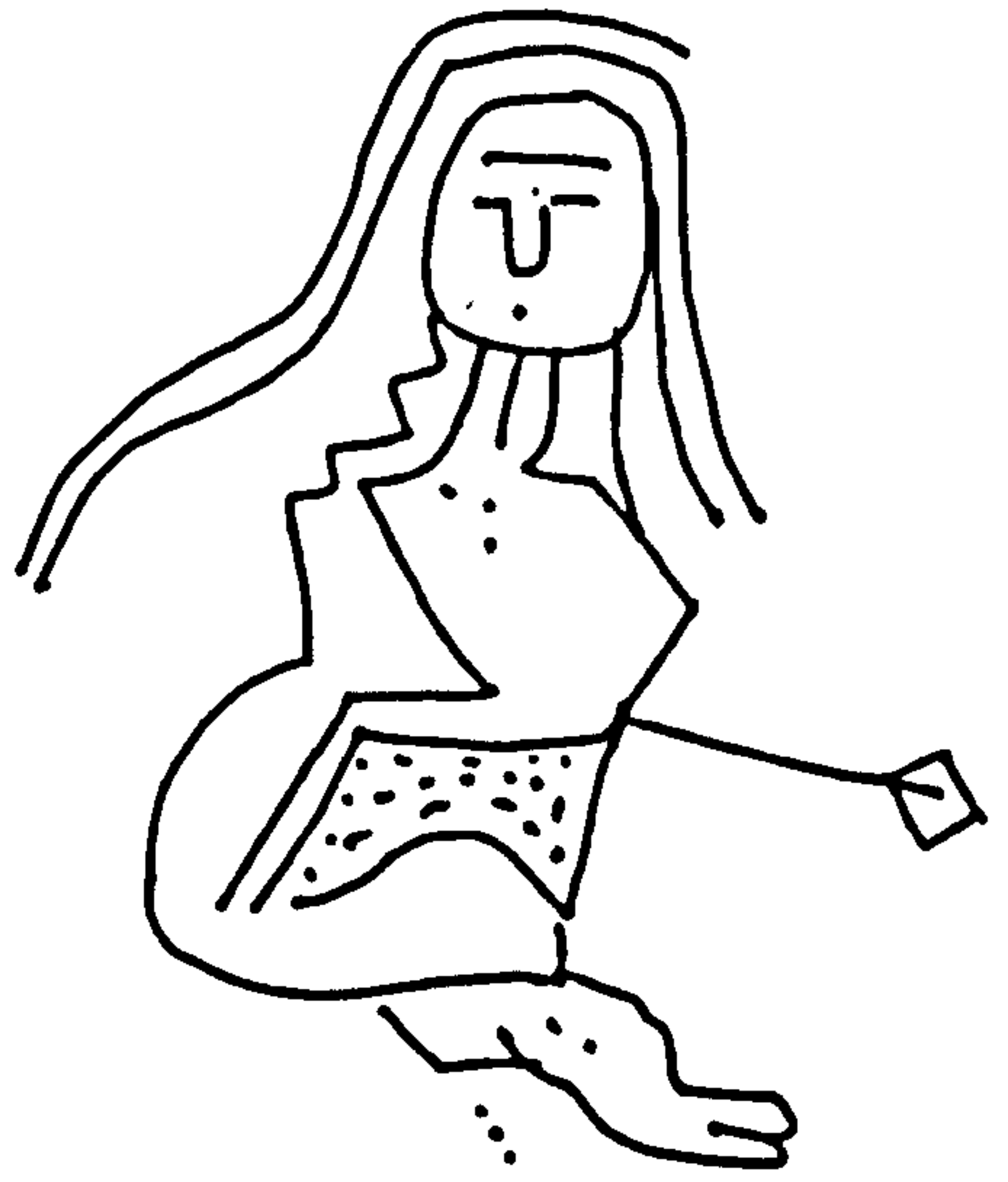
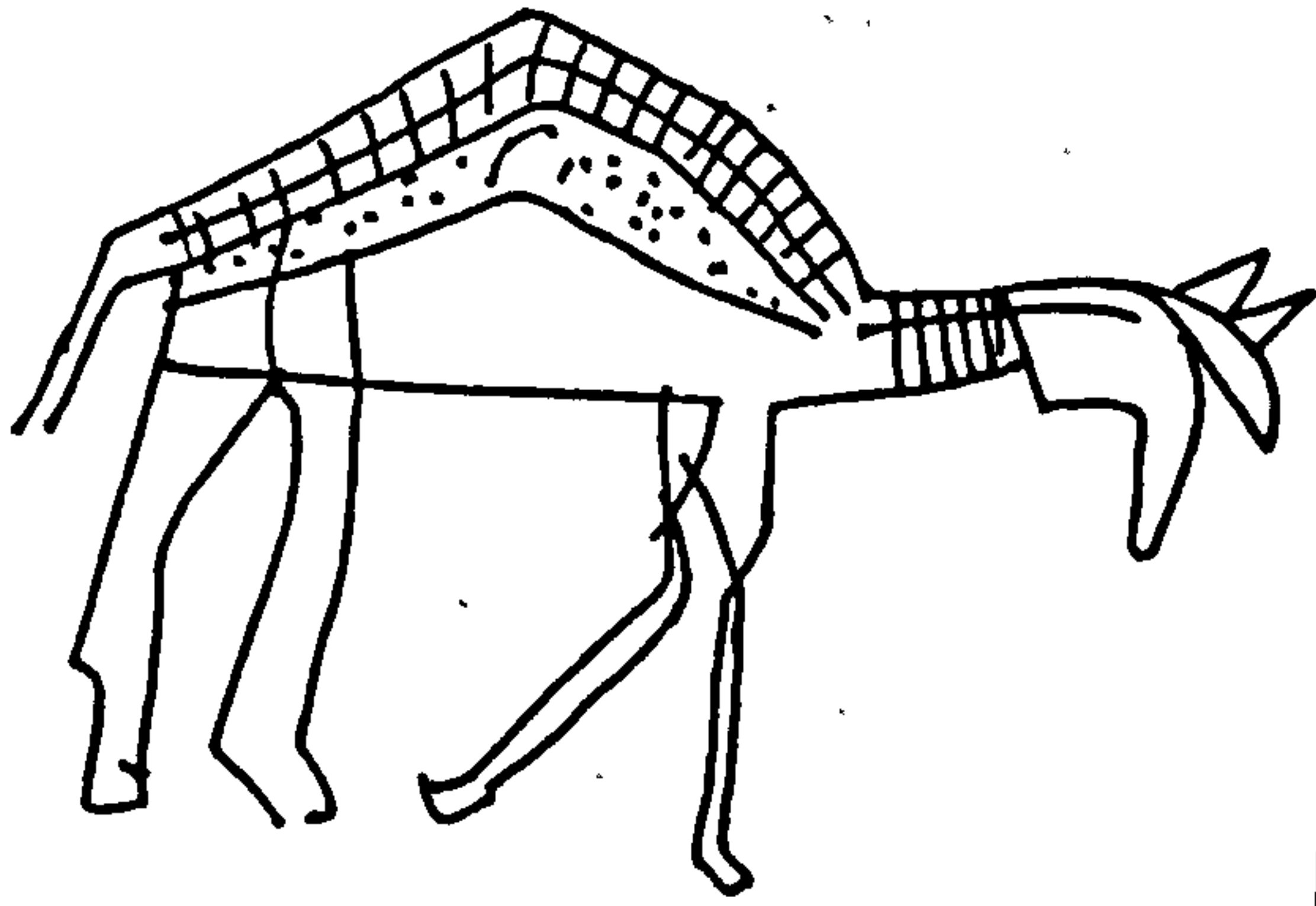


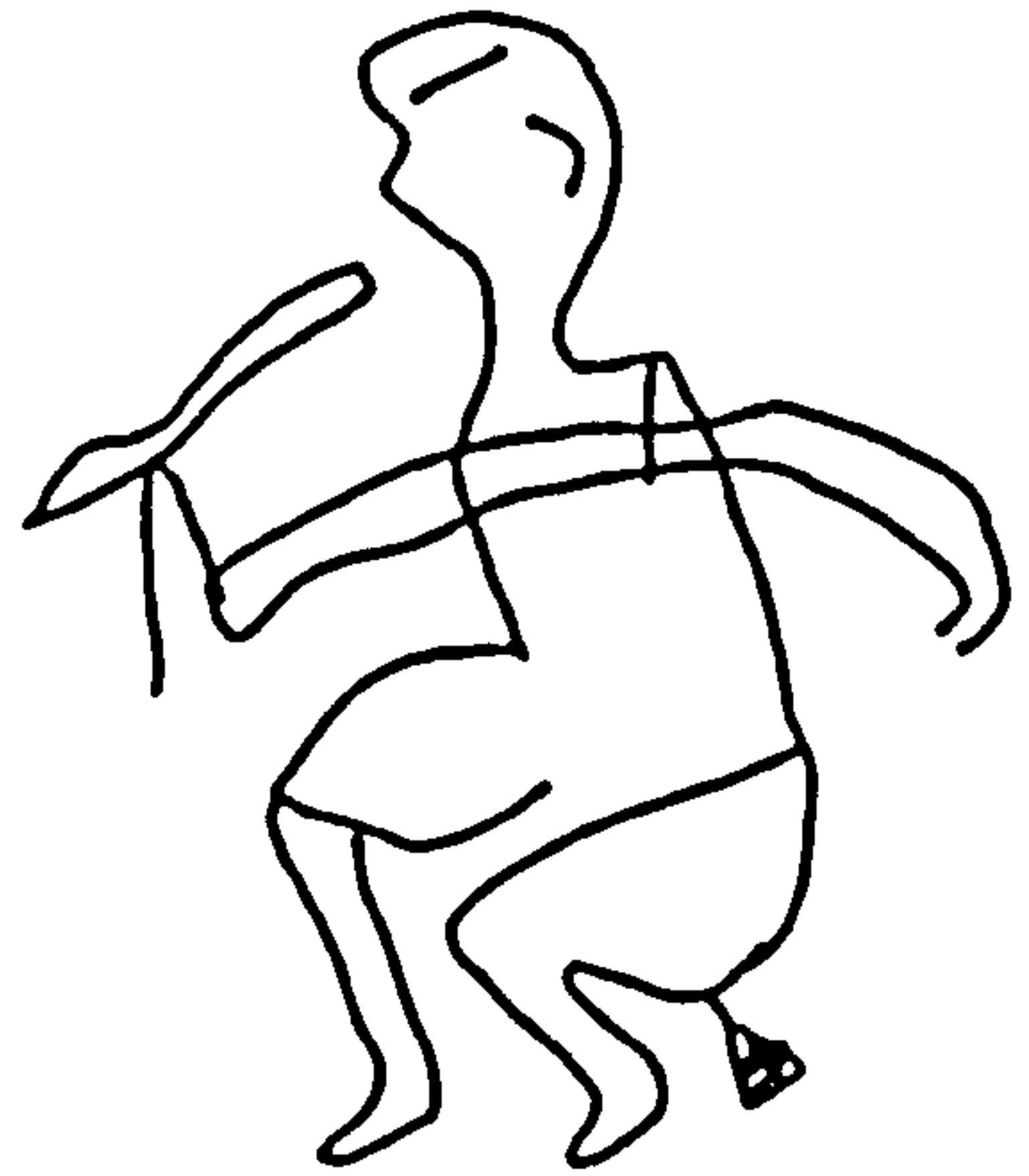
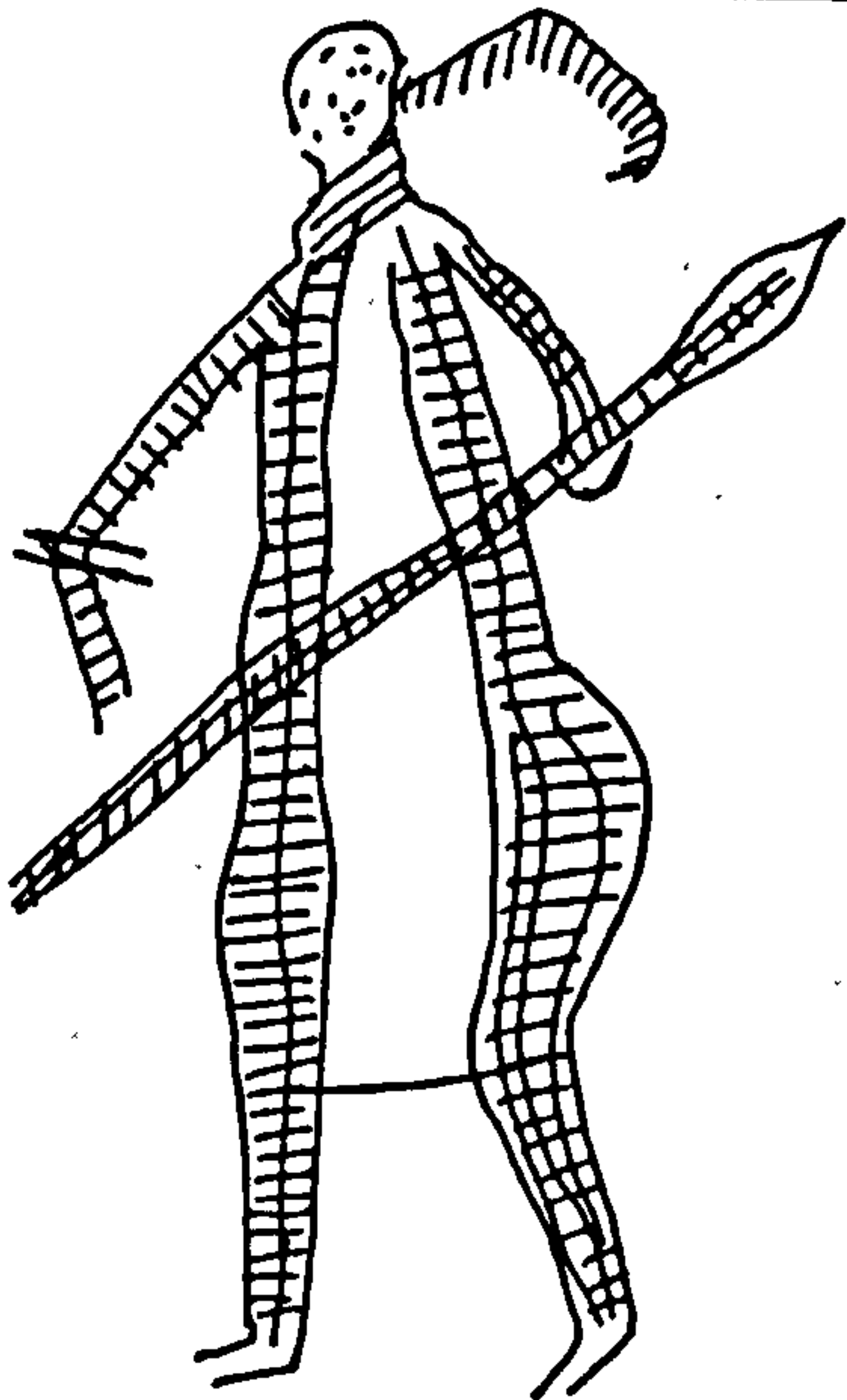
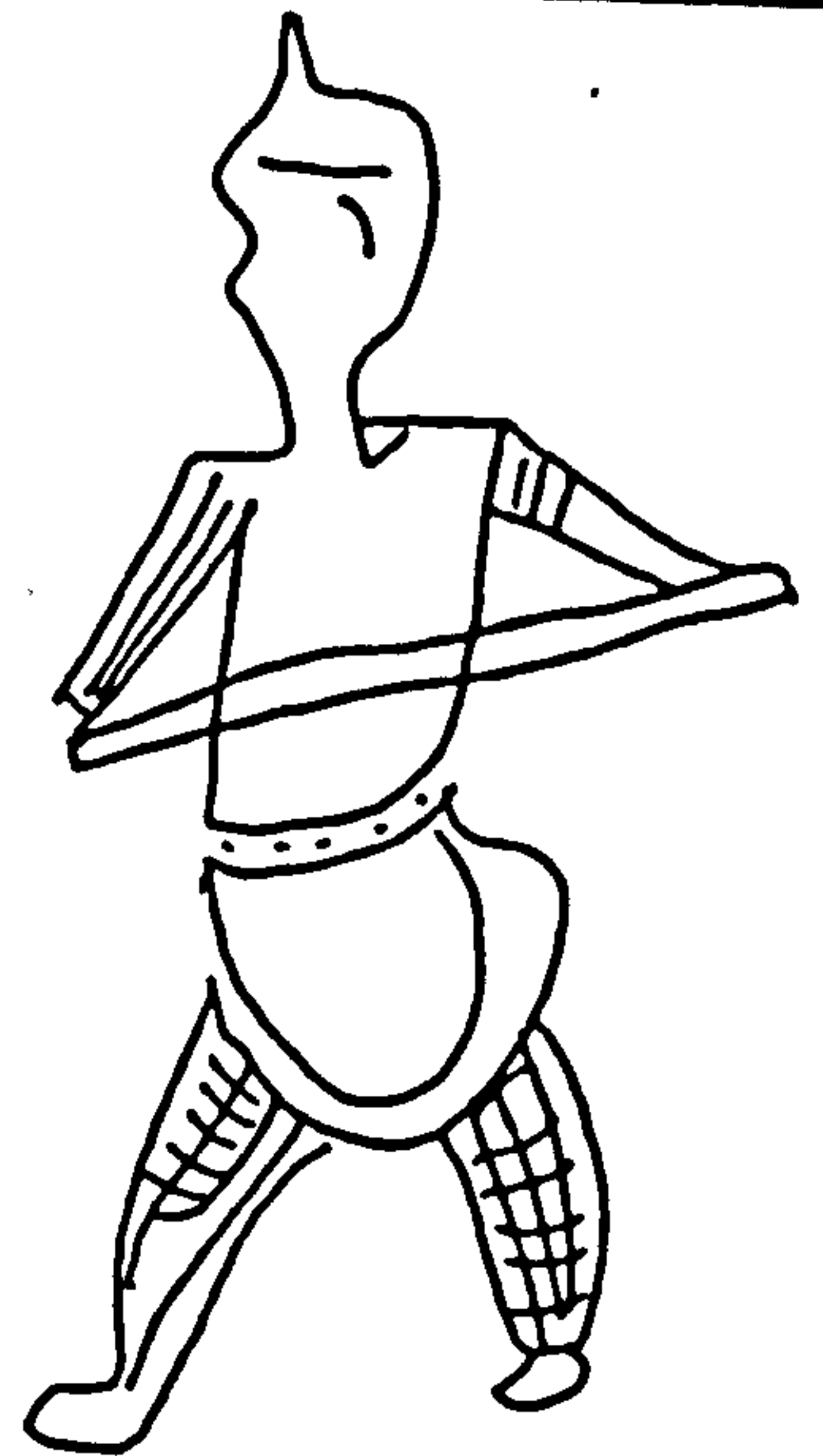
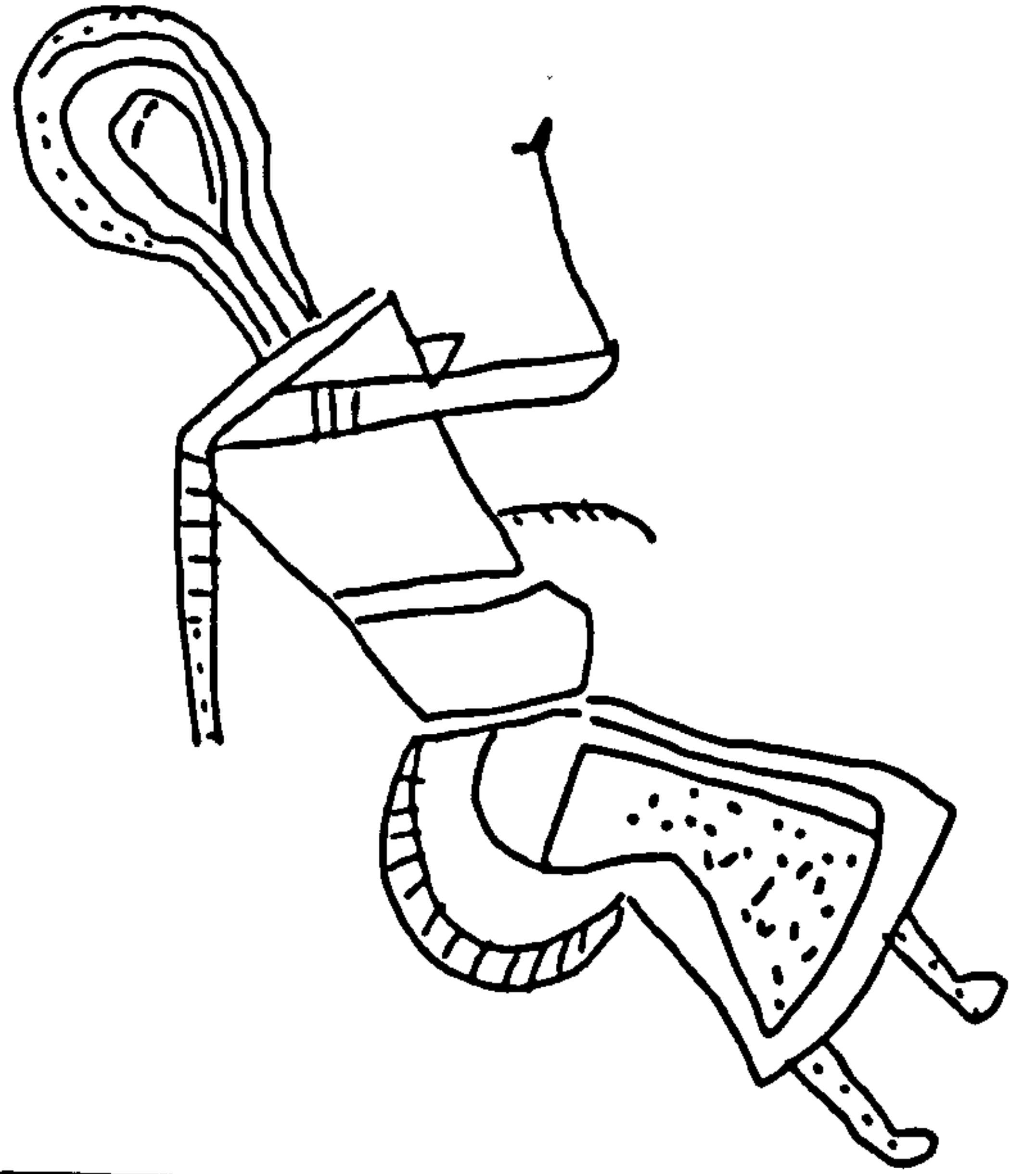
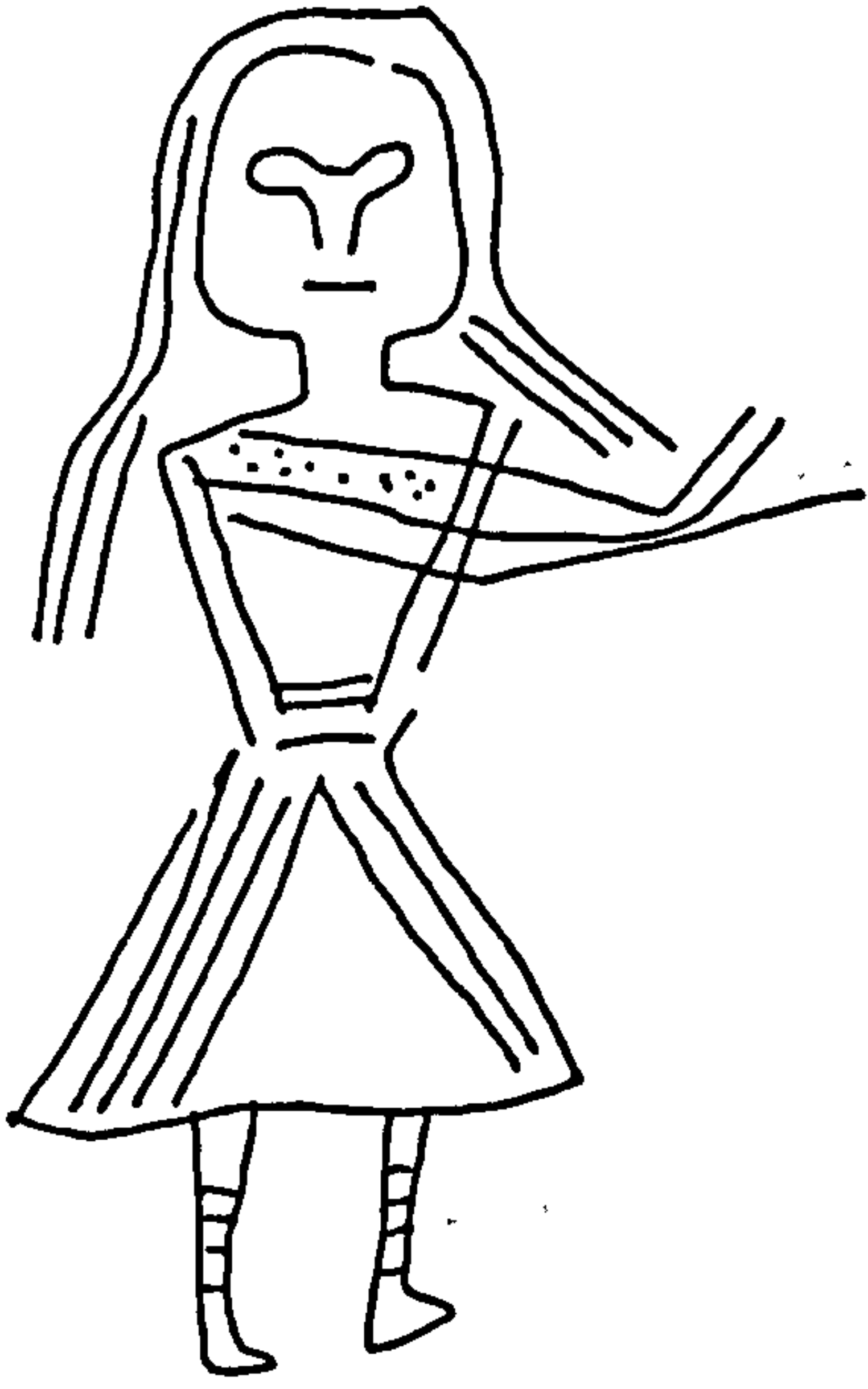


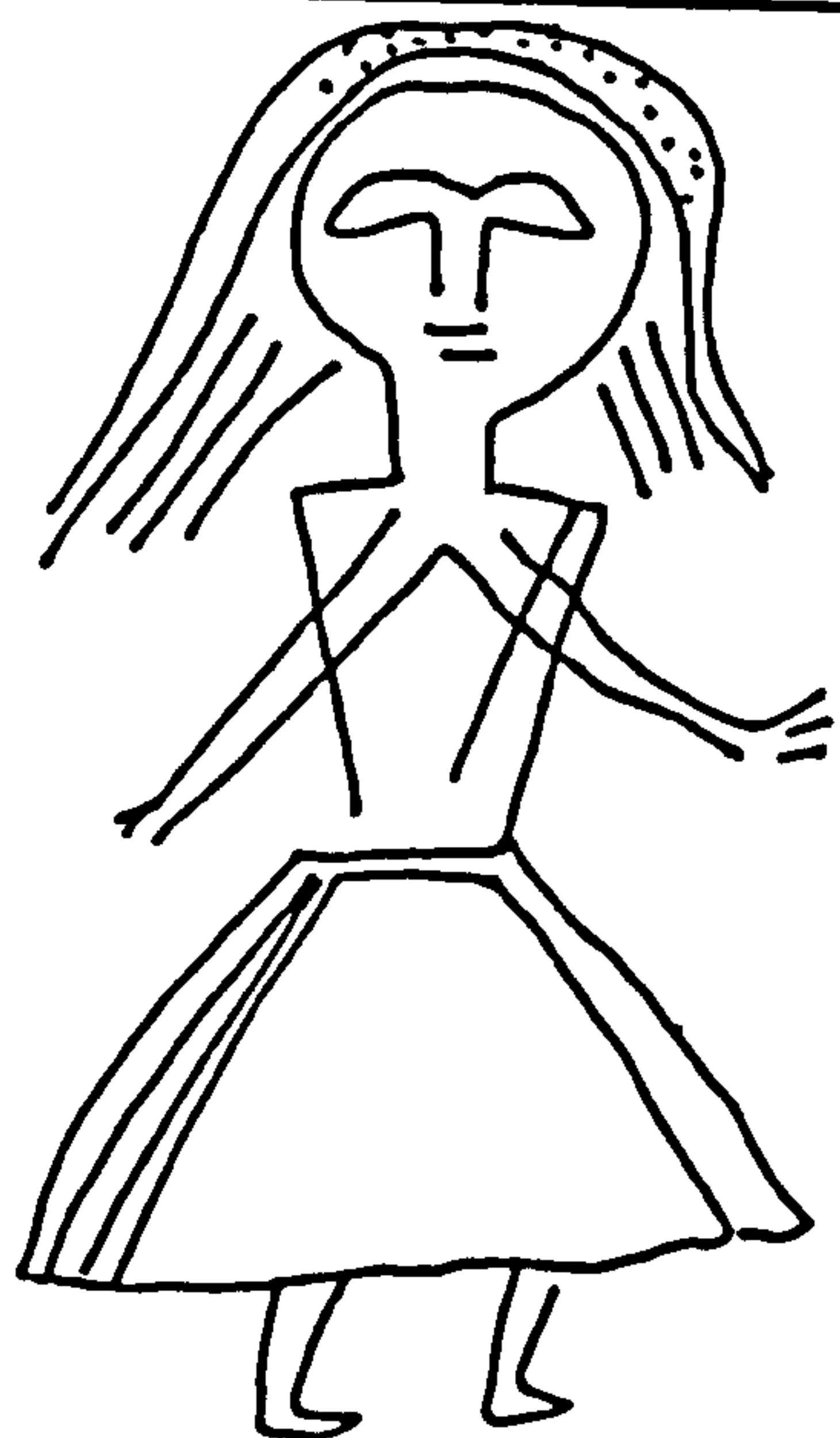
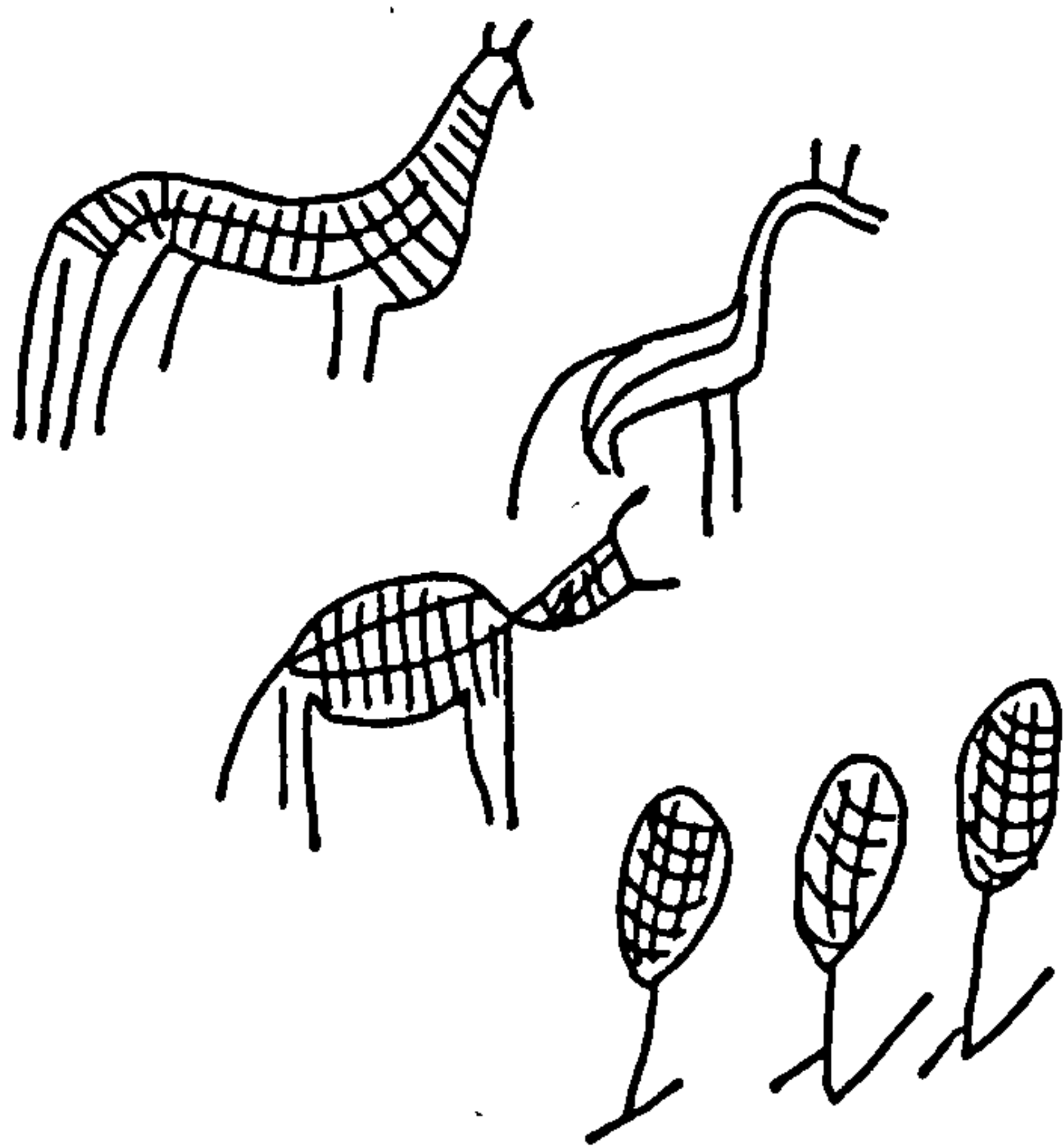
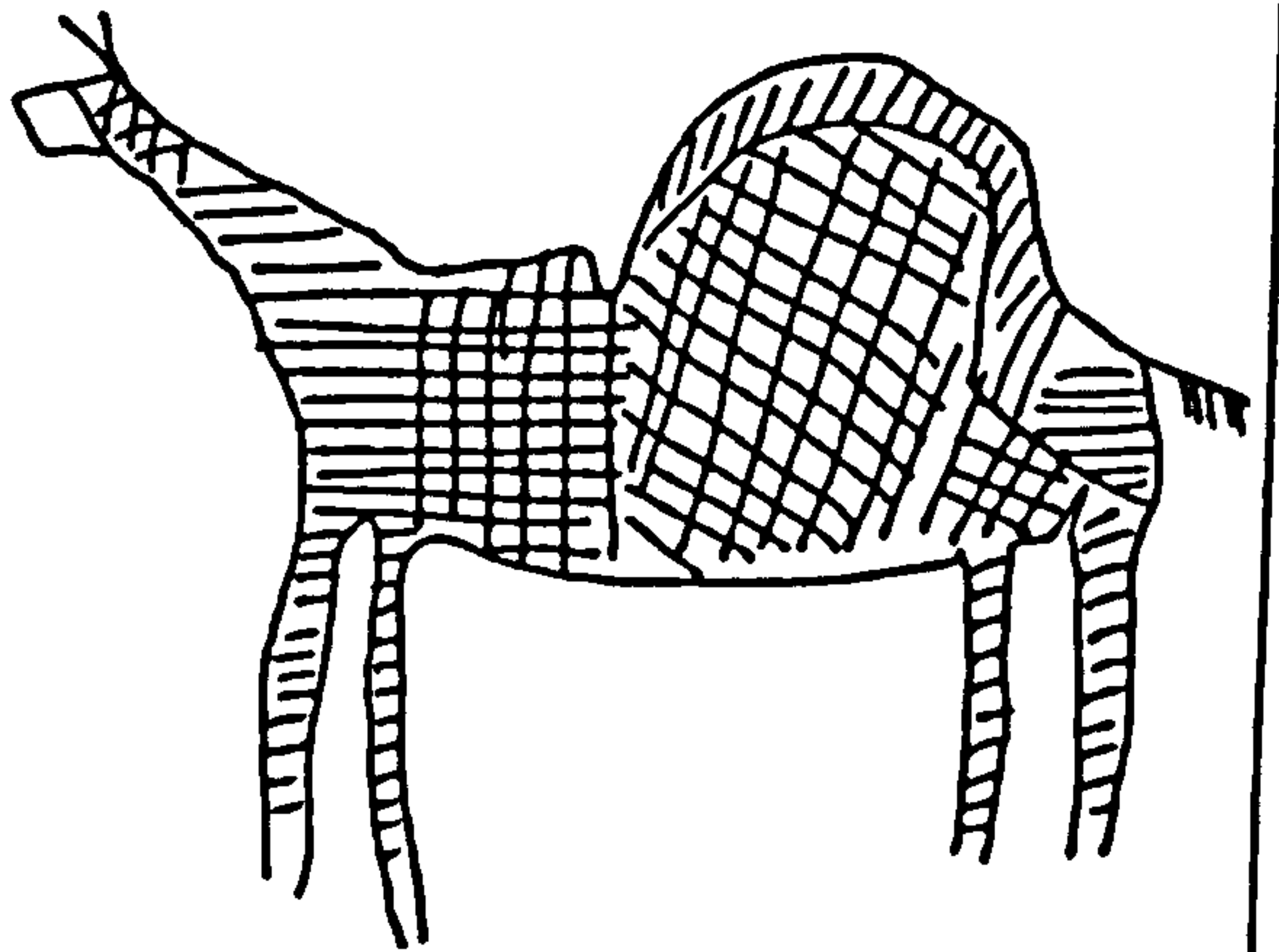
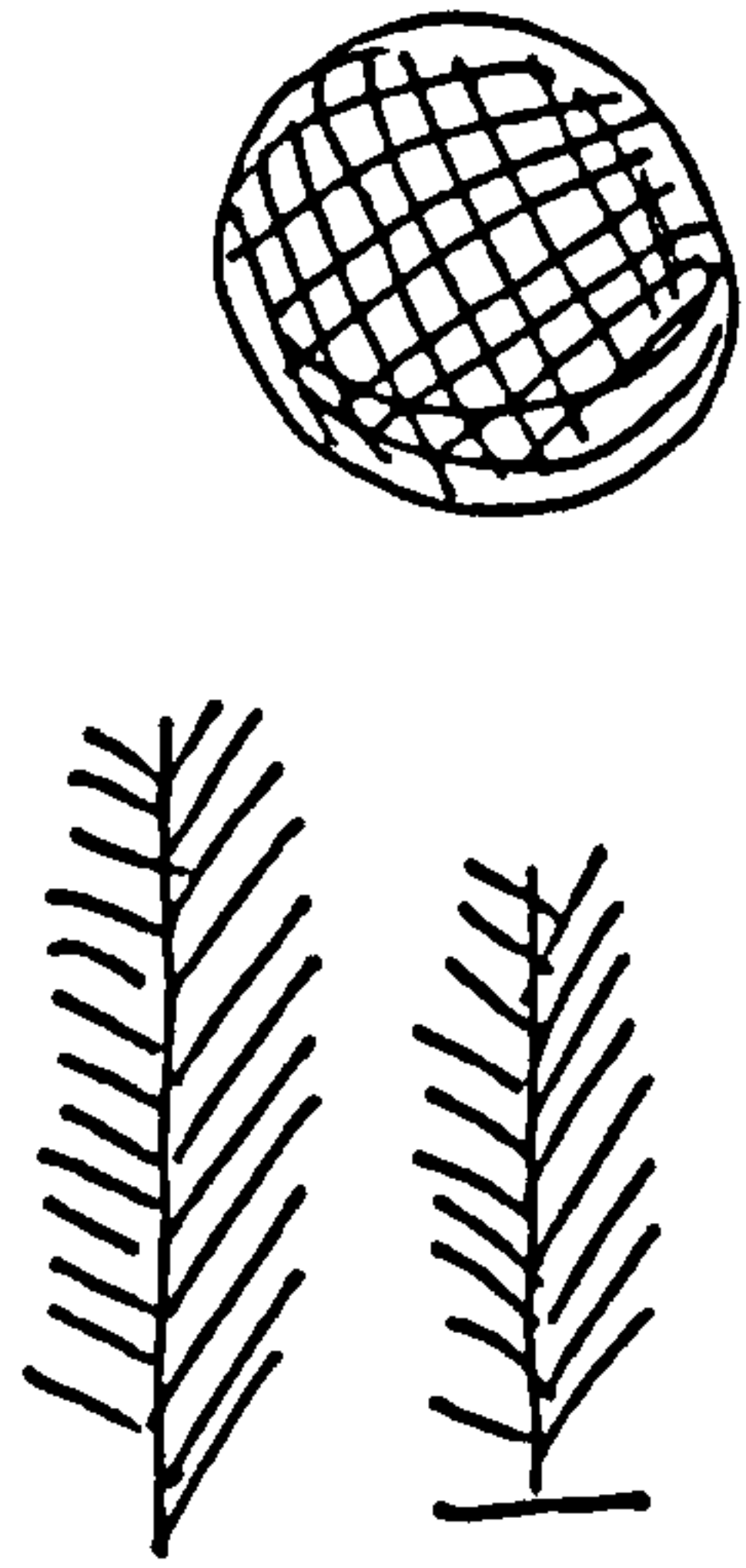
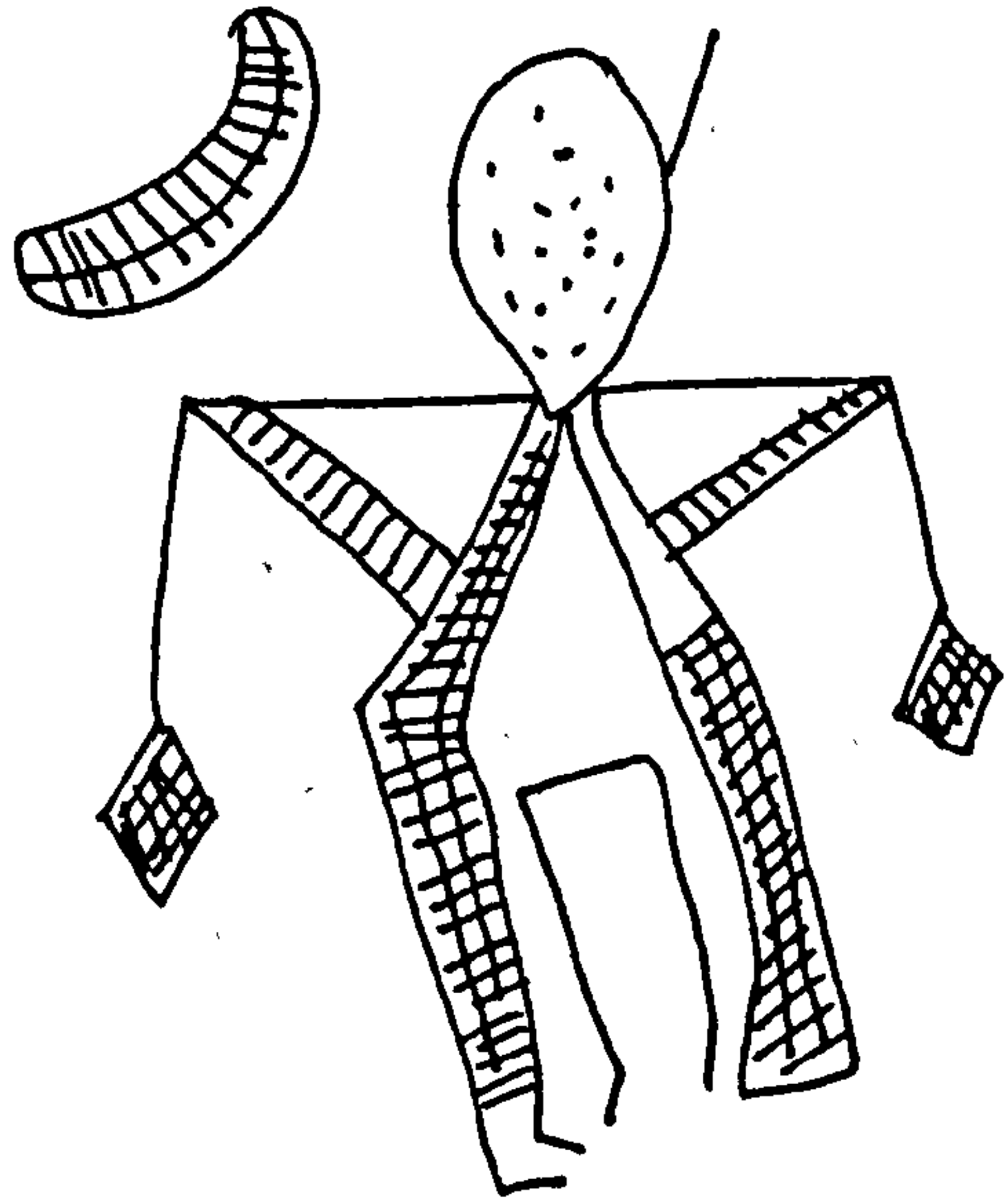


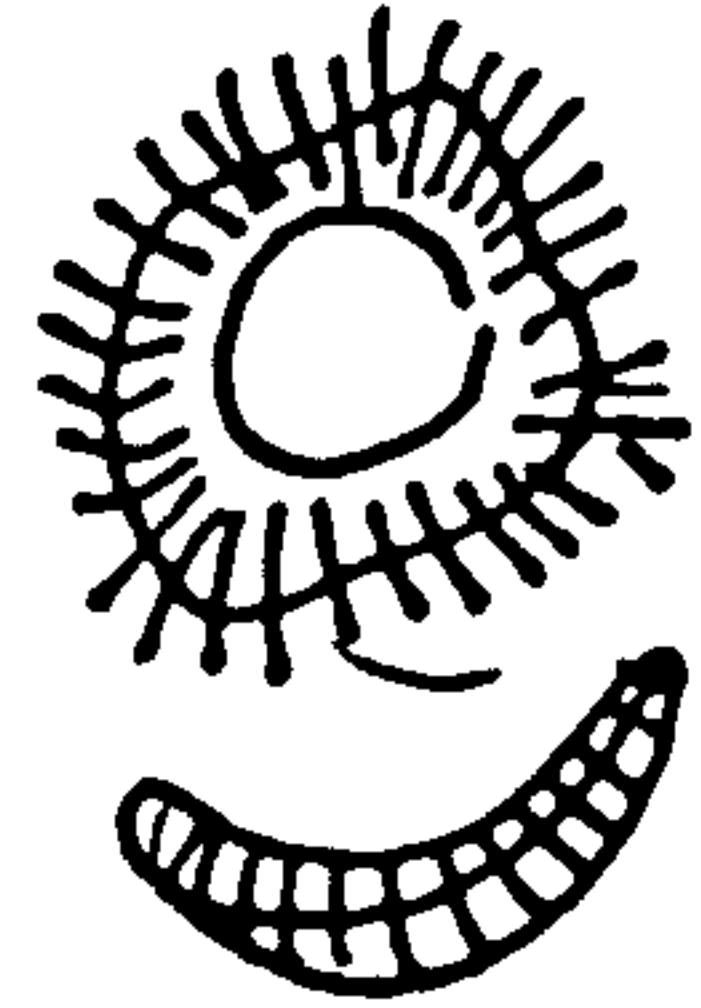
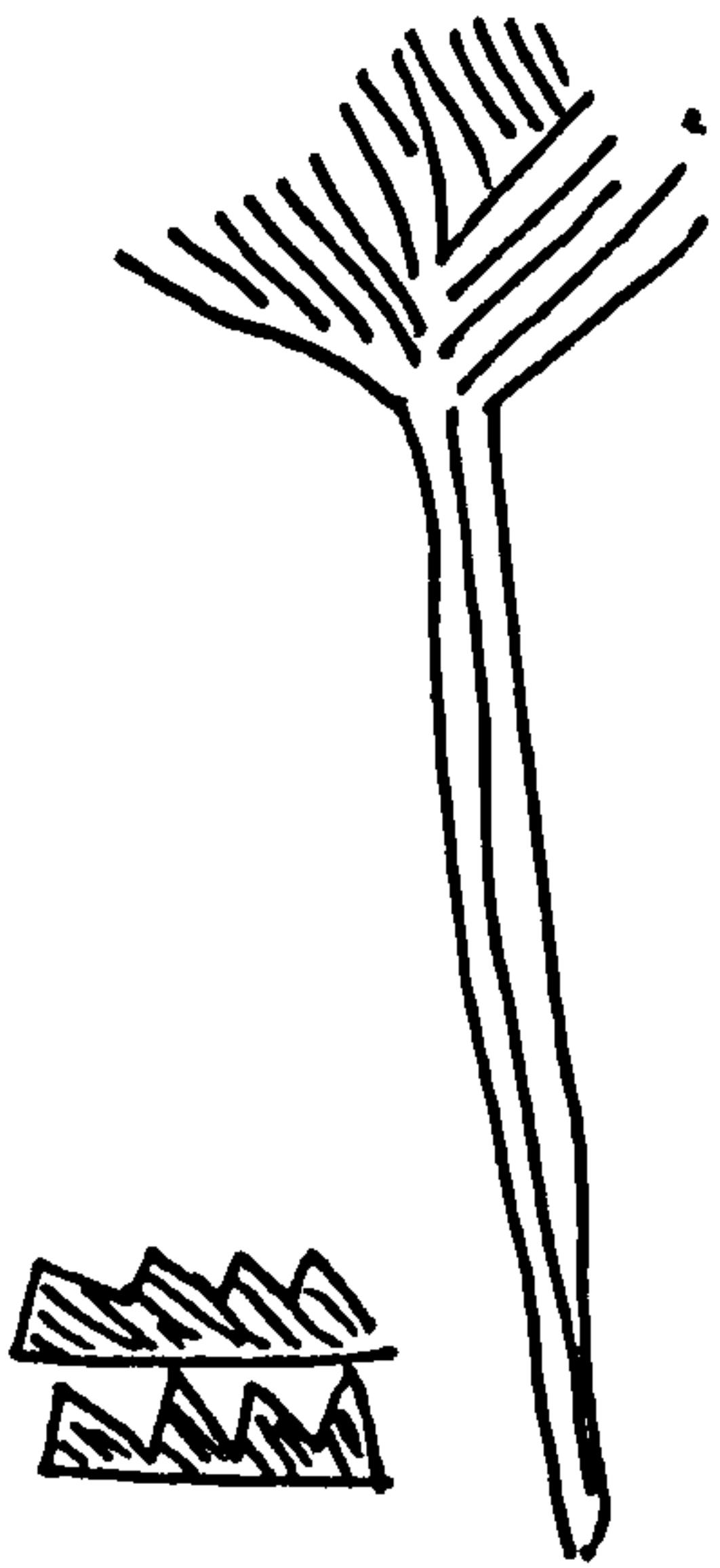
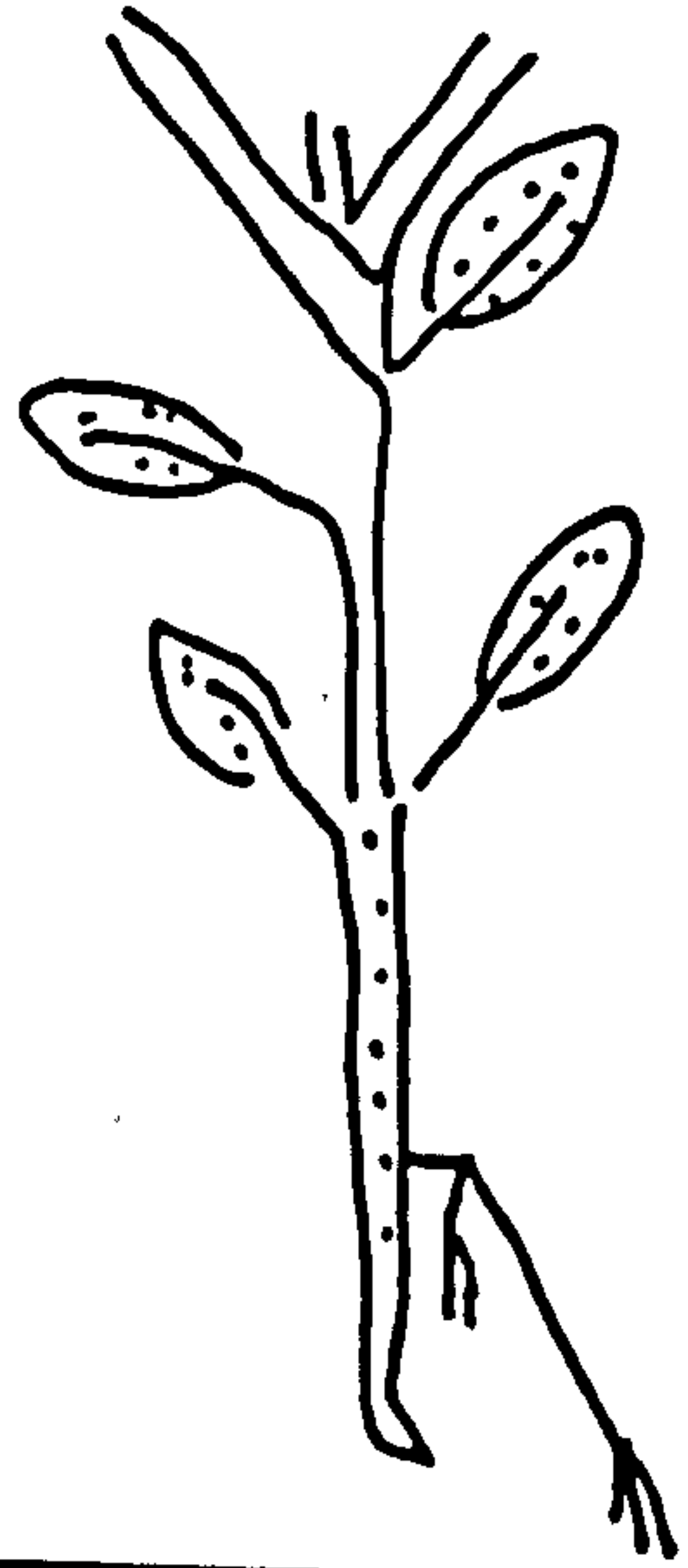
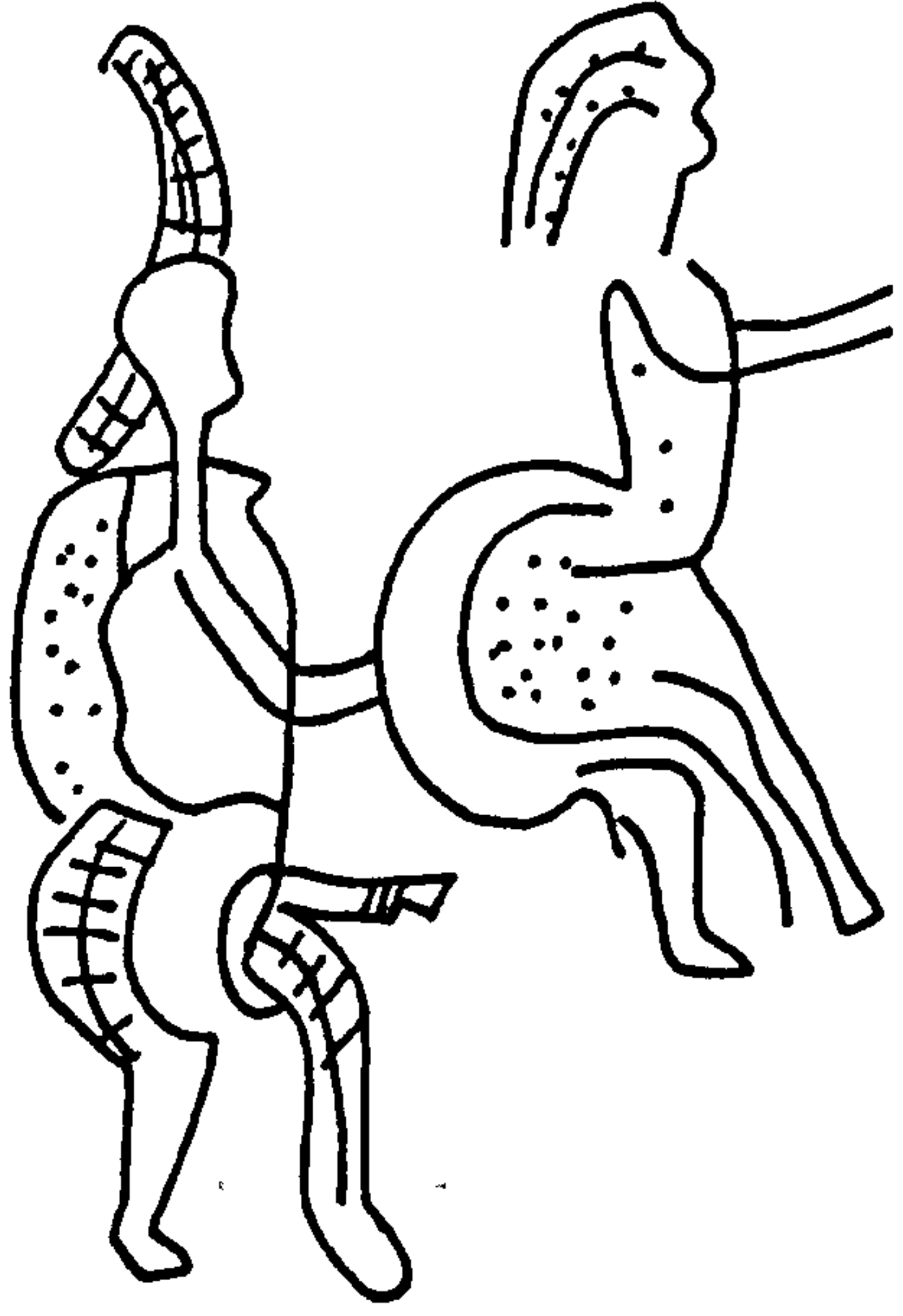


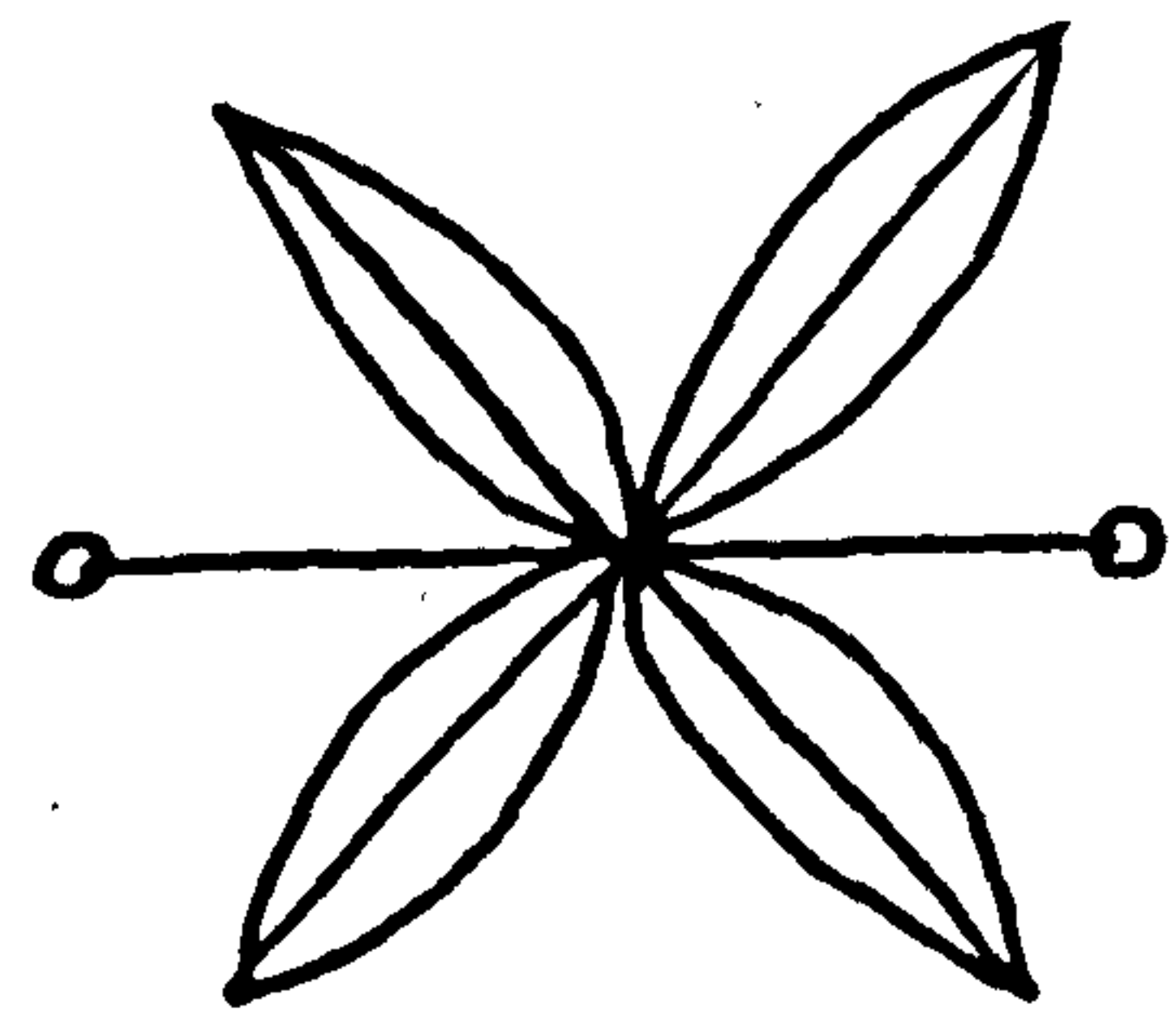
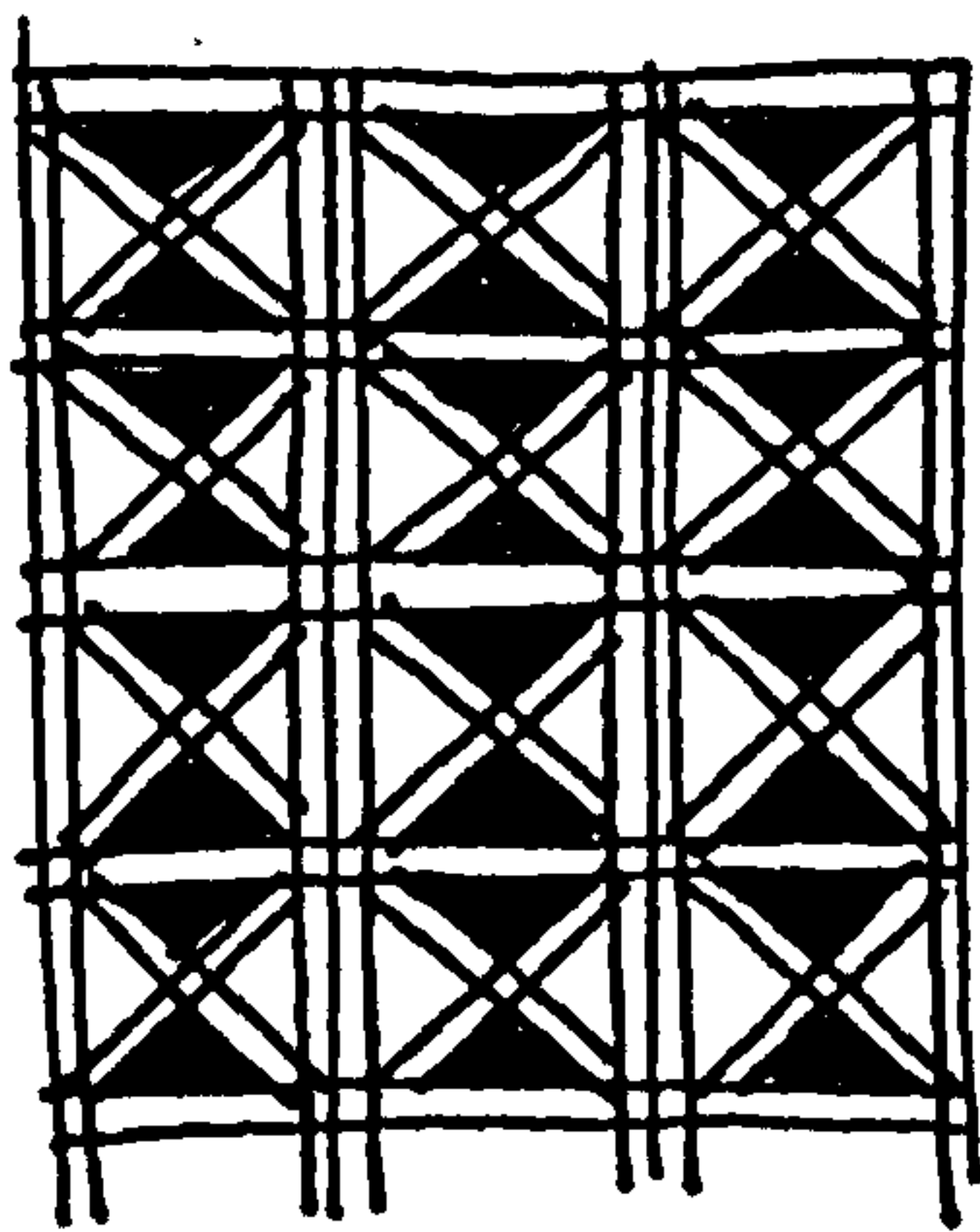
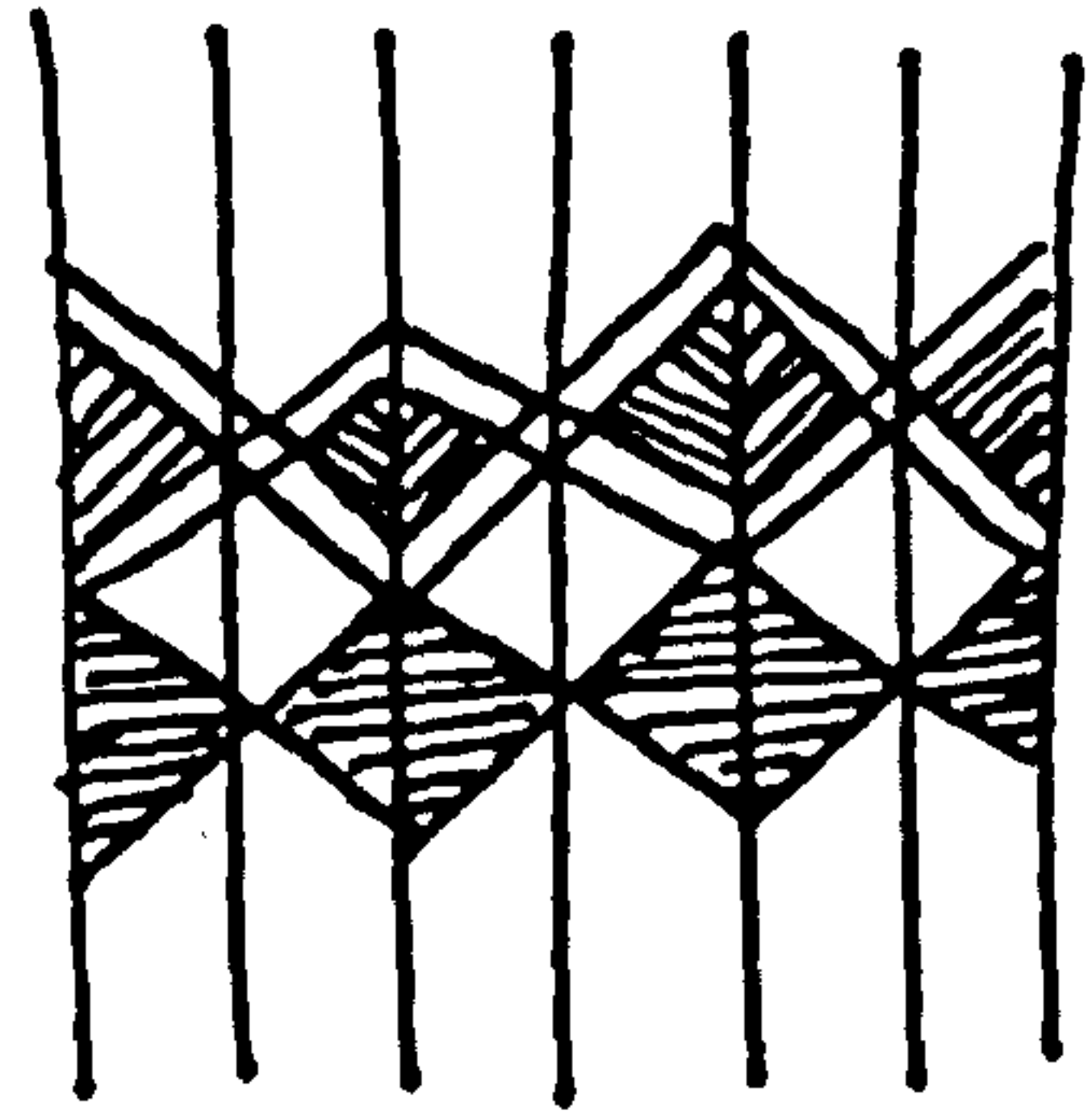
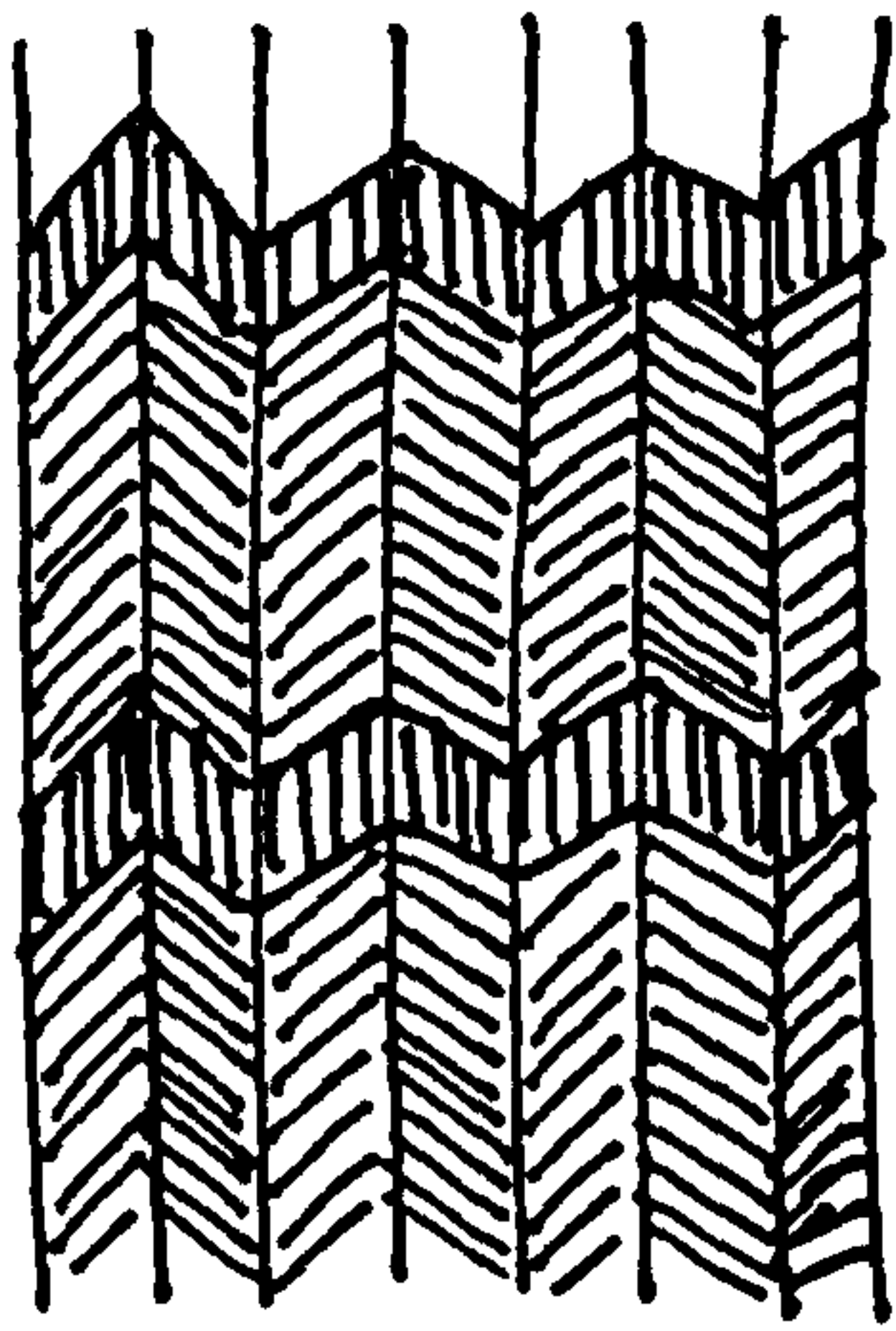
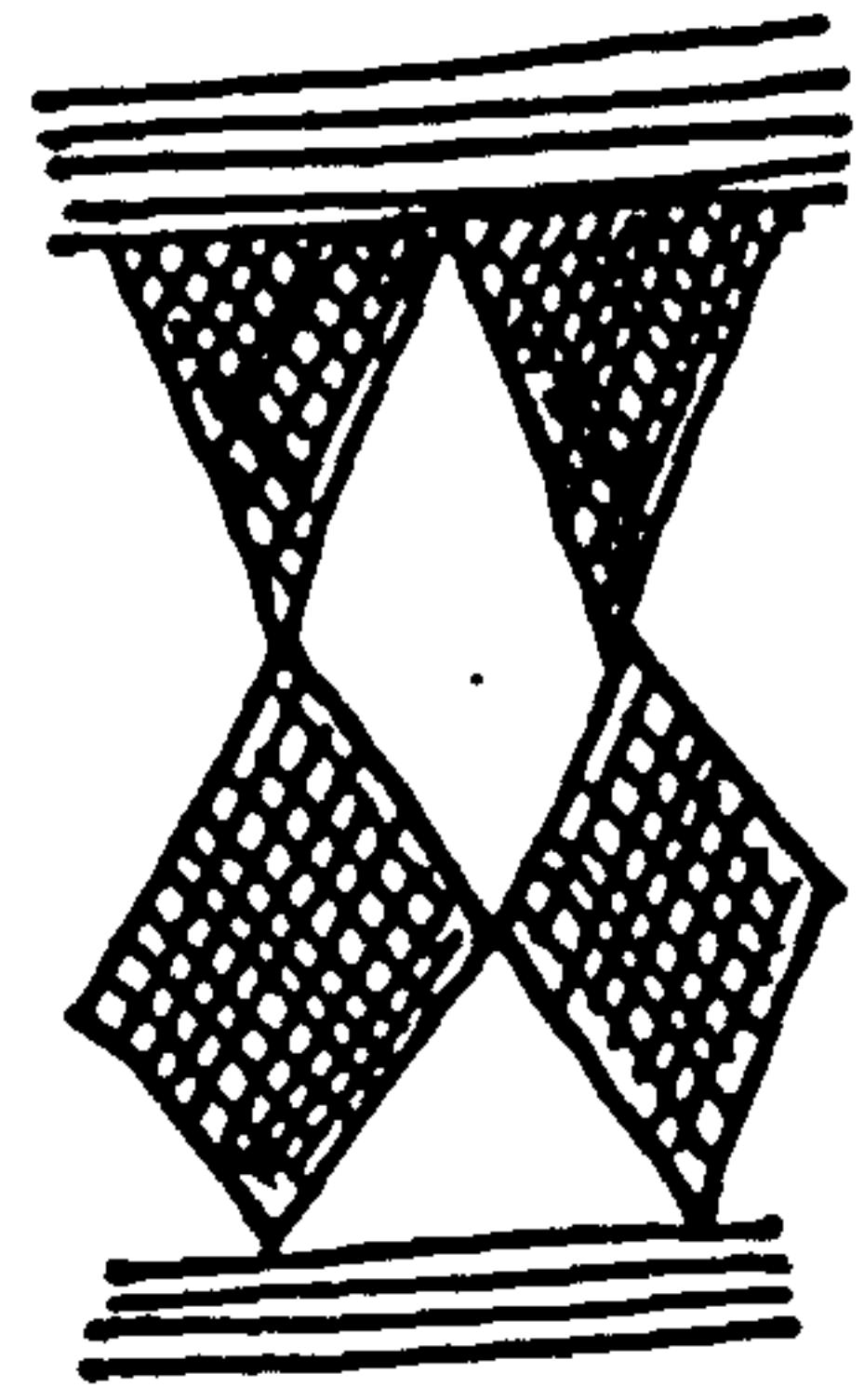
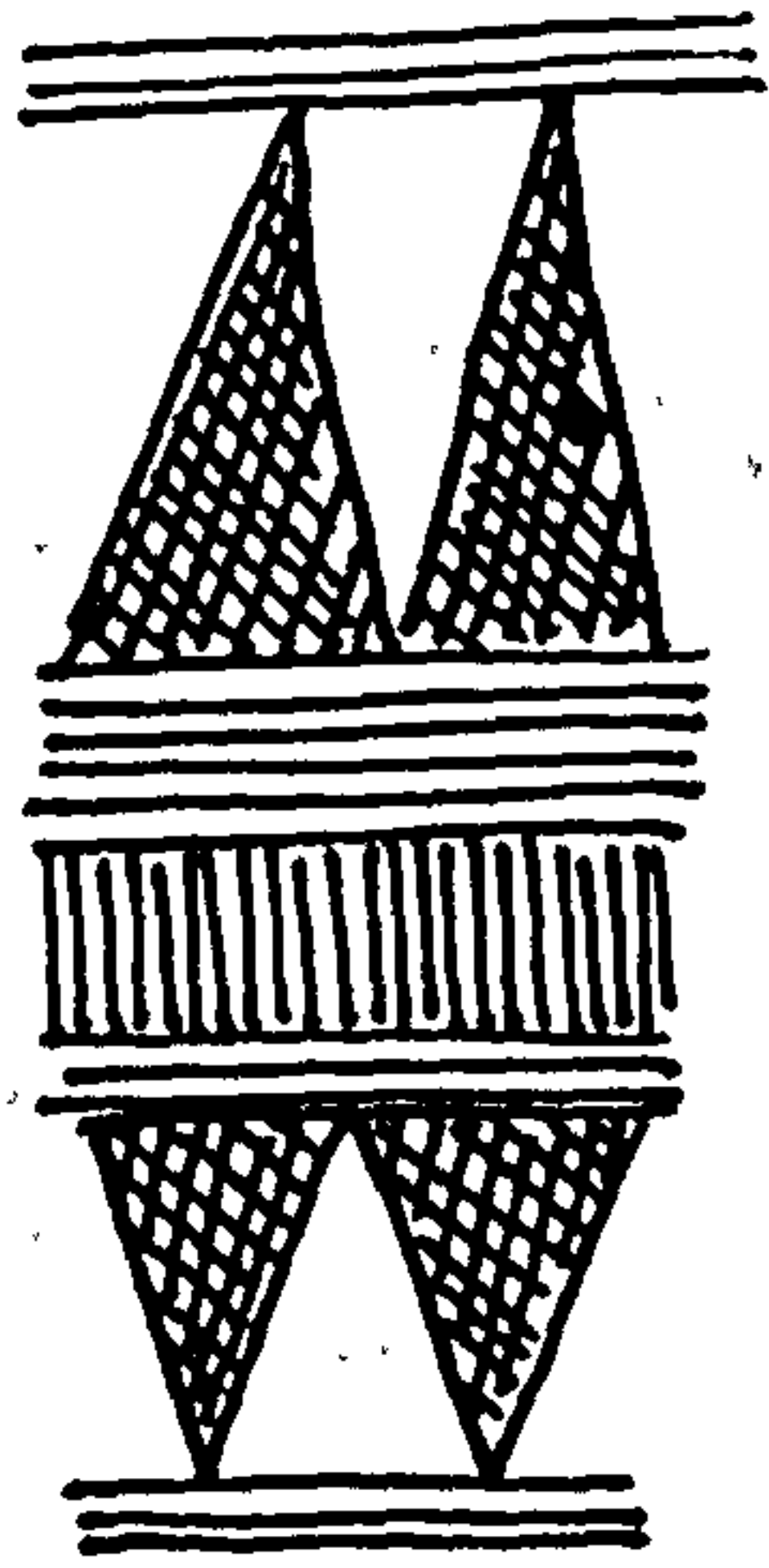


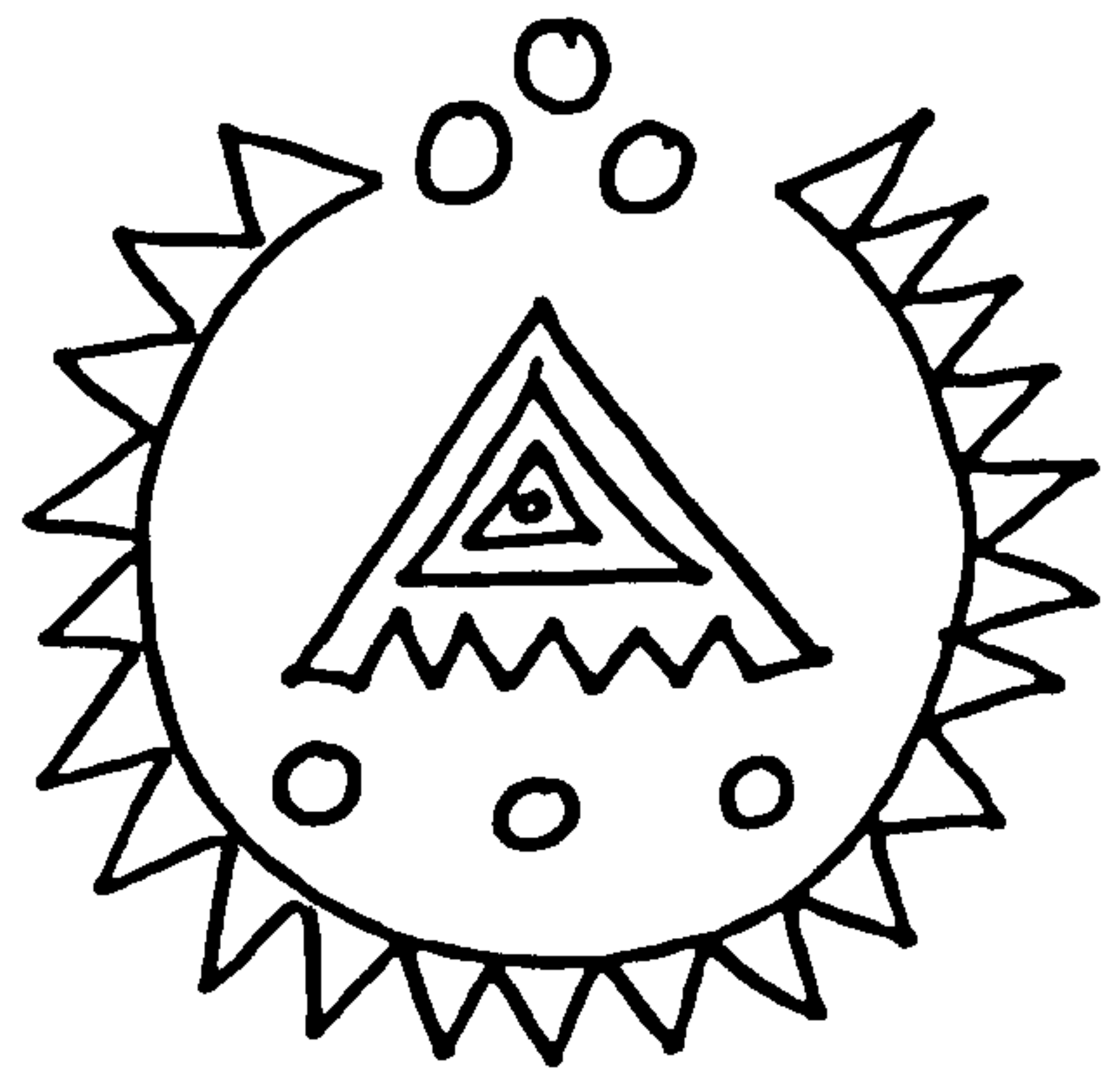
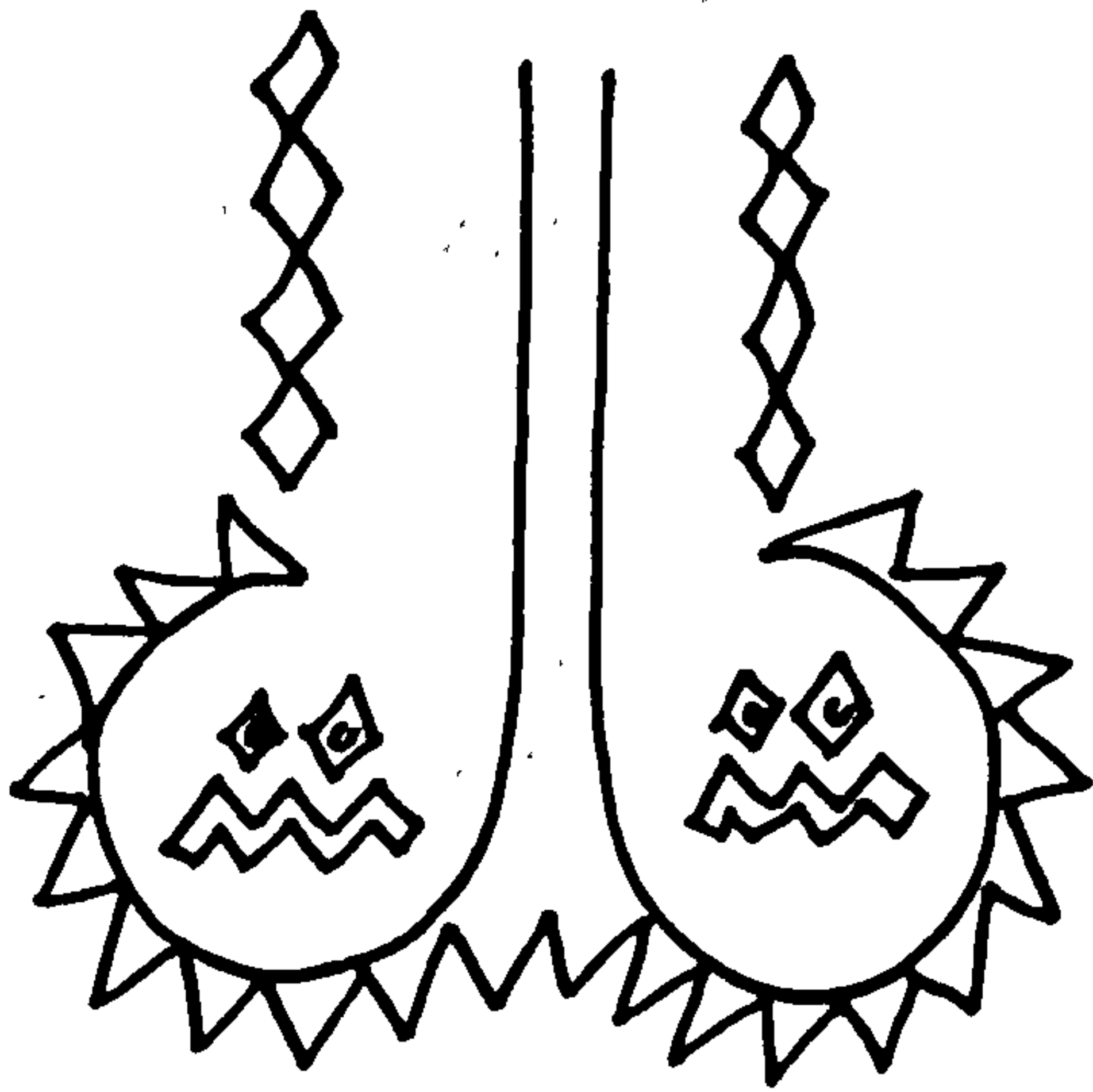
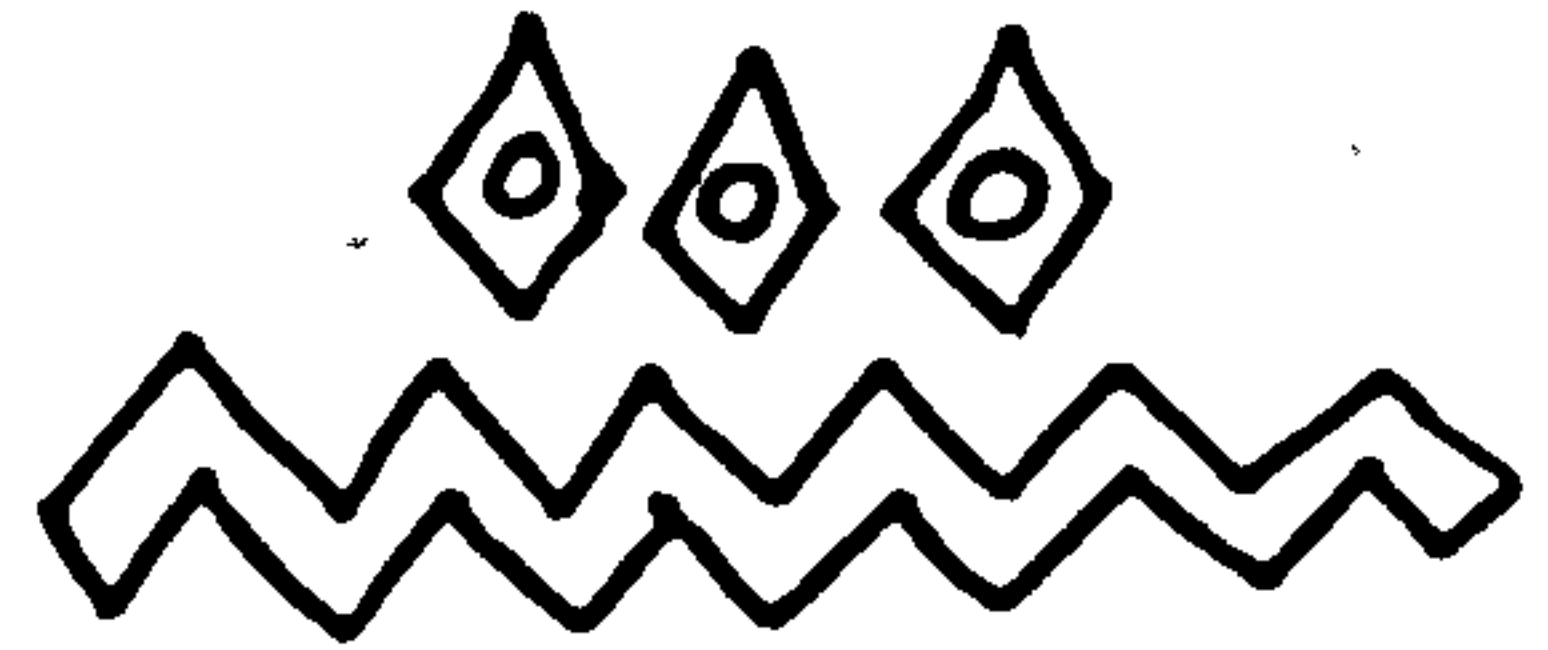
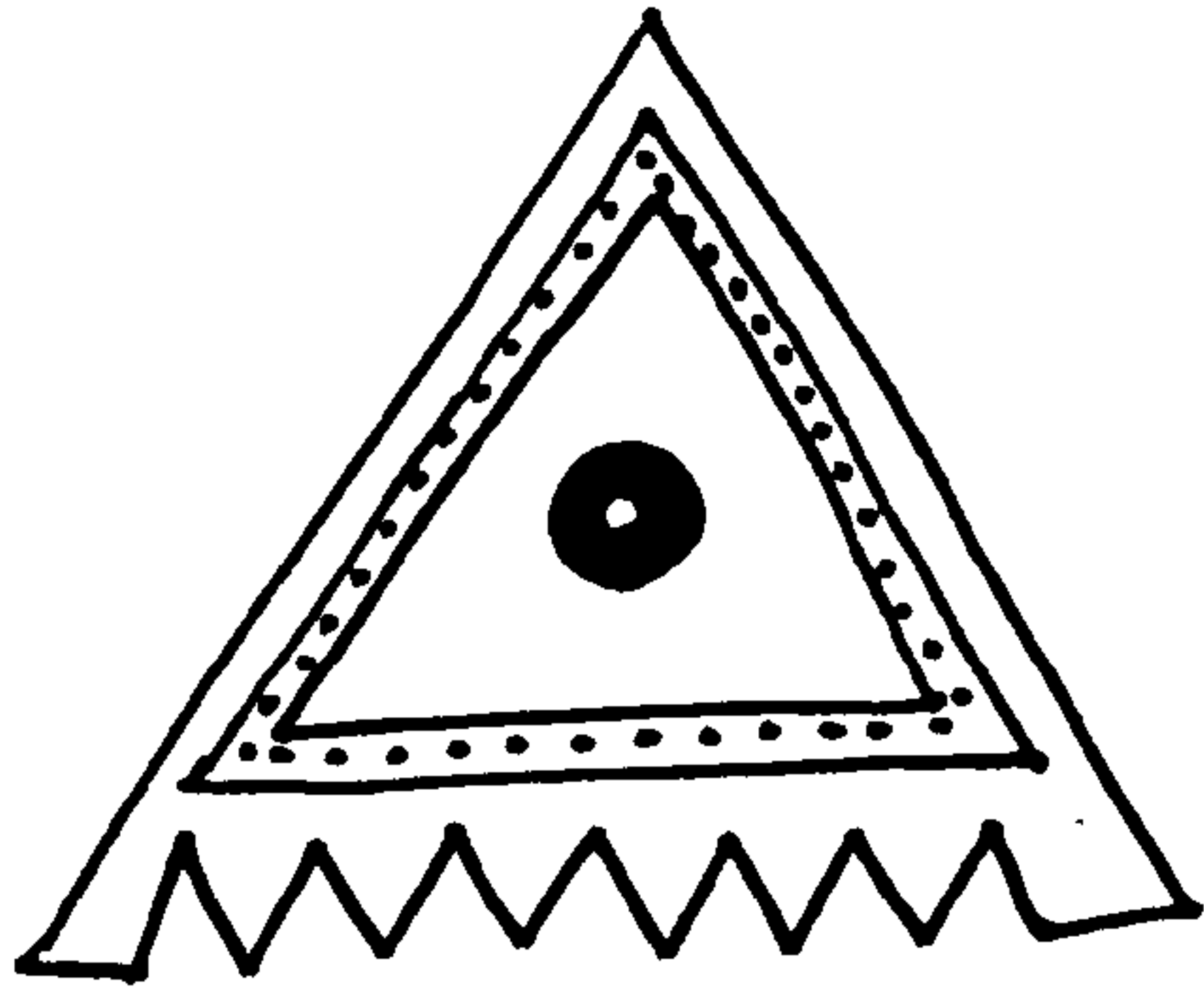
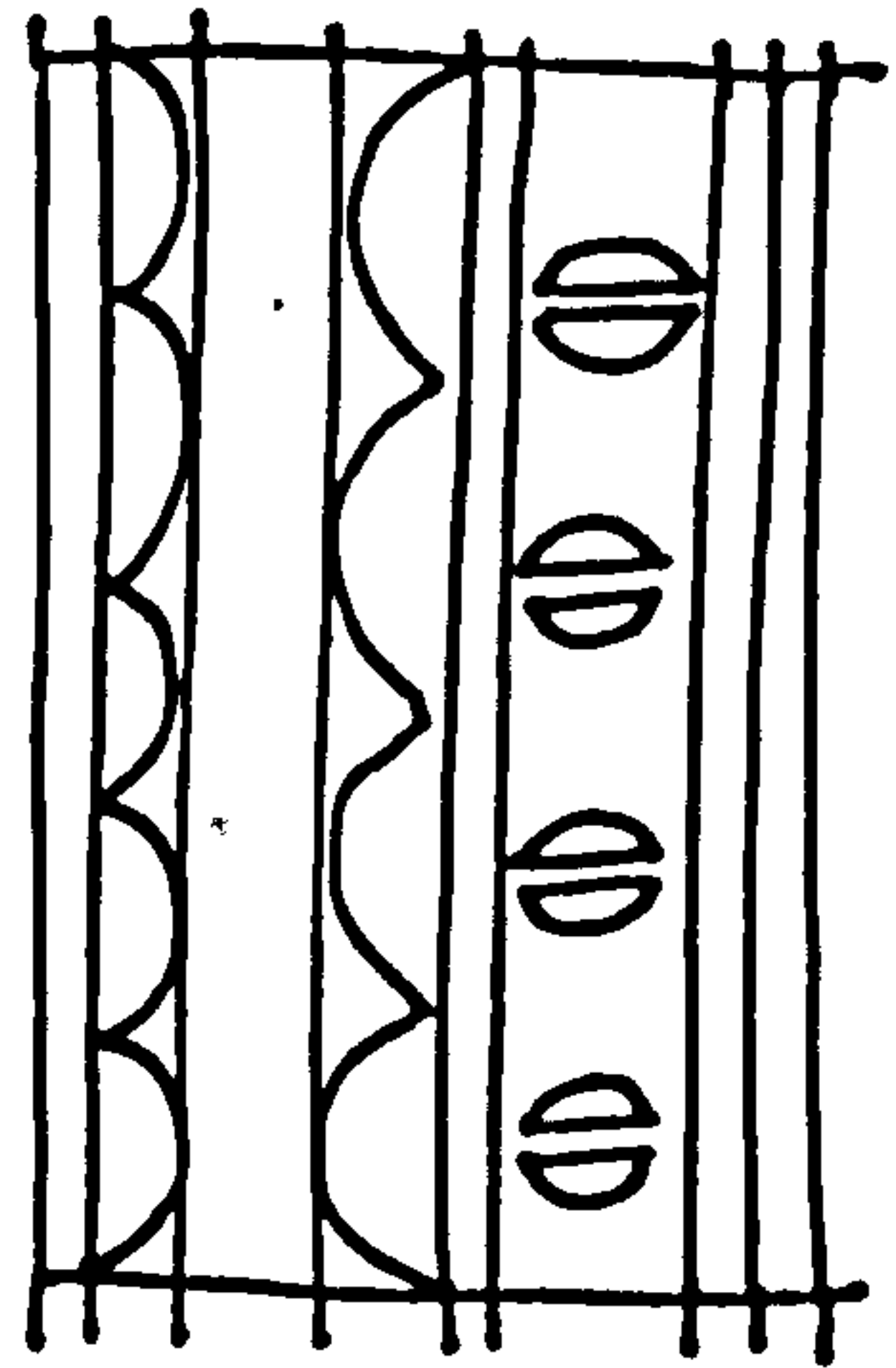
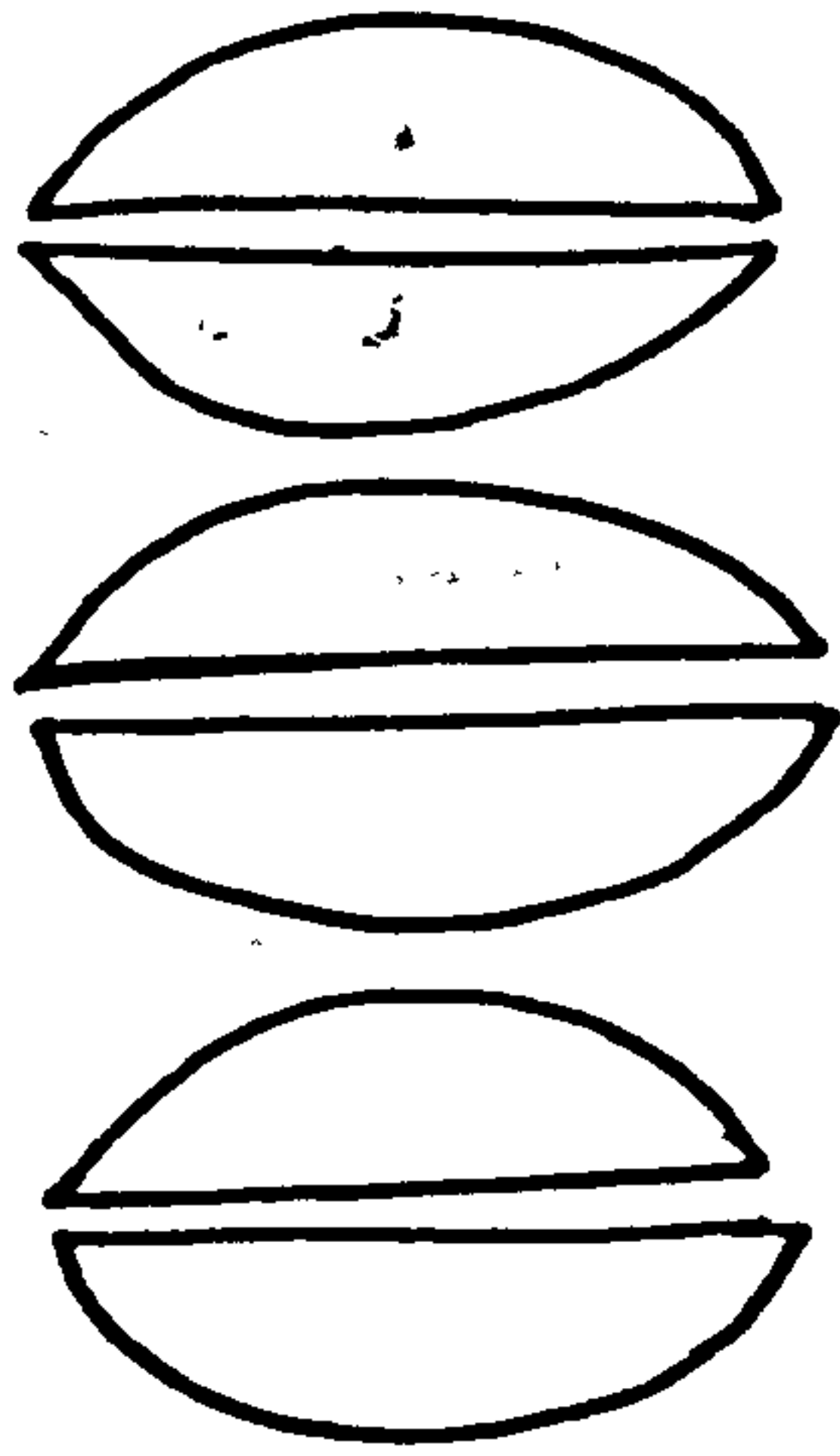


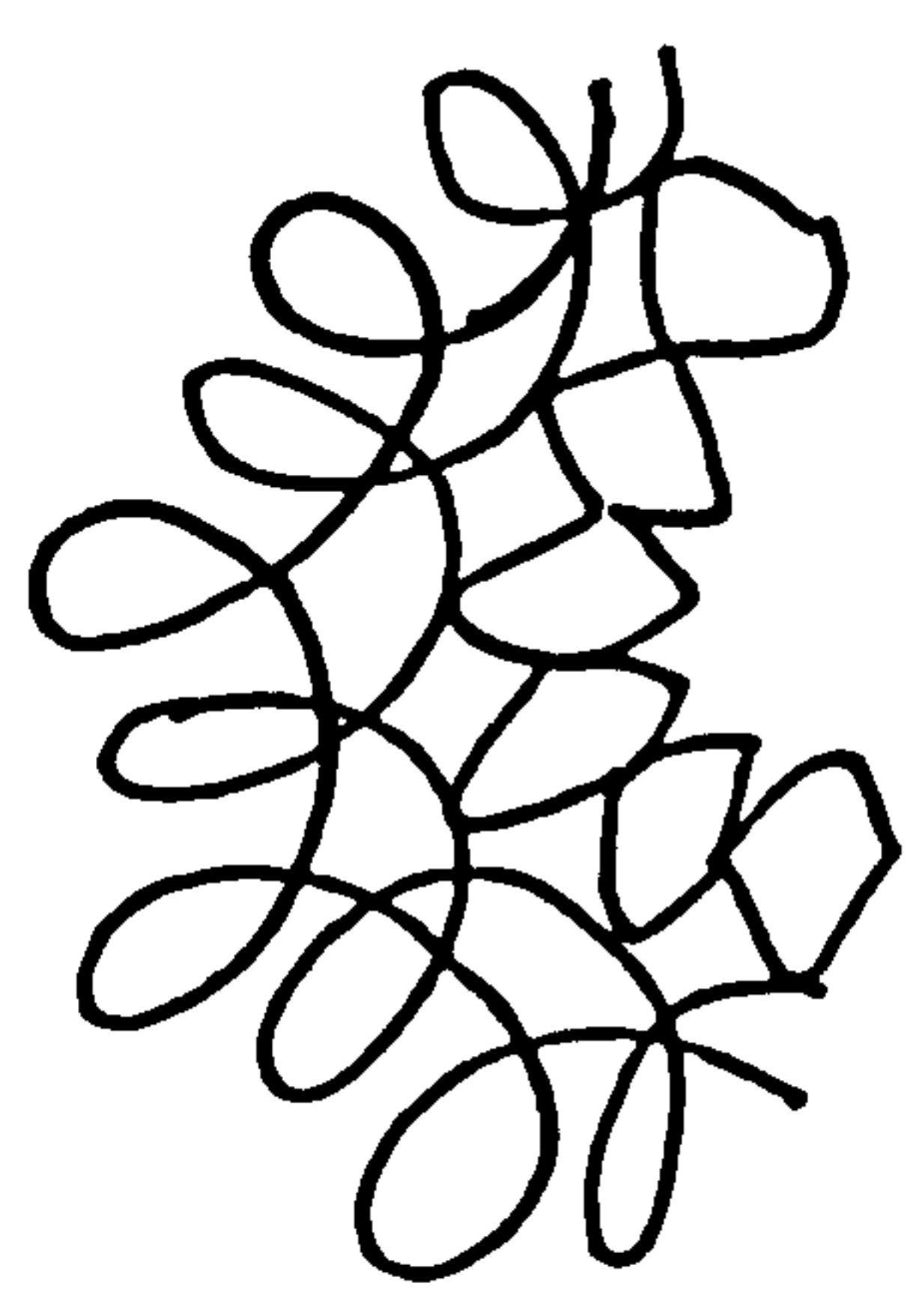
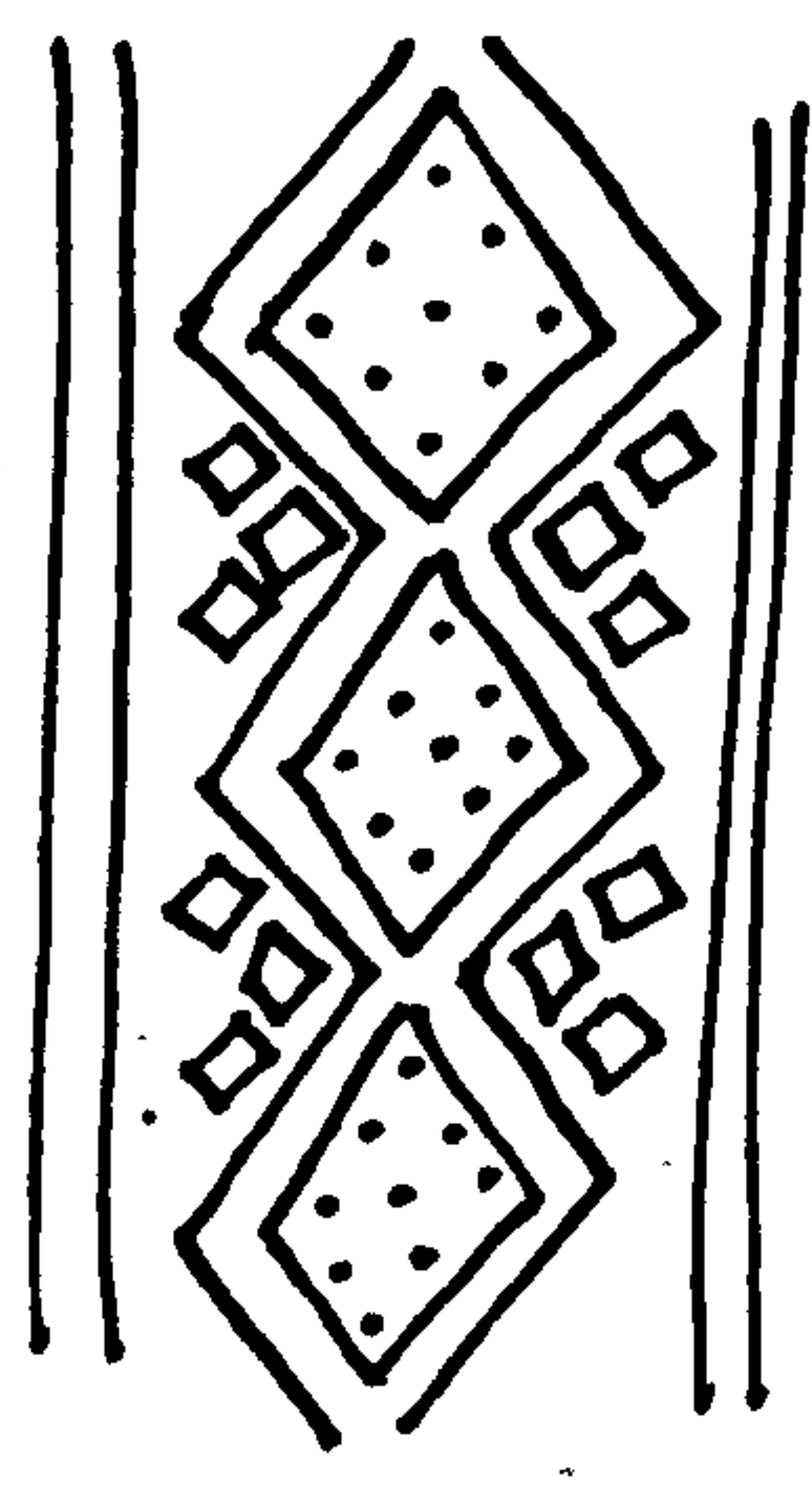
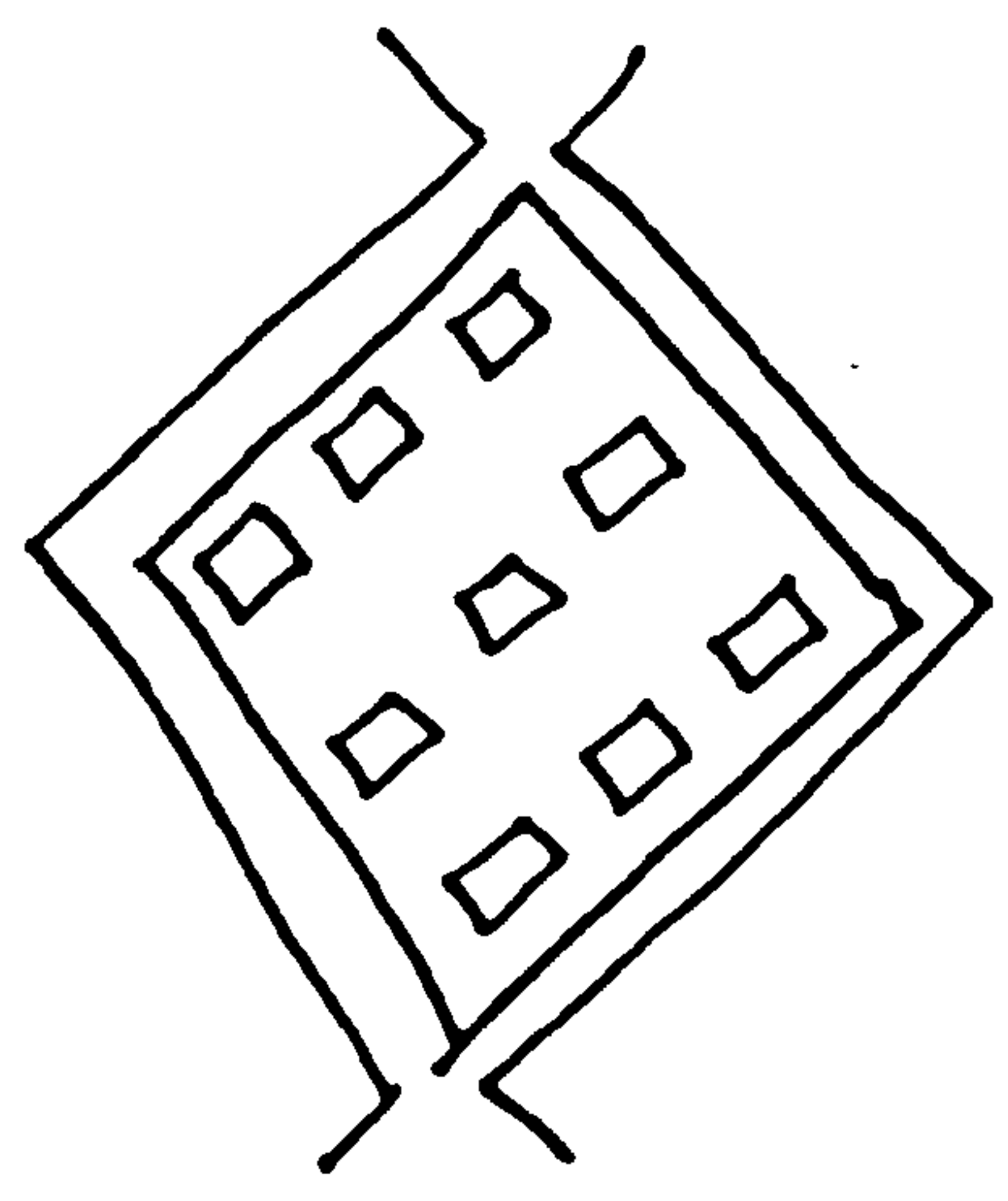
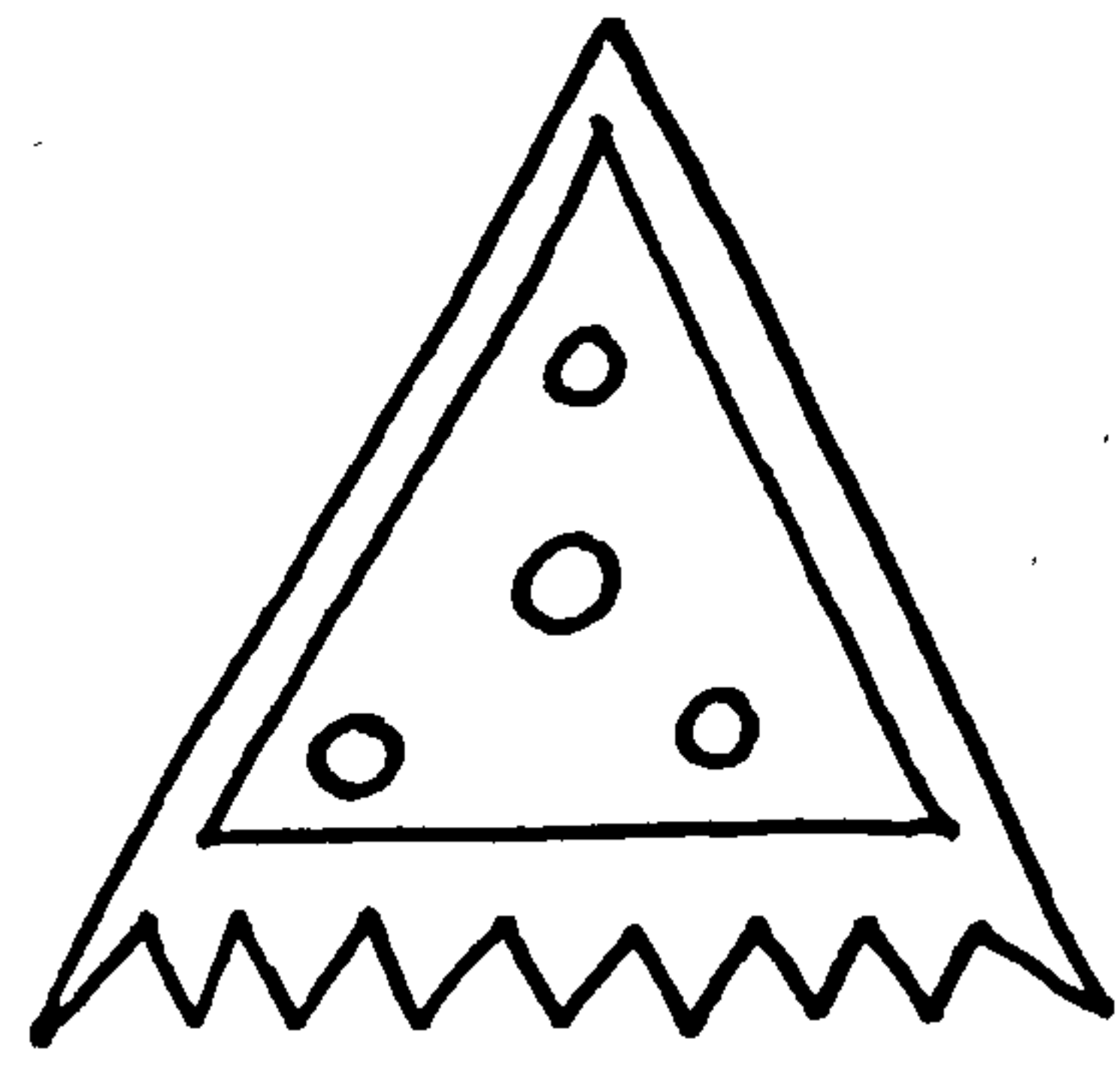
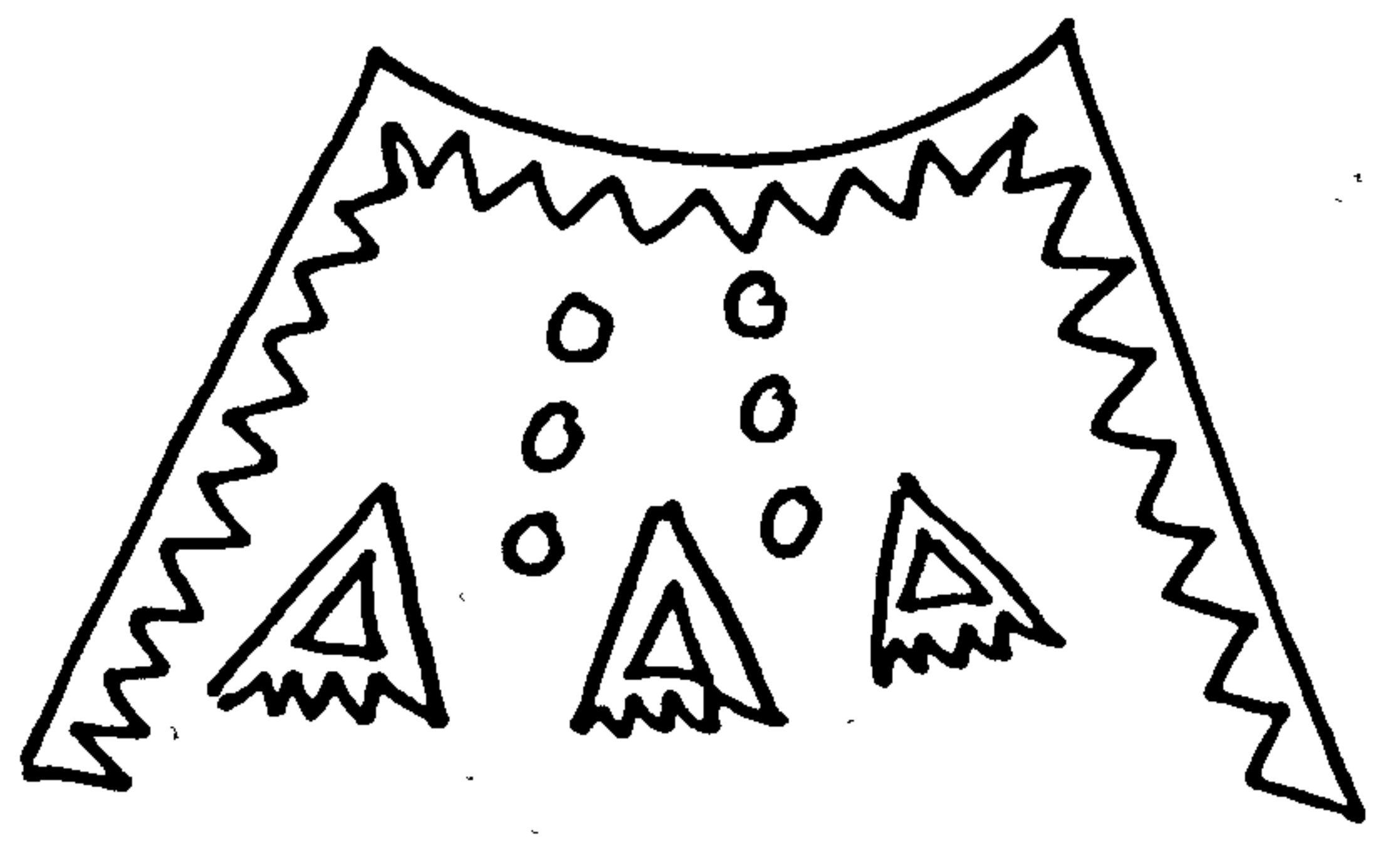
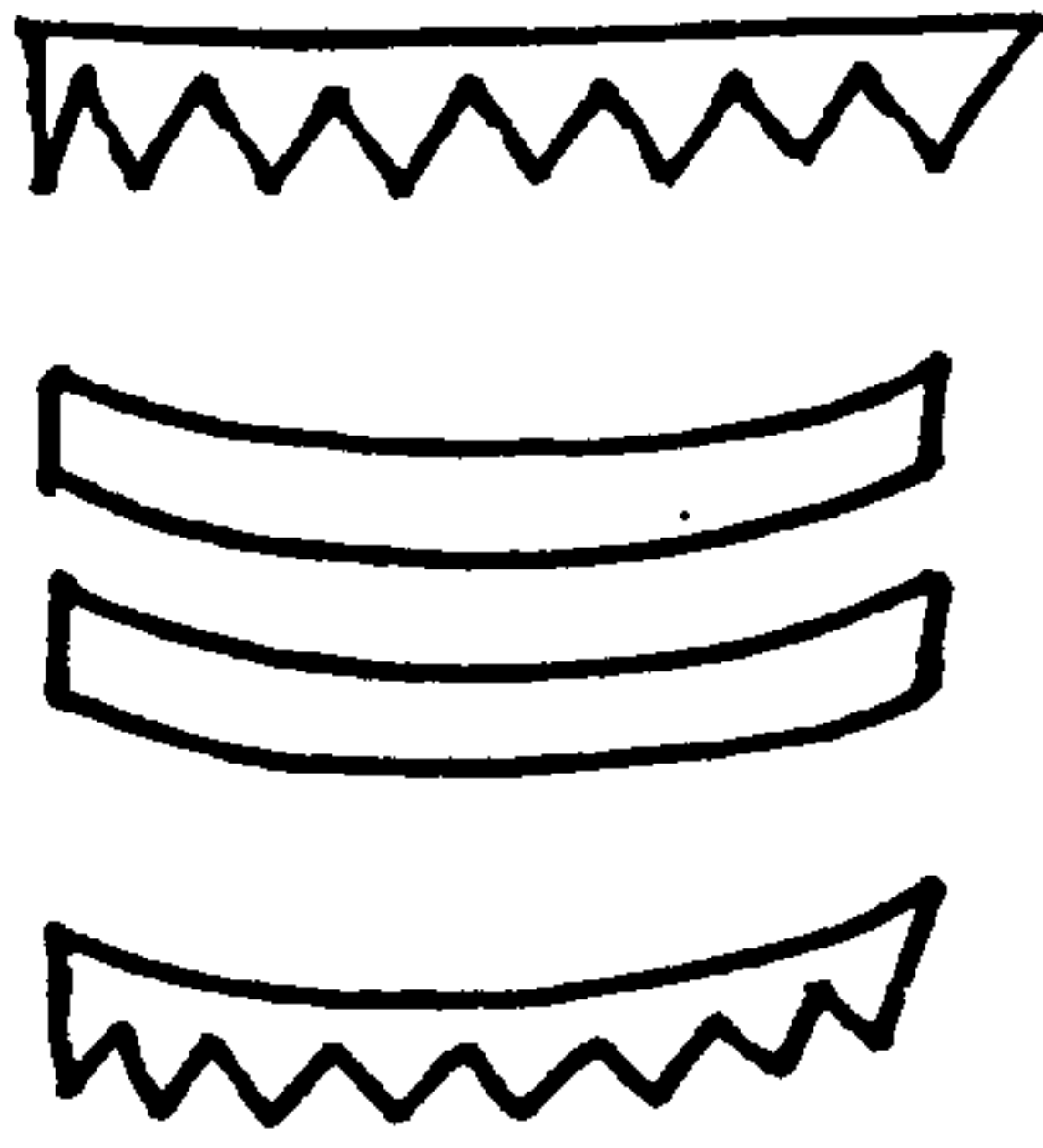


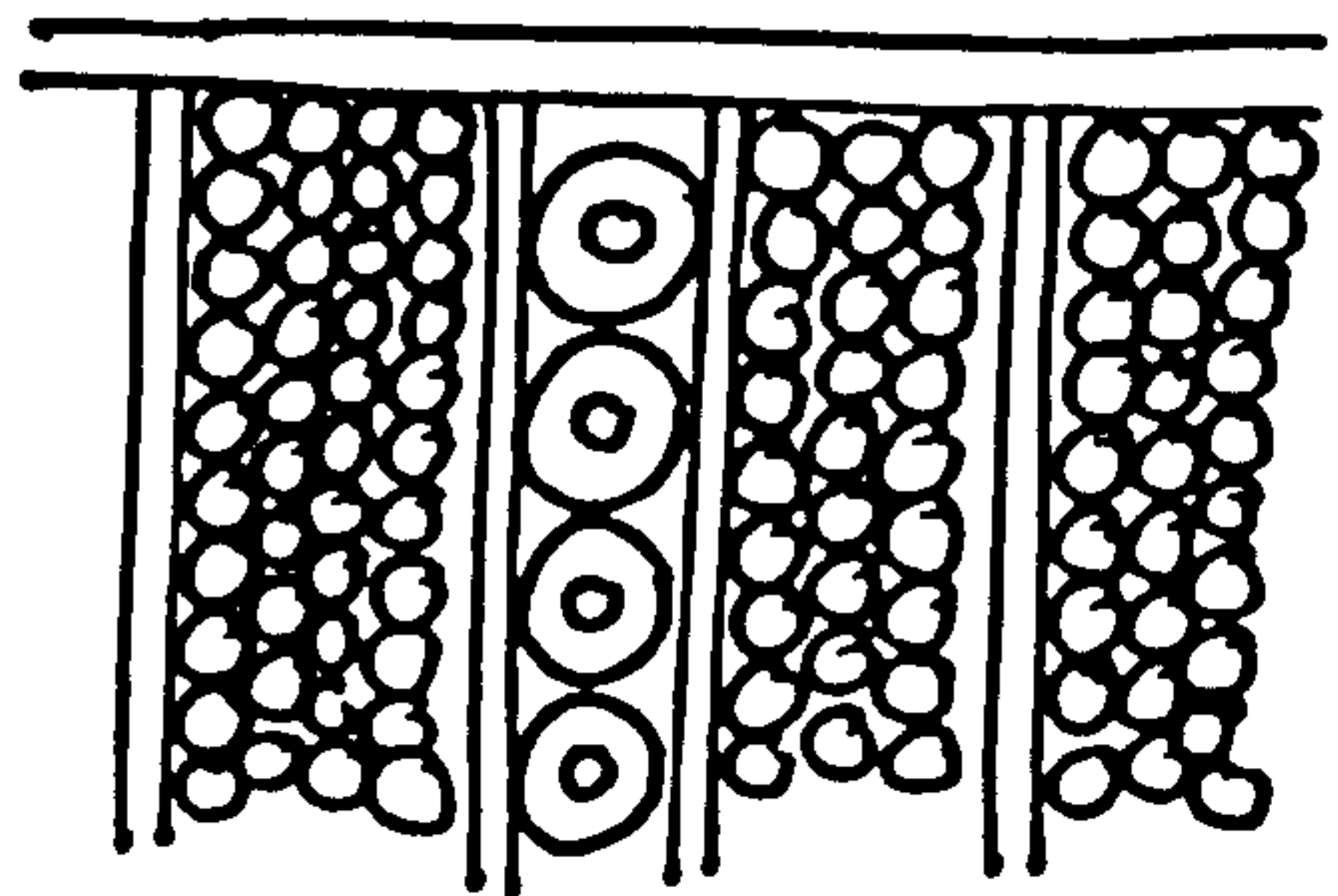
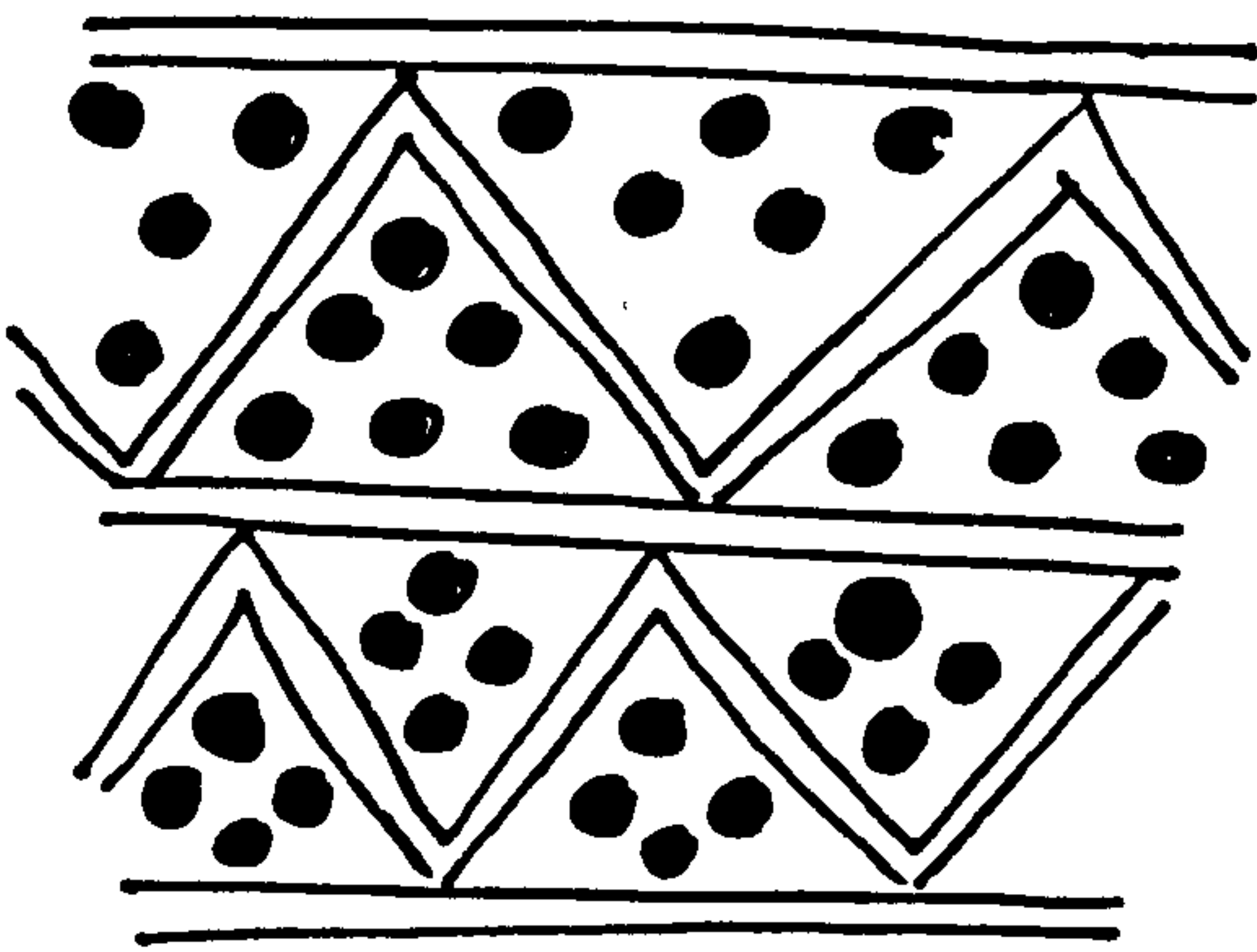
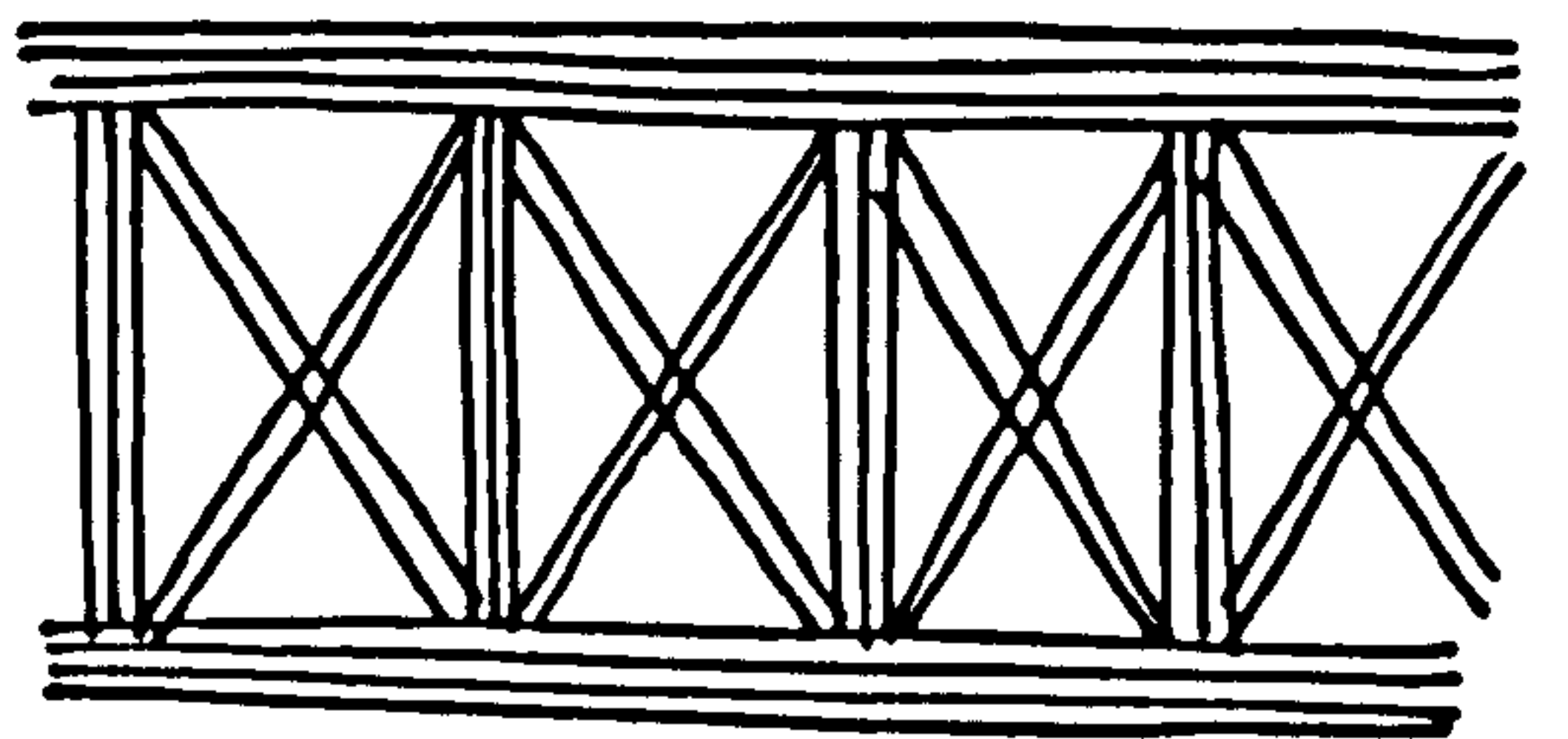
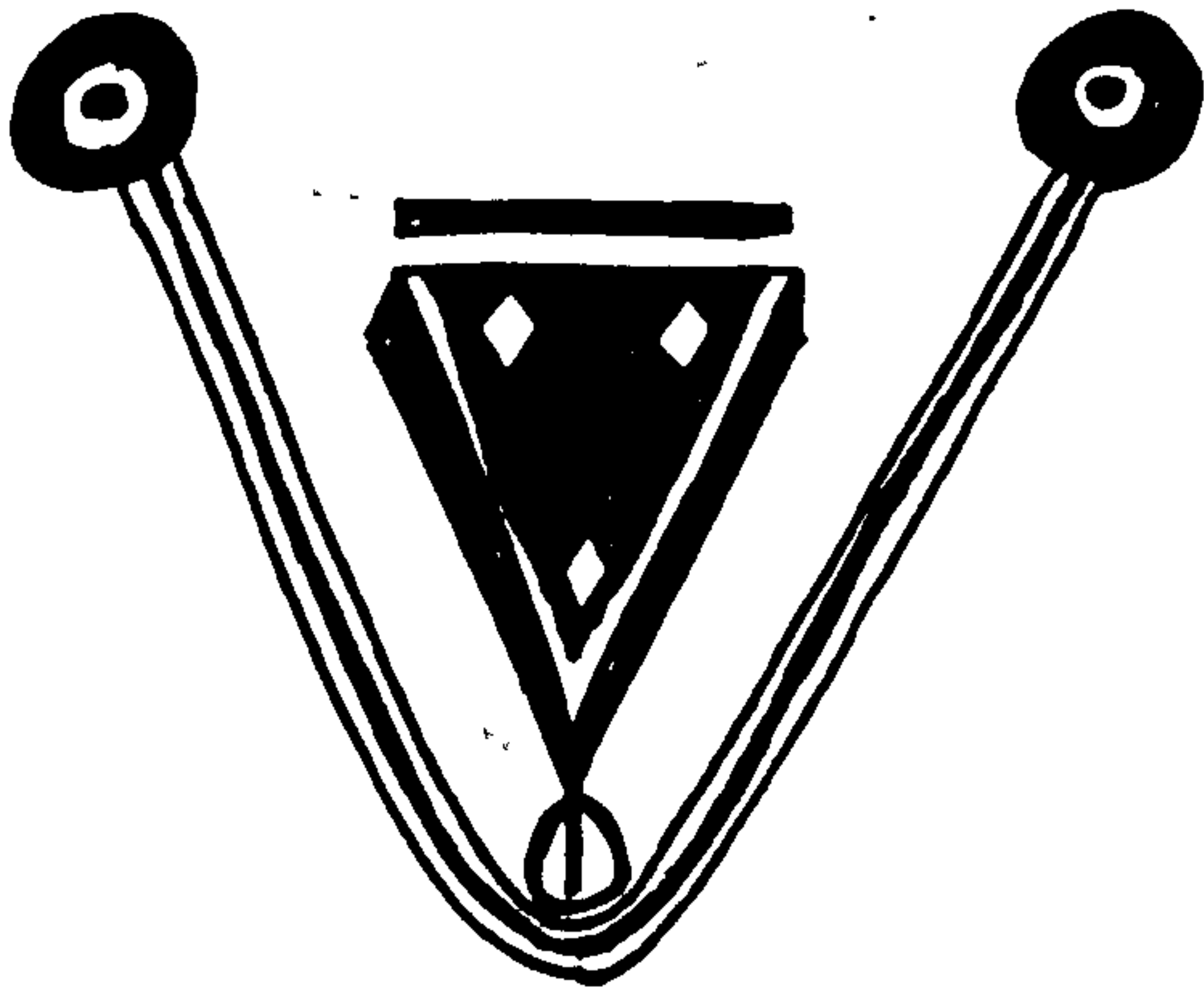
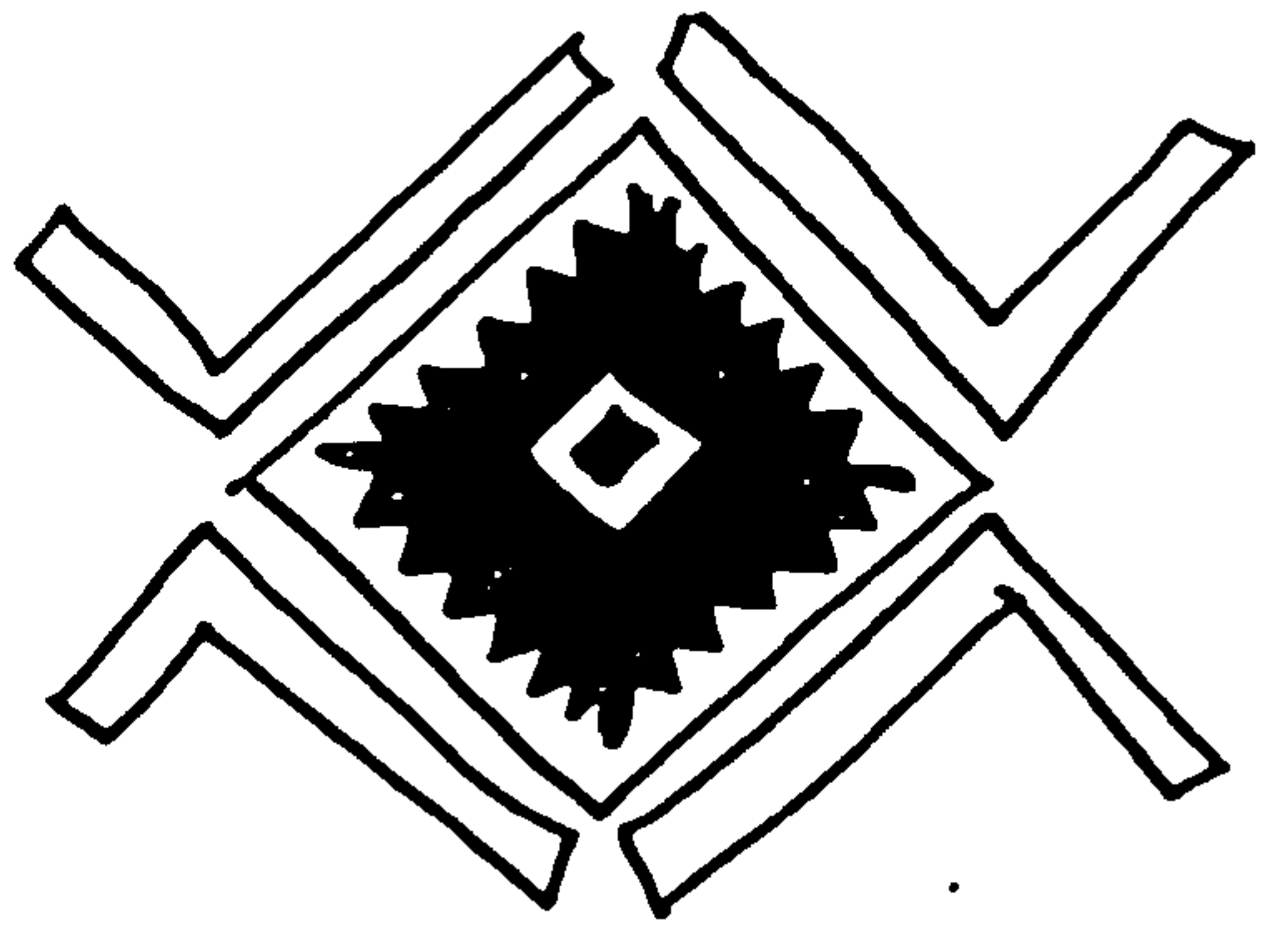


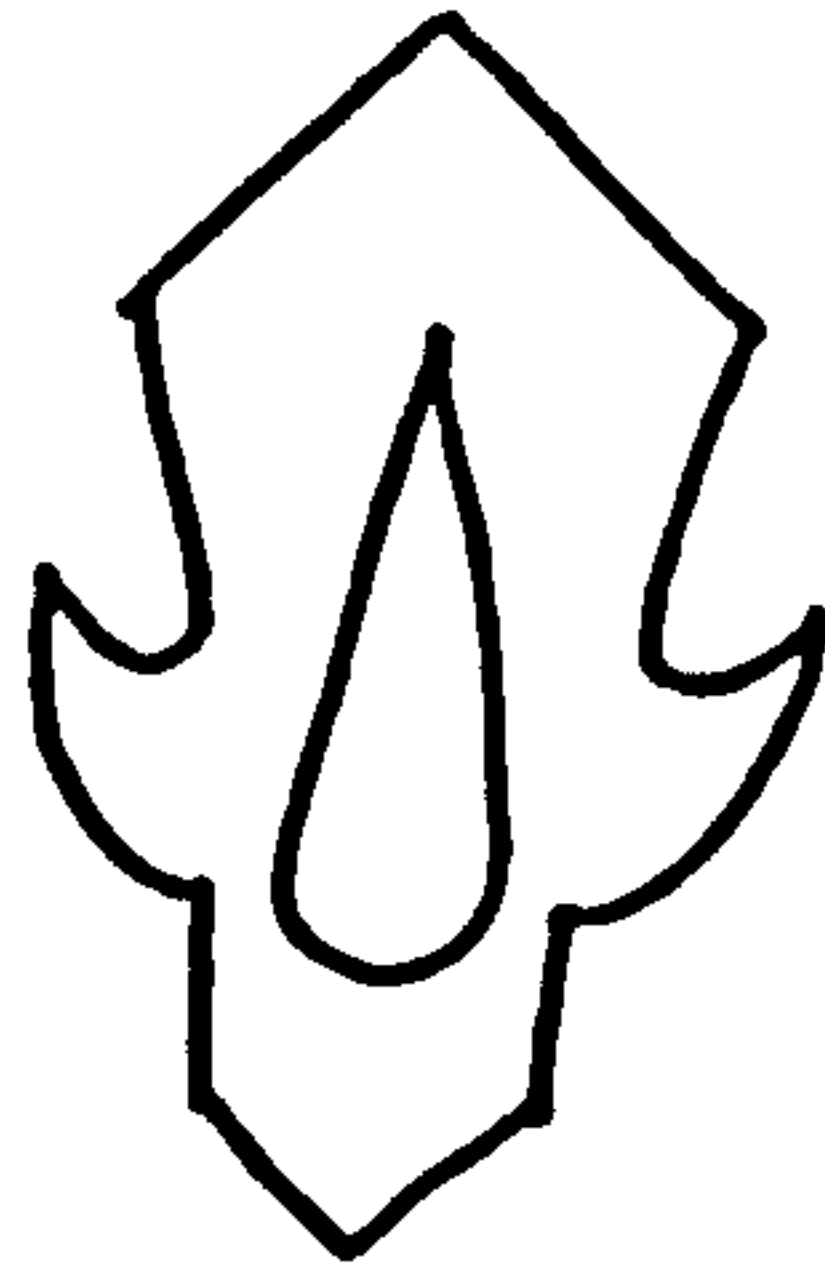
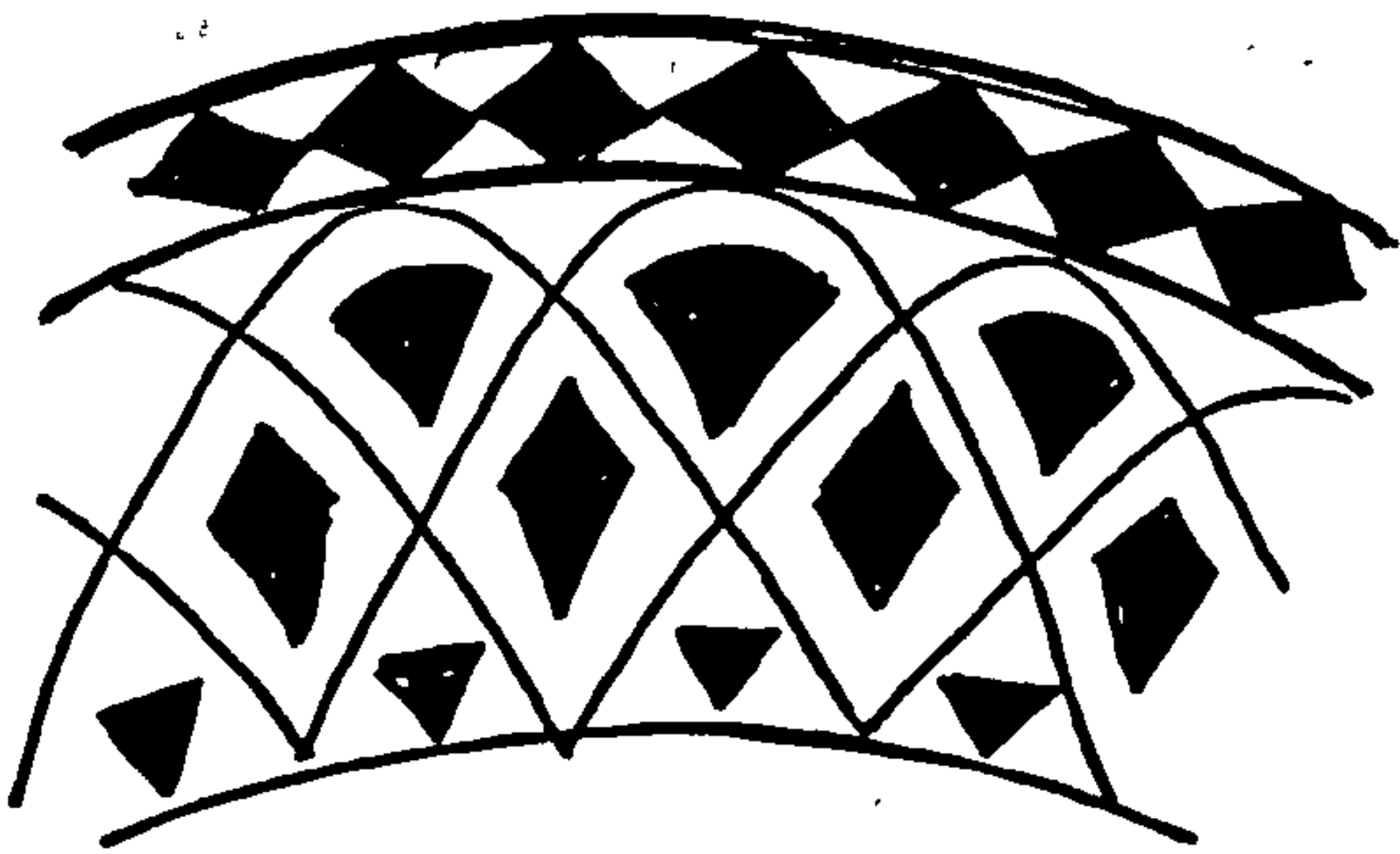
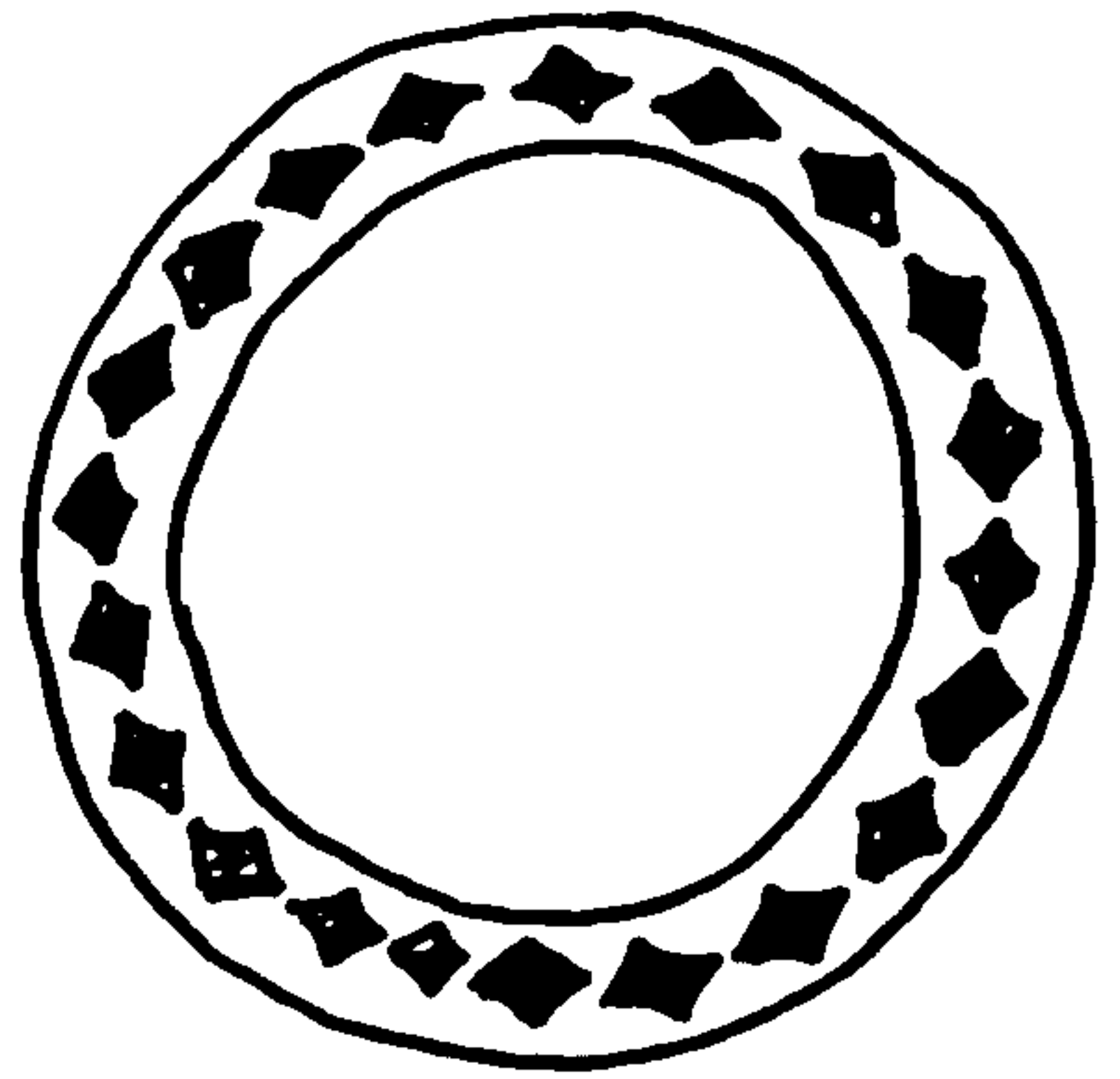
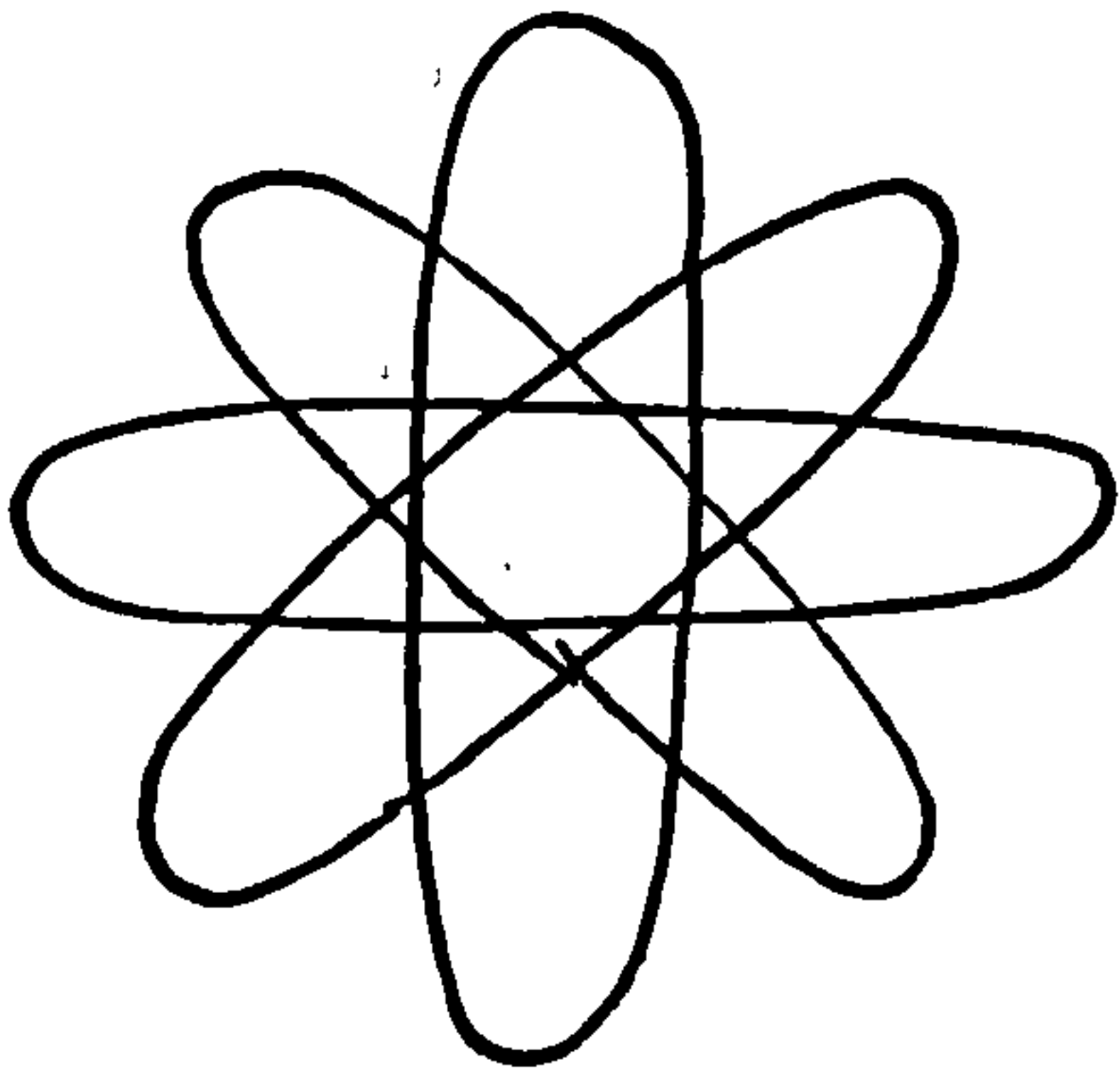
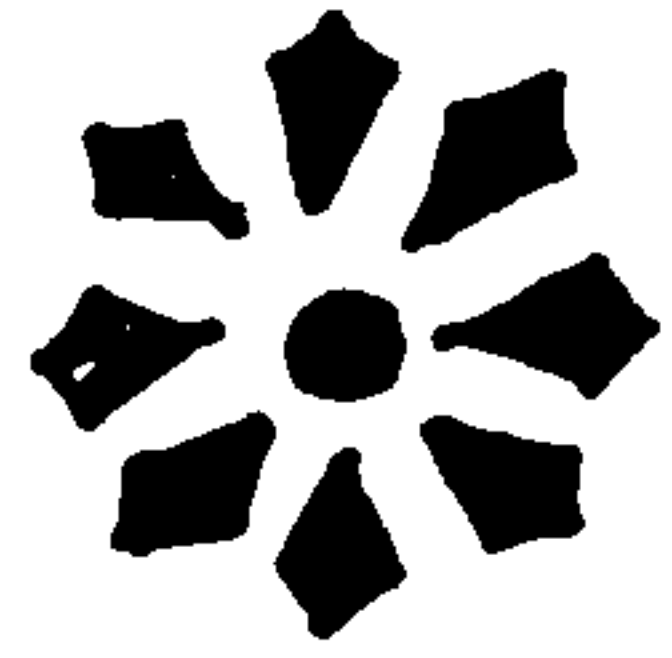
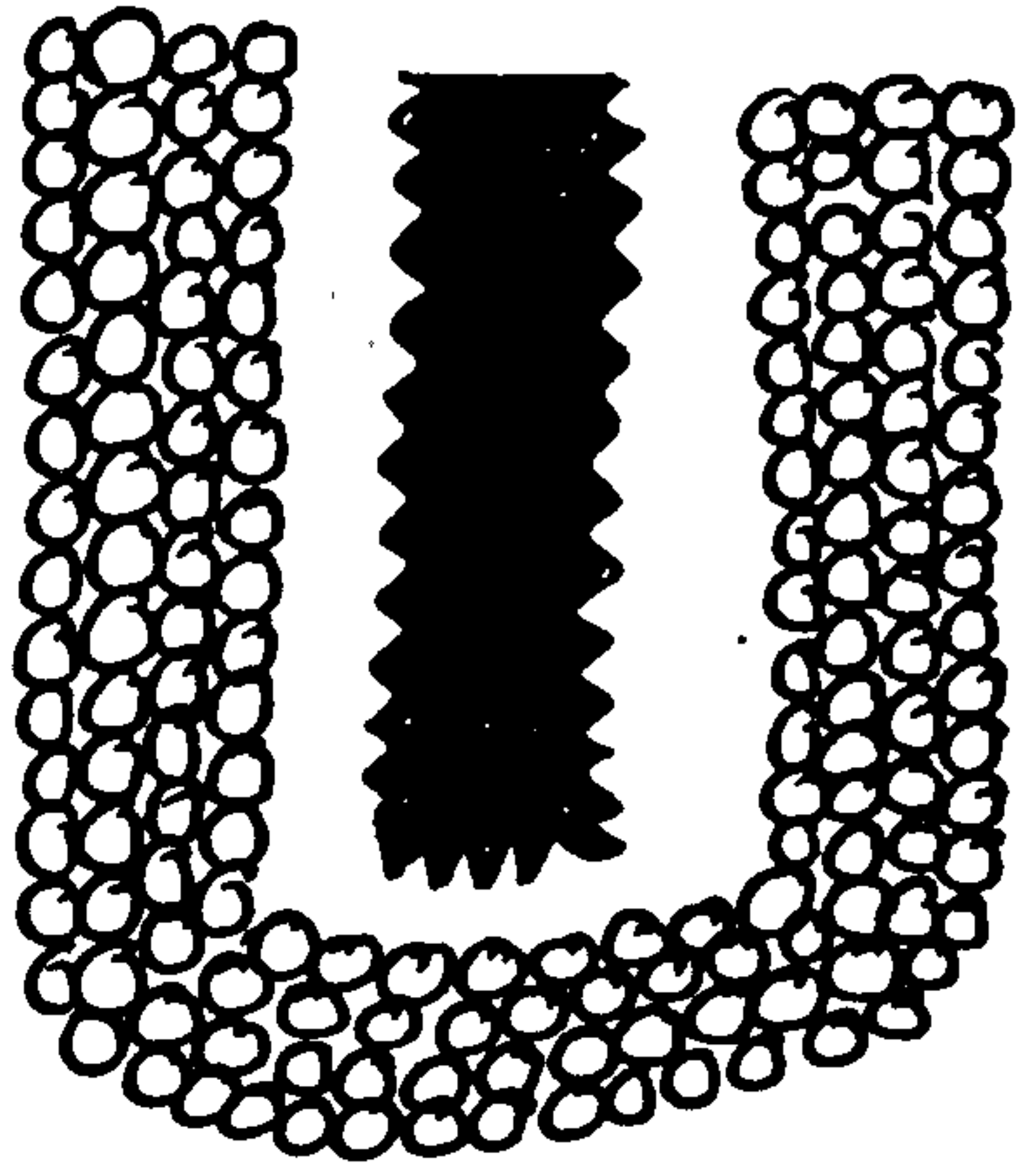


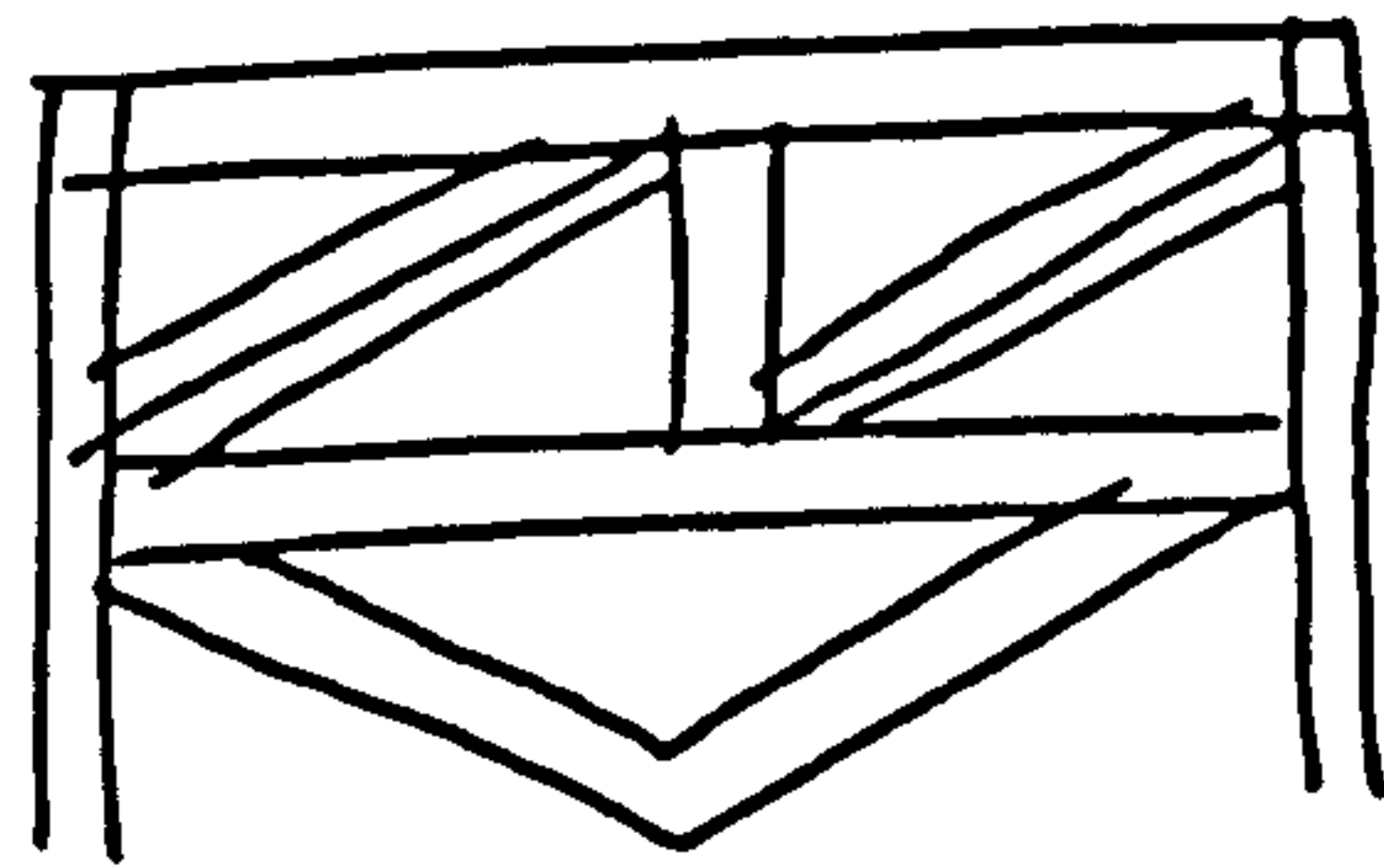
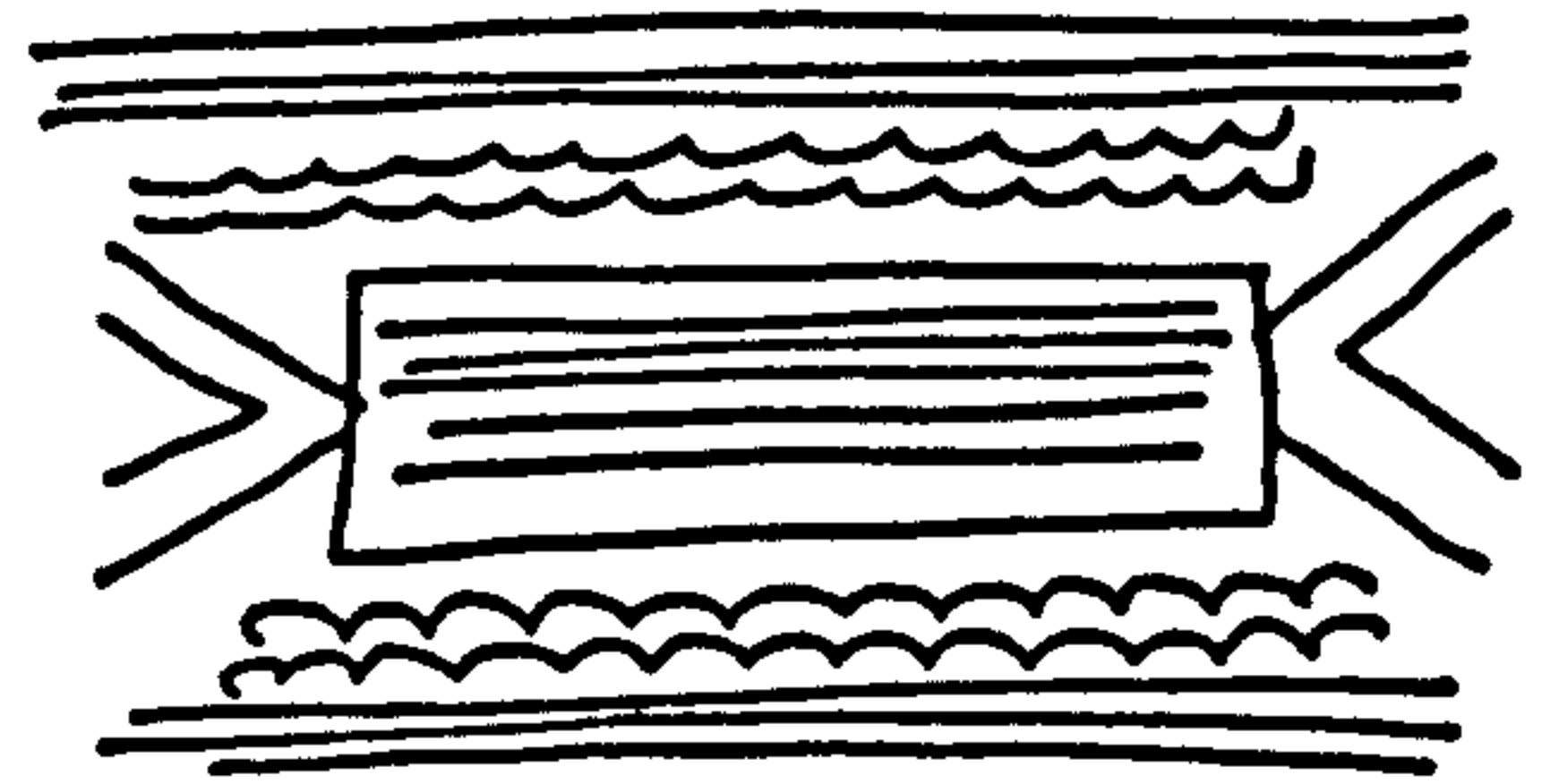
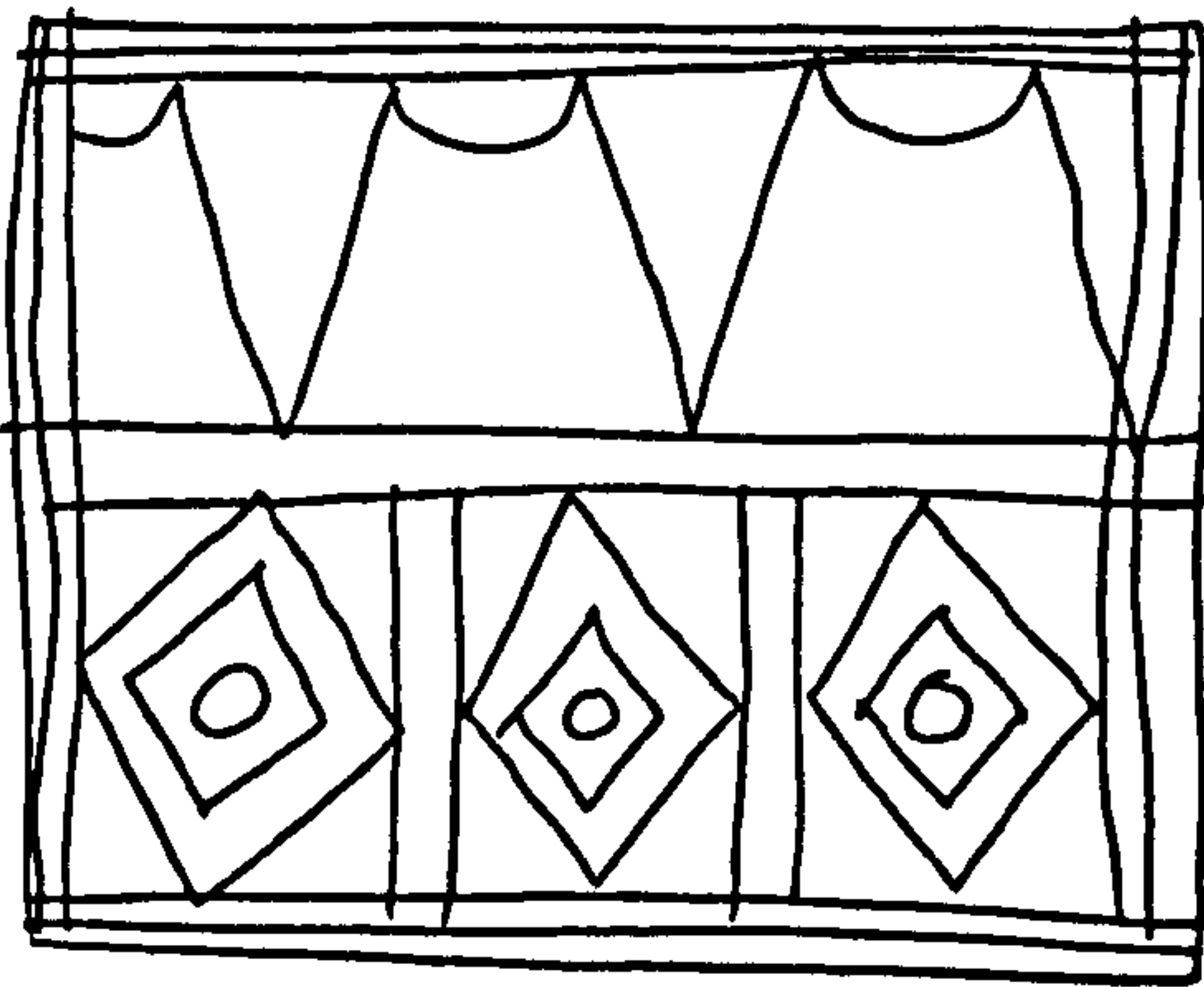
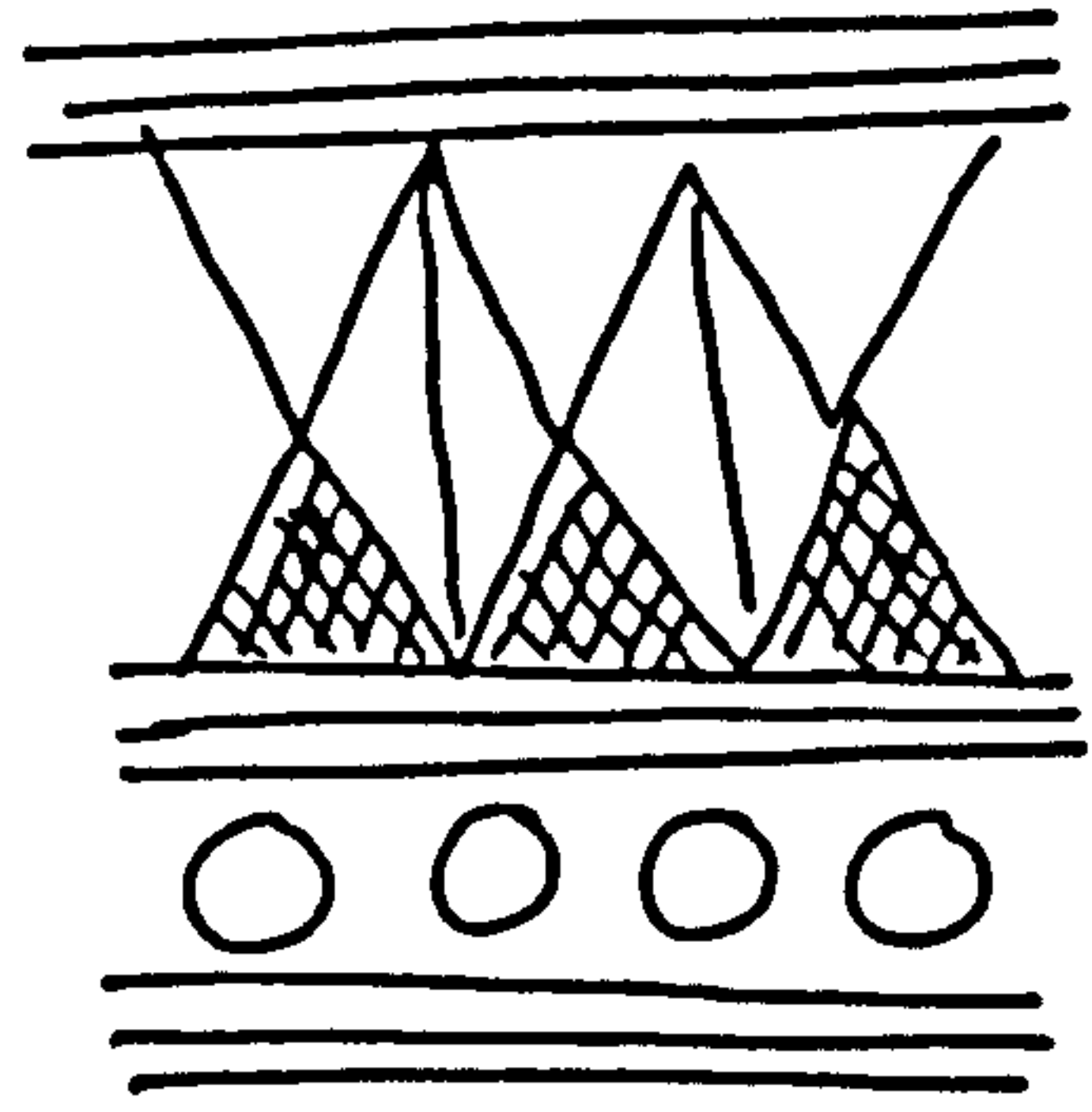
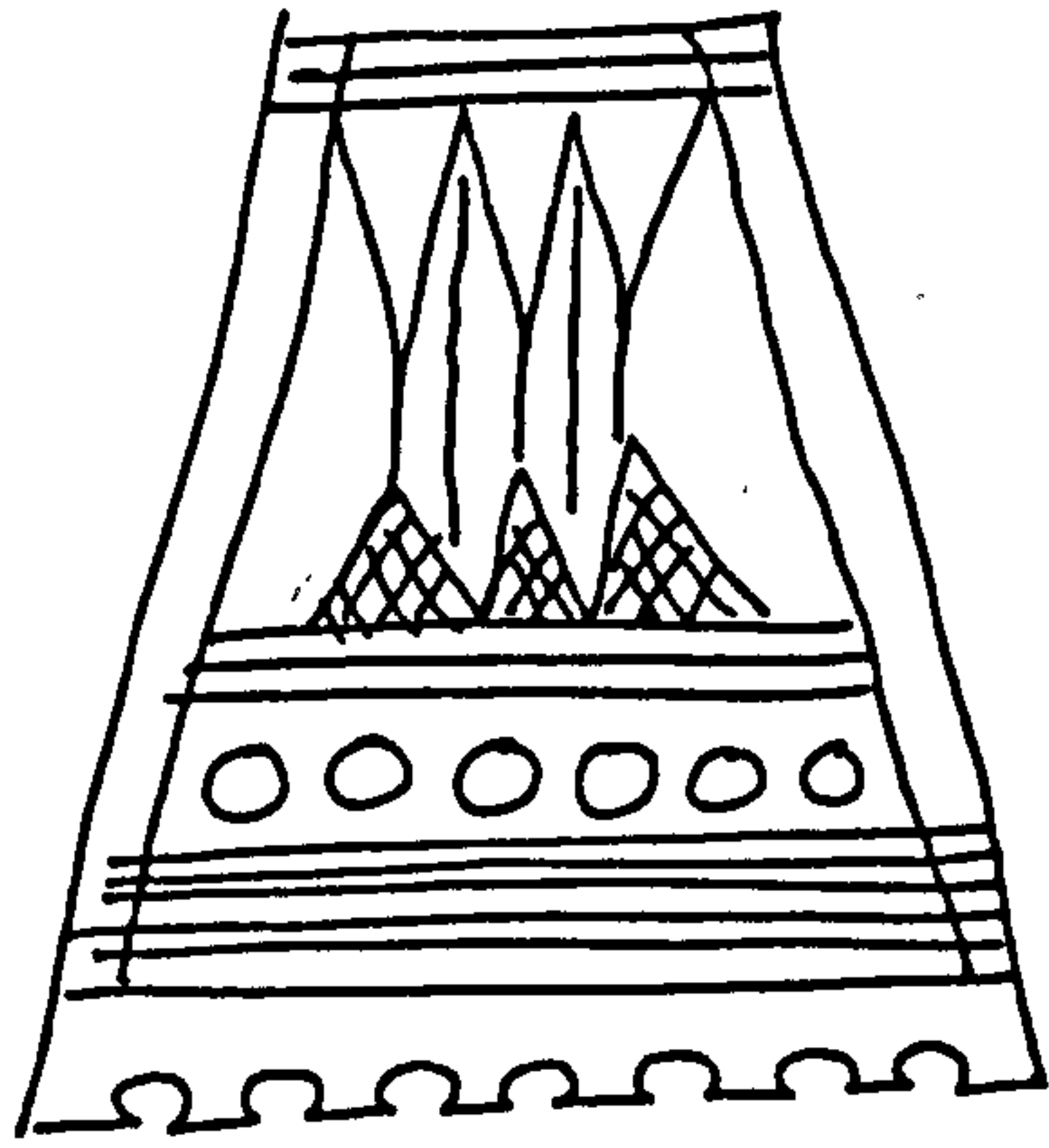
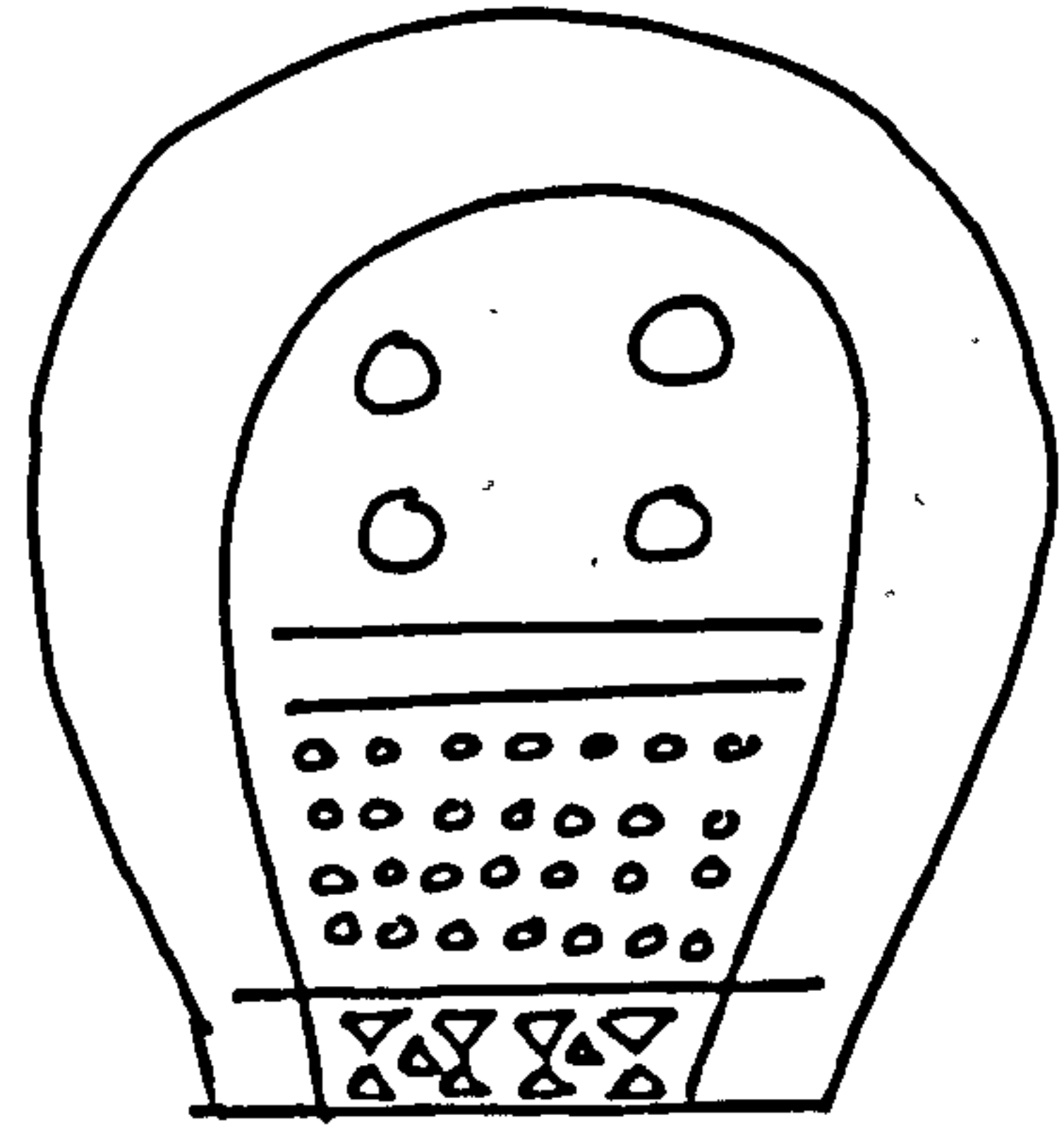
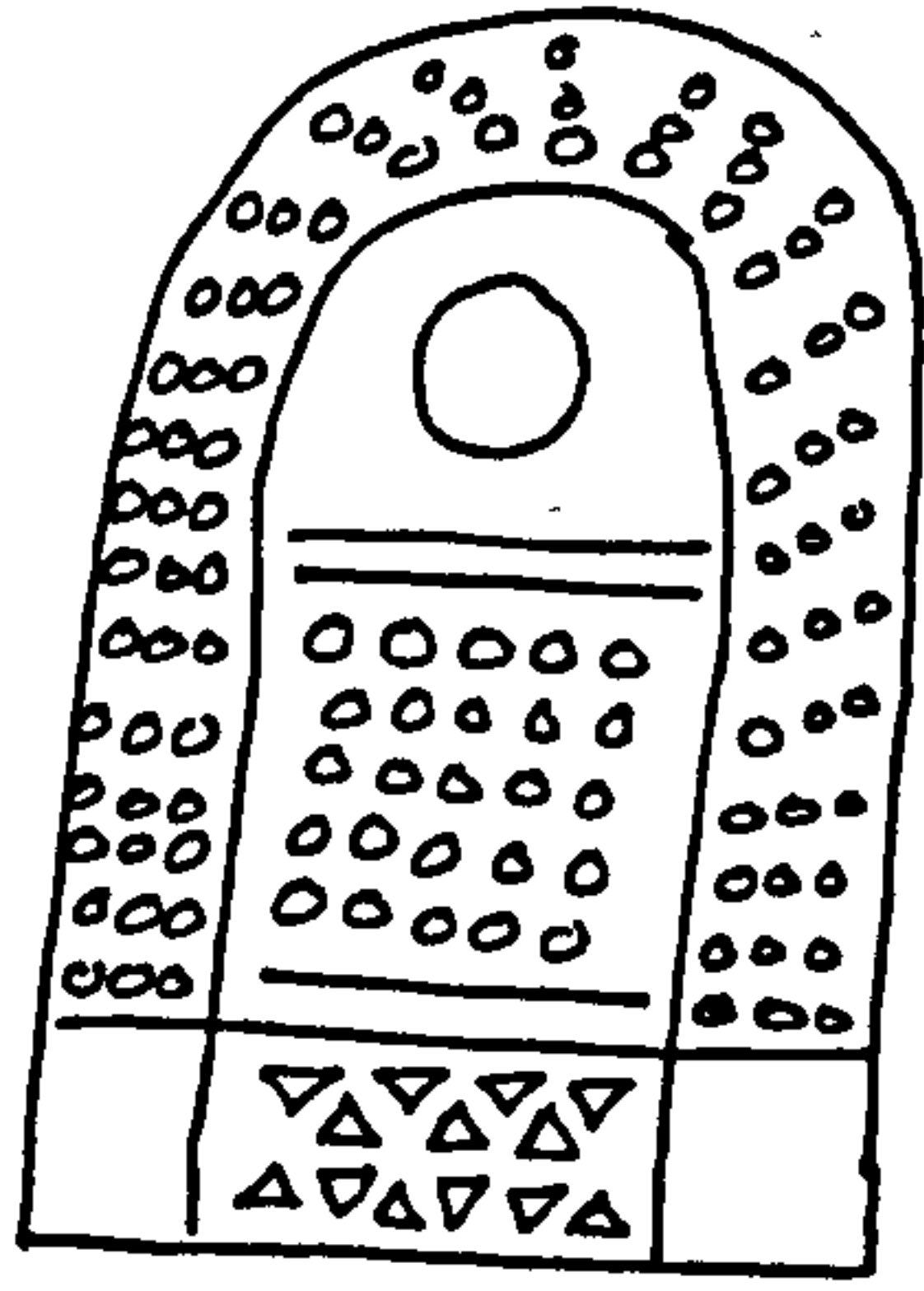


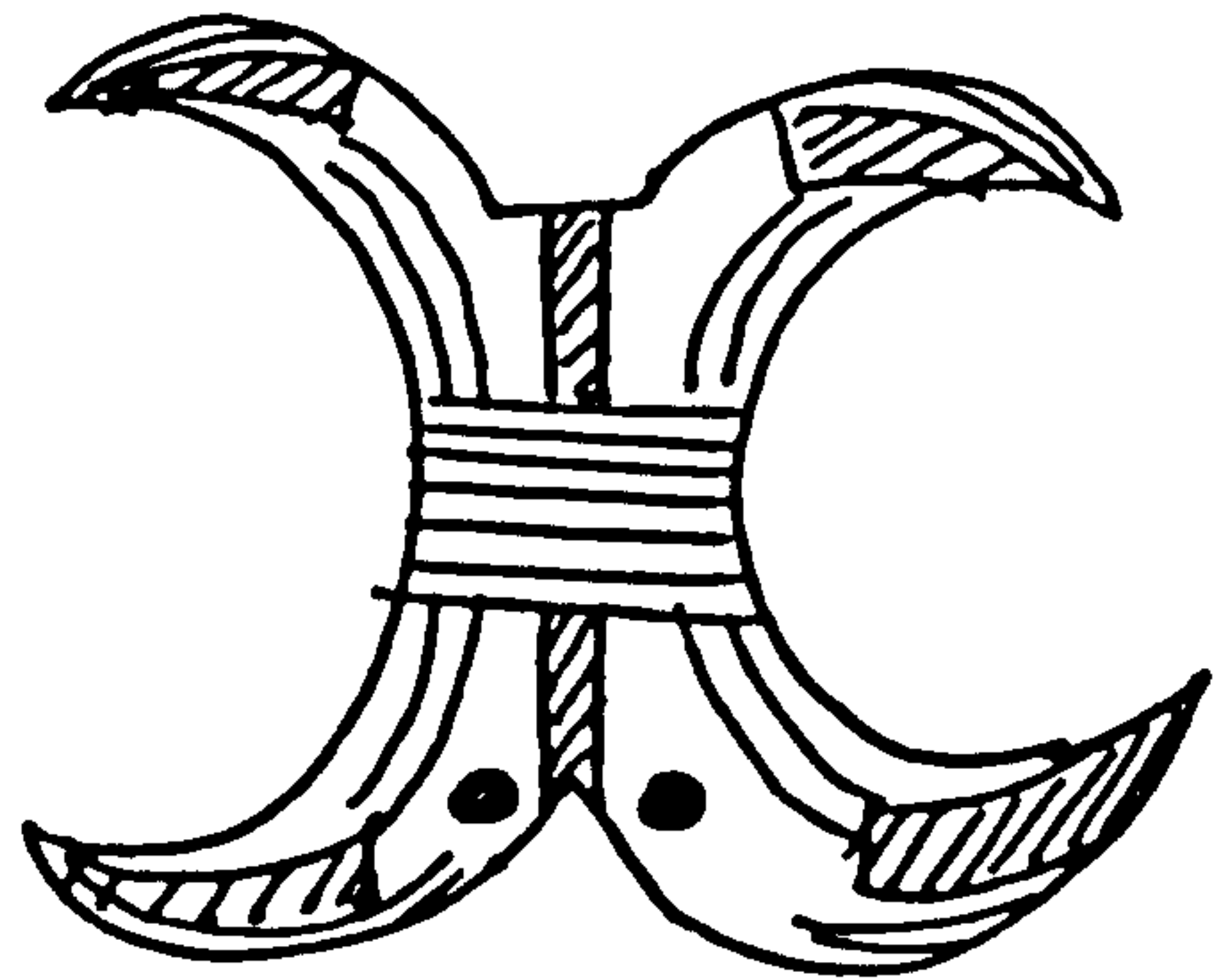
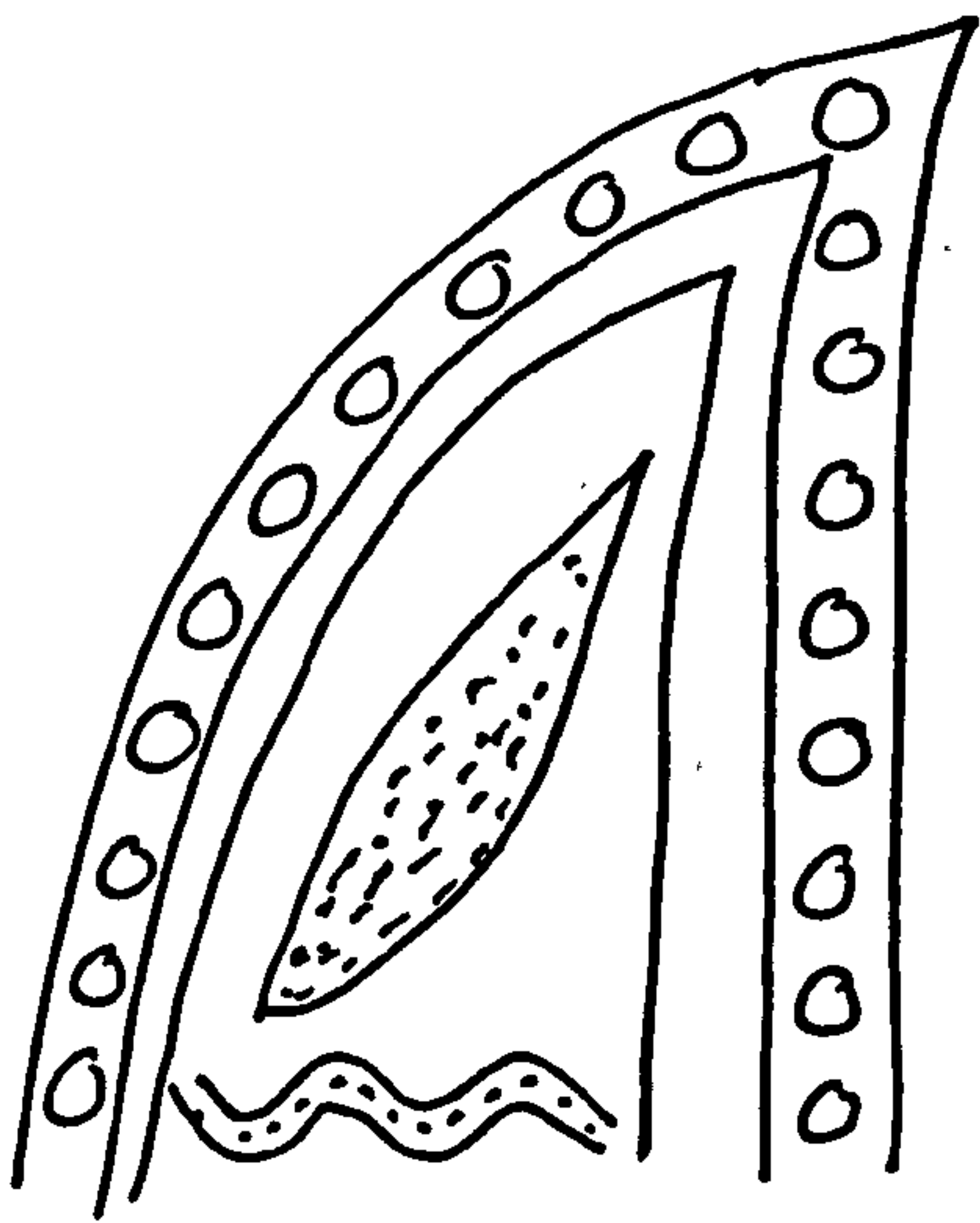
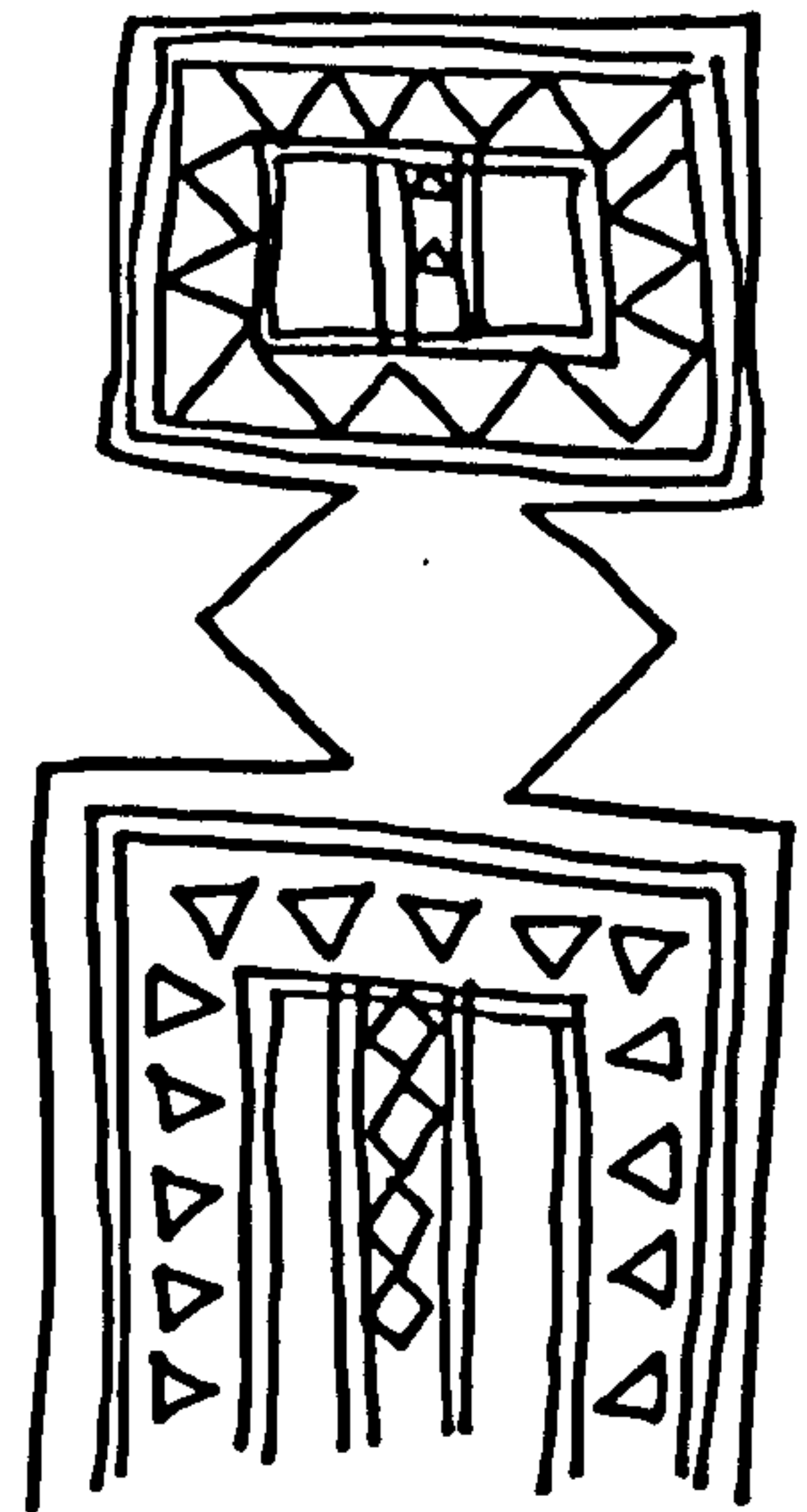
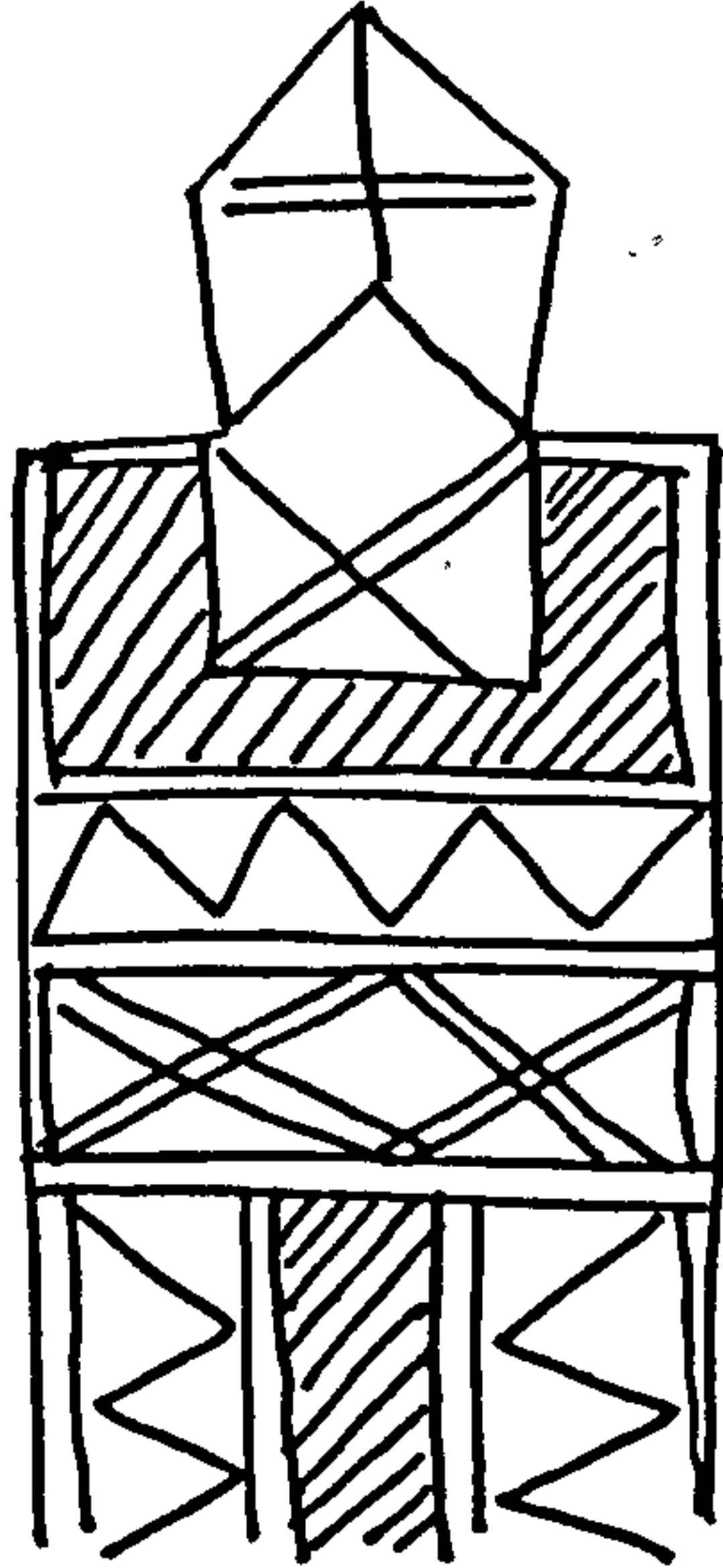


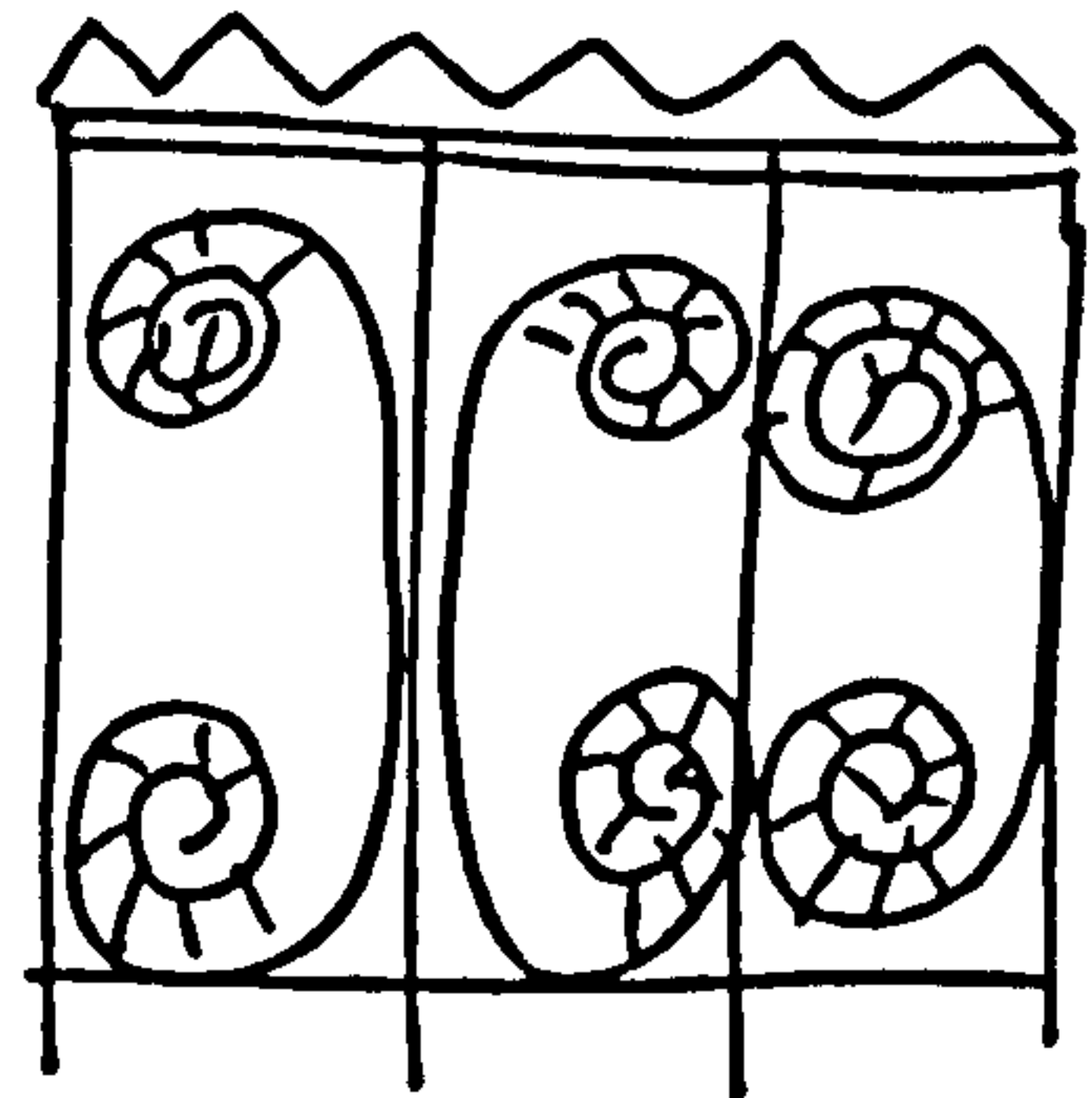
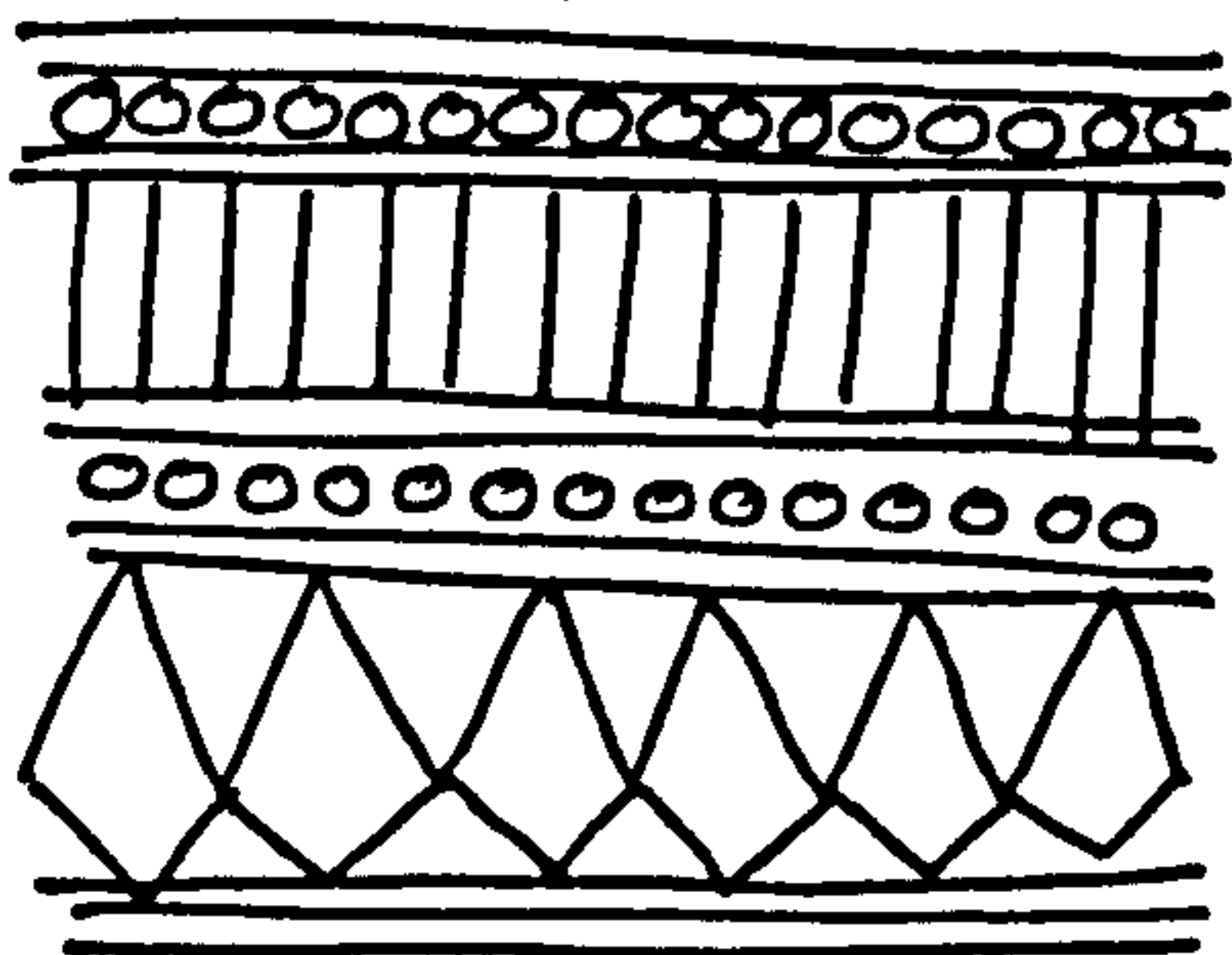
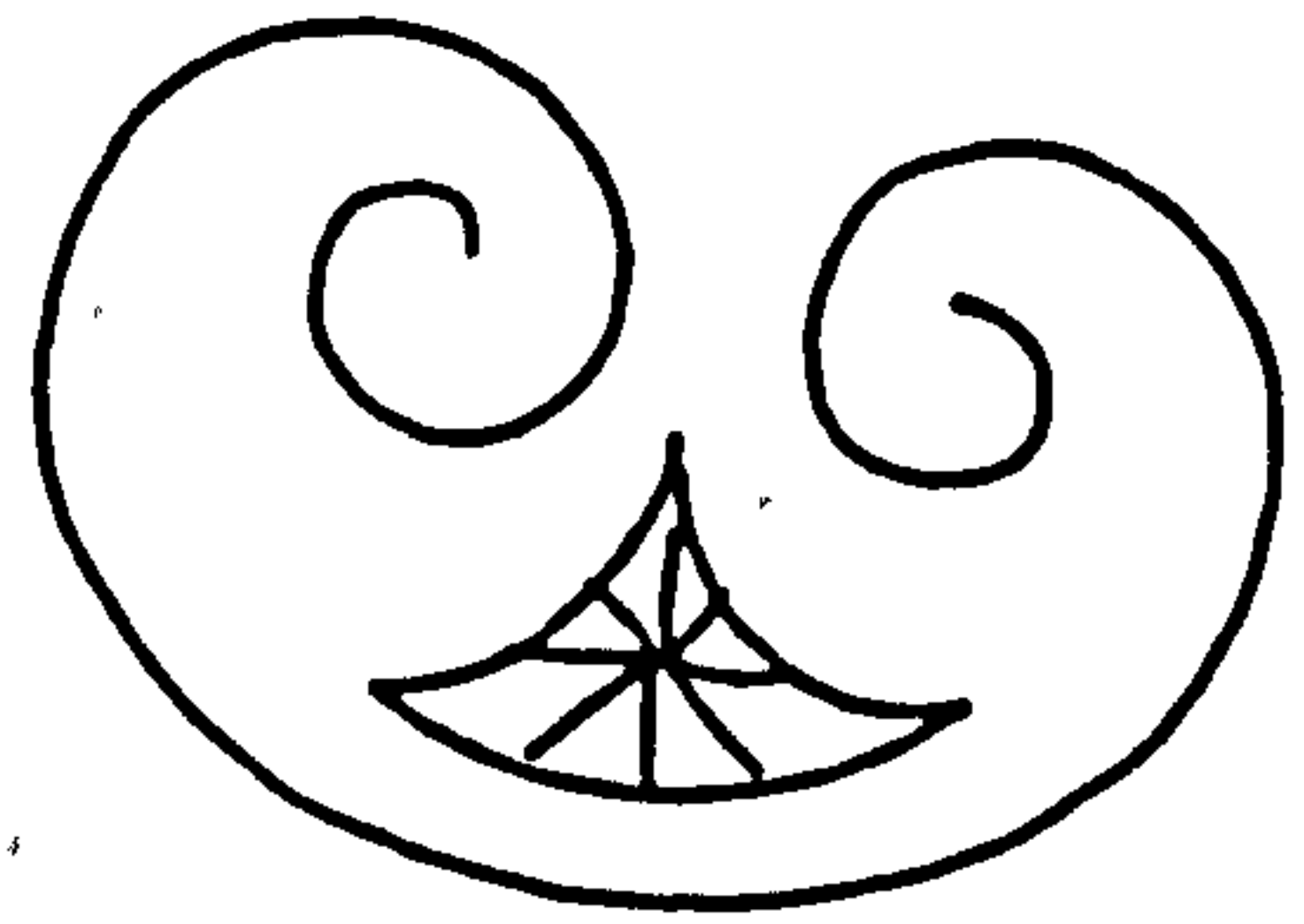
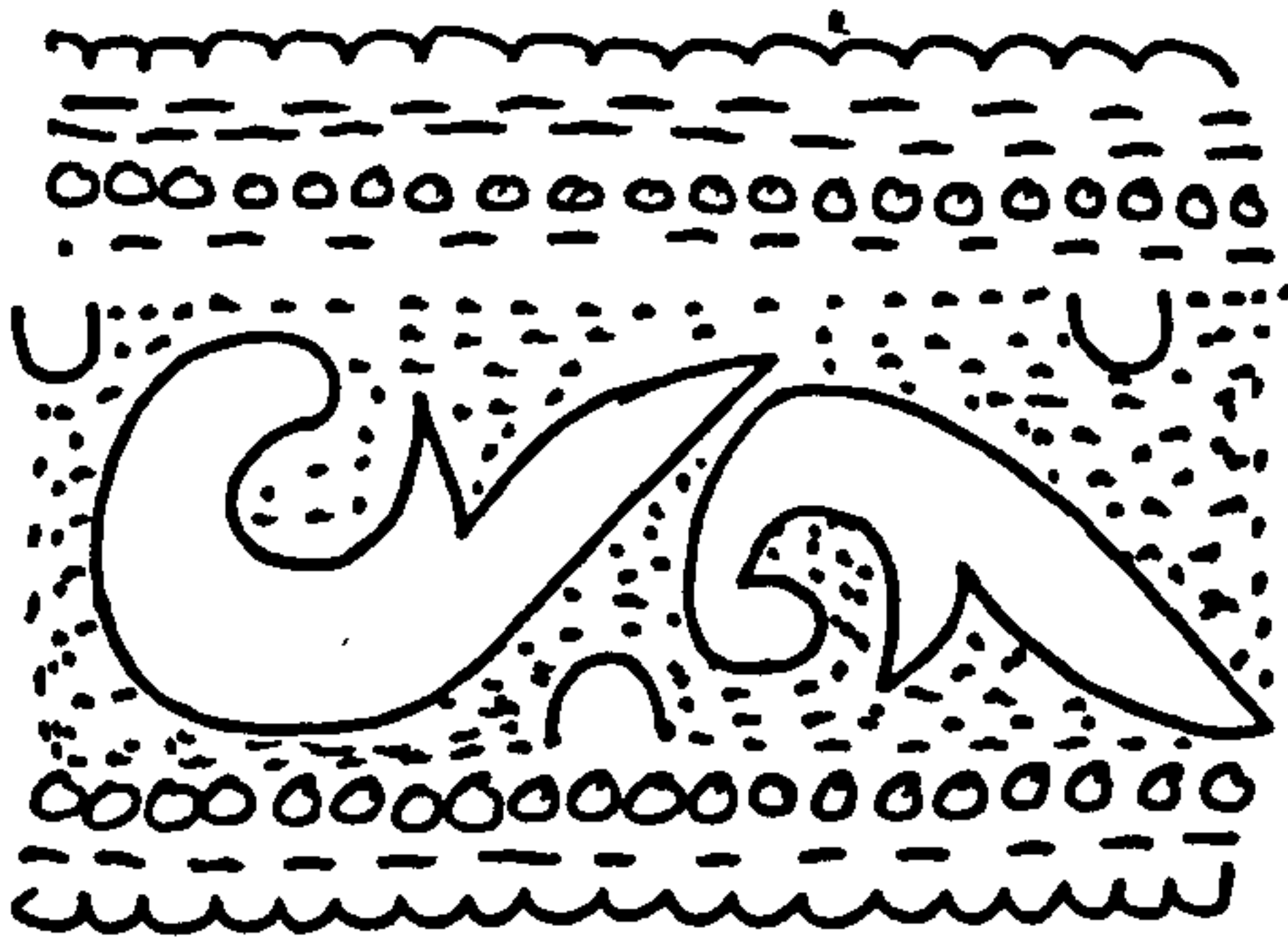
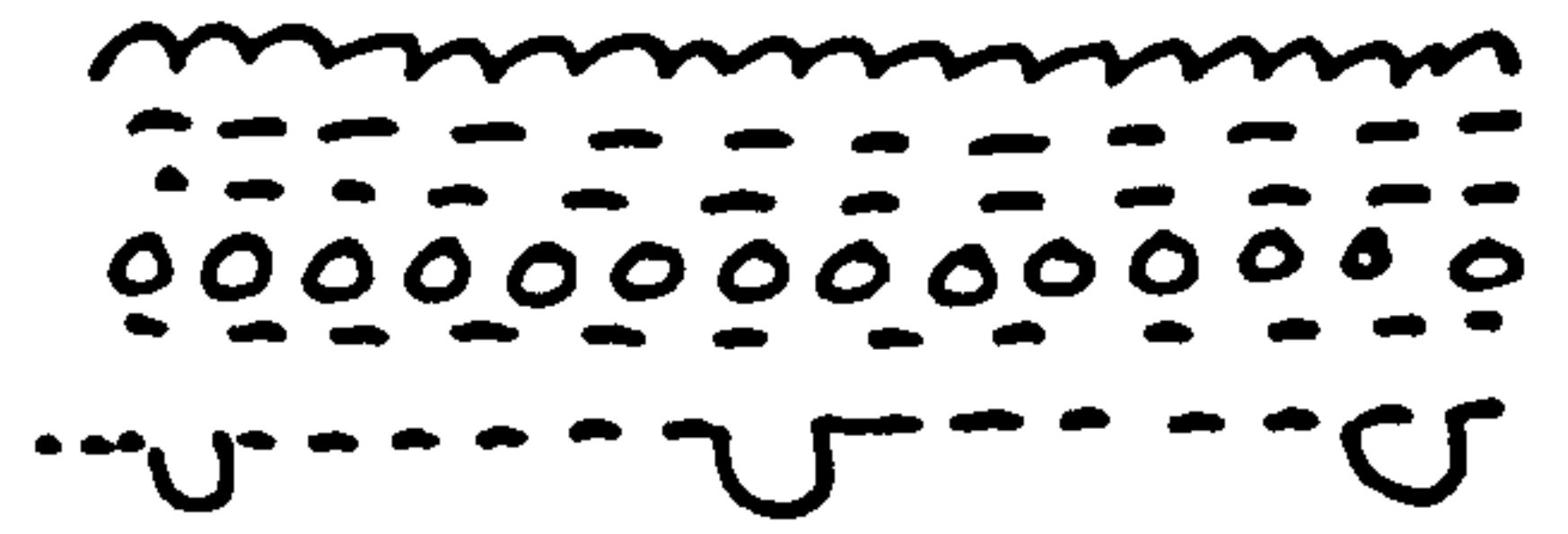
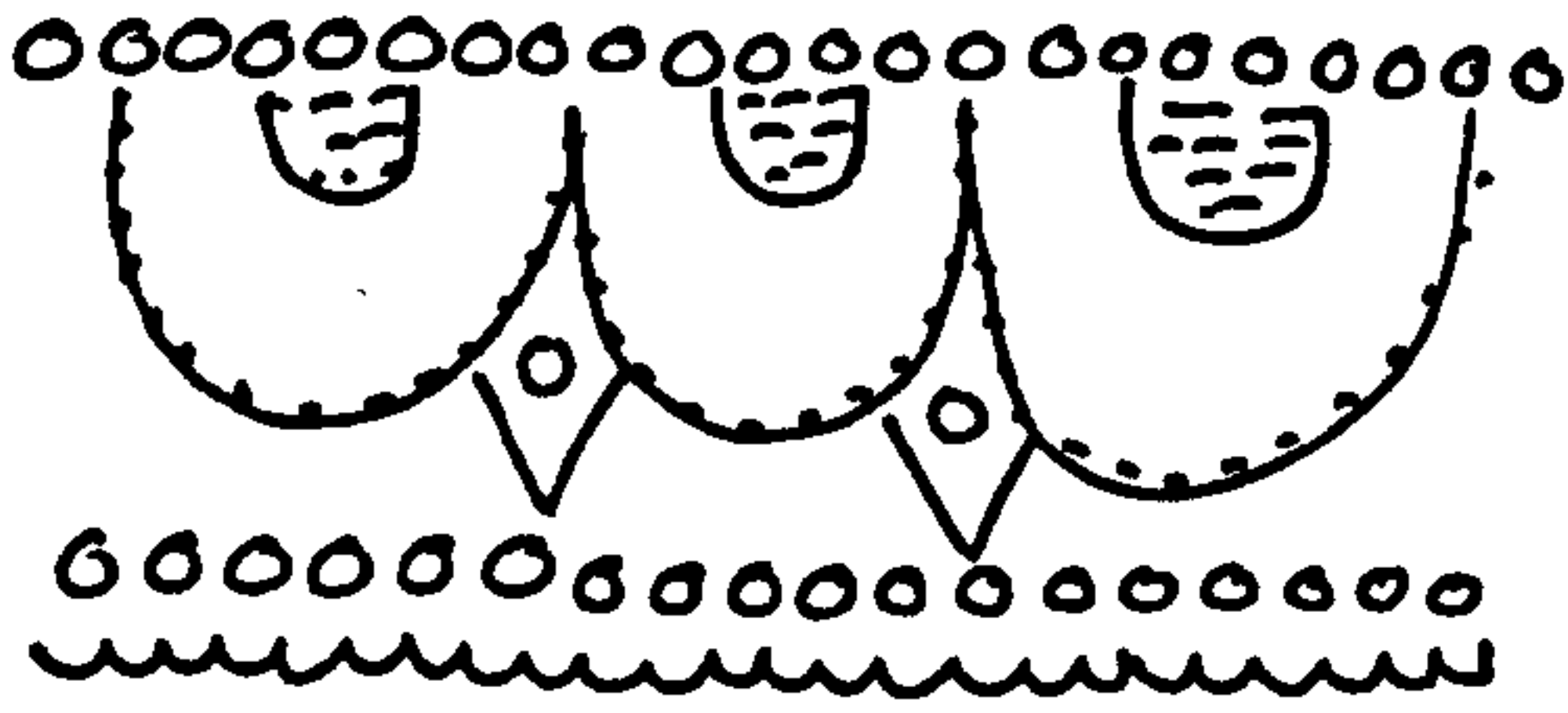


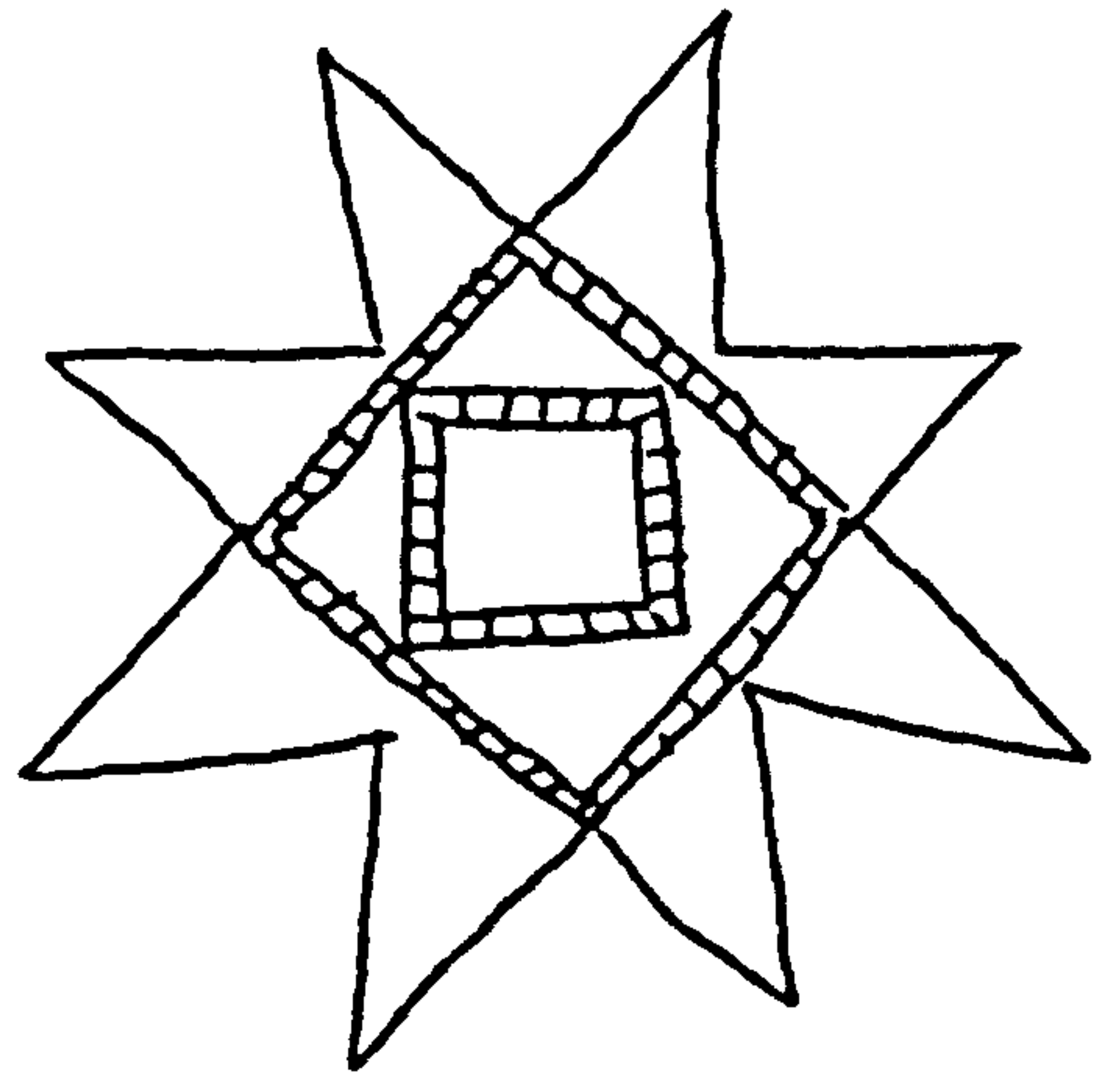
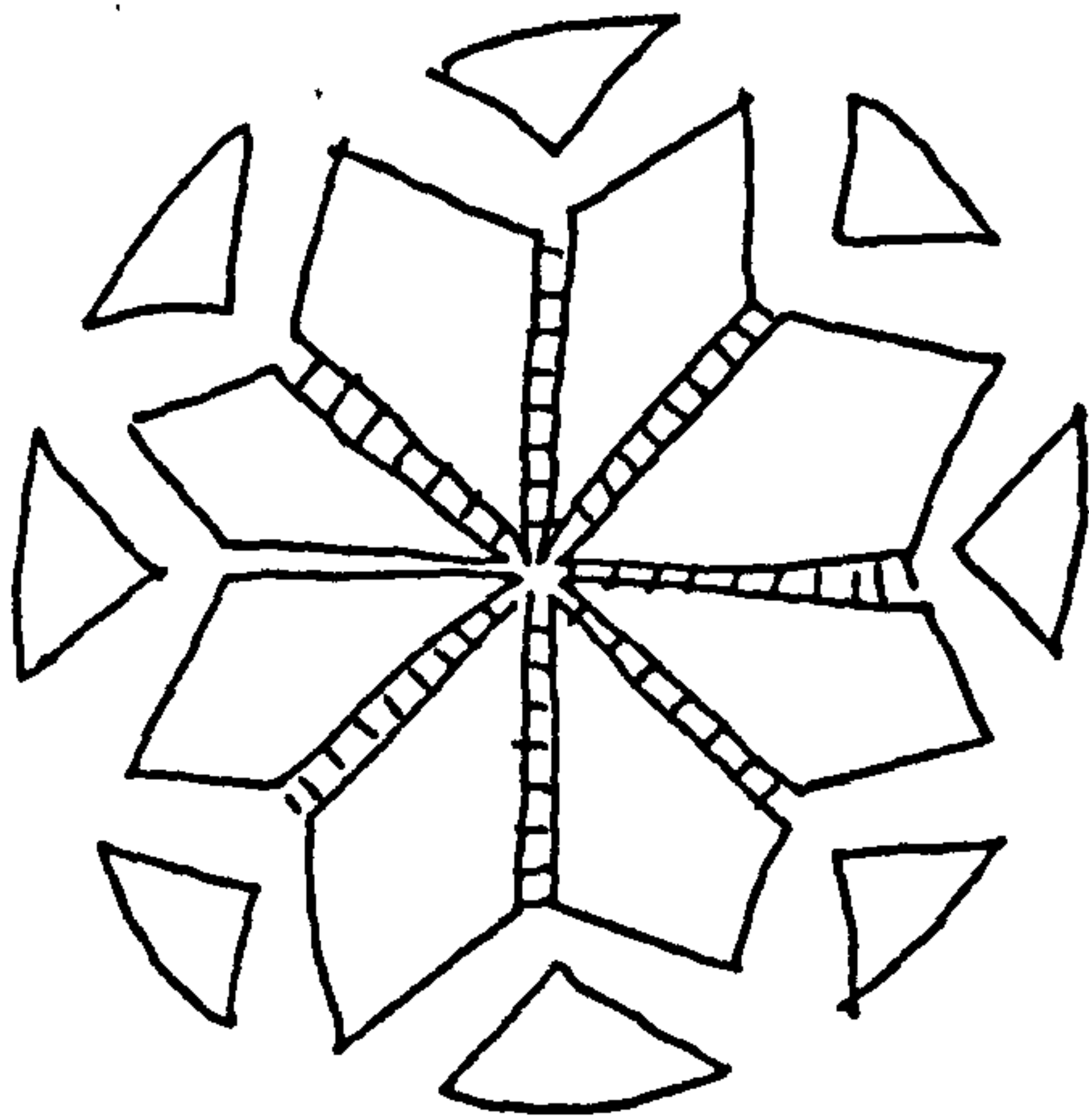
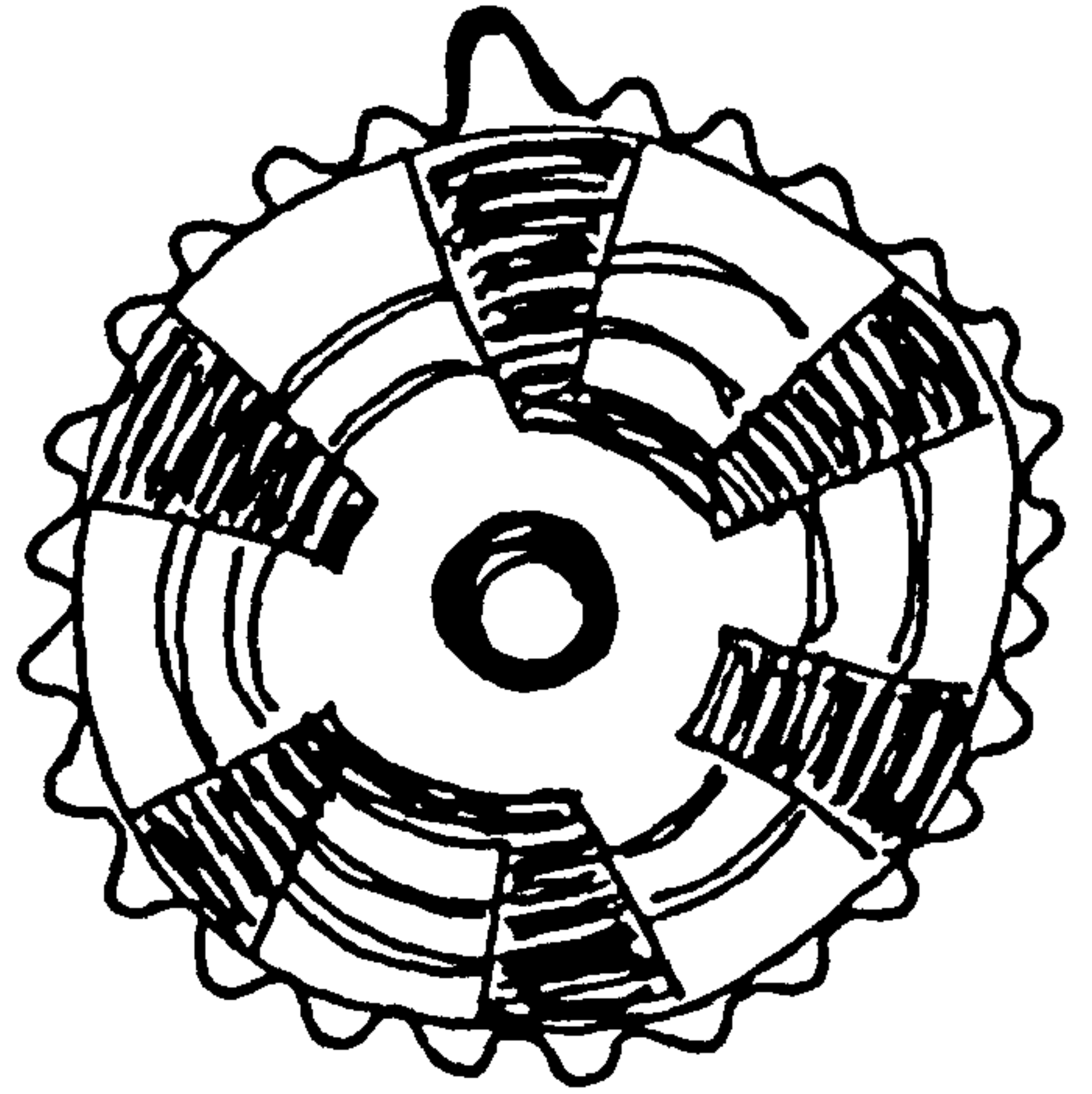
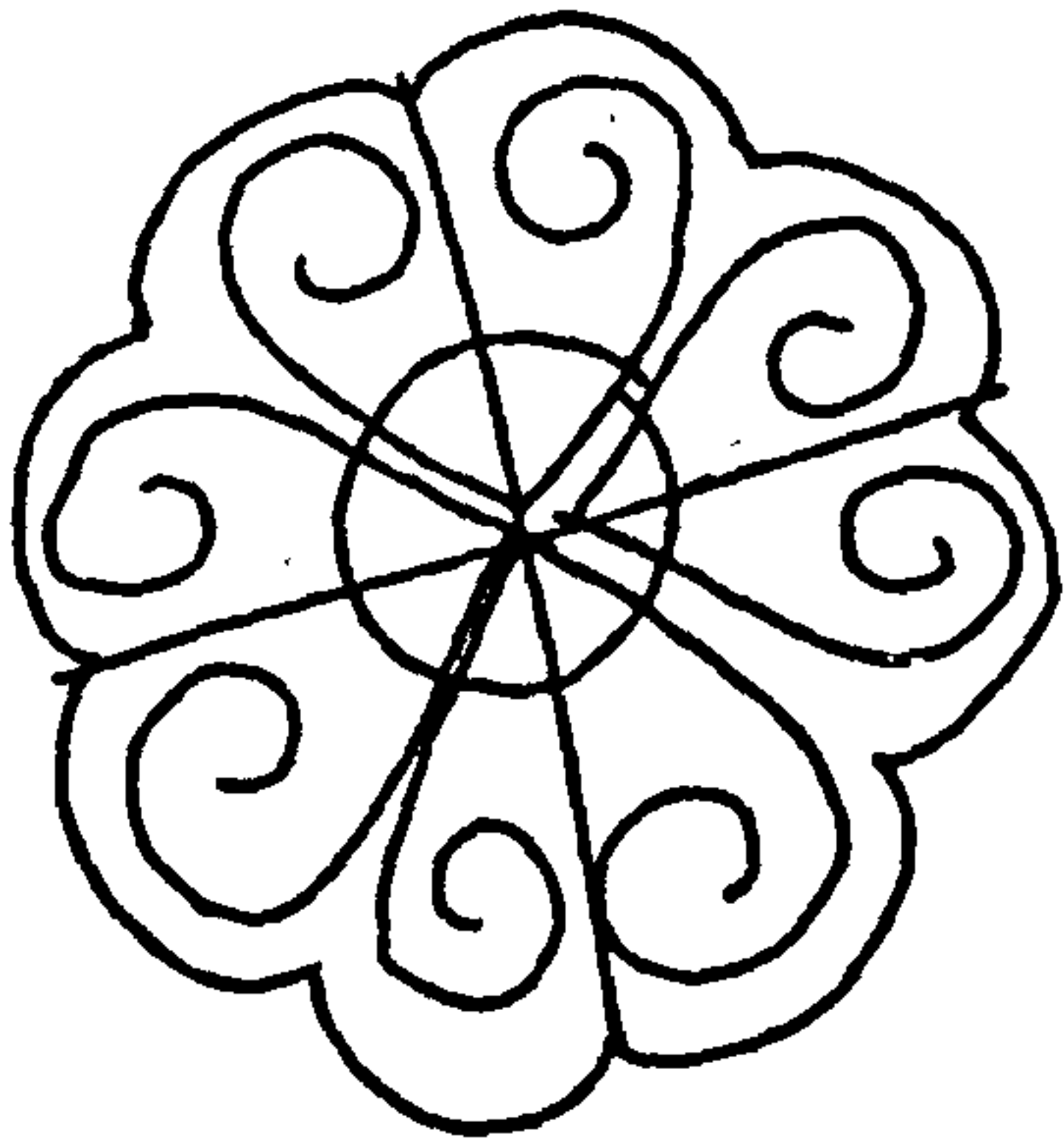
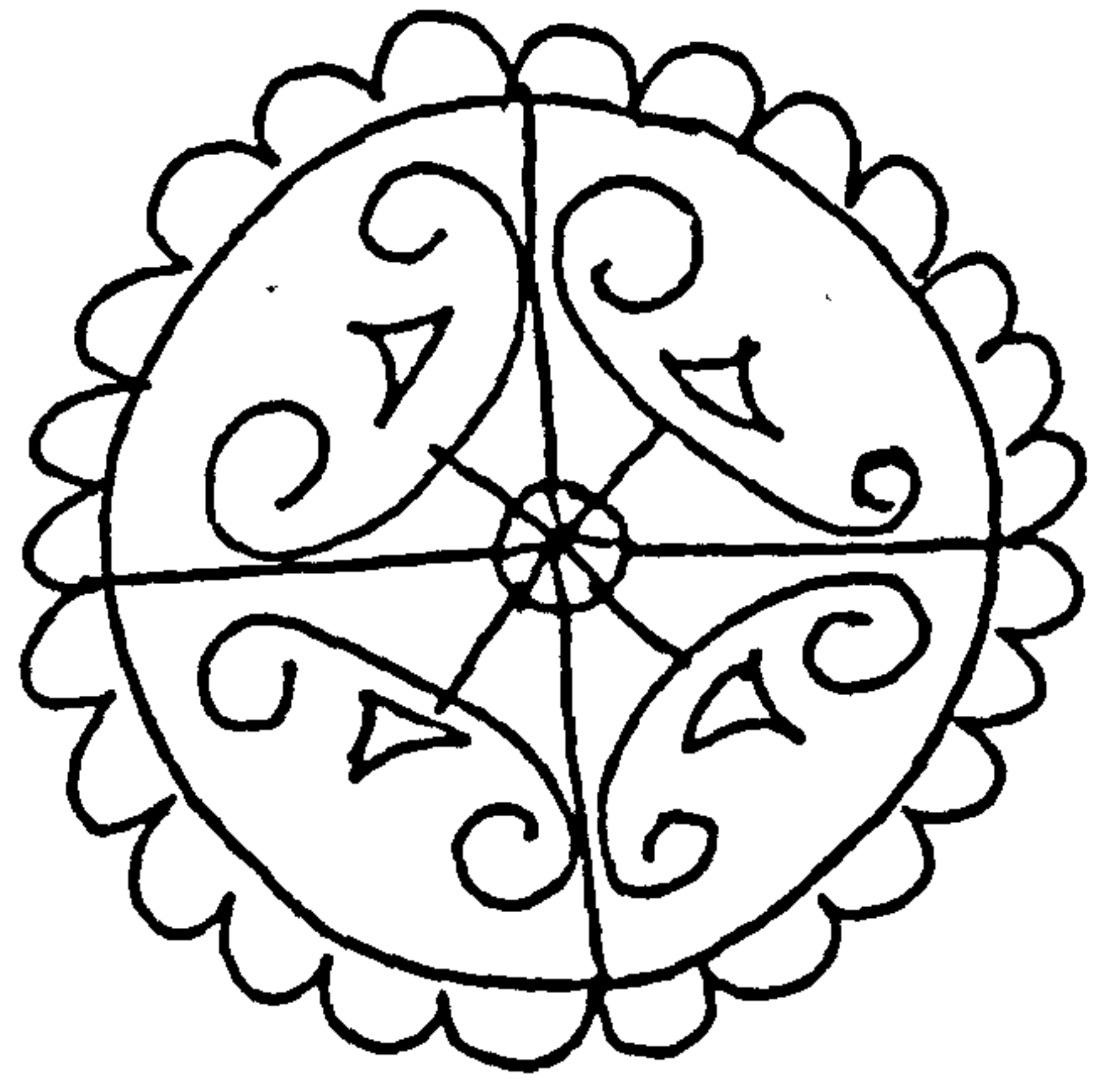
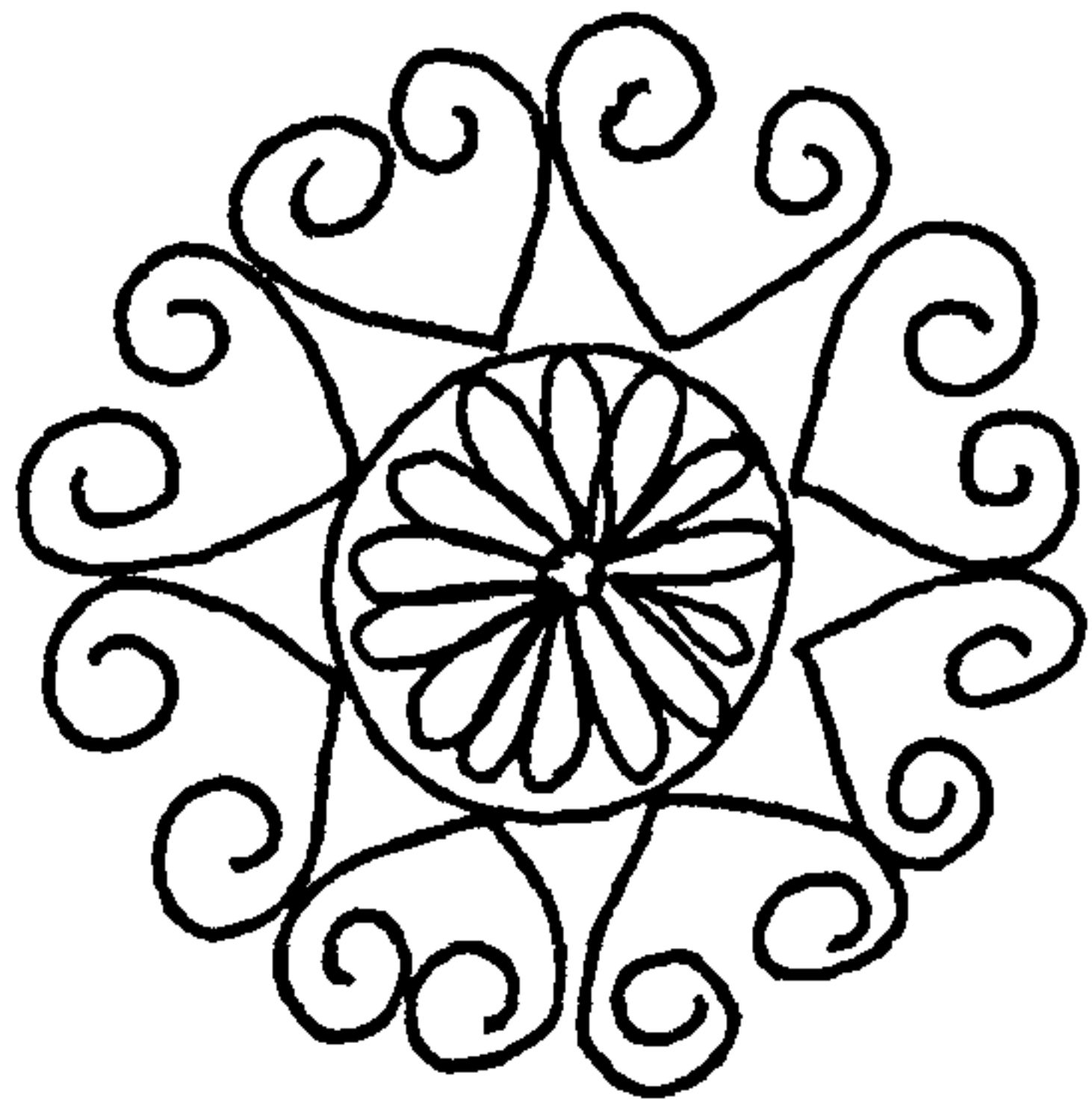


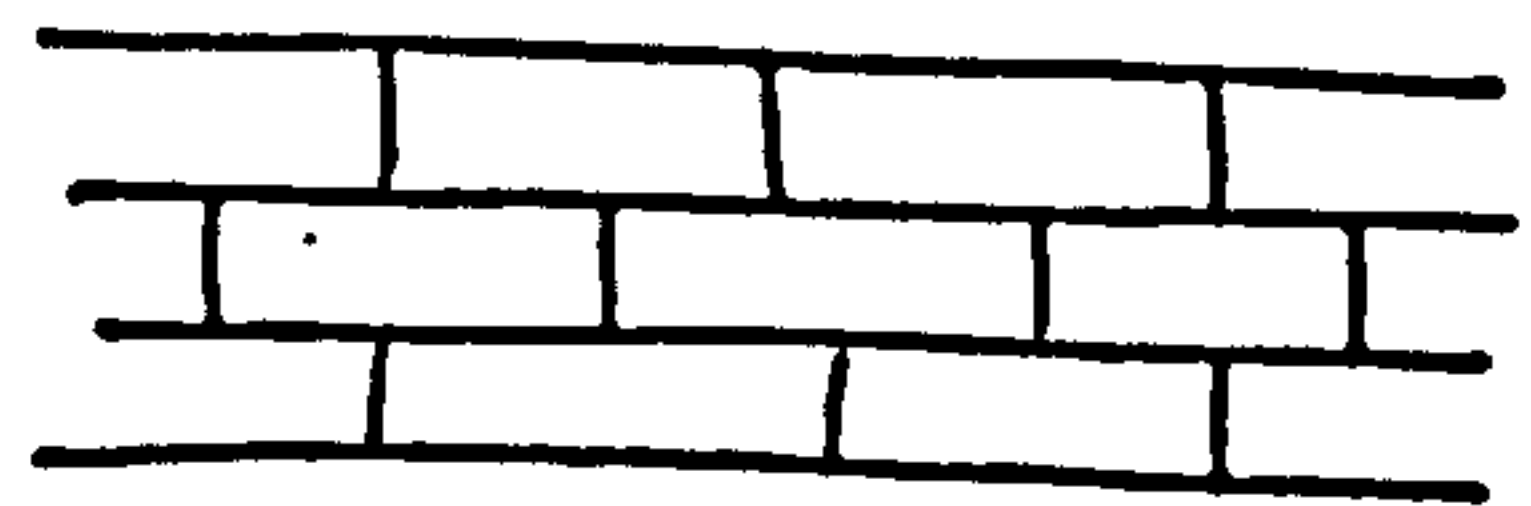
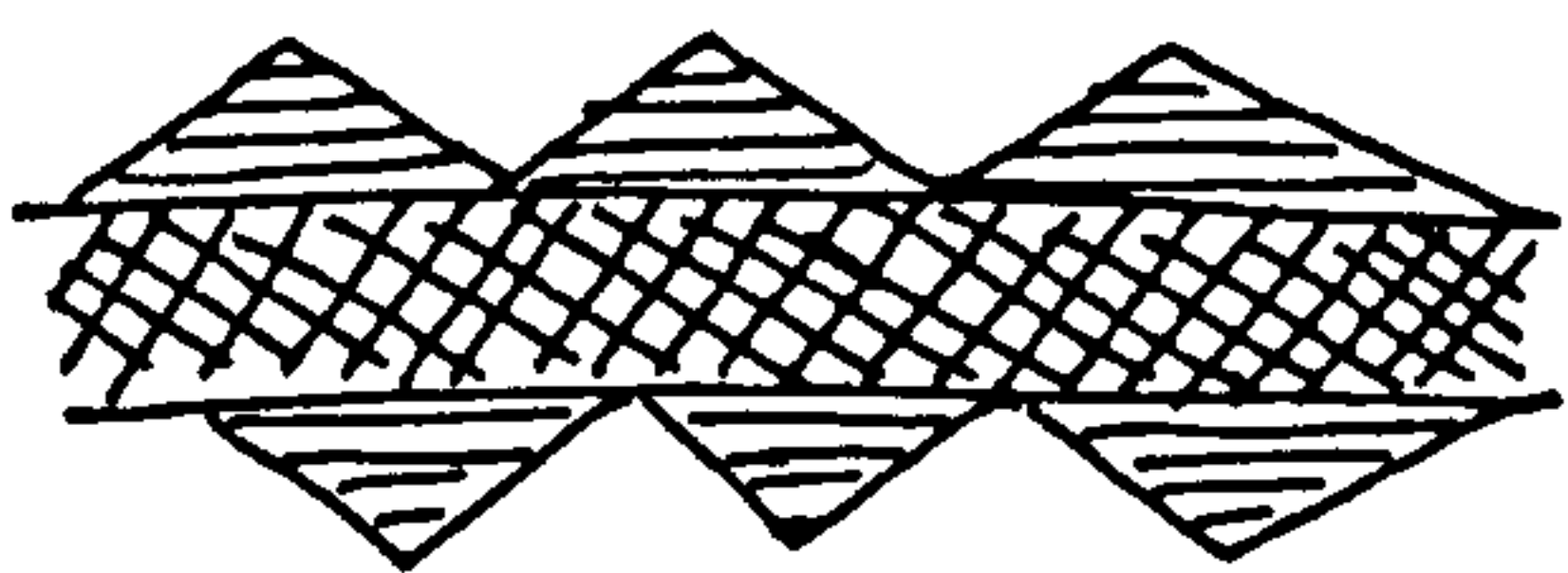
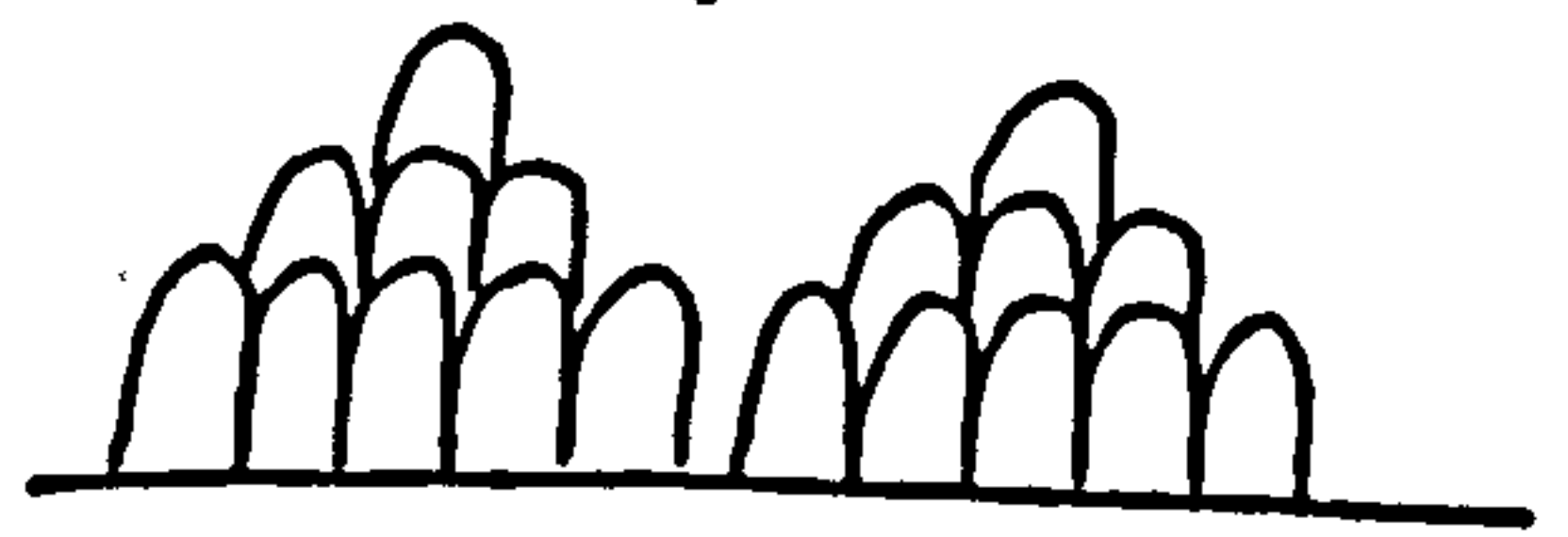
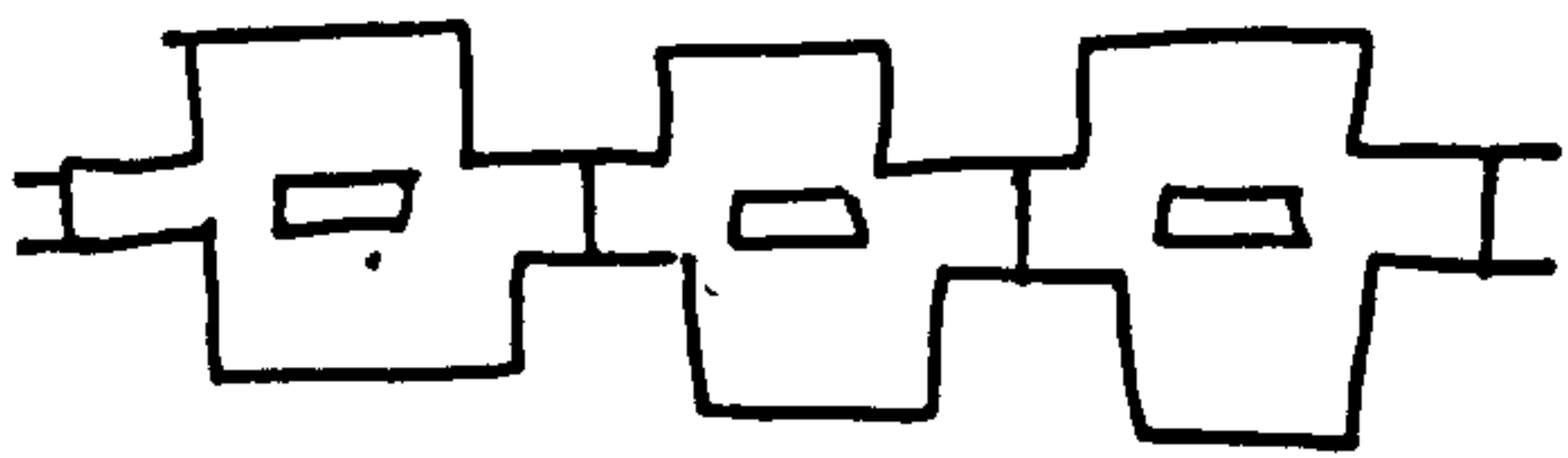
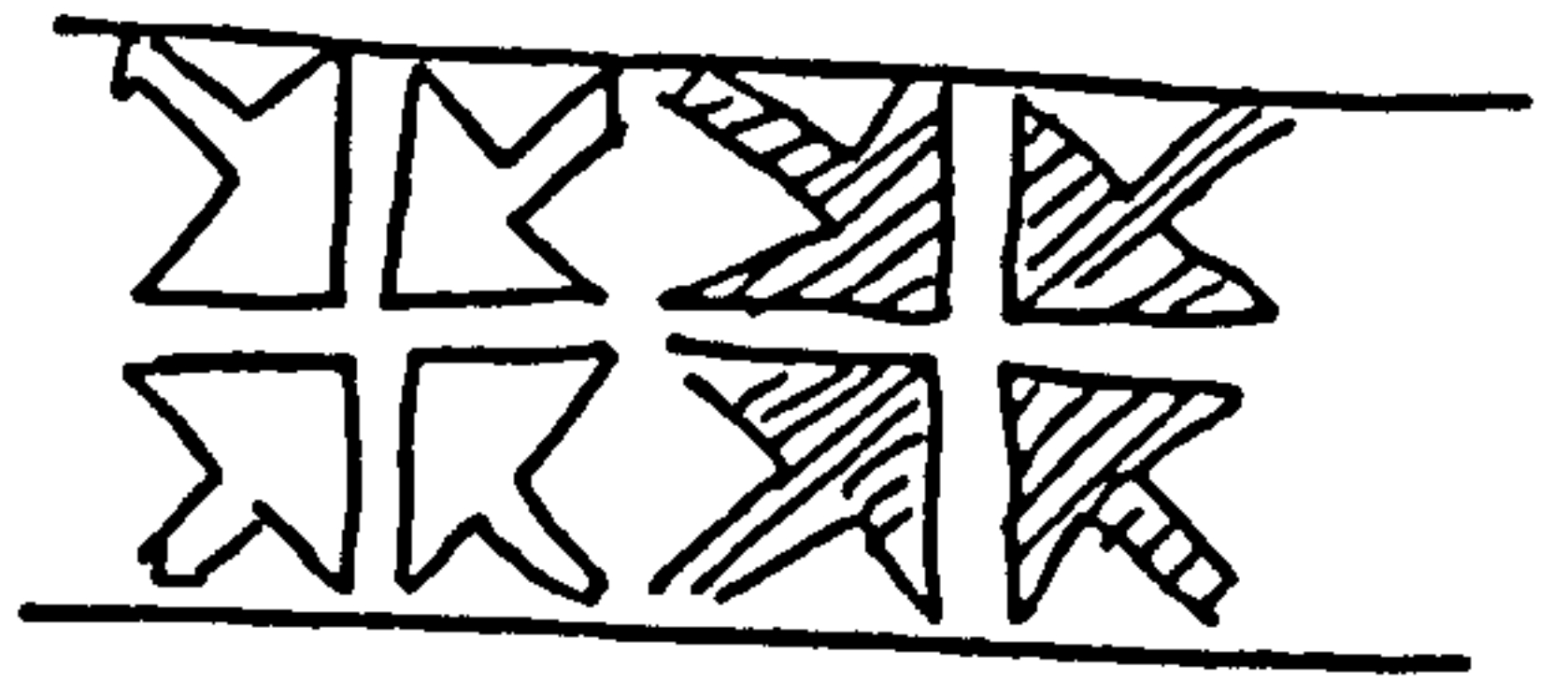
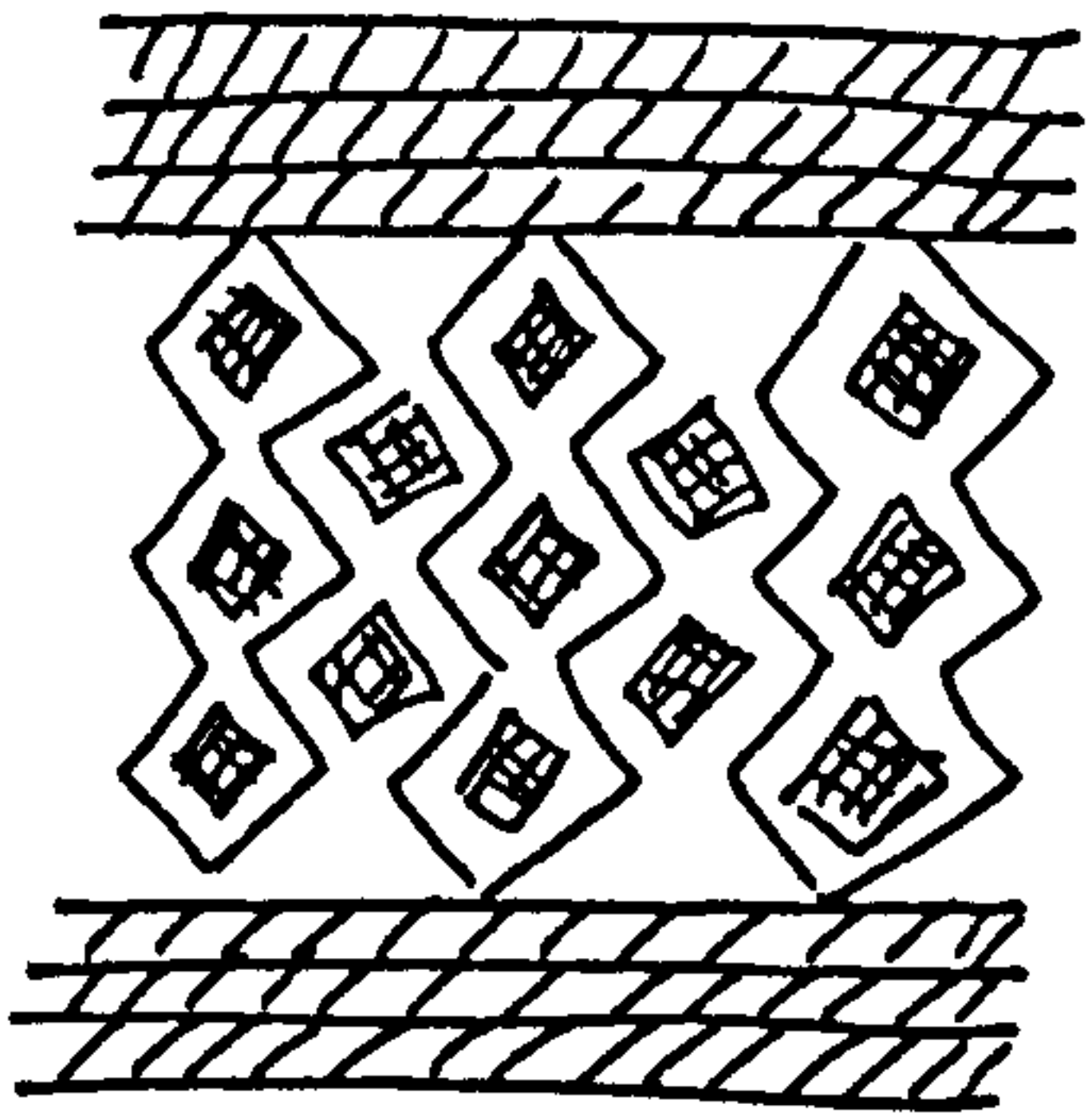


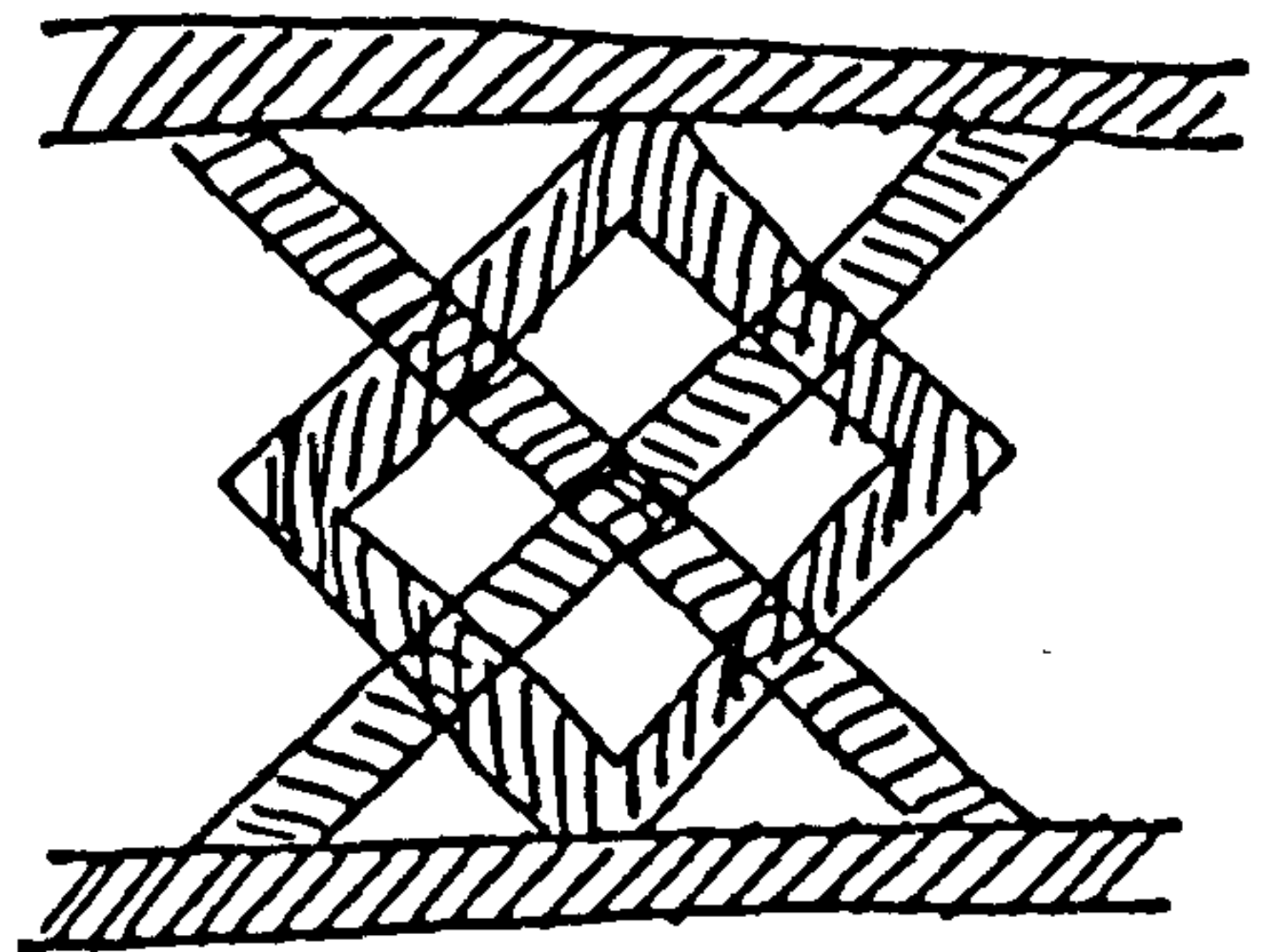
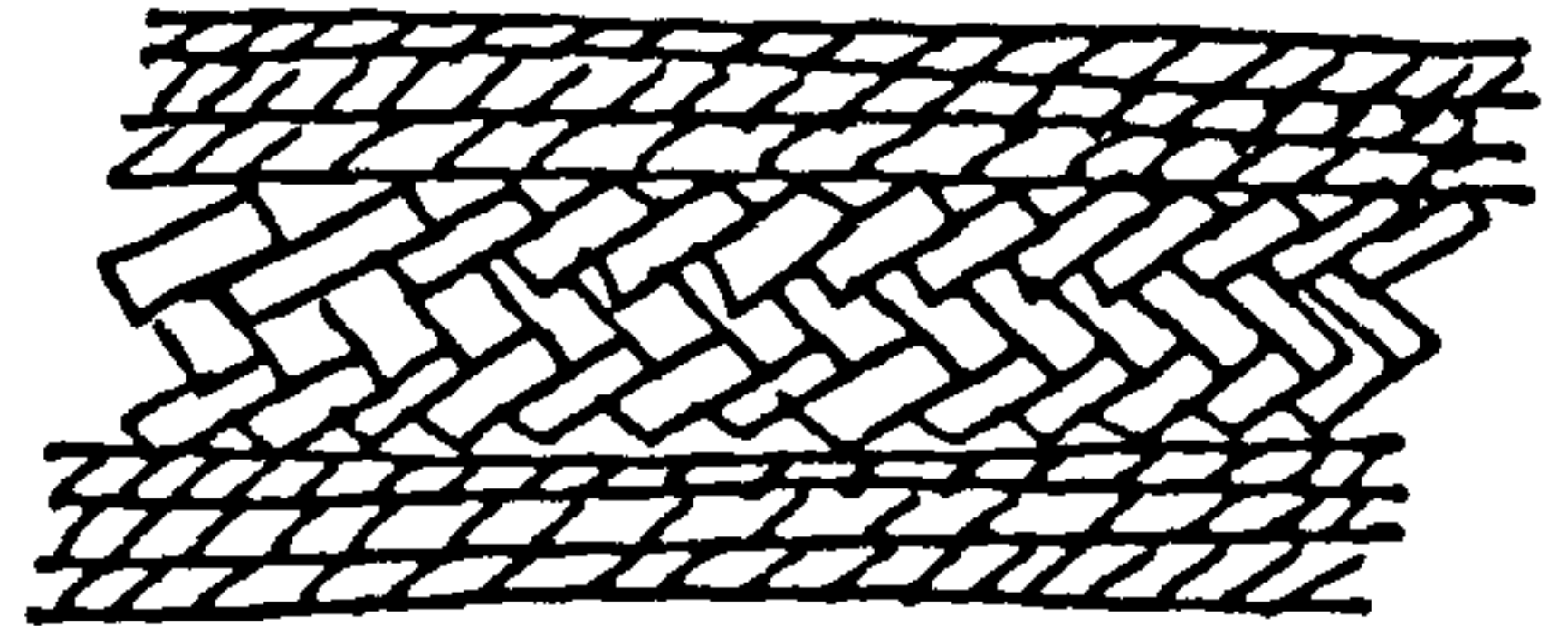
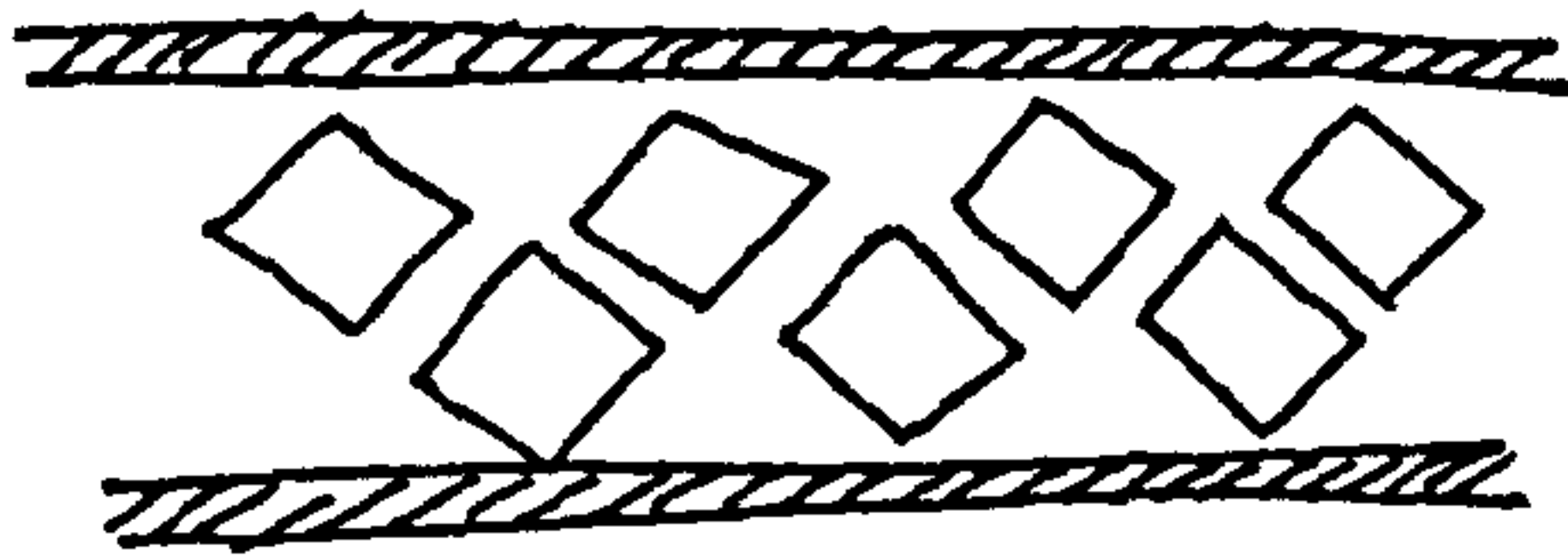
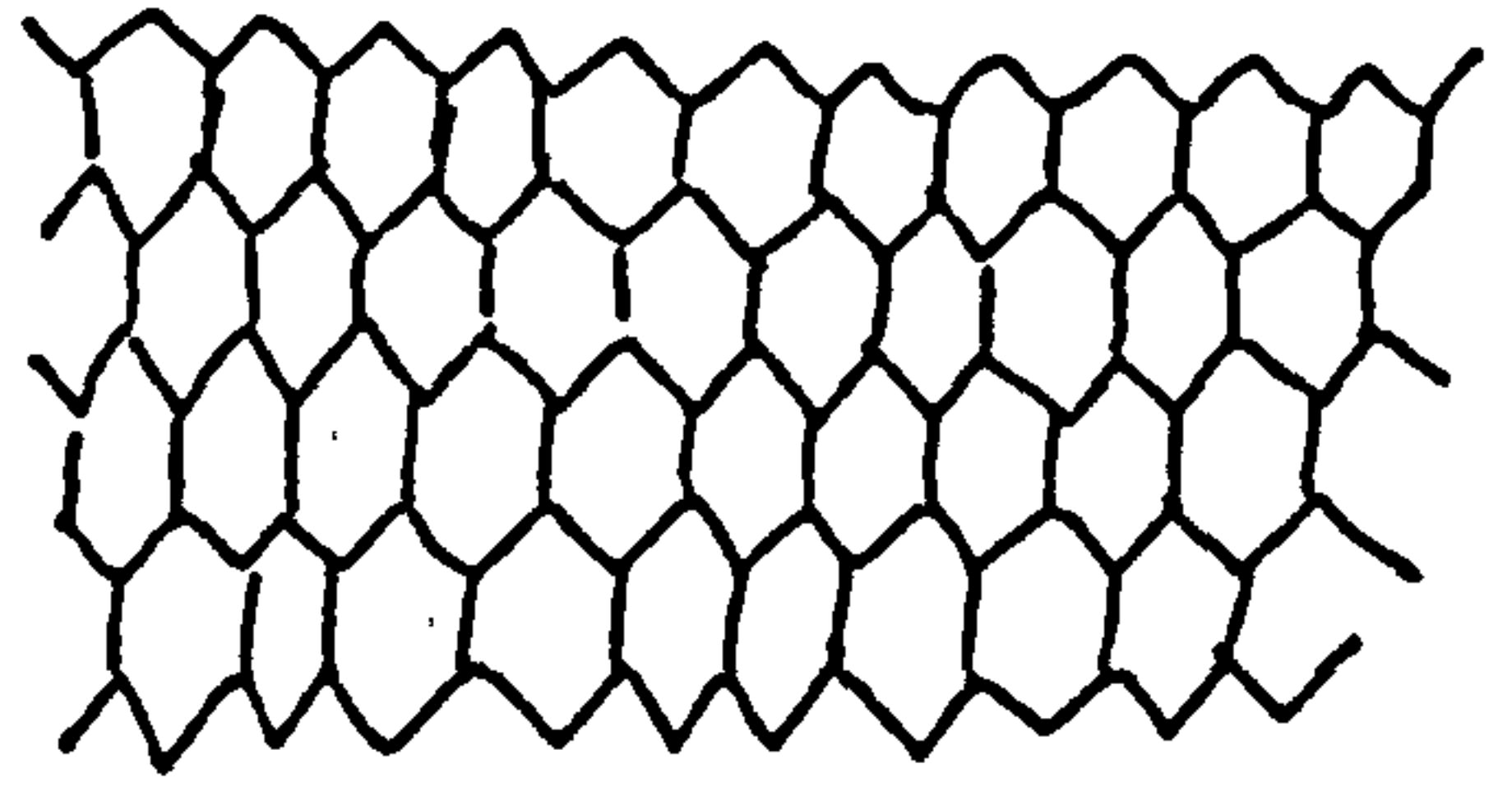
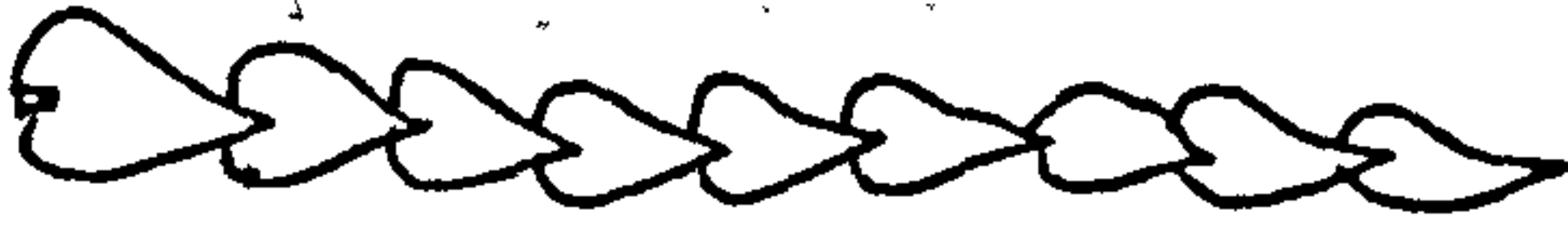


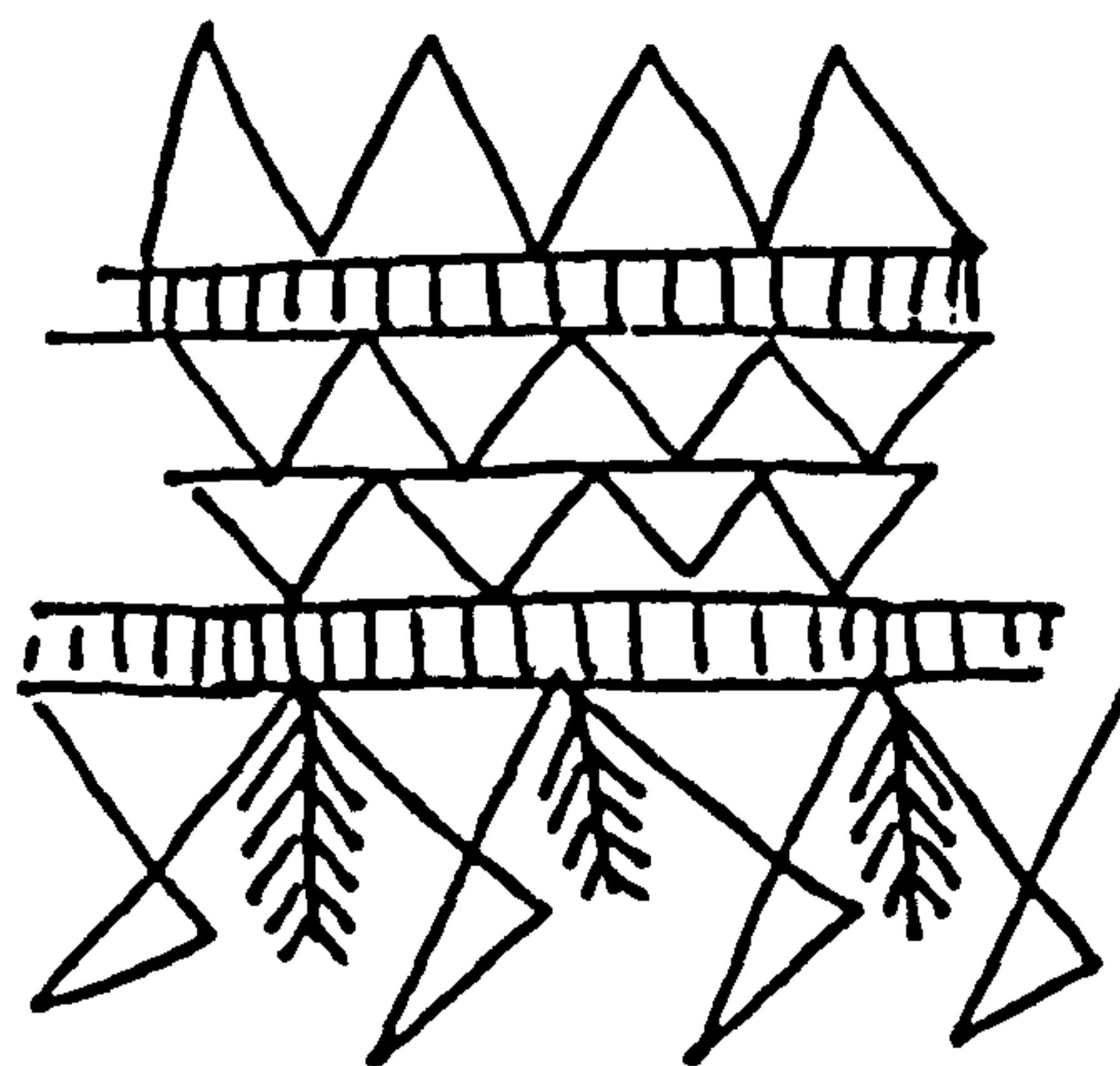
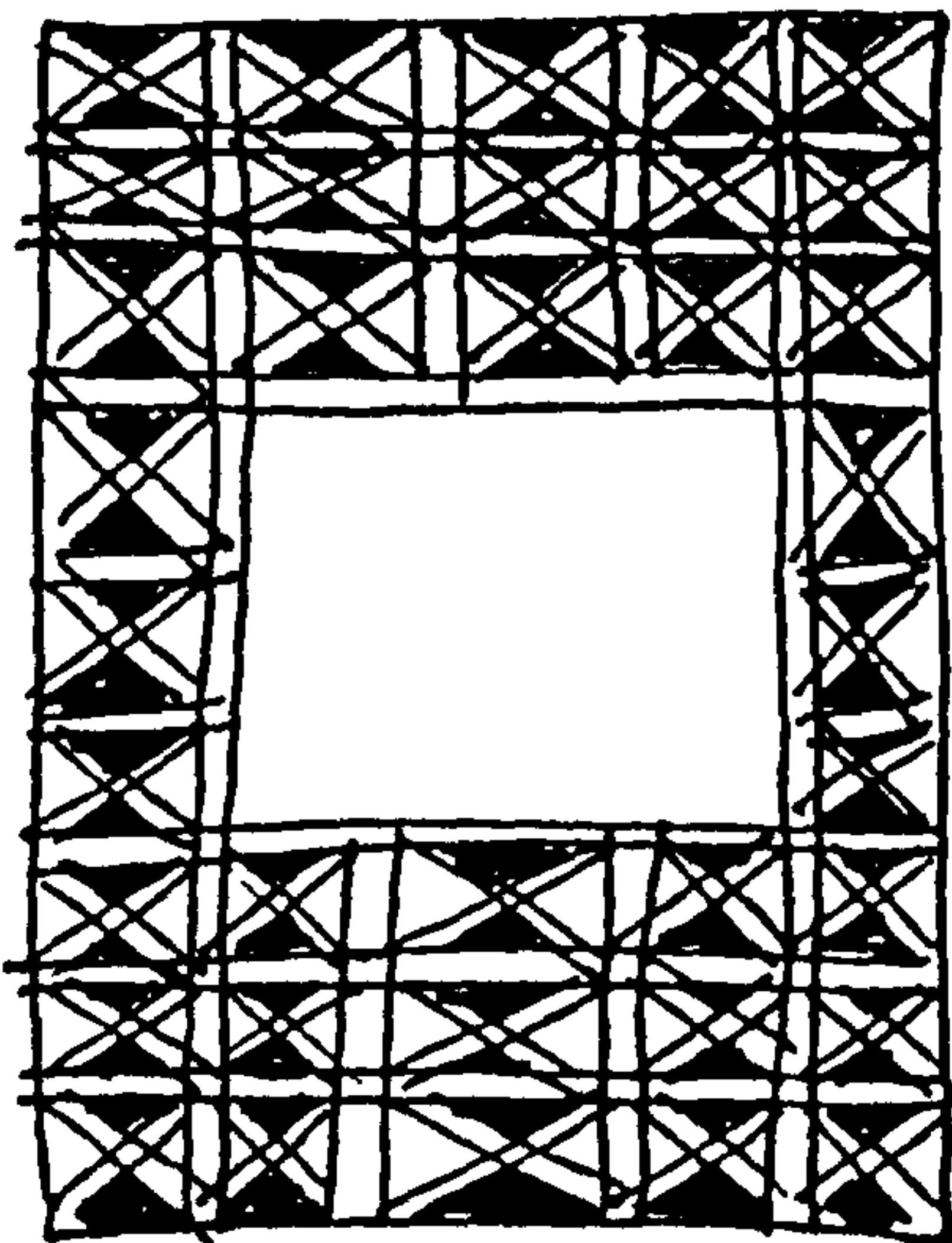
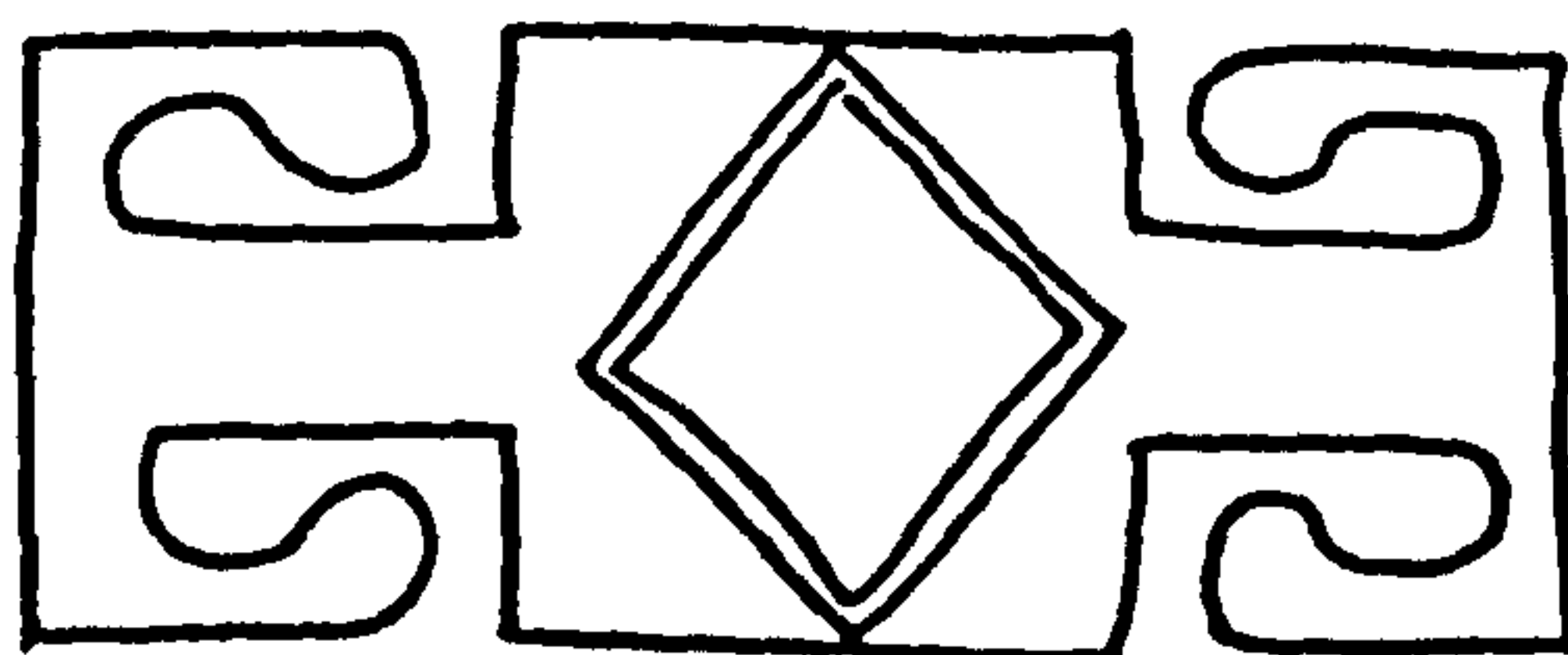
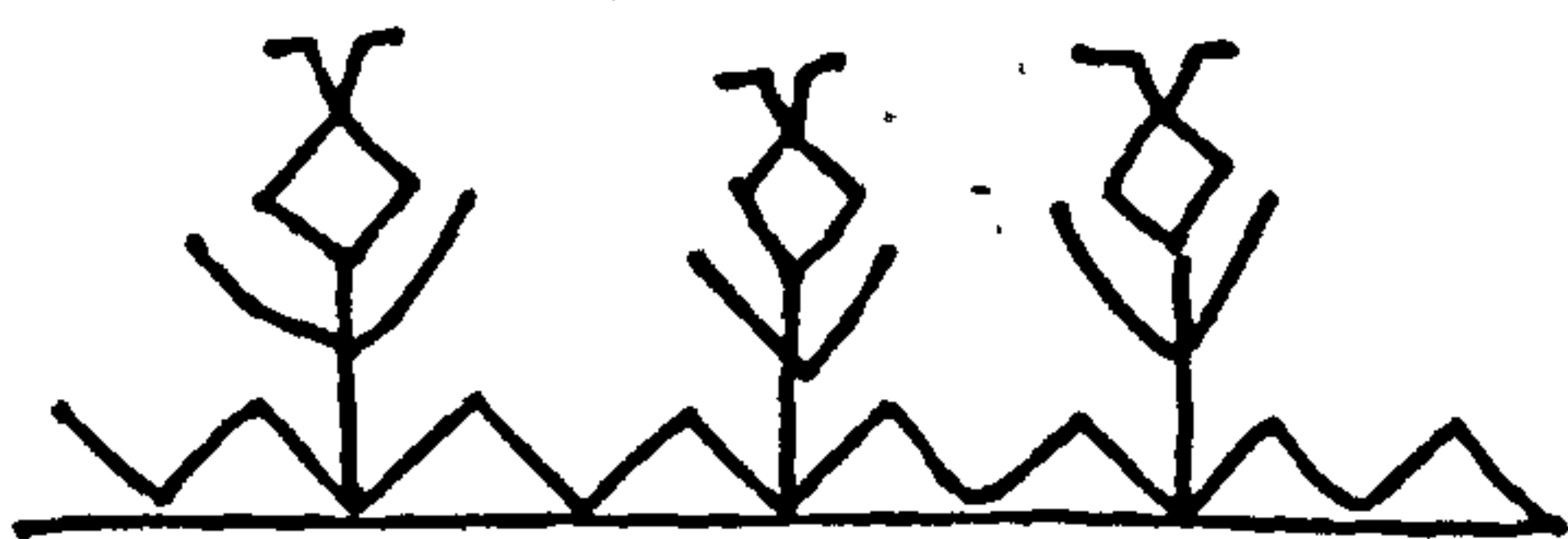
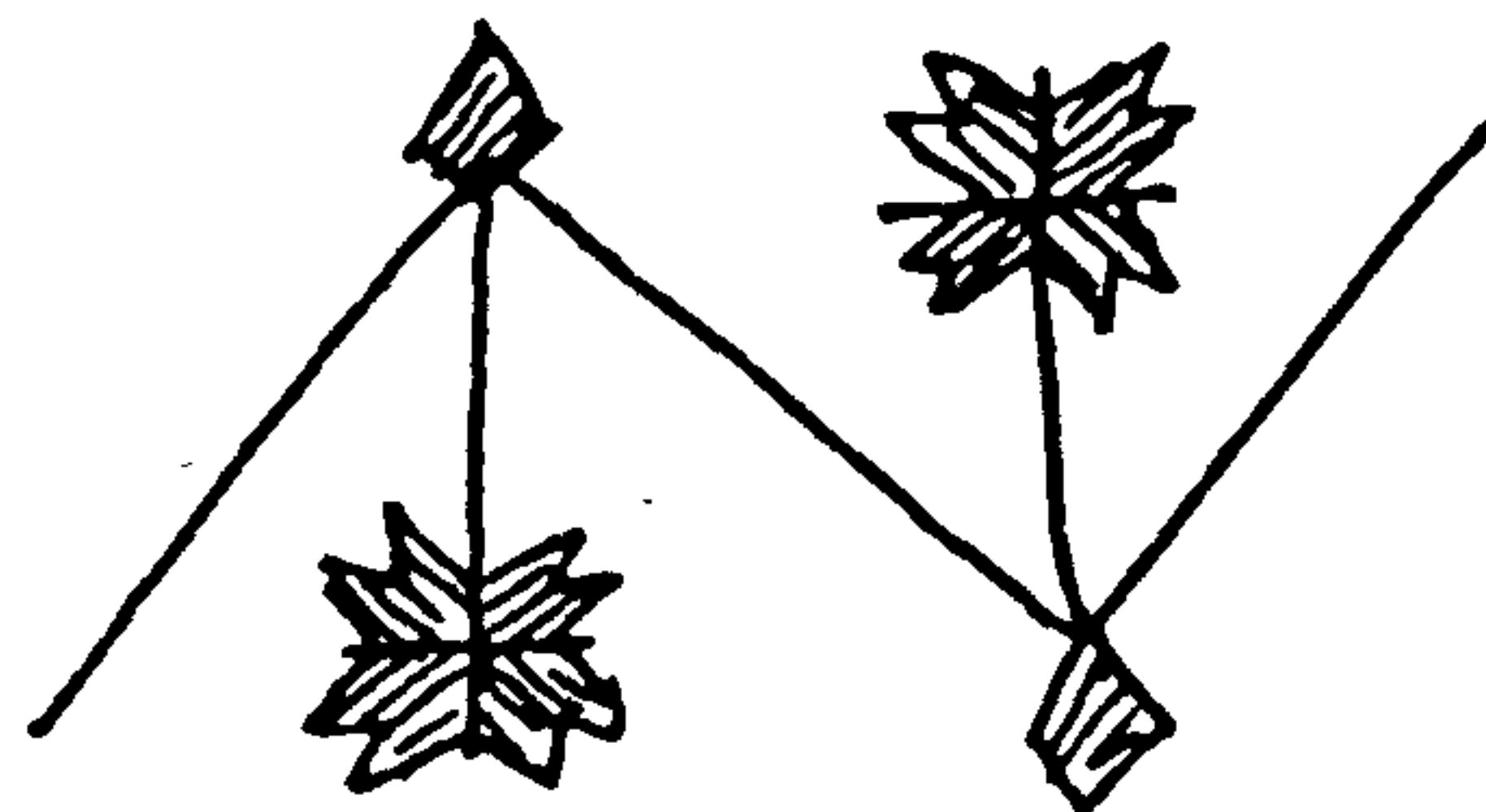


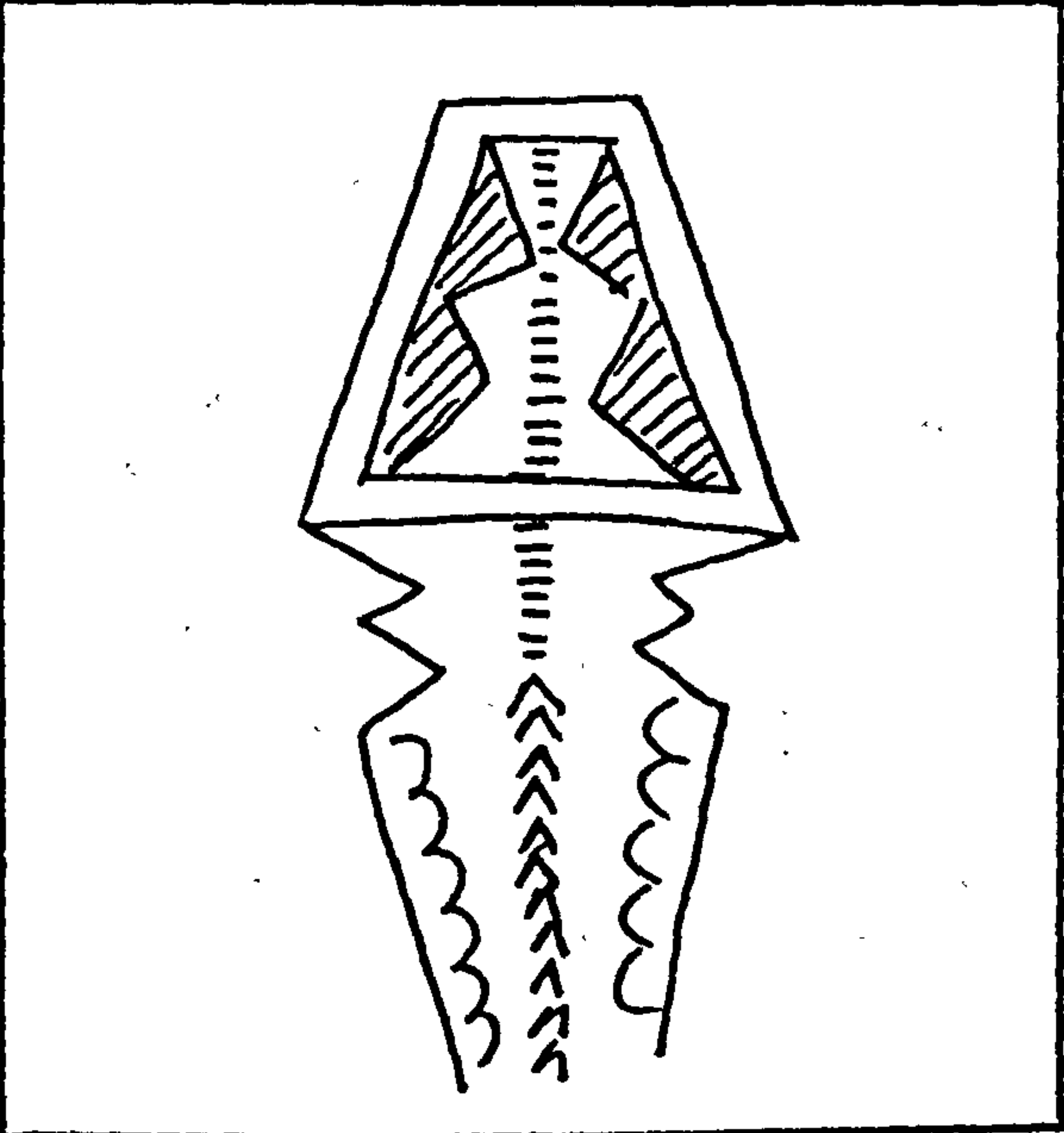
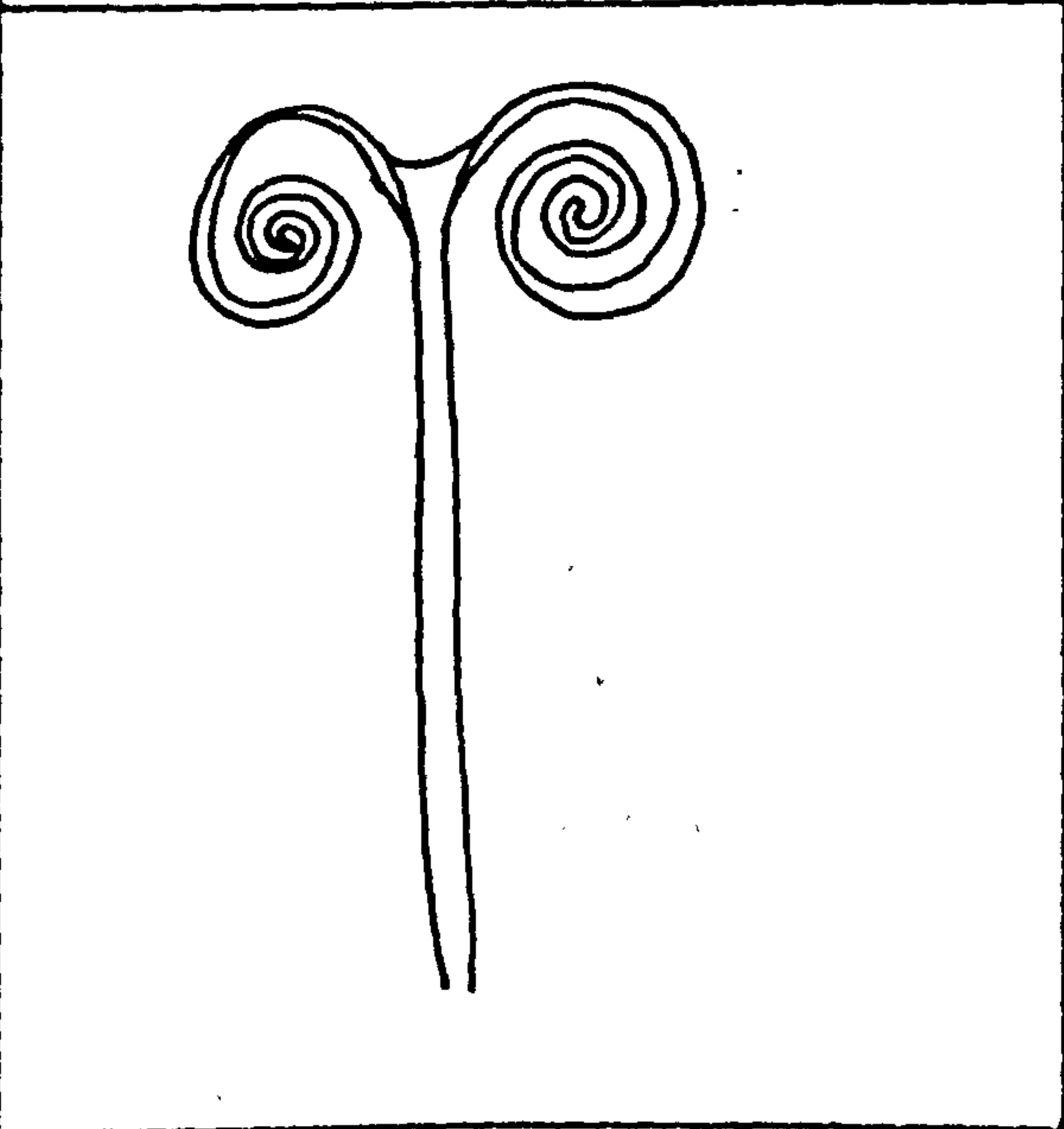
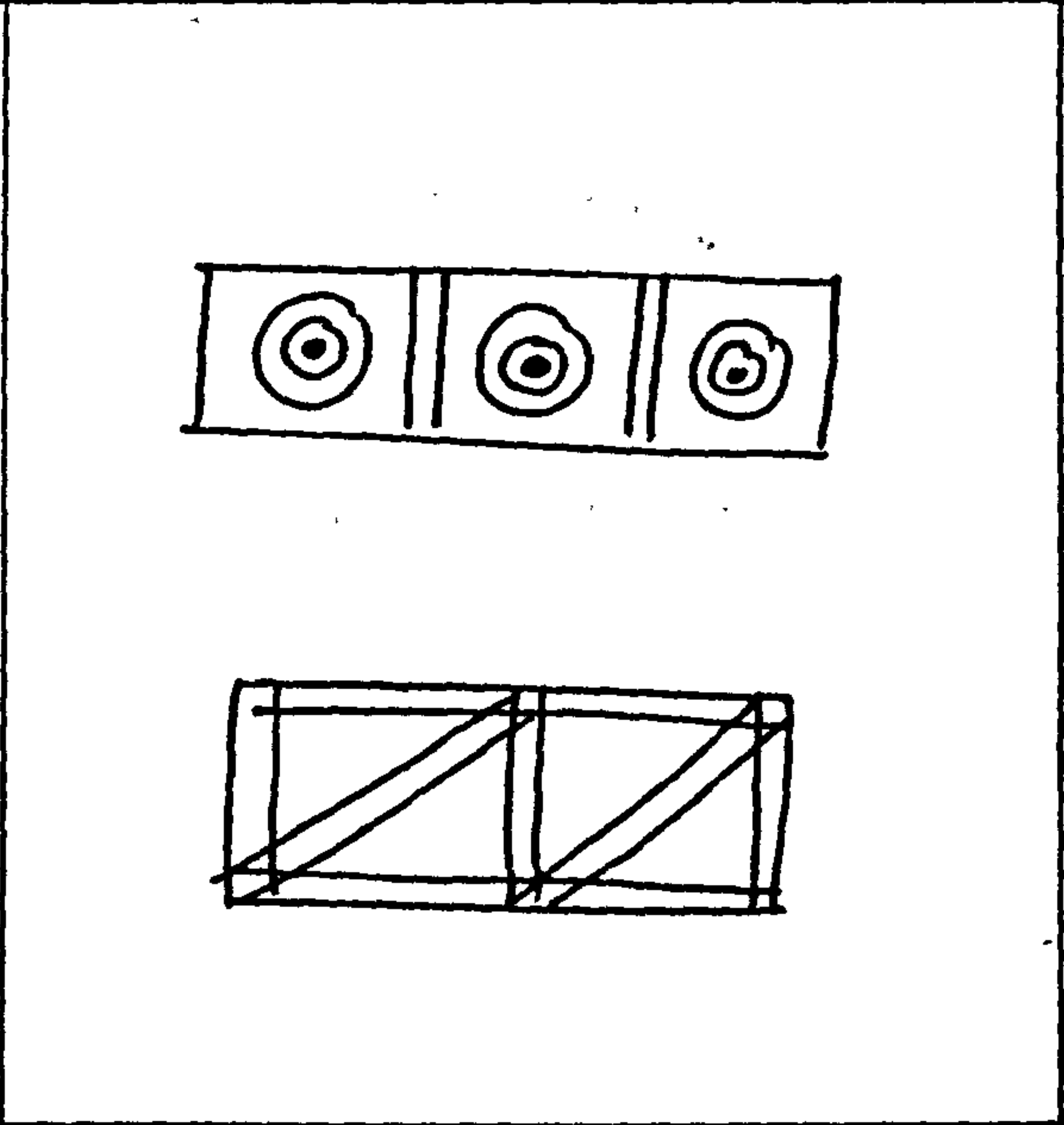
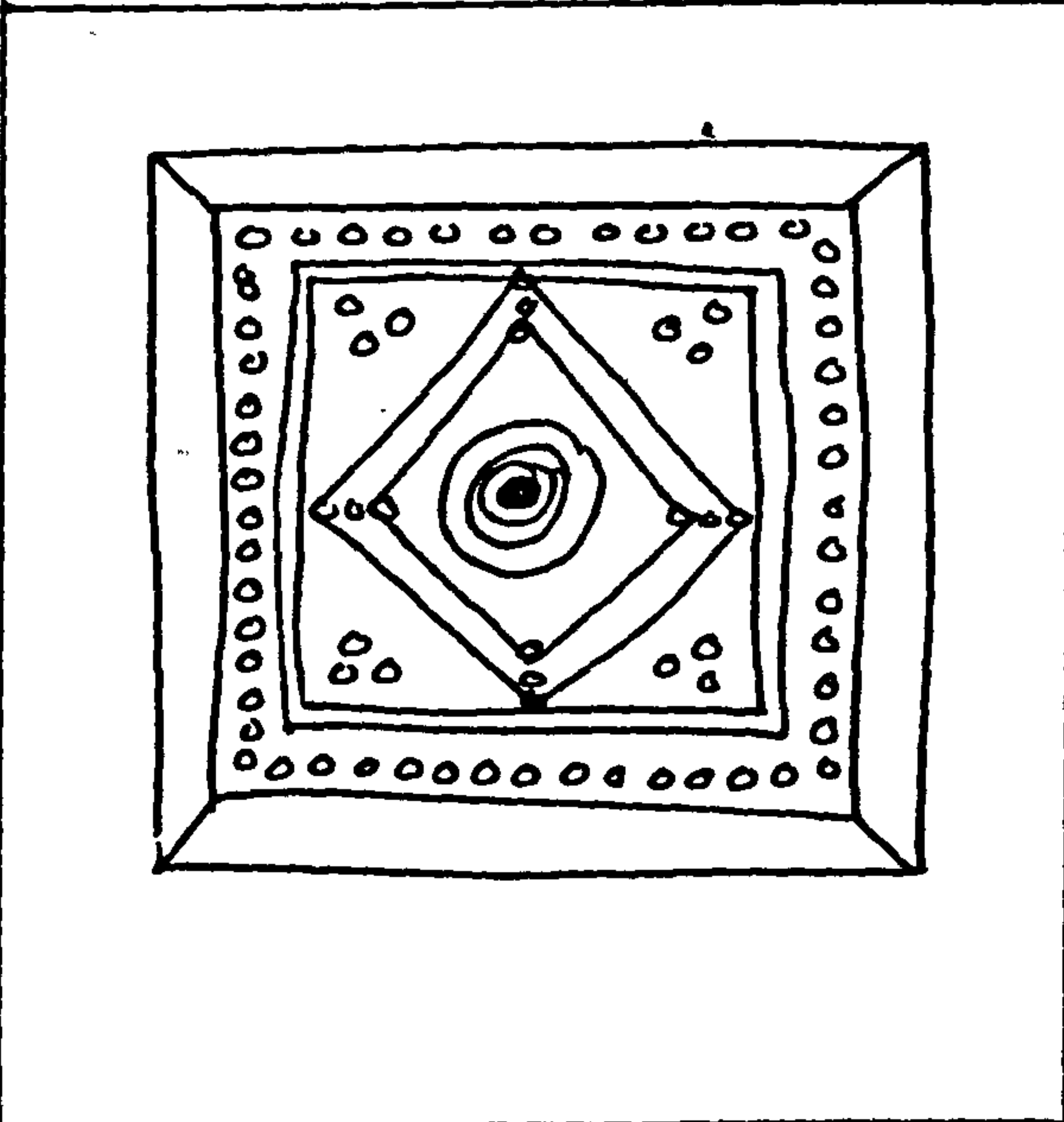
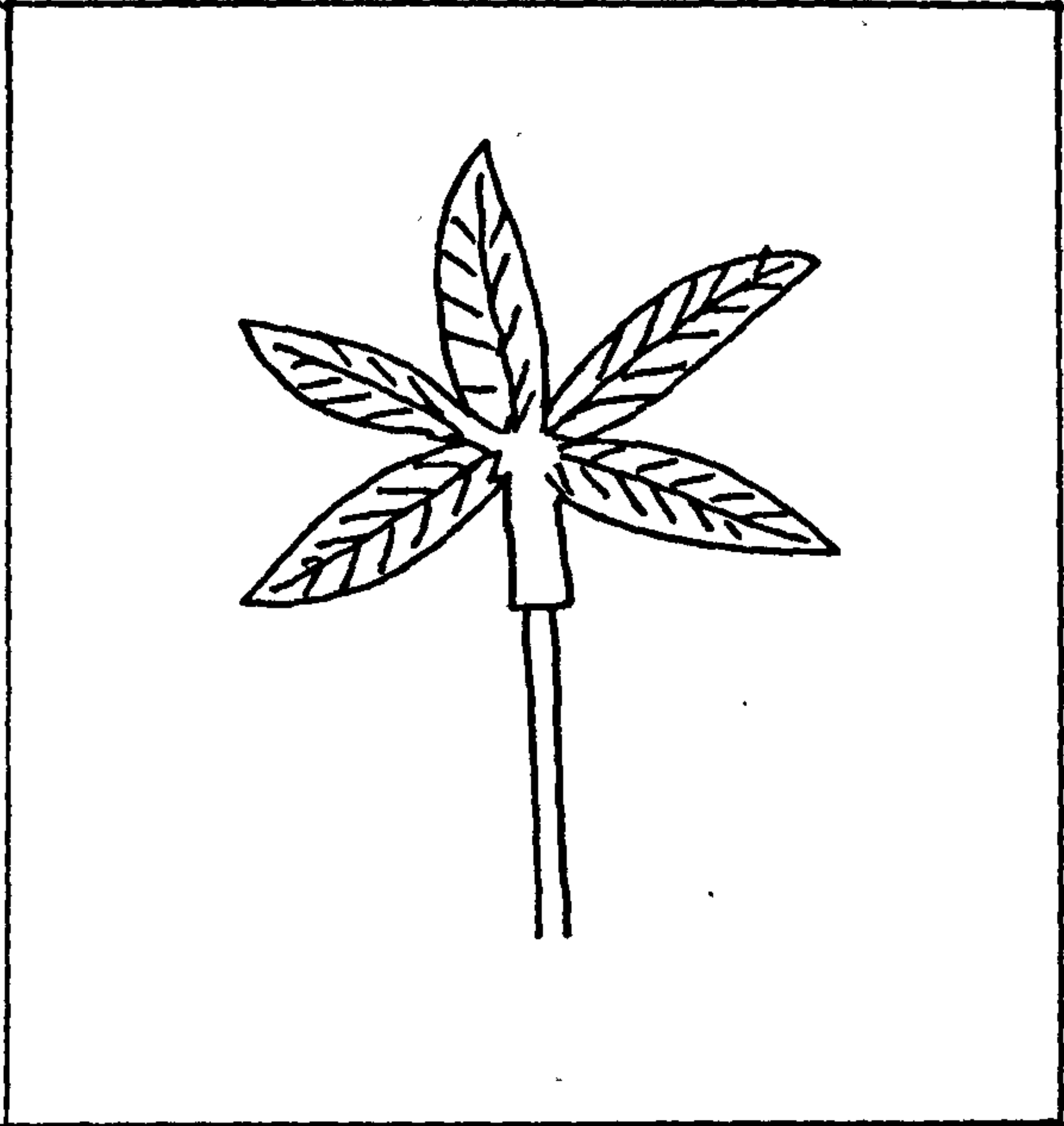
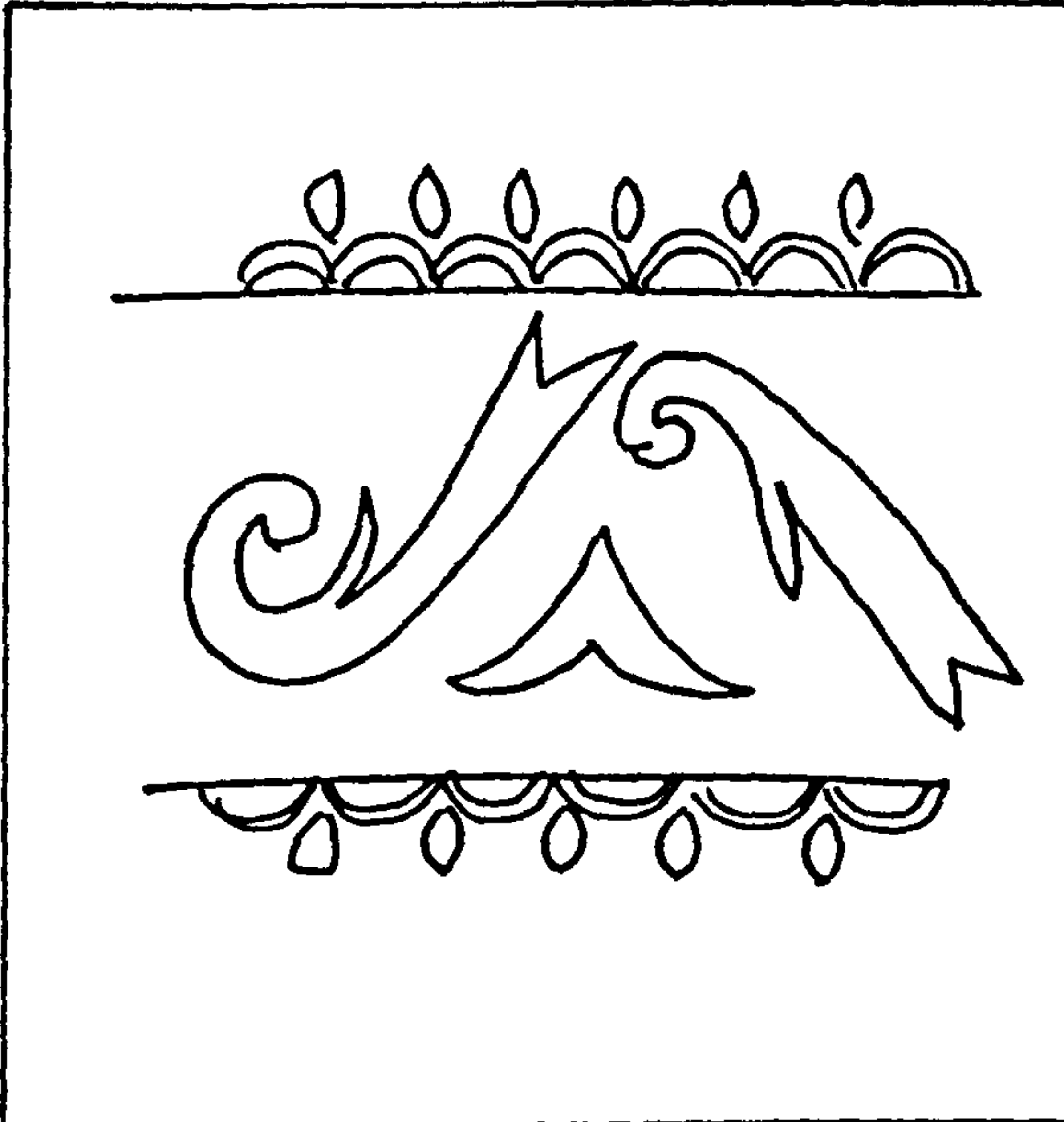


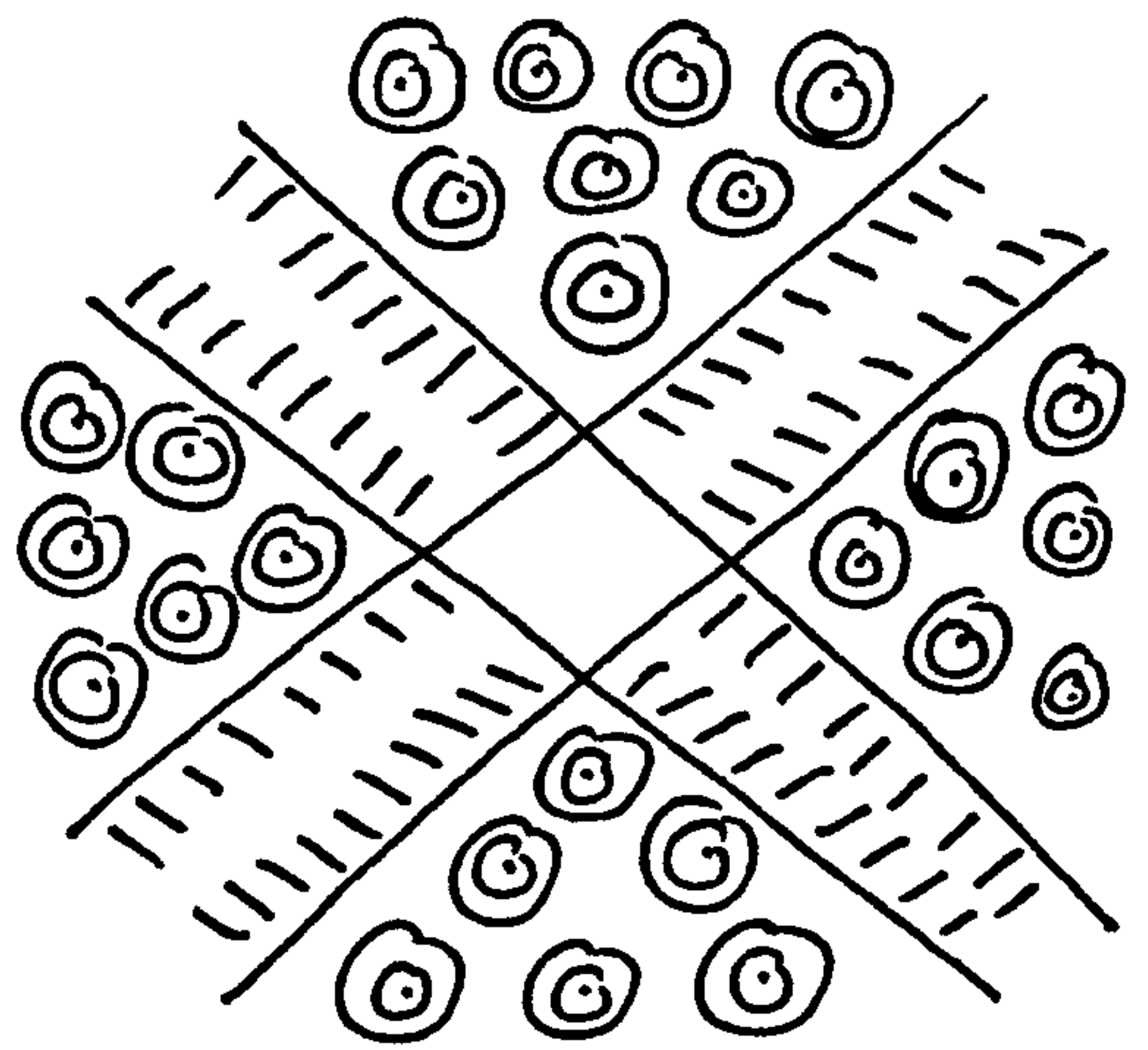
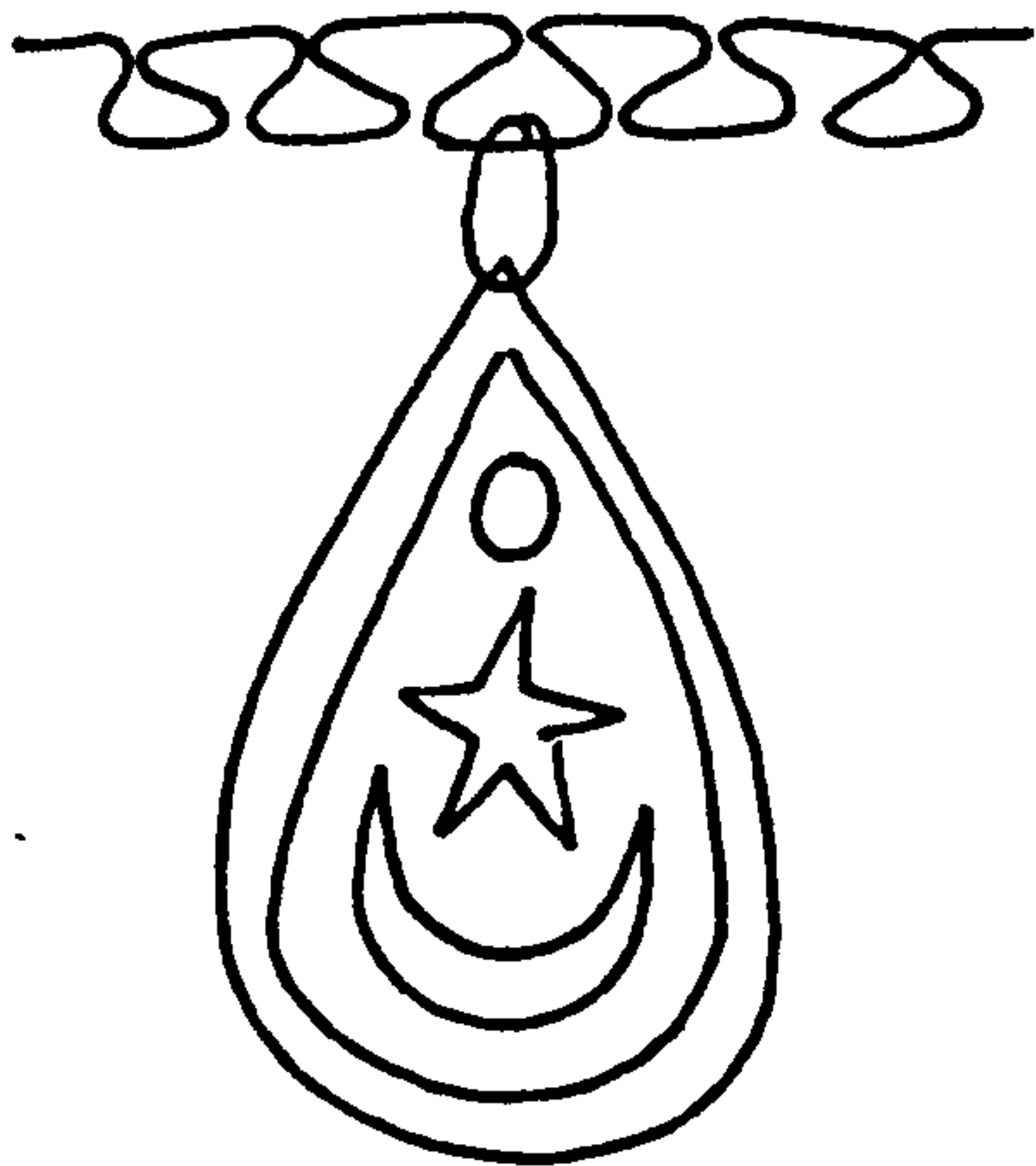
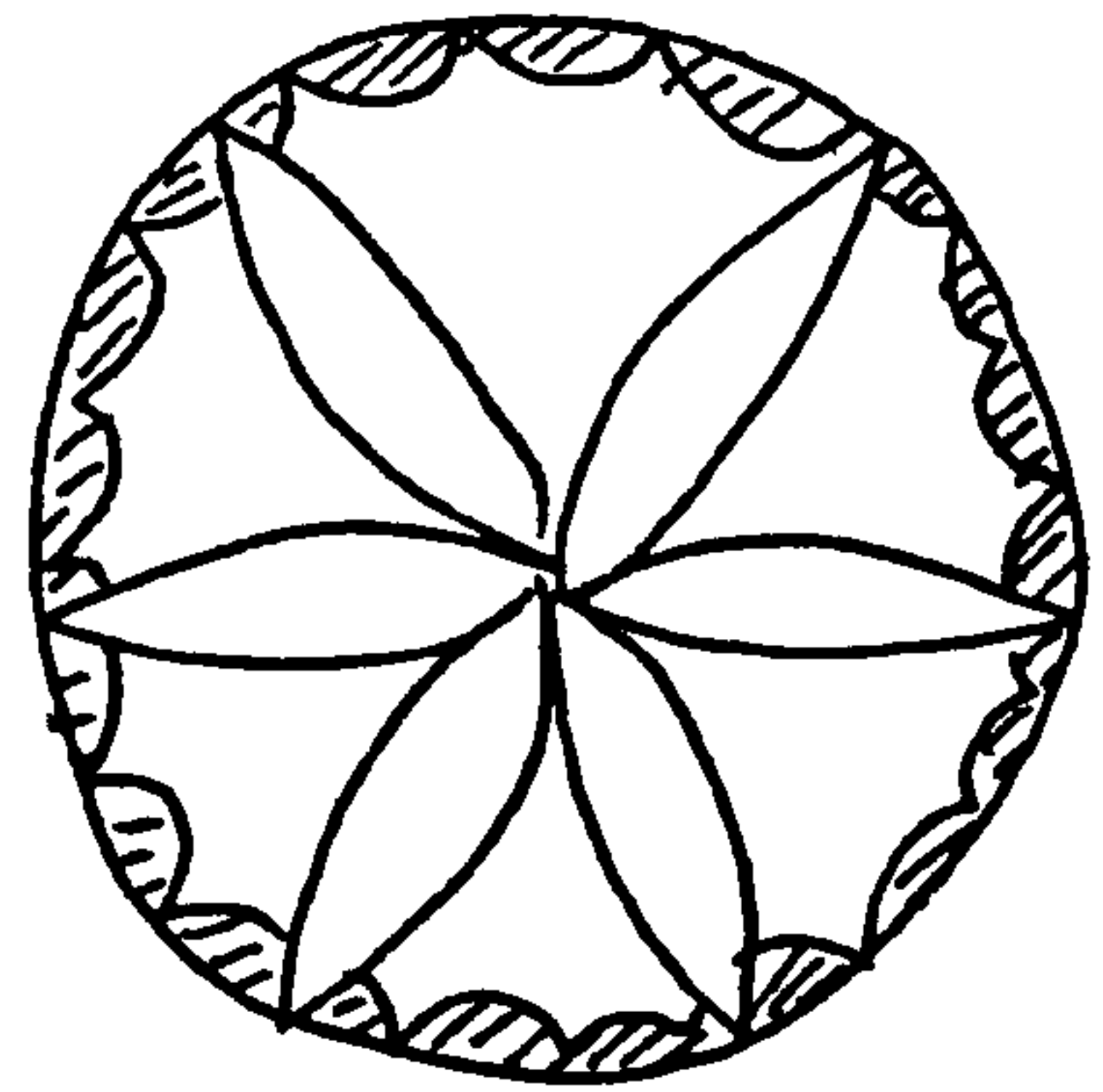
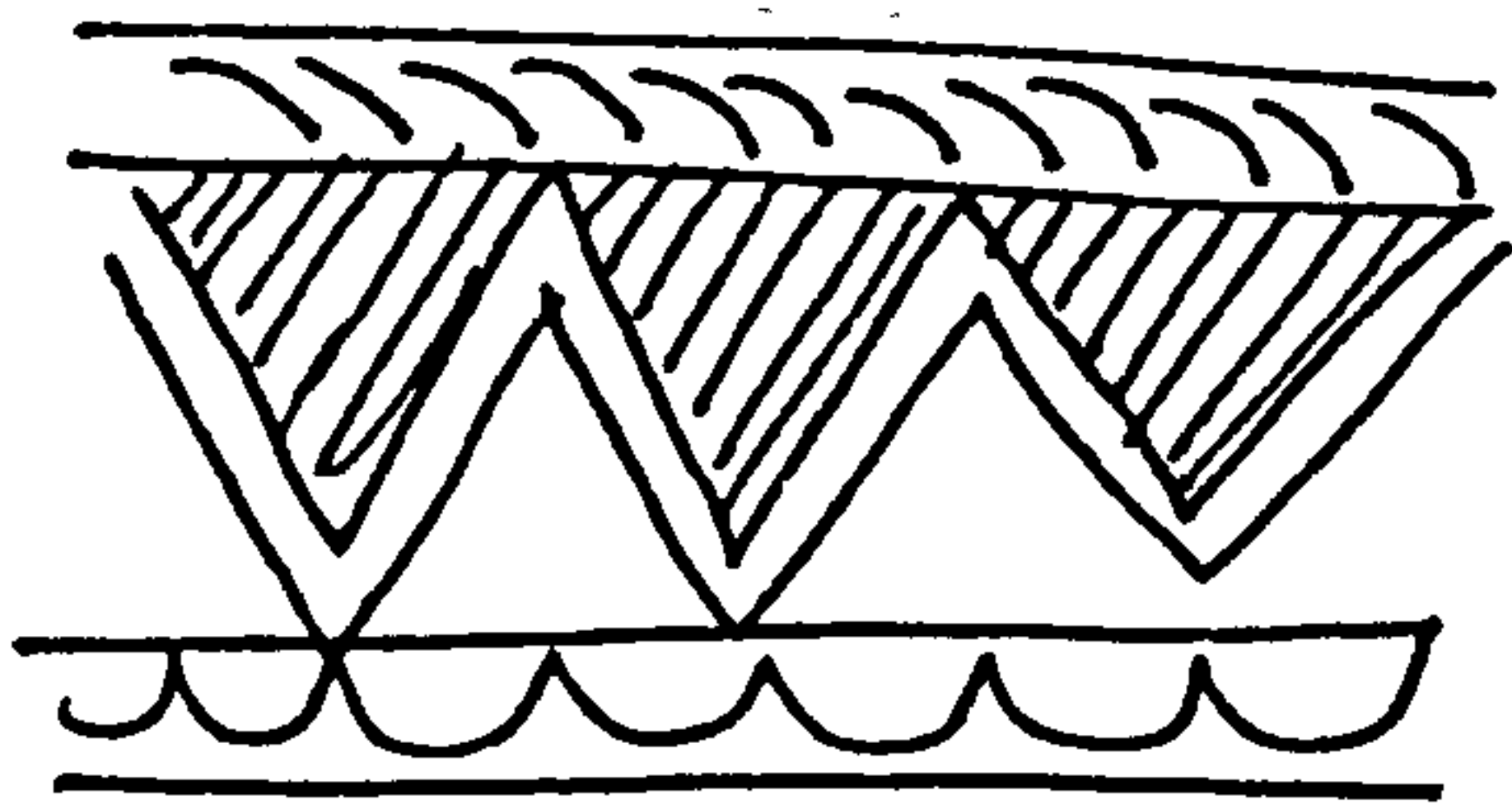
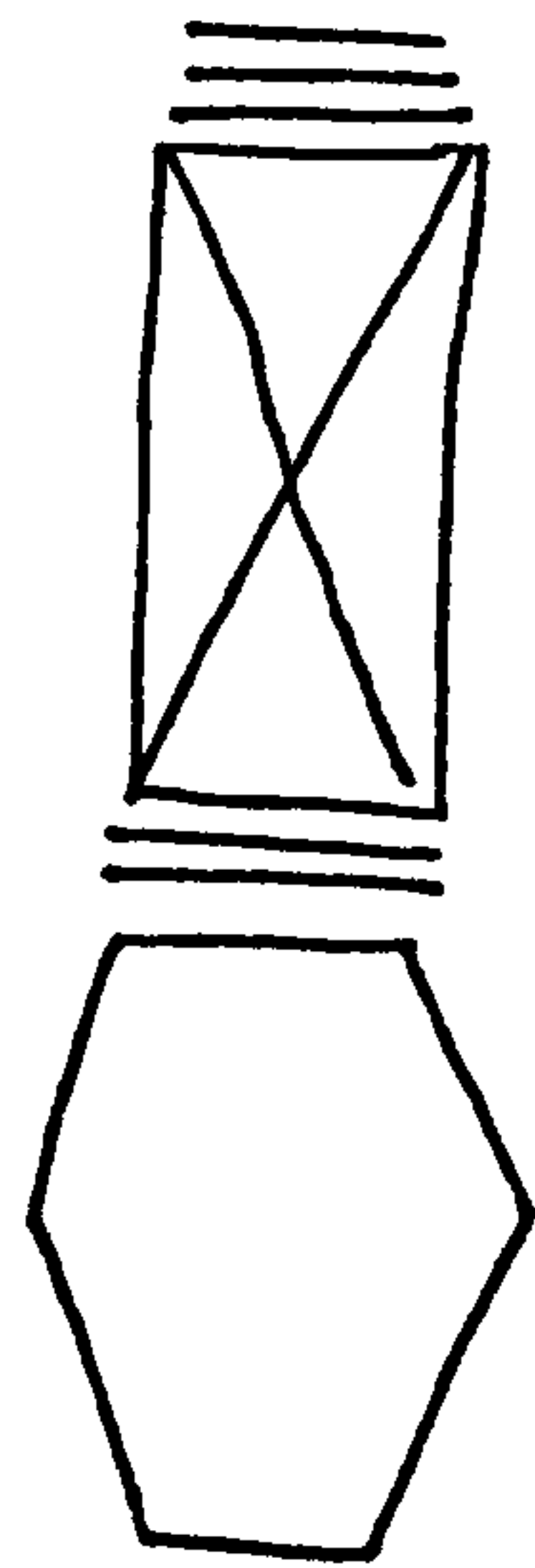
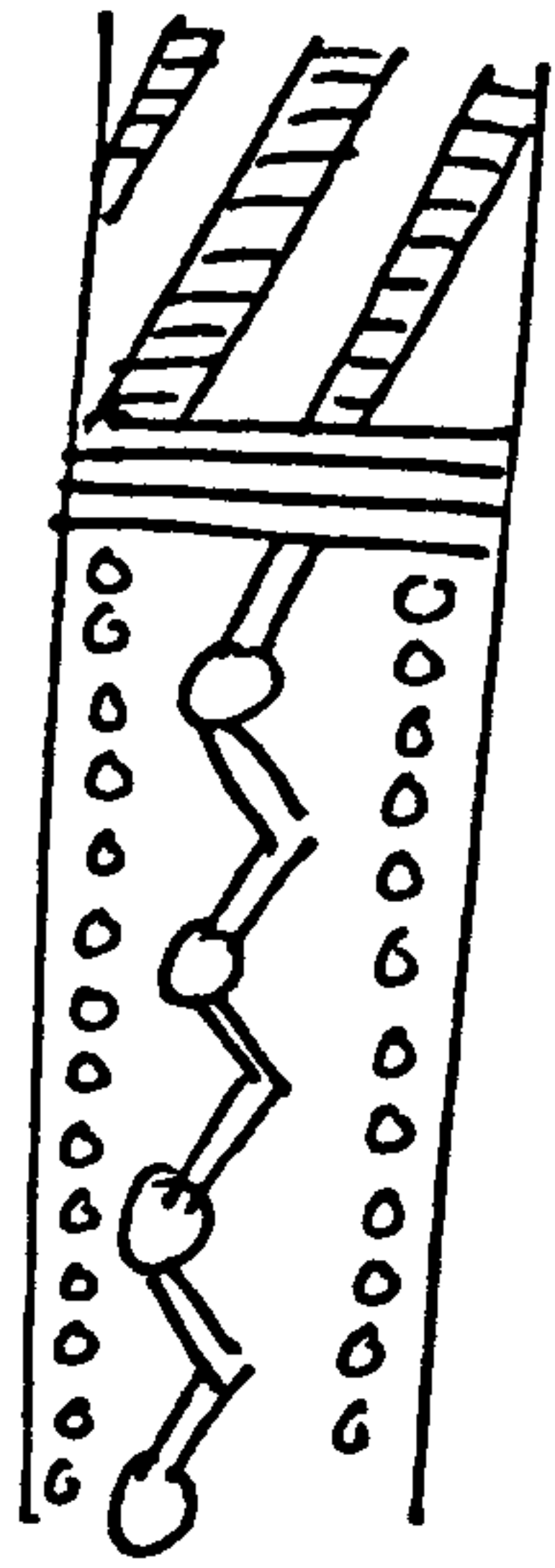


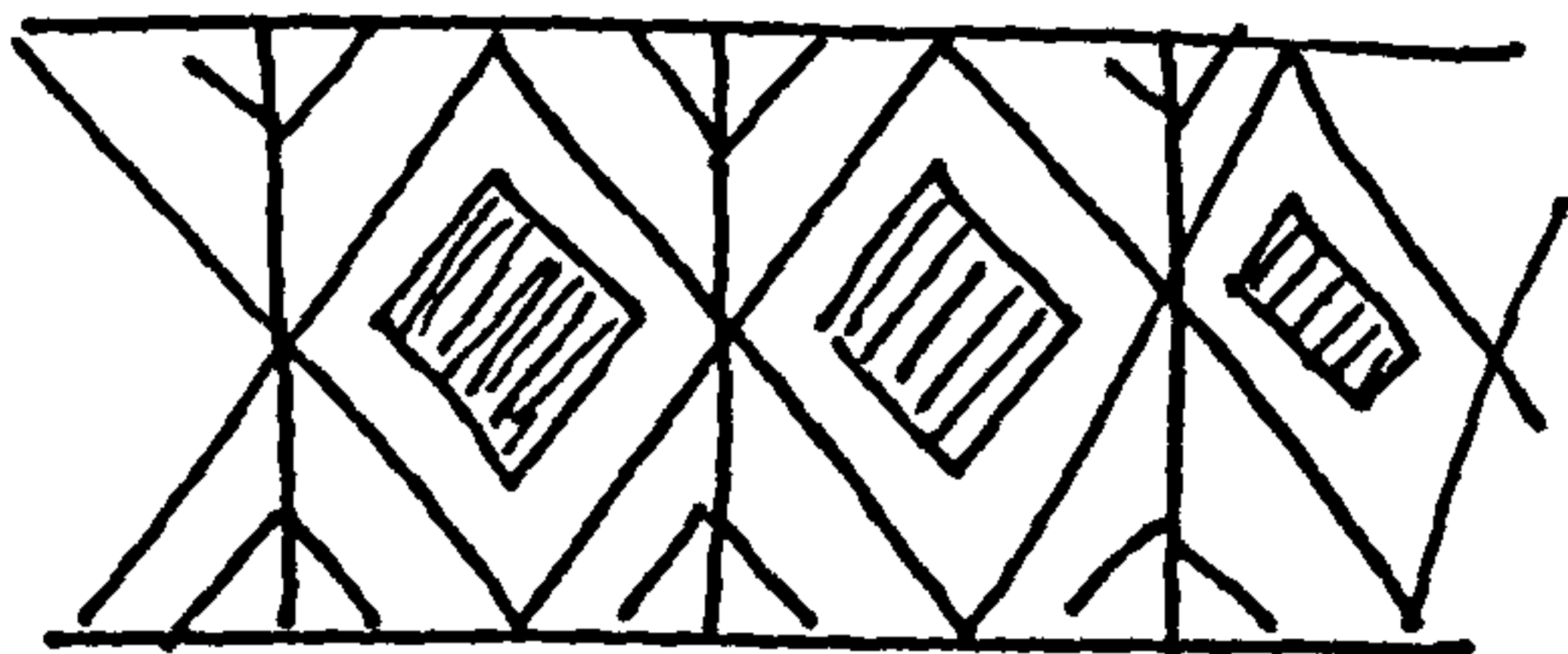
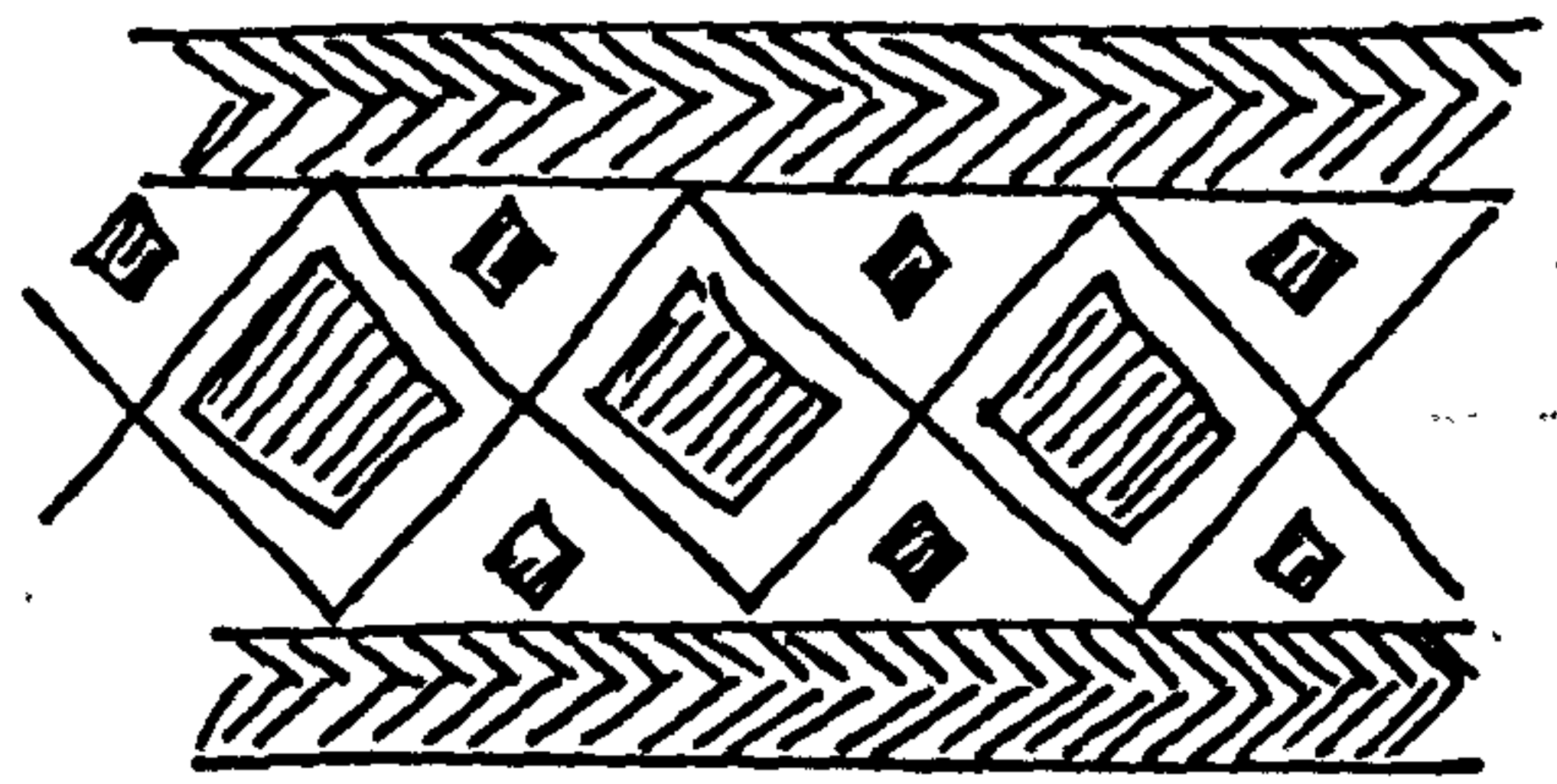
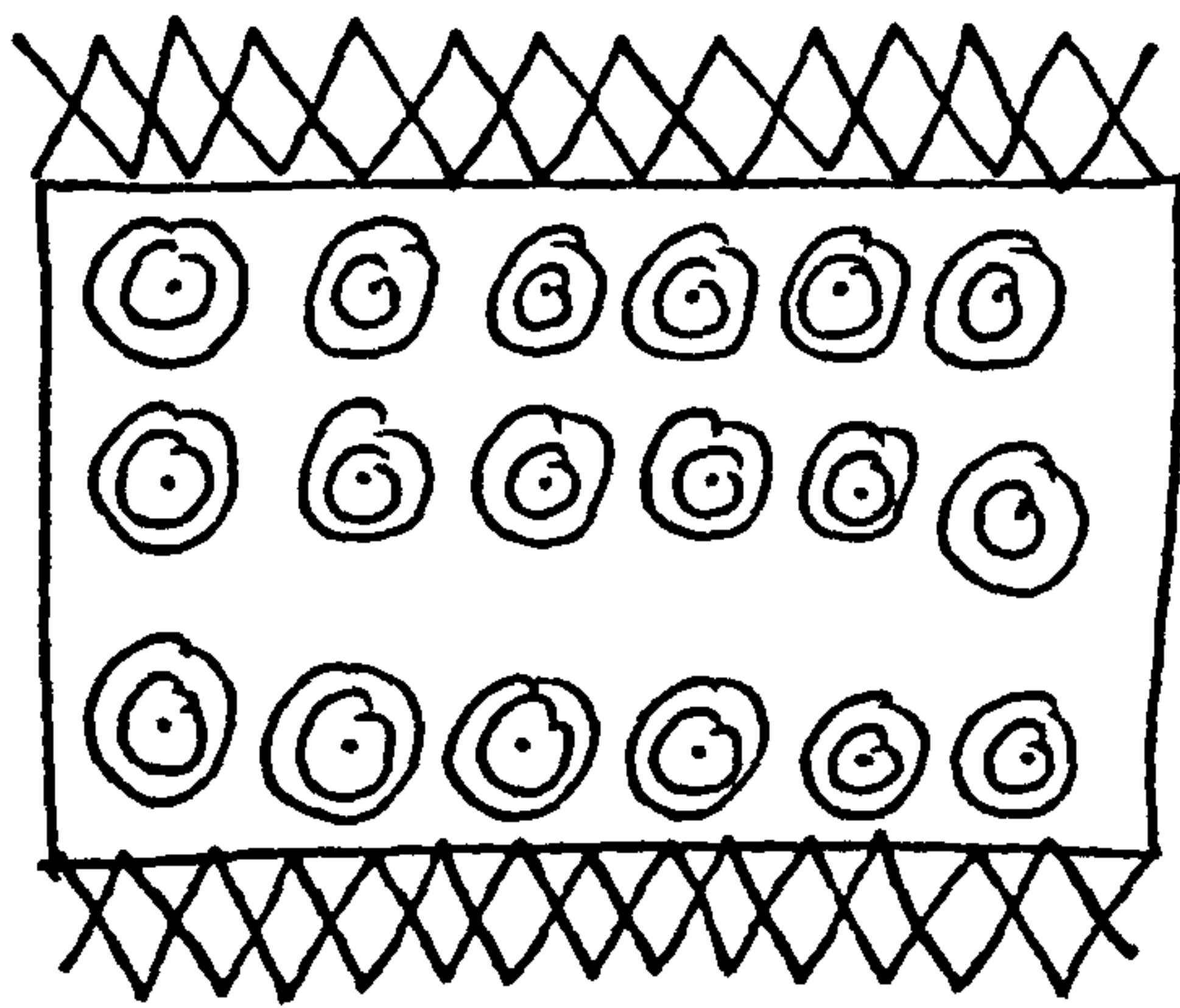







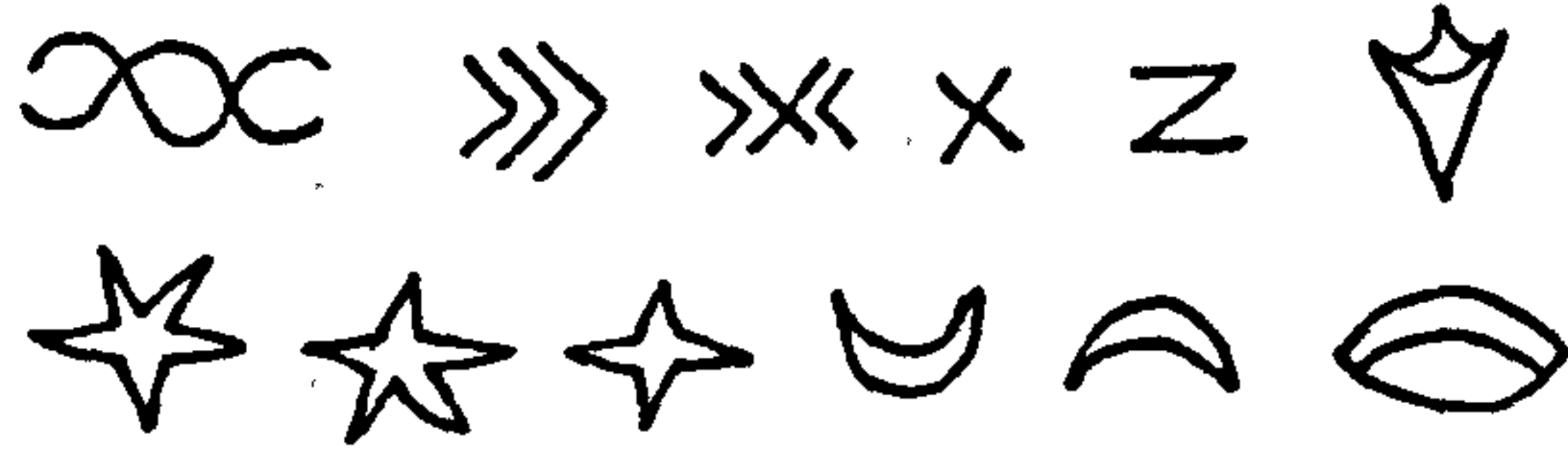





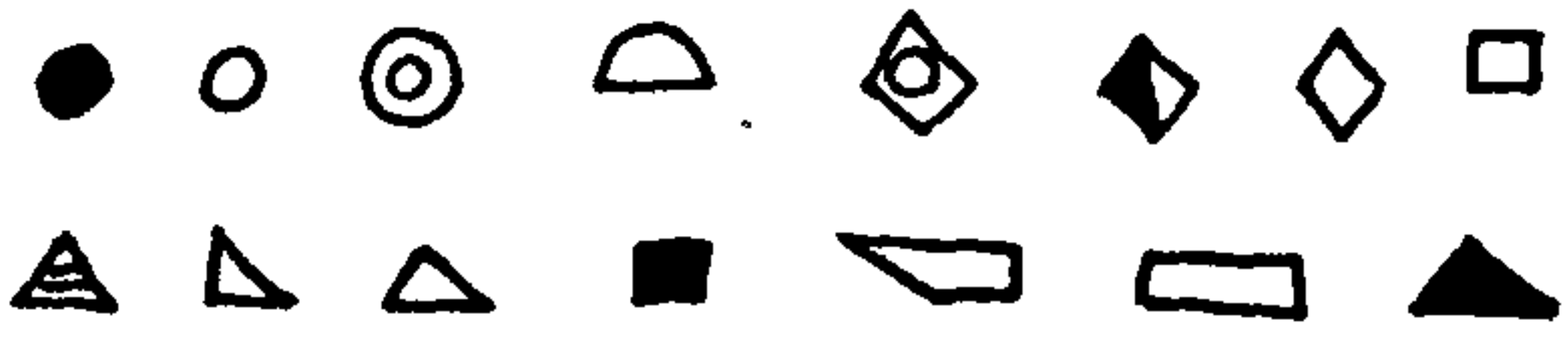
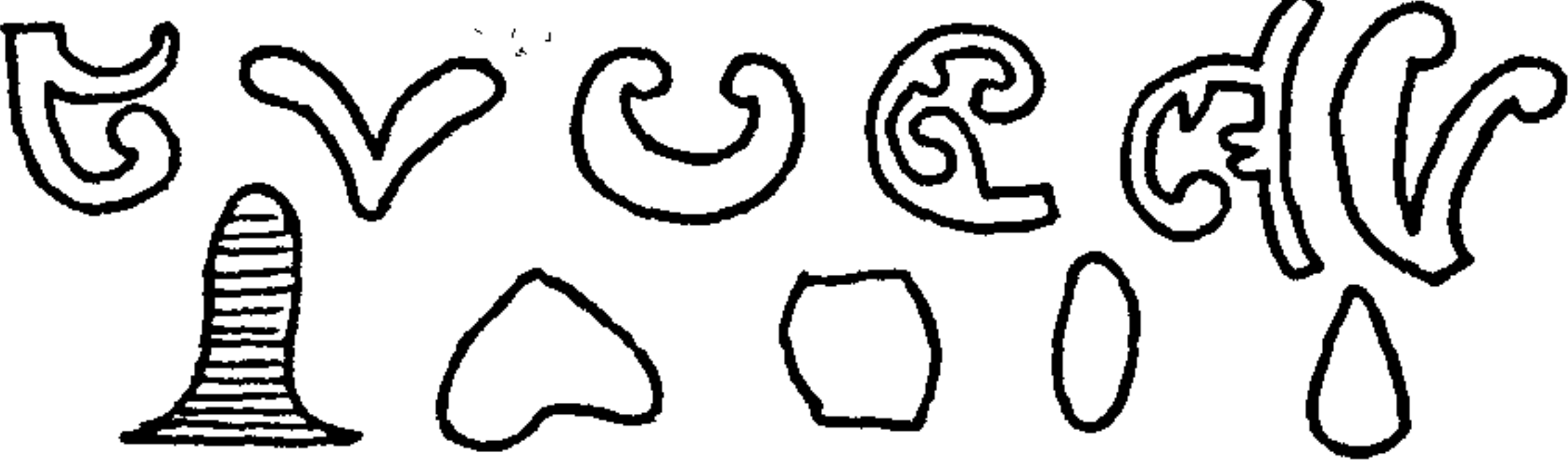
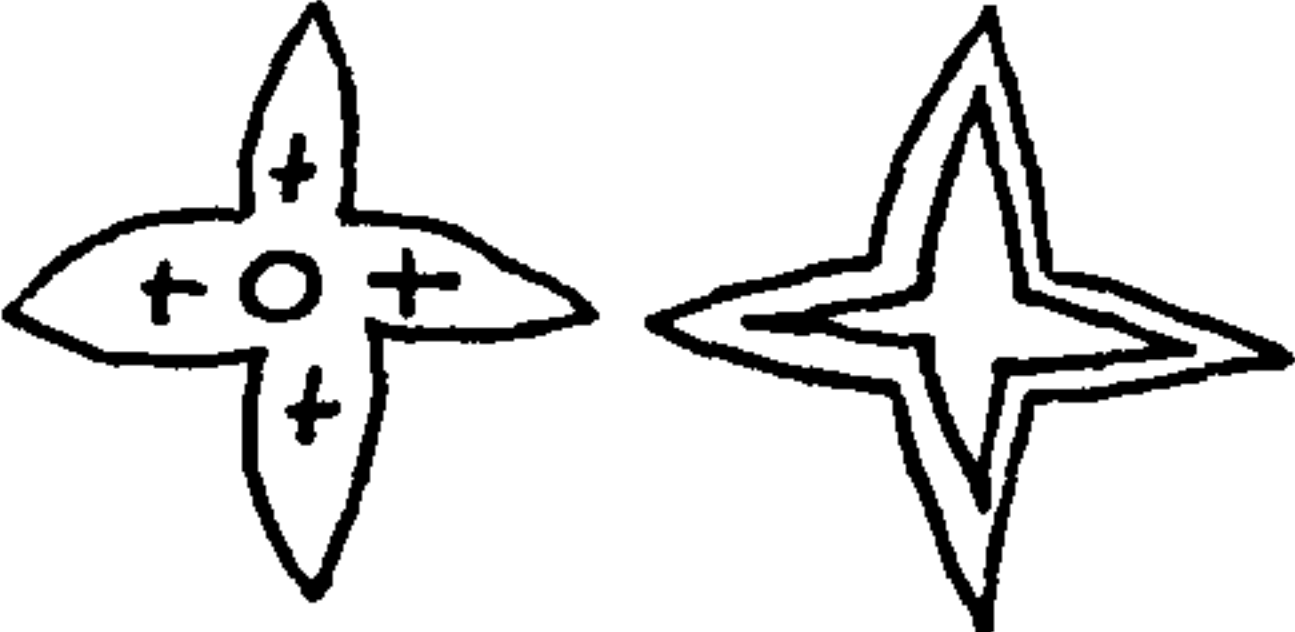
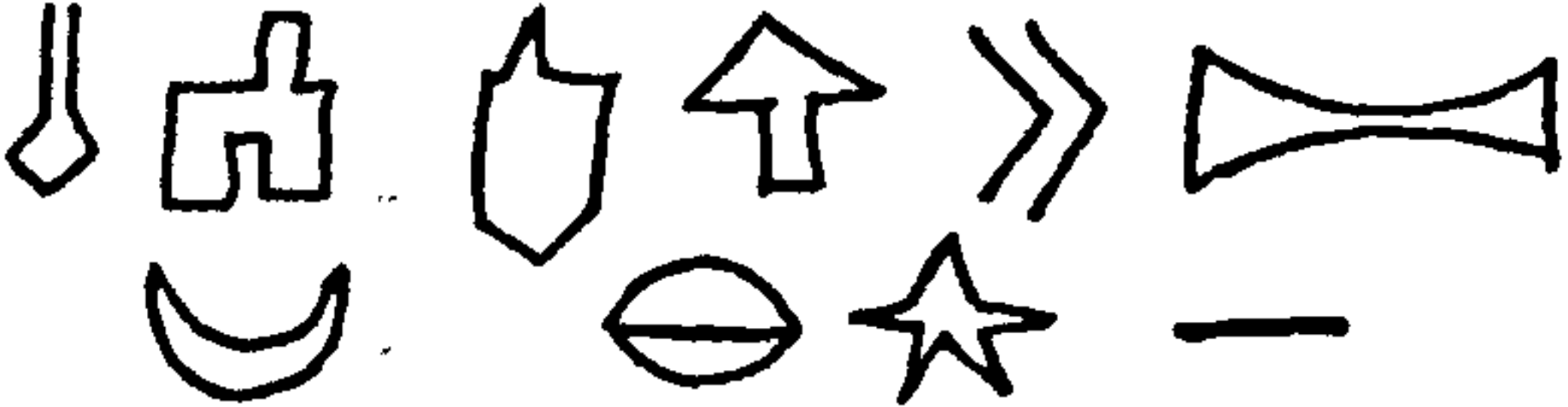
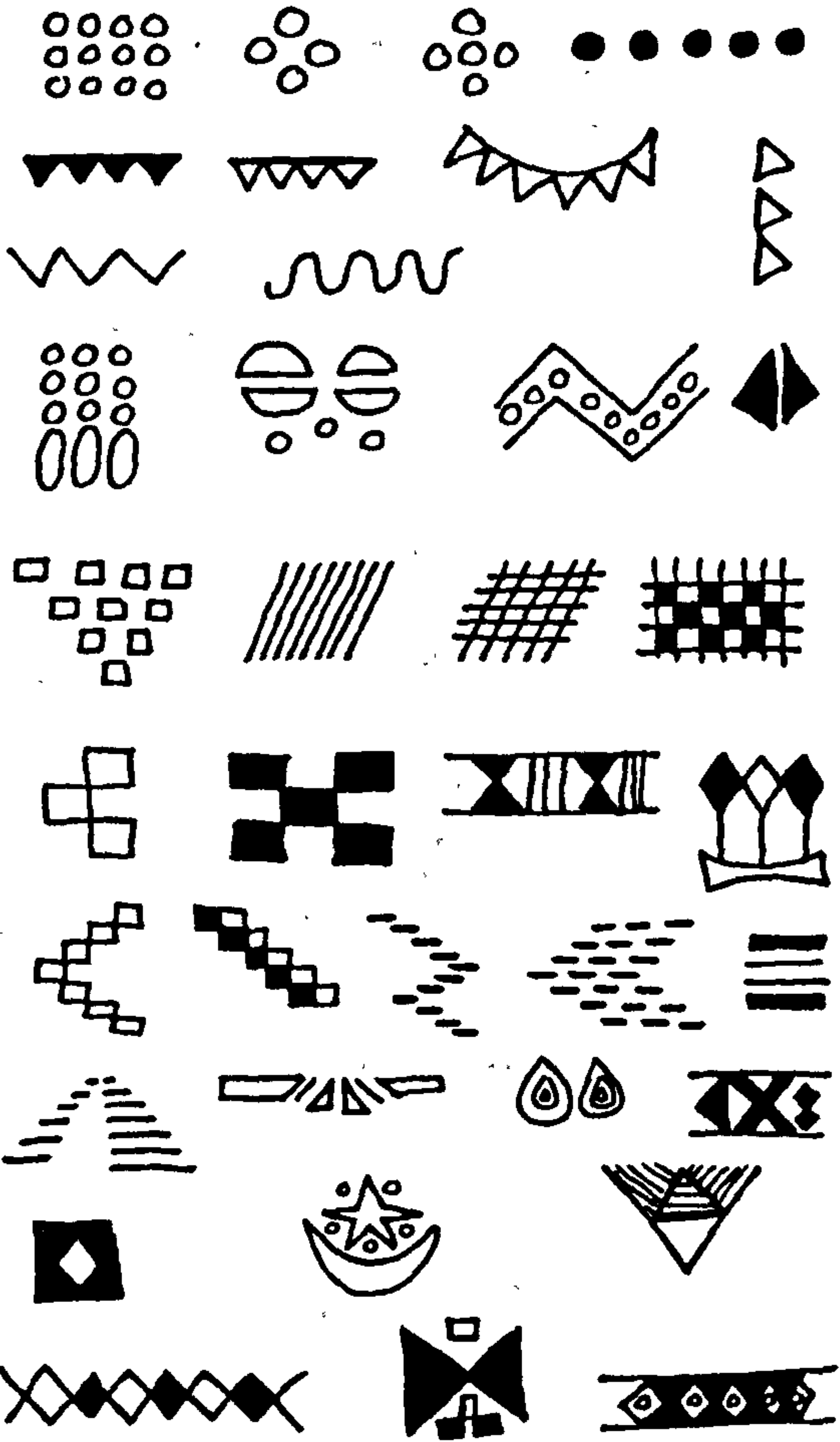





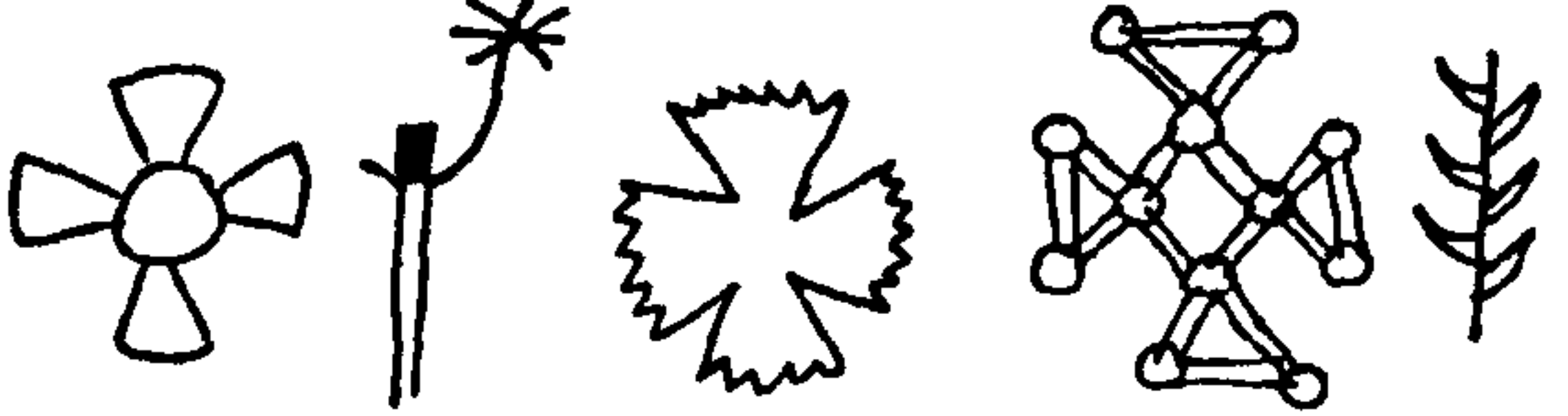

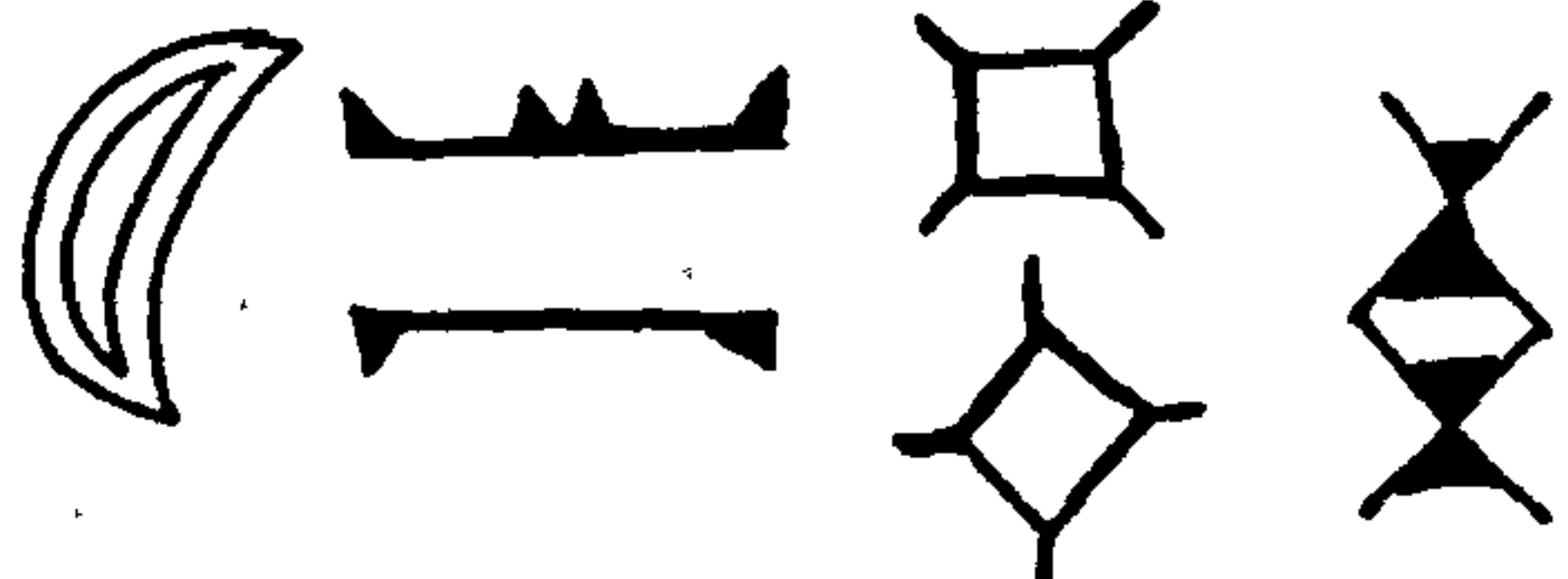

APPENDIX II DEVELOPED TAXONOMY SHEETS
NORTHERN REGION

<p><u>MOTIFS</u></p> <p>GEOMETRIC</p>	
<p>FLORAL</p>	
<p>ORGANIC</p>	
<p><u>MISCELLANEOUS</u></p>	
<p><u>PATTERNS</u></p>	

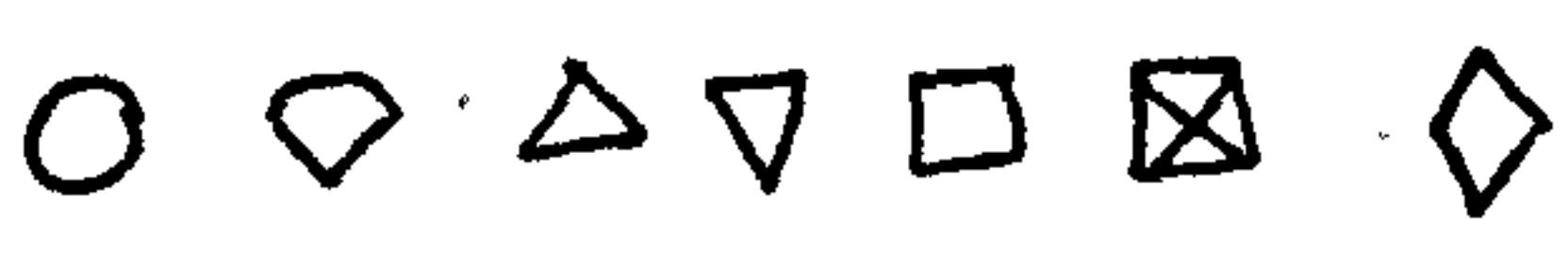
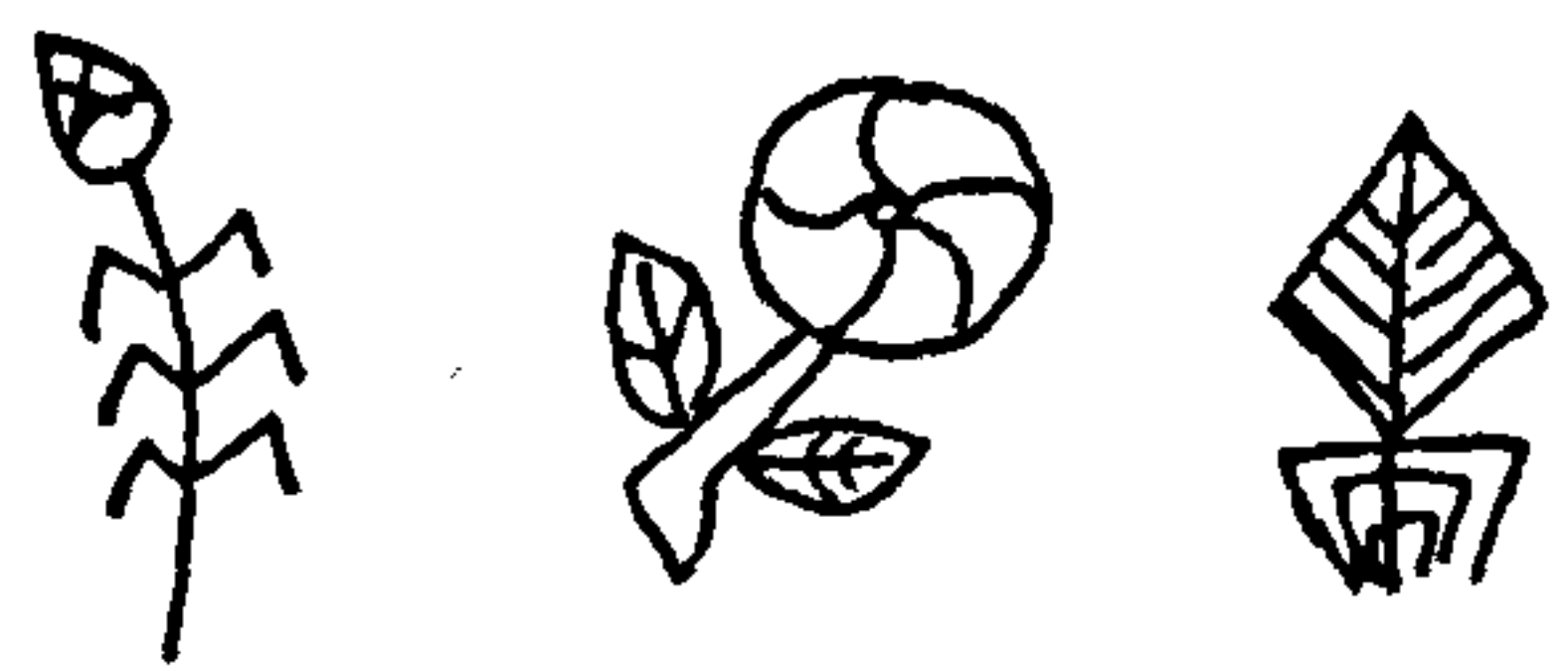
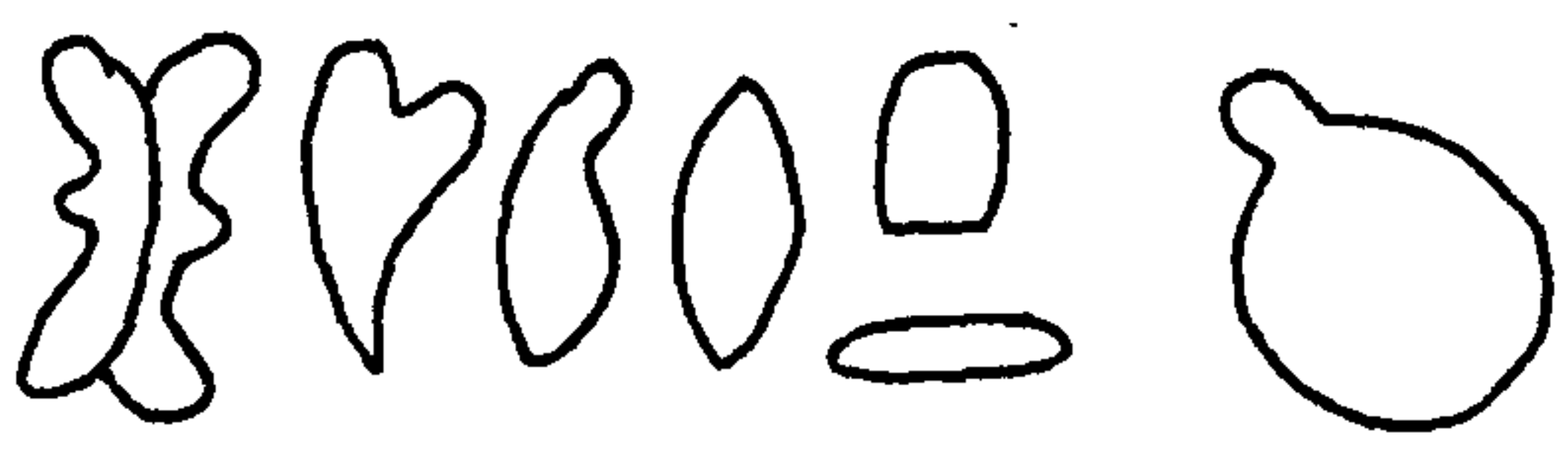
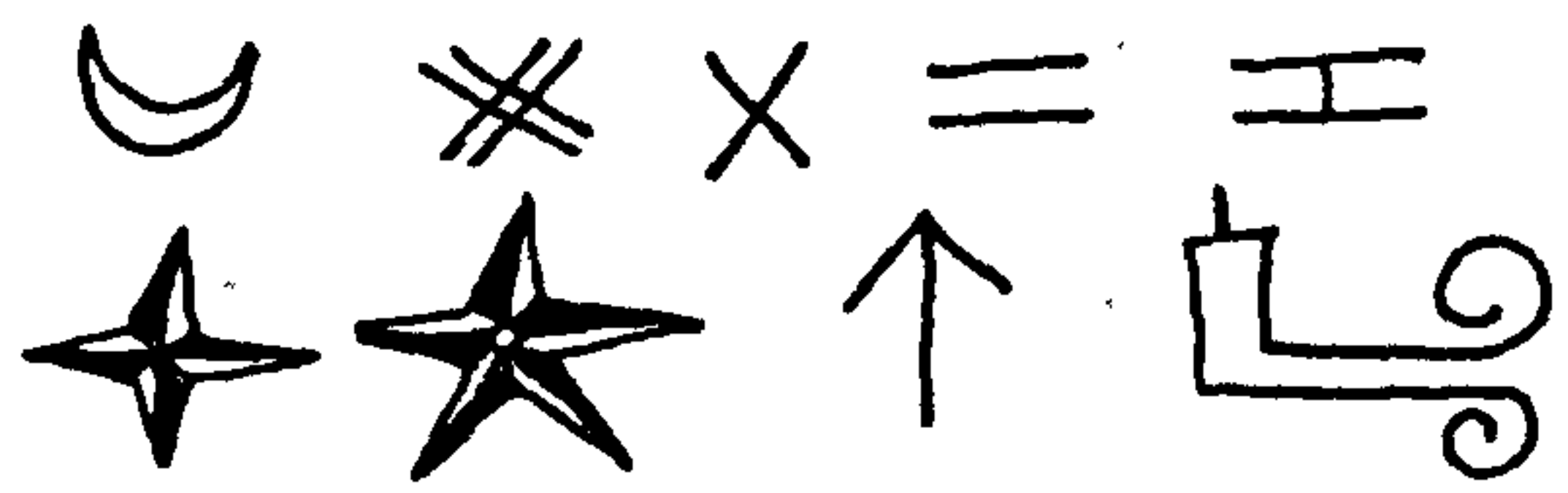
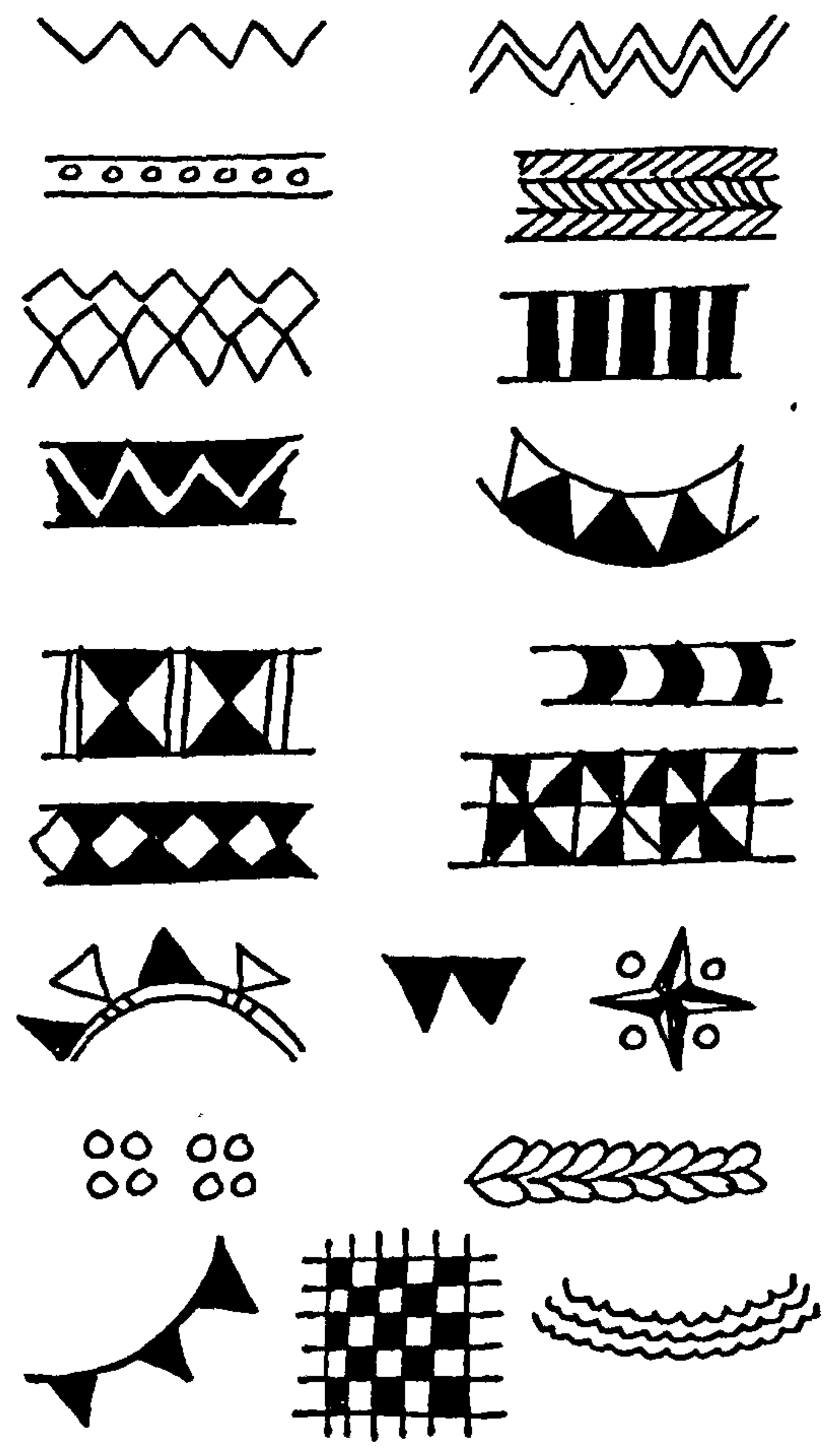
WESTERN REGION

<p><u>MOTIFS</u></p> <p>GEOMETRIC</p>	
<p>ORGANIC</p>	
<p>FLORAL .</p>	
<p><u>MISCELLANEOUS</u></p>	
<p><u>PATTERNS</u></p>	


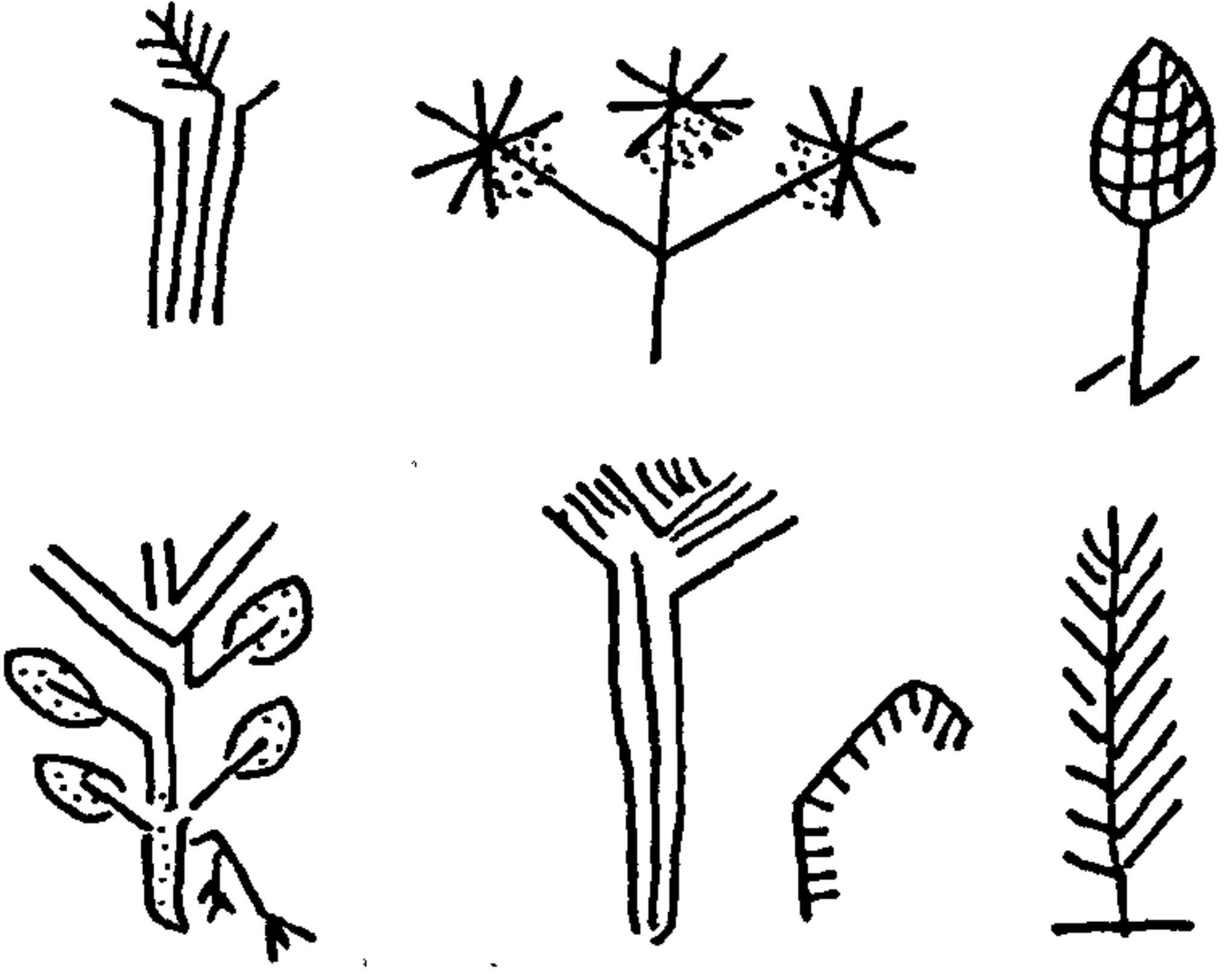
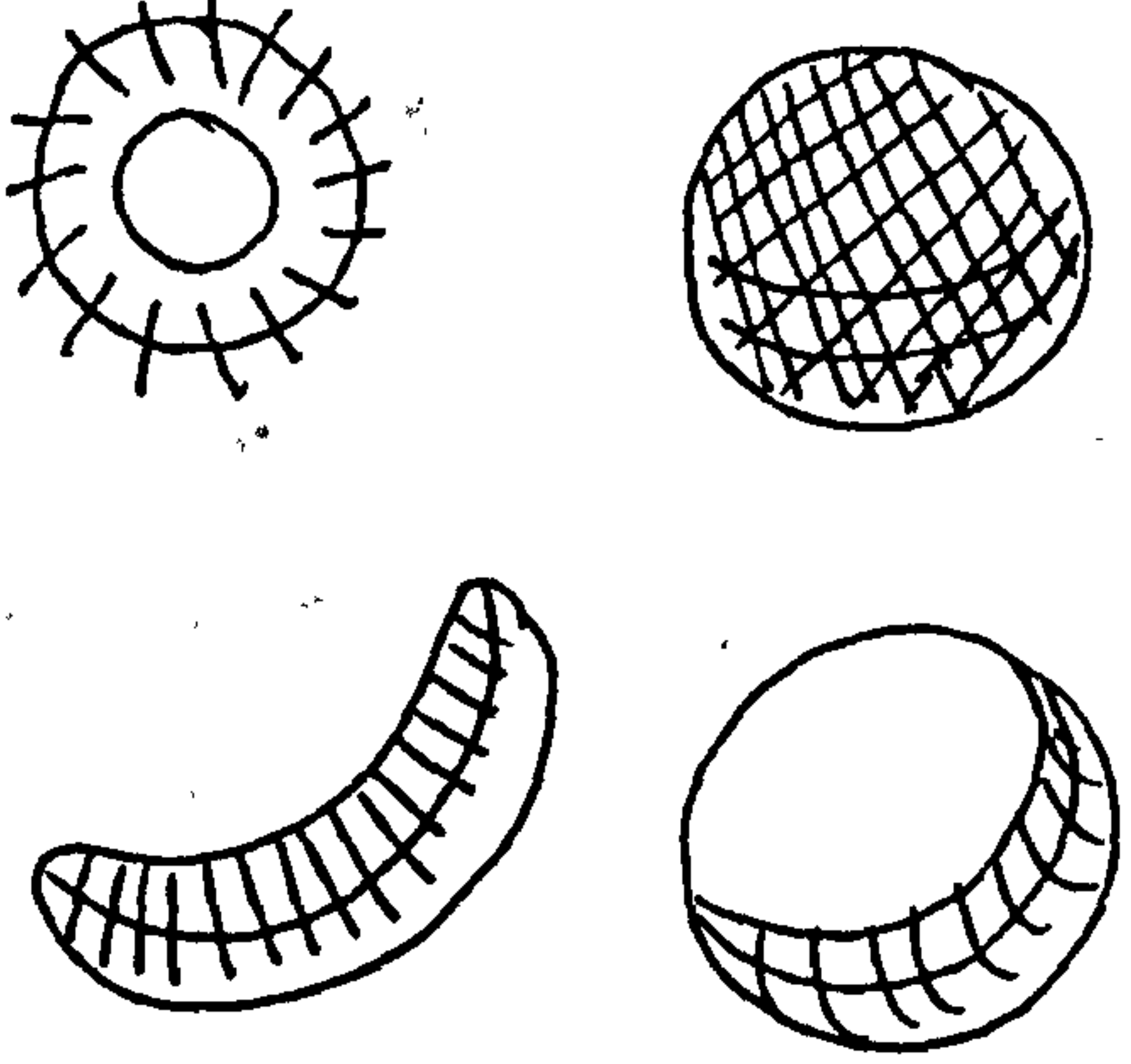
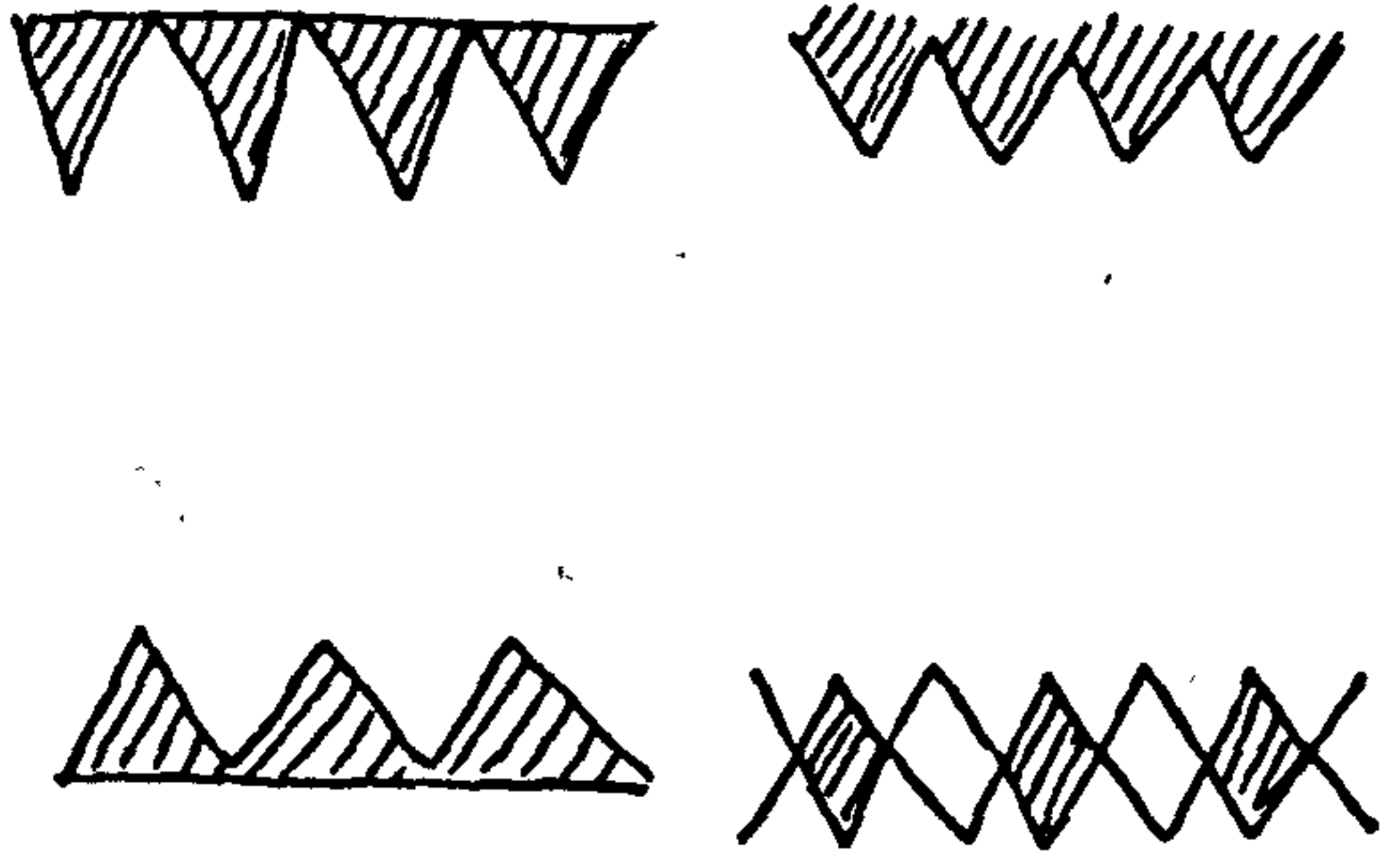
SOUTH-WESTERN REGION

<p>MOTIFS</p> <p>GEOMETRIC</p>	
<p>FLORAL</p>	
<p>ORGANIC</p>	
<p>MISCELLANEOUS</p>	
<p>PATTERNS</p>	



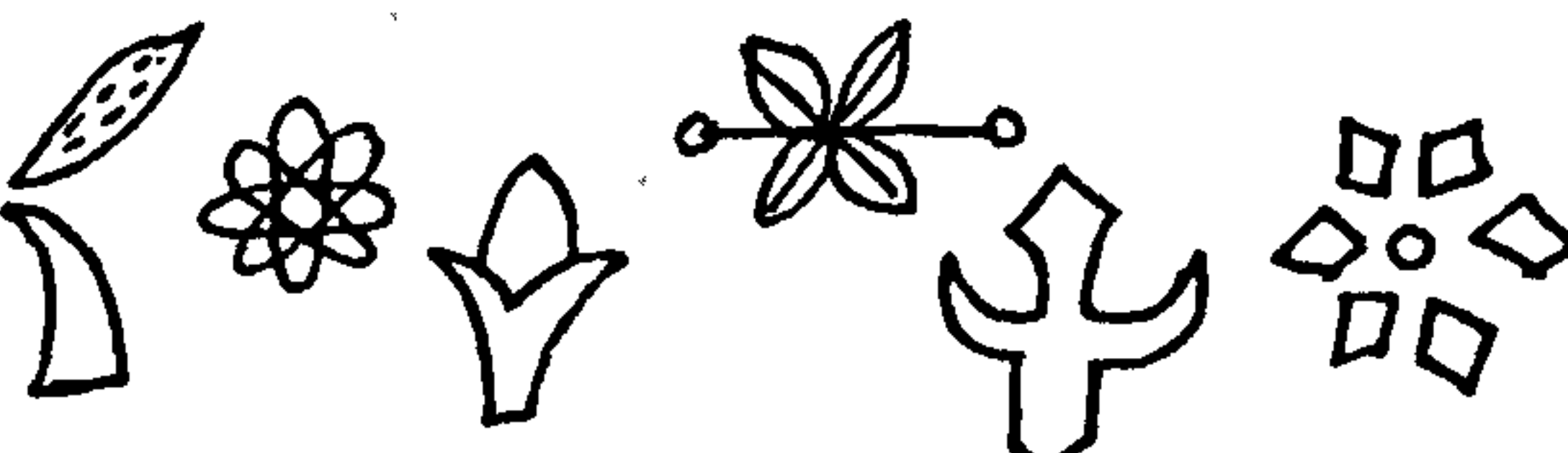
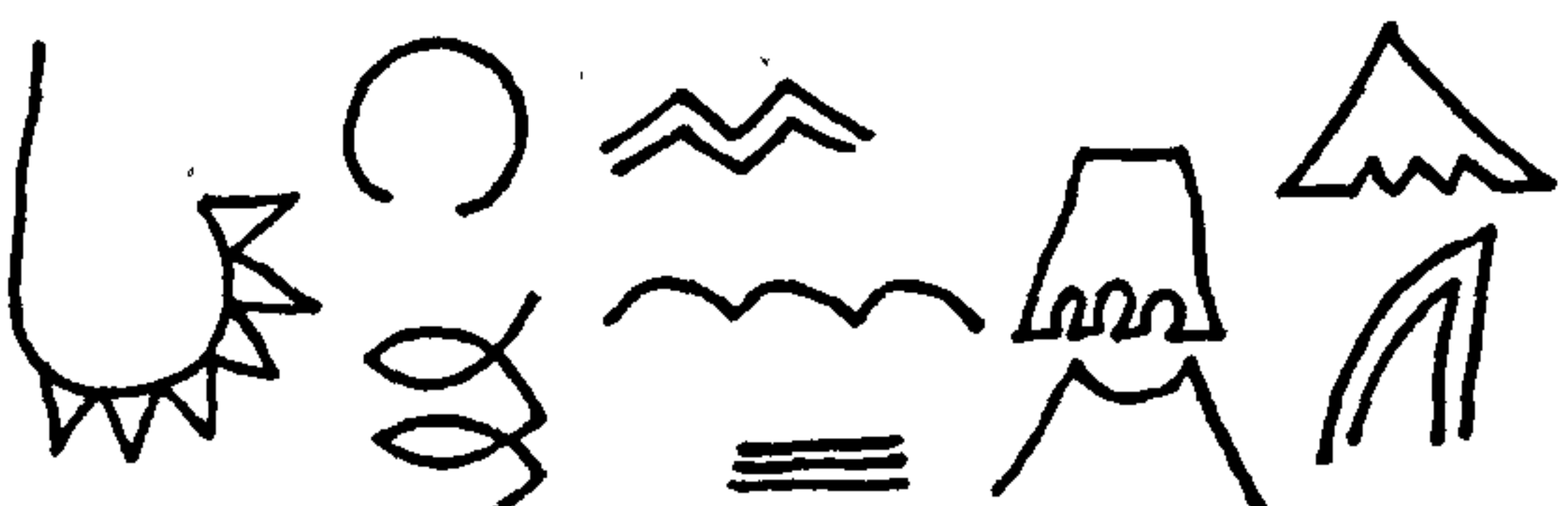

SOUTHERN REGION

<p>MOTIFS</p> <p>GEOMETRIC</p>	
<p>FLORAL</p>	
<p>ORGANIC</p>	
<p>MISCELLANEOUS</p>	
<p>PATTERNS</p>	

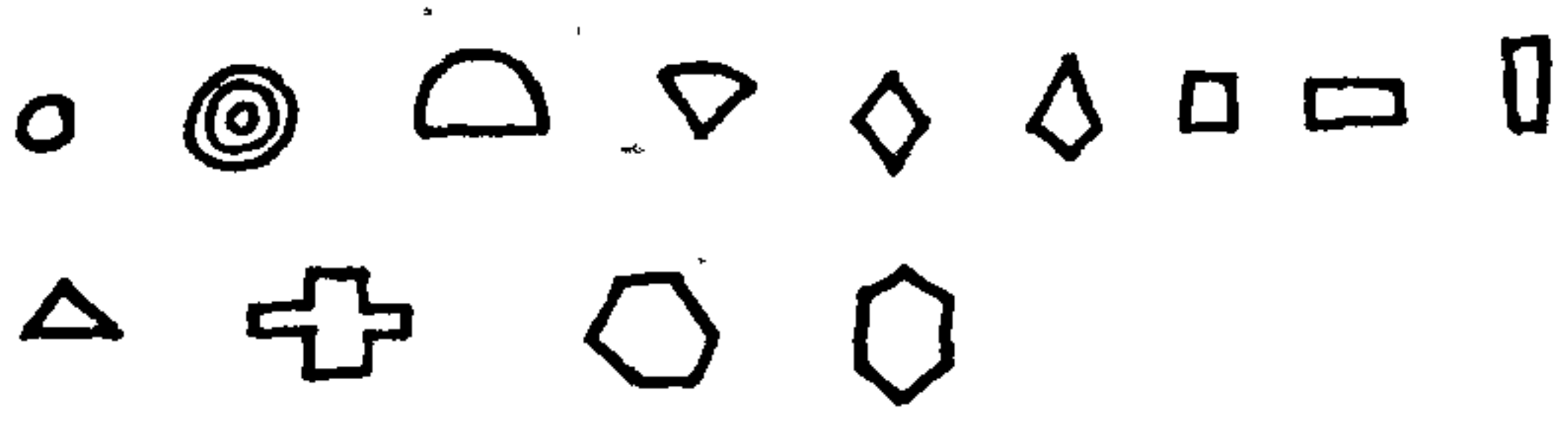
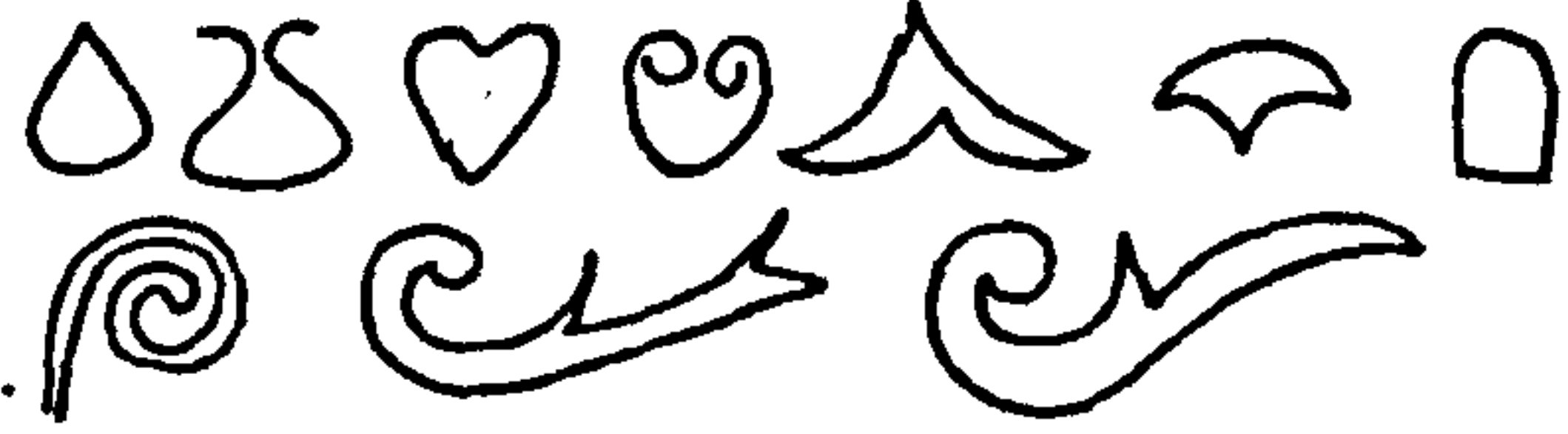
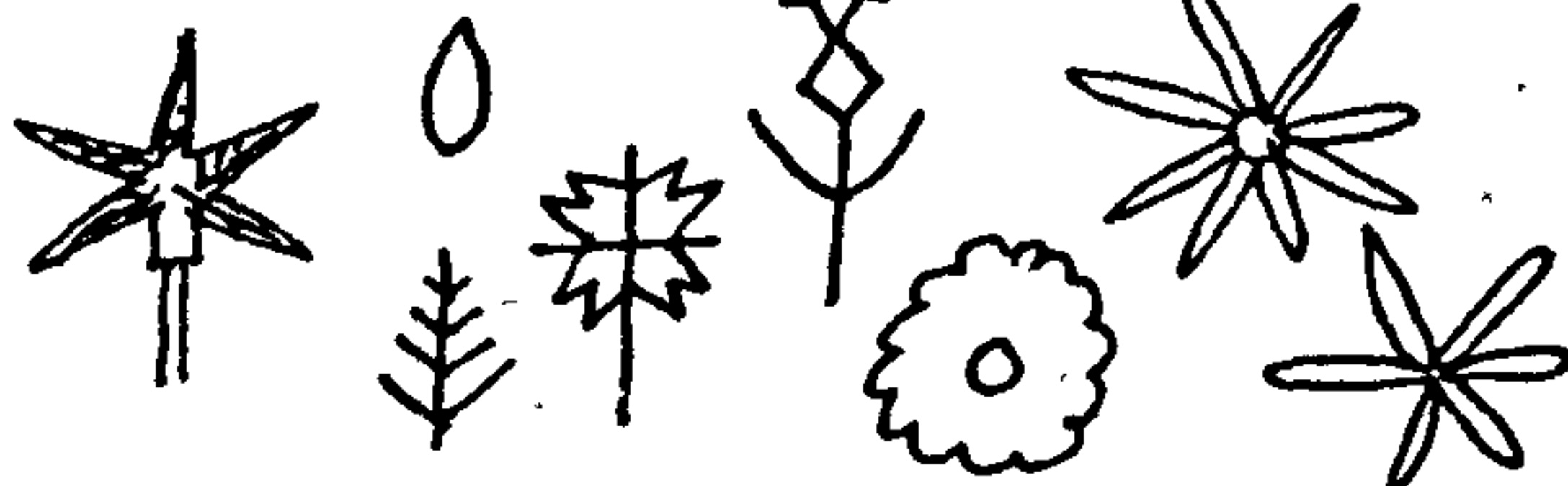
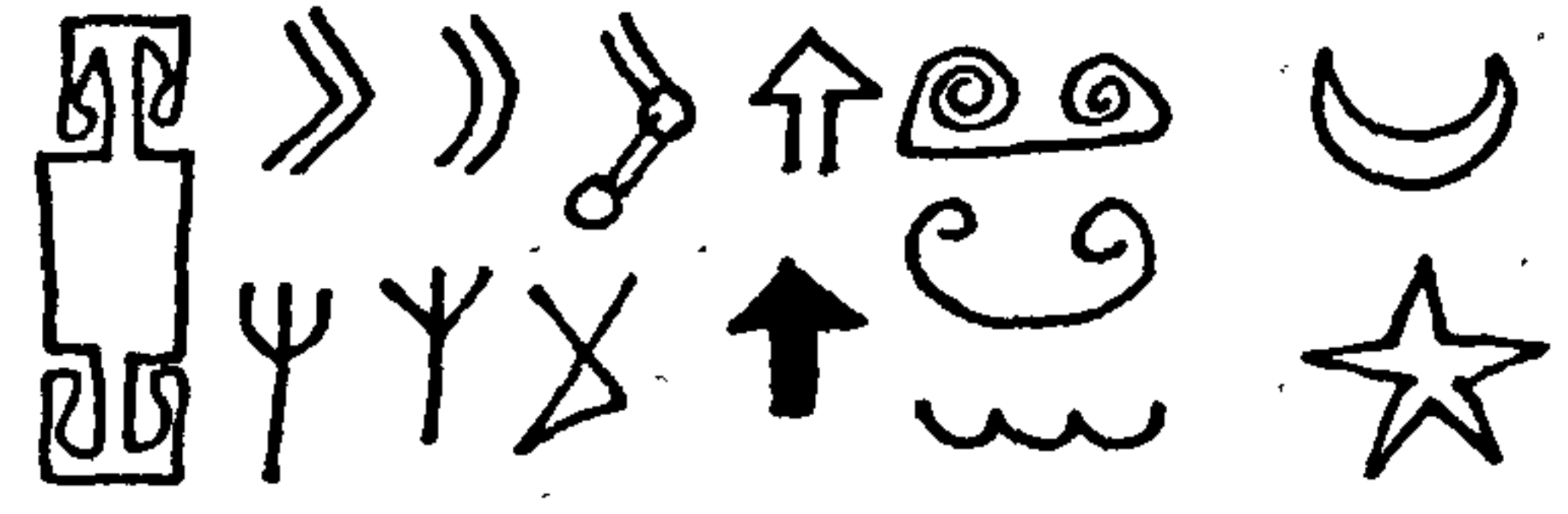

SOUTH-EASTERN REGION

<p>MOTIFS</p> <p>GEOMETRIC</p>	
<p>FLORAL</p>	
<p>MISCELLANEOUS</p>	
<p>PATTERNS</p>	

EASTERN REGION

<p>MOTIFS</p> <p>GEOMETRIC</p>	
<p>ORGANIC</p>	
<p>FLORAL</p>	
<p>MISCELLANEOUS</p>	
<p>PATTERNS</p>	

CENTRAL REGION

<p><u>MOTIFS</u></p> <p>GEOMETRIC</p>	
<p>GEOMETRIC</p>	
<p>FLORAL</p>	
<p>MISCELLANEOUS</p>	
<p><u>PATTERNS</u></p>	

APPENDIX III FIRST MASTER SHEET:
 RESPONSES OF MAIN GROUP MEMBERS
 TO STUDENTS' GRAPHIC WORK

REGION	SCPT	PANT	TXTL	INDE	GRDE	GRDE	TOTAL	REGION	SCPT	PANT	TXTL	INDE	GRDE	GRDE	TOTAL
NORTHERN	1	2	3	4	5	6		WESTERN	1	2	3	4	5	6	
1	X	X	X	X	X	X	6	40	X	X	X	X	X	X	6
2	X	X	X	X	X	X	6	41	X	X	X	X	X	X	6
3	C	C	E	X	E	C	1	42	N	N	E	N	E	X	1
4	X	X	X	X	X	X	6	43	X	X	X	X	X	X	6
5	X	X	X	X	X	X	6	44	X	X	X	X	X	X	6
6	X	X	X	X	X	X	6	45	X	X	X	X	X	X	6
7	C	E	E	E	X	C	1	46	S	E	X	S	S	C	1
8	X	X	X	X	X	X	6	47	X	X	X	X	X	X	6
9	W	X	W	C	C	X	2	48	X	X	X	X	X	X	6
10	X	X	X	X	X	X	6	49	X	X	X	X	X	X	6
11	X	X	X	X	X	X	6	50	X	X	X	X	X	X	6
12	X	X	X	X	X	X	6	51	N	N	X	S	C	X	2
13	X	X	X	X	X	X	6								
14	X	C	X	C	W	W	2	SOUTHERN							
15	E	E	E	X	C	X	2	52	X	X	X	X	X	X	6
16	E	E	E	E	X	X	2	53	X	X	X	X	X	X	6
17	X	X	X	X	X	X	6	54	X	X	X	X	X	X	6
18	X	X	X	X	X	X	6	55	X	X	X	X	X	X	6
19	X	X	X	X	X	X	6	56	X	X	X	X	X	X	6
20	X	W	W	C	C	E	1	57	X	X	X	X	X	X	6
21	X	X	X	X	X	X	6	58	X	X	X	X	X	X	6
22	X	X	X	X	X	X	6								
23	C	C	C	W	X	W	1	CENTRAL							
24	X	X	X	X	X	X	6	59	E	E	N	W	X	X	2
25	X	X	X	X	X	X	6	60	X	X	X	X	X	X	6
26	X	X	X	X	X	X	6	61	X	X	X	X	X	X	6
27	E	S	S	E	C	X	1	62	X	X	X	X	X	X	6
28	X	X	X	X	X	X	6	63	N	X	N	E	X	E	2
29	X	X	X	X	X	X	6	64	X	X	X	X	X	X	6
30	X	X	X	X	X	X	6	65	X	X	X	X	X	X	6
31	S	E	E	S	C	X	1	66	X	X	X	X	X	X	6
32	X	X	X	X	X	X	6	67	X	X	X	X	X	X	6
33	X	X	X	X	X	X	6	68	W	X	X	N	E	N	2
								69	E	E	N	W	X	W	1
WESTERN								70	X	X	X	X	X	X	6
34	X	X	X	X	X	X	6	71	W	E	X	X	N	N	2
35	X	X	X	X	X	X	6	72	X	X	X	X	X	X	6
36	X	X	X	X	X	X	6	73	X	X	X	X	X	X	6
37	X	X	X	X	X	X	6	74	W	X	E	E	N	X	2
38	X	X	X	X	X	X	6	75	N	N	N	E	X	X	2
39	X	C	E	E	X	C	2	76	X	X	X	X	X	X	6

KEY:

- | | |
|---------------------------|------------------------------|
| 1 SCPT : SCULTOR | 4 INDE : INDUSTRIAL DESIGNER |
| 2 PANT : PAINTER | 5 GRDE : GRAPHIC DESIGNER 1 |
| 3 TXTL : TEXTILE DESIGNER | 6 GRDE : GRAPHIC DESIGNER 2 |

REGION	SCPT.	PANT.	TXTL	IN.DE	GR.DE	GR.DE	TOTAL	REGION	SCPT.	PANT.	TXTL	IN.DE	GR.DE	GR.DE	TOTAL
CENTRAL	1	2	3	4	5	6			1	2	3	4	5	6	
77	X	X	X	X	X	X	6								
78	N	E	E	E	X	X	2								
79	X	X	X	X	X	X	6								
80	X	X	X	X	X	X	6								
81	X	X	X	X	X	X	6								
82	X	X	X	X	X	X	6								
83	N	E	E	E	N	W	-								
84	X	X	X	X	X	X	6								
85	X	X	X	X	X	X	6								
86	N	M	N	E	E	X	1								
87	E	E	N	W	X	E	1								
88	N	E	N	E	X	X	2								
EASTERN															
89	N	X	X	N	C	C	2								
90	X	X	X	X	X	X	6								
91	X	X	X	X	X	X	6								
92	X	X	X	X	X	X	6								
93	X	X	X	X	X	X	6								
94	N	N	X	N	C	C	1								
95	X	X	X	X	X	X	6								
96	X	X	X	X	X	X	6								
97	X	X	X	X	X	X	6								
98	X	X	C	X	N	N	3								
99	X	X	X	X	X	X	6								
100	C	C	X	X	X	C	3								
TOTAL	74	76	78	75	82	83	100								

APPENDIX IV SECOND MASTER SHEET:
 RESPONSES OF SUPPLEMENTARY GROUP
 TO STUDENTS' GRAPHIC WORK

REGION		TXTL	GRDE	TOTAL	REGION		TXTL	GRDE	TOTAL
NORTHERN		1	2		WESTERN		1	2	
1		X	X	2	40		C	X	1
2		C	X	1	41		X	E	1
3		X	C	1	42		X	C	1
4		X	C	1	43		X	C	1
5		C	E	-	44		E	X	1
6		E	X	1	45		C	C	-
7		W	X	1	46		C	X	1
8		C	C	-	47		E	C	-
9		X	X	2	48		X	X	2
10		X	C	1	49		C	C	-
11		C	X	1	50		X	C	1
12		C	X	1	51		E	X	1
13		C	E	-					
14		X	E	1	SOUTHERN				
15		E	W	-	52		X	X	2
16		C	X	1	53		X	X	2
17		X	C	1	54		W	X	1
18		C	E	-	55		X	W	1
19		W	X	1	56		C	X	1
20		W	X	1	57		X	X	2
21		X	C	1	58		X	X	2
22		C	E	-					
23		X	E	1	CENTRAL				
24		C	X	1	59		X	X	2
25		X	C	1	60		N	N	-
26		X	X	2	61		N	X	1
27		X	E	1	62		E	X	1
28		C	X	1	63		X	N	1
29		E	E	-	64		W	N	-
30		X	X	2	65		E	X	1
31		E	X	1	66		N	E	-
32		X	C	1	67		N	X	1
33		E	X	1	68		N	N	-
					69		E	X	1
WESTERN					70		N	E	-
34		X	C	1	71		E	X	1
35		C	X	1	72		N	E	-
36		X	E	1	73		X	X	2
37		X	X	2	74		X	N	1
38		C	C	-	75		N	N	-
39		C	X	1	76		E	N	-

KEY:

1 TXTL : TEXTILE DESIGNER
 2 GRDE : GRAPHIC DESIGNER

