

Tribal Architecture in India

Dr. O. P. Joshi



GUJARAT VIDYAPEETH
Ahmedabad-380014

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TRIBAL ARCHITECTURE IN INDIA

Dr. O. P. Joshi



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FOREWORD

It would be difficult to exaggerate the importance of house for a tribal family. Founded on extensive field observation, meticulous study and an intensive scholarly output, Dr. Joshi's ideas on tribal architecture are of great interest for social scientists, architects, and archaeologists. This is the first time that a book has been published on tribal architecture. Generally the architecture is believed as of large important-buildings, built with expensive material, which can stand for longer periods. But millions of tribal families live in their own planned mostly earthen houses. They plan, build and regularly maintain their dwellings with interest. Tribal communities in different geographical areas build their shelters in different designs according to their tradition and requirement. This study presents various types of houses used by tribal communities in India and for comparison; the examples from all the continents have been taken.

This book is a unique example, which presents fine sketches of different type of tribal houses from various parts of the world. The techniques of building the house and materials used for building have also been presented. Tribal houses are planned verbally and constructed under the direction of the experienced senior local technician. No house can be planned and completed without certain rituals. The rituals are social aspects in which kin and other people participate.

Among all tribal communities youth houses existed and young people used to live in group-life. Youth houses were the places where community life was important factor to learn. Young boys and girls used to learn about the rituals, traditions and artistic crafts of the tribe. Though the tradition of youth houses has changed much but the architecture of the youth houses is very artistic. Young members used to maintain and decorate their community houses. The book contains illustrations of youth houses of South-east Asia. These can be of the interest to architects, anthropologists, sociologists and planners.

Each of the tribal communities worship their deities and build temples and worship-places covered or under the open sky. Memorials constructed by tribal sculptors are very artistic and have symbolic meaning. The book covers all these aspects. Some photos of the settlements and houses will help in understanding the beauty of tribal houses.

Dr. Joshi has done this study while working under visiting fellowship at Tribal Research and Training Institute, Ahmedabad, Gujarat.

Director,
Tribal Research and
Training Center, Gujarat Vidyapith
Ahmedabad, 380014

Dr. Chandrakant B. Upadhyaya

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Without the support given by Dr. Rajendra Khimani, Registrar, Gujarat Vidhyapeeth and the director of the institute, Dr. Chandrakant B. Upadhyaya, it was not possible to do this study. I am grateful to the faculty and staff members of the institute who helped me.

It was difficult to get the book published without the financial help given by the Tribal Research and Training Institute, Ahmedabad.

PREFACE

The purpose of this book is to present the architecture styles of tribal communities in India. Although modern architects do not include the house types and settlement planning of the tribal people in architecture, as tribal communities and their planning is simple. But millions of tribal families live in houses planned and constructed by them, hence it is important to present the different forms of houses and the layout of their settlements to learn more about the primitive architecture. The present approach includes from the anthropological to architectural and artistic stylistic form of houses. The house types have been chosen simply because their living styles articulate certain points of view and present the philosophy of their community. Each house design and layout of settlements in different tribes is something stimulating and controversial in own right. I hope the usefulness of all house designs will be of interest to anthropologists, architects and archaeologists.

The most expensive and most important item in human life is 'house' where persons live, create and develop a family. The house is built for security of oneself, family and basic materials needed for the members of family. One has to protect all members of family from cold, rains and summer. The tribal communities residing in forest have to protect themselves from the wild animals. For this purpose a house is the basic need. While studying the art and aesthetics of tribal communities of Gujarat, I observed tribal settlements and houses in South Gujarat and I was astonished to see the artistic planning of settlements and design of architecture of the simple houses. The planning of settlements, design of houses, the cleanliness and plantation around settlements were of great attraction. It was again matter of the interest that the tribal people planned and constructed houses themselves. The plans of settlements and houses are of the practical purpose.

This inspired me to plan a study of tribal architecture in India. As there are varieties of tribes in the country who have different type of architectural designs, it was

necessary to compare the house designs, method of construction, and plans of settlements. Most of the tribes prefer to plan their settlements on mounds, plateaus and hill slopes on which there is natural beauty of the tree-clad hills. The shimmering waters in the streams surround the small and scattered hamlets of the tribal communities. Small hamlets give no sense of overcrowding, filth or slums.

Each hamlet has a structural completeness and functional efficiency. There is proportion, colour and harmony in the entire surroundings. Tribal communities use locally available materials as the physical basis of their homes. The indigenous knowledge and skill is used for planning. The experienced tribal leaders guide the plan and implemented by local technicians. Though tribal communities live in harmony but quarrels and attacks are part of life. While planning settlements leaders think about security, water sources and food as well as contacts with other settlements. All these practical points are amalgamated in sacred rituals.

The architecture of tribal houses (Generally these have been referred as huts) is worth taking cognizance by anthropologists, architects and archaeologists. The Oxford Dictionary has given the meaning of 'hut' as- small simple, or crude house or shelter, and 'house' means, building for human habitation, building for special purpose or for keeping animals or goods, buildings for religious community, royal family, dynasty, assembly and theater etc. As tribal houses are for human habitation where families reside, so I have used the word 'house' for tribal buildings, in place of hut. This is true that in constructing tribal houses, in place of cement, concrete and iron, the mud, bamboo, wood and grass is used, but these self planned and constructed houses are comfortable and away from any urban problems. The house designs, material for construction and techniques of construction have been developed by tribal communities in last thousands years. The interior arrangement and outer decoration depicts the mastery of technique of tribal people.

I have tried to present the relevance of the indigenous knowledge of it while people in planning houses and building these houses according to verbal plan. Tribal communities do not prepare plan of the house on paper. My efforts have been to present house designs of tribes of all regions of India. For this purpose I have made sketches of variety of houses from different part of the country. For this purpose tribes from North India-Himanchal Pradesh, and Sikkim, Eastern India -Nagaland, Assam, Meghalaya,

West Bengal, Bihar and Chattisgarh, Western India-Rajasthan, Gujarat, and Maharashtra, Central India- Madhya Pradesh and Chattisgarh, and South India -Orissa, Karnatak, and Tamil Nadu have been covered. For explaining the form and use of houses a vivid description of the house designs have been given. The life style of tribal communities of the region has influenced the architecture of their region. In the eastern India Naga community is divided in many groups and they fight and attack on each other. Traditional rivalry developed more protective house designs. They have large houses with symbols of their bravery, and have side doors so can escape when the rival groups attack them. Tribes who work on crafts need space to work and plan settlements and houses according to their craftwork. In Gujarat the Kotwalia tribe make baskets with bamboos and they need more open space to work. They plan small settlements of 10 to 12 families in round form and leave enough space in the center for work and social activities.

Pastoral tribe of Tamil Nadu -the Toda, build houses on plateaus to keep buffalos for milk and to run dairies. They build one house to reside and another for dairy and buffalos. They migrate seasonally for pastureland and construct houses at more than one place. The insightful planning and use of local resources by the tribal communities of most primitive tribe Jarawa of Andaman and Nicobar is worth mentioning. The small community Jarawa has no material culture worth mentioning. They even do not wear cloth and use leaves and fibers strings to cover vital parts of body. They make ornaments with fiber strings. They plan their houses with bamboos and pyramid type of roof. Their houses stand on bamboo or wooden pillars as they get heavy rains in these islands.

Local resources to build house, also influence the pattern of architecture. In Himachal Pradesh slate stones provide different type of house designs. They make single storey or double storey houses in small space. For building walls for houses mud, (earth+stablizers) bamboo, grass, palm leaves, stones and slates are used. The grass generally used is dub, (*polliness argentea*) which appears after the first harvest is reaped. The floors, walls and partitions are plastered in mud. Many tribes fence their courtyards too.

The 'Veranda' is also important part of the house where guests are welcome and aged people sit and keep watch on children, domestic animals and strangers. The veranda provides open and covered space to householders. On the back of the house a covered space is constructed for women for bathing at the time of menstruation.

The most important part of the house is the roof, which protects residents against cold of the winter; heat of the summer and from rains. The roof is very expensive and technically very difficult to make. The construction of the roof needs help from larger group. Social relations are important for mutual help. Technical knowledge for constructing slopes for roof is required. New type of tiles for roof is now popular which are known as Mangalore tiles. These tiles are in the form of half pipes. It is interesting to record that in Africa Pygmy tribal community construct the roof on ground and put it on walls with the help of kin group and relatives.

The cattle sheds are also constructed to provide shelter for domestic animals. These simple structures constructed with mud and bamboos remain strong for decades.

The tribes in India traditionally keep nuclear family and keep their young boys and girls in youth houses in night. The Tradition of youth house was prevalent among the tribes of the world. The designs of youth houses has been studied and presented here.

Without deities no tribe can remain socially strong, therefore places for worshipping deities are constructed. As in all other cultures sacred buildings are built. Some worship places are in open and others are covered in the form of temples. Tribal communities build memorials also. Most of the memorials are in the form of engraved stone plates.

I was happy to participate in the 10th International Conference- Terra 2008 at Mali in February 2008. Nearly 400 architects, archaeologists and anthropologists participated to discuss earthen architecture. I am thankful to the Getty foundation for the financial support to attend the conference and publishing the paper, "Earthen Architecture in Indian Tribes".

Tribal architecture in India presents a surprising wealth of forms. The art and aesthetics of tribes in their houses are amazing. Many tribes use paintings, drawings and sculpture in a meaningful way. These are partly used in sacred functions, partly as pure decoration. These need to be documented in photographs and films. Hopefully this study will stimulate Anthropologists social scientists and architects to do further research. There is an urgent need to take interest in the study, before these houses may become things of past and archives.



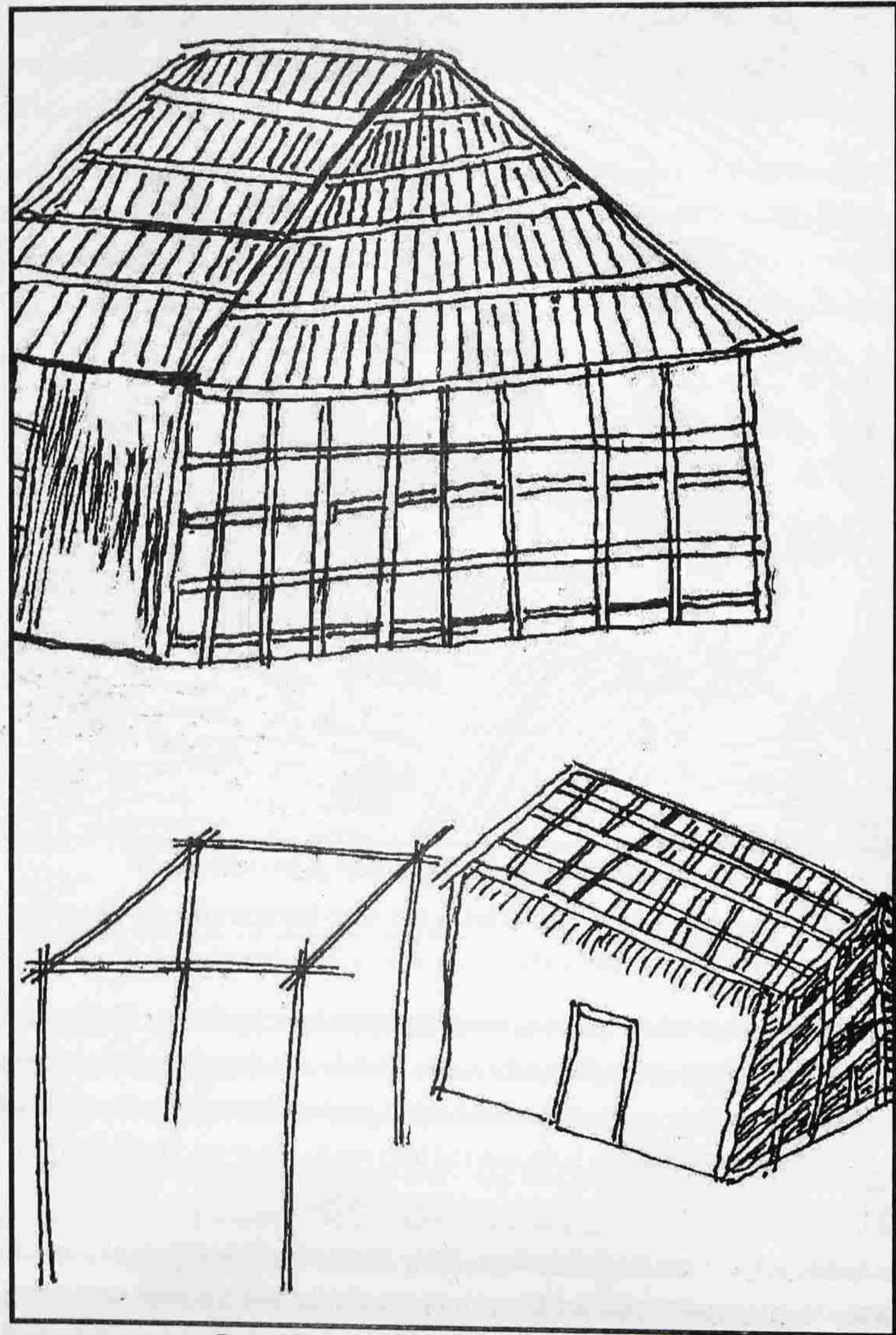
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INTRODUCTION

Architecture is believed to be related with only great houses or buildings, which are constructed with cement, stone, and lime, bricks etc. Tribal houses built with mud and wood are not treated as buildings of any worth. The more durable material is believed to construct a building, which can be called architecture. Julius F. Gluck says that 'the concept of architecture in art-historical thinking remains limited in general to stone, brick, timber-built and larger wooden buildings (with hewn planks), and thus to the more durable materials and to forms which require a considerable capacity for controlling and shaping the materials used' (1966: 224). Yet one forgets that simple huts of less durable materials are also forms of architecture which each culture has used at one time or another and without which all later development remains unintelligible.

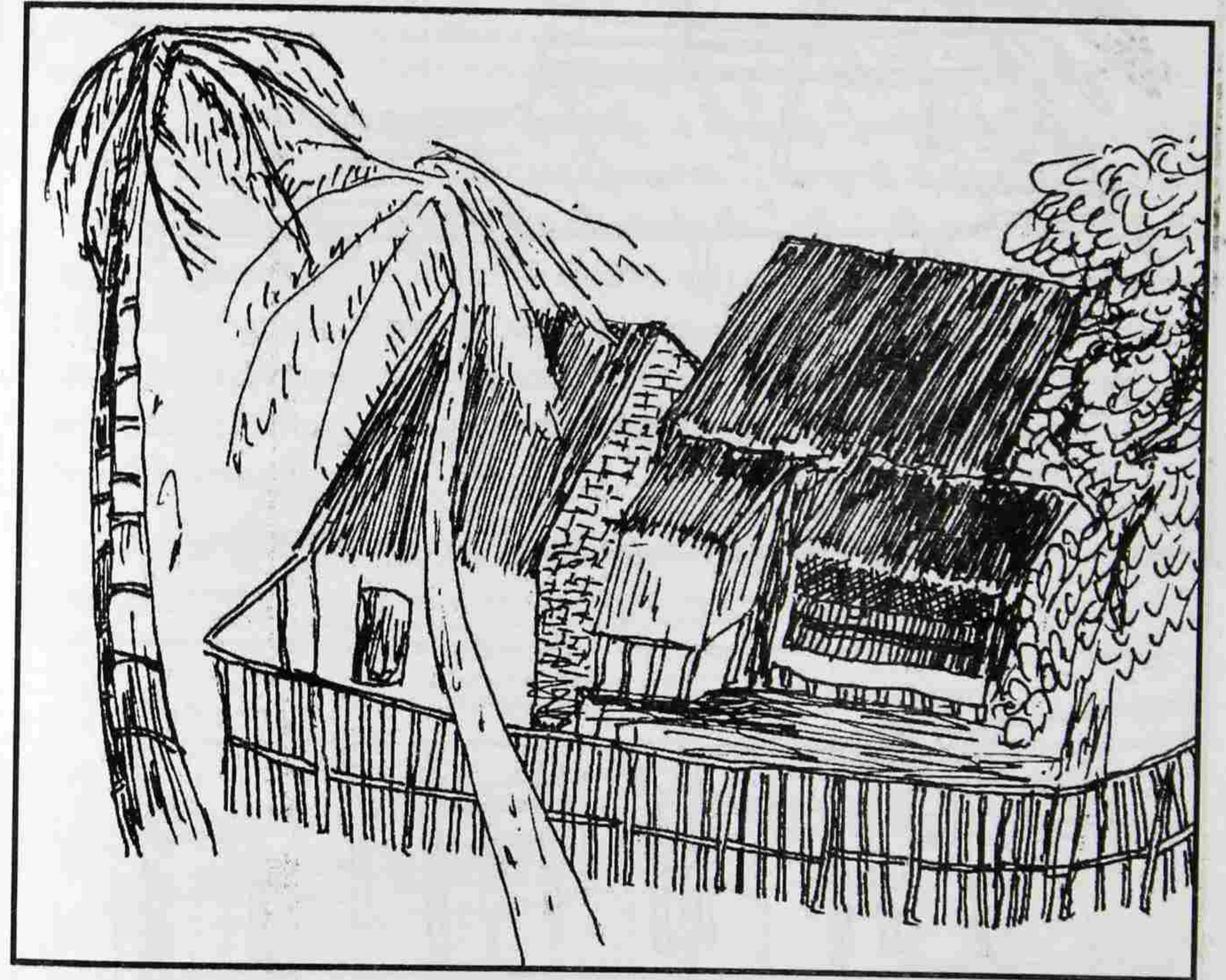
A house is social unit that shares domestic activities such as food production, cooking, eating, and sleeping. Often under one roof, and usually based on nuclear or extended family. Household groups in a habitat might periodically combine to socialize over manioc beer and to sing and dance. They might also combine to form raiding parties. They spend most of the year at a permanent residence, and form a village. In comparison to mobile tribes, life in houses has potential to change relationship between people and place. Mobile foragers are likely to be socially more open and less territorial than sedentary villagers, where privacy of houses creates a potentially closed society where



Preparing the 'lithi design for the wedding rite

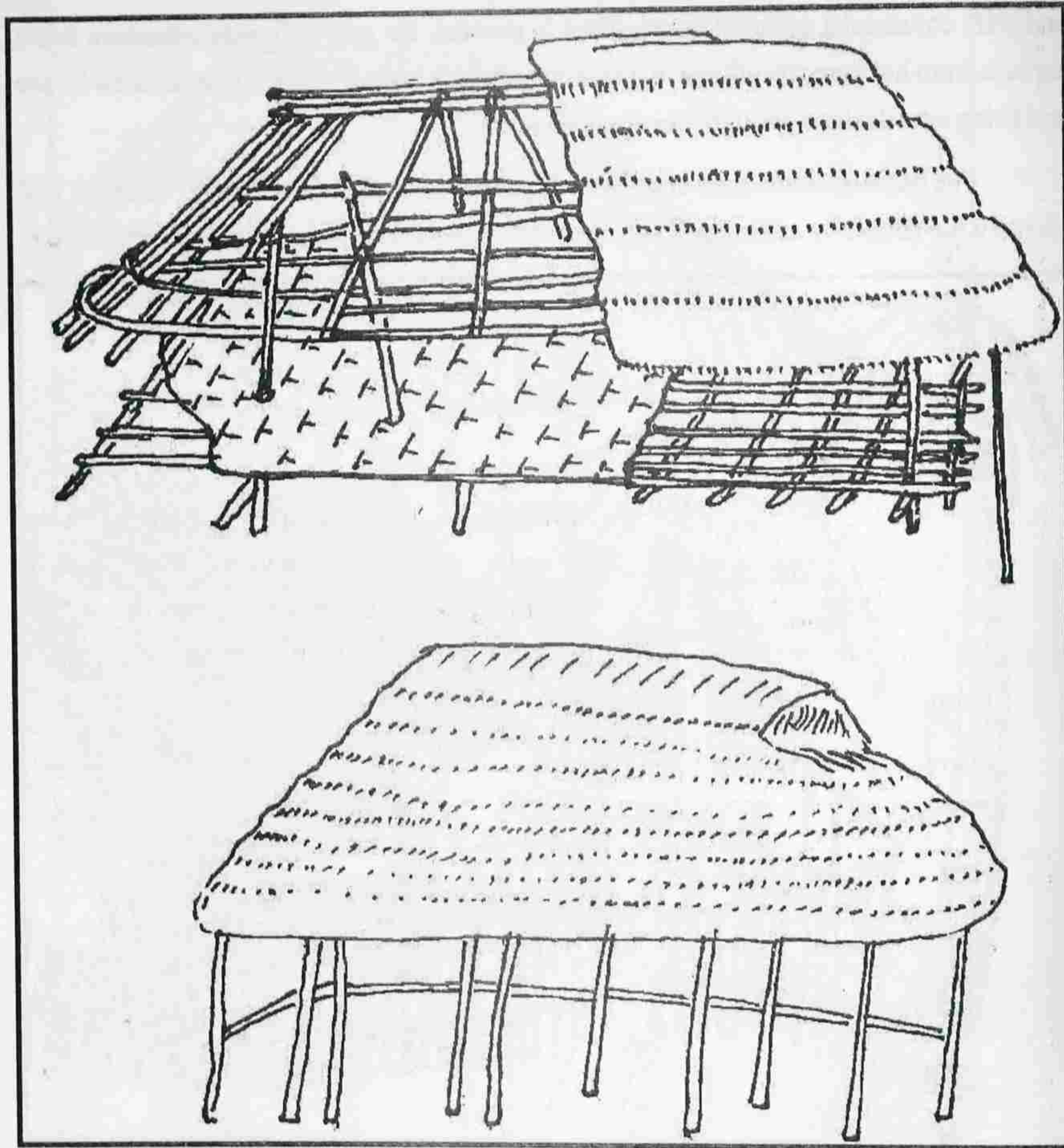
and wife construct a separate house. Thus in process, the new lady may introduce some aspects from her parental village, to the architectural changes in her husband's new house and bring new designs, though these may be small.

The basic question may arise that why house is needed for a family? Here we will identify the necessity of house. It is believed that in the beginning people used to live in



A house in Maldives Islands

caves or caves were used as a place to stay for the people. In Upper Paleolithic age that is known as late Old Stone Age the grand cultural era begun. The men of the late Old Stone Age used tools and techniques as well as the scallop-edged scrapers of the Neanderthals. The stone tools shaped very much like the blade of a penknife and an implement known as a burin. The burin's great virtue was that it made possible the much more orderly



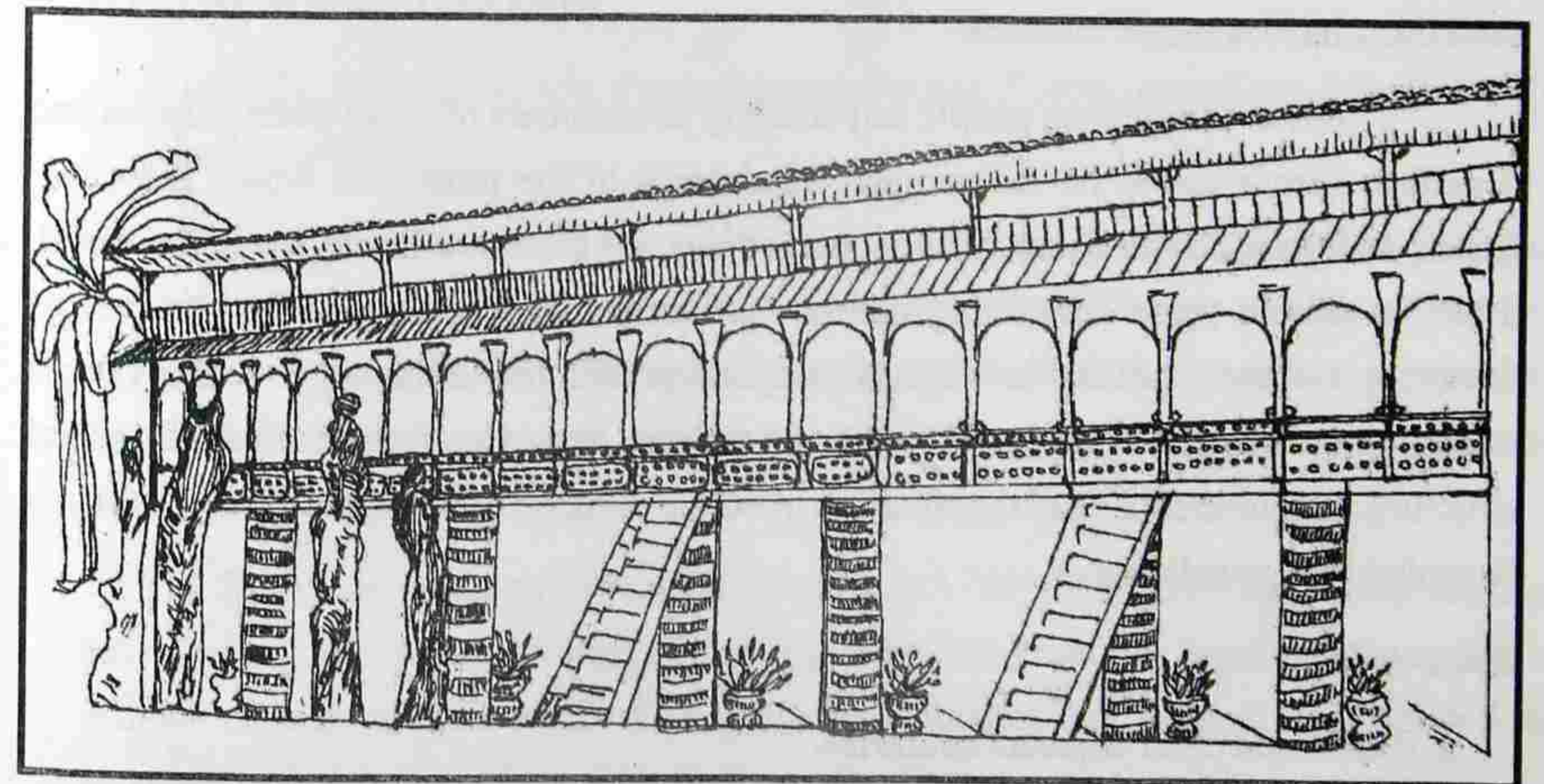
Amazonians village houses - each house is covered by a single palm leaf - thatched roof

working of wood and bone. The men of Upper Paleolithic man could now manufacture better tools from these materials and also add artistic expression by carving and engraving the surfaces with patterns and designs that had previously been impossible. With new implements men came out of the caves and rock shelters to open camp sites. The camp sites were in open areas where people planned huts to live. Near sea, rivers, and

lakes, which were food-catchments areas, people made houses with wood. Some Russian tribes of Late Stone Age slew so many woolly mammoths that they were able to build their huts from the bones of the enormous beasts. With abundance of food material and increased mastery of his surroundings was able to spare time to devote to aesthetic activities. The cold weather, rains and hot summer also encouraged men to create huts and houses.

Mesolithic way of life was development and it survives among the hunter-gatherers of the world right up to modern times. A Mesolithic culture still exists in a few isolated pockets of the world: among the Aborigines of Australia; in the deserts of South West Africa; in the forests of the Congo, Southeast Asia, and South America; and on the fringes of the polar wastelands. The life of Jarwa and Onge of Andman Nicobar Islands is the Mesolithic culture. When agriculture first appeared and domestication of animals started tribes lagged behind and remained in more or less in Neolithic or new Stone Age. It is interesting that agricultural communities and wandering hunter groups live side by side without severely disrupting one another.

Slowly people learned to develop huts and houses. The first idea, which attracted to construct a hut with strings and leaves of trees.



Long house in Moncong, Borneo

In the beginning the house or hut was not a dwelling place but a sleeping place. Slowly it developed as a shelter against climatic effects. With creation of material culture the hut became form of a house. In house people needed place to store food items including forest products. The fire and ovens as well as kitchen became necessary in the house. A separate place for children was needed in the house. Husband and wife required a place to sleep and have sex.

Agricultural families felt that their animals need protection from the climate and wild life, hence they created house according to their requirements. Earlier there were no windows and light used to enter only through the doorway. But change in the material and form of roof created the house well lighted.

Aborigines or indigenous people live in all the continents and build houses according to the knowledge of technique, available material and their requirements. The requirements were based on the environment, among Eskimos there was snow bound situation while in North Africa desert was the area where people had to live. In India large number of tribes lives in different environment and geographical situation. Language is the main means of communication. But there are so many languages and dialects that tribes cannot communicate with each other. Thus tribes living geographically near to each other have separate cultures.

Tribes or Indigenous people self-identify as members of small scale cultures and consider themselves to be the original inhabitants of the territories where they live. Perhaps 200 million or more indigenous peoples are scattered through out the world, often in remote areas containing natural resources. They are self-conscious of the advantages of their cultural heritage in comparison with life in the larger-scale systems surrounding them. A Tribe has a common territory, language, religious beliefs, social structure and culture. In brief the situation of ethnic division of tribes in all continents can be understood as follows:

Euro-Asia

- a. Russia and other adjacent countries.
- b. Finland and other small countries.

- c. China
- d. India
- e. Pakistan, Afghanistan, Turkey, Saudi Arabia and adjacent states.
- f. Vietnam, Myanmar, Indonesia and other islands.

AFRICA

- g. Africa has 50 states and every state have more then two tribes.

AUSTRALIA

- h. Australia has very primitive tribes.

NORTH AMERICA

- i. Canada, USA, many nearby islands, and Meso-America

SOUTH AMERICA

- j. Brazil, Mexico
- k. Peru, Equadore, Chile and other countries of South America.

POLYNESIA/MELANESIA

- l. Islands, British, French, Portuguese and some European nations conquered this fourth world.

A report presented in 1837 in House of commons demonstrated that European colonialism was a source of many calamities to the tribes. The report elaborated: "Too often, their territory has been usurped; their property seized: their numbers diminished; their character debased; and spread of civilization impeded. European diseases introduced among them."

The European invasion of Australia began in 1788 with founding of Port Jackson, now Sydney as a penal colony. The aborigines were given no legal existence and no official claims to their land. As elsewhere, genocide and ethnocide followed the Australian frontiers of European settlements. Tasmania's aboriginal population was

reduced from 5000 to 111 within 30 years. In western Victoria, 4000 aborigines were reduced to 213 within 40 years, and 10 years later no one remained who could reliably describe the culture. With colonial expansion-*ethnocide, genocide and ecocide* took place. It is estimated that 20 percent of global population is of tribal population.

TRIBES IN INDIA

In India Anthropological survey of India was established in 1945 then it was decided that the survey of tribes should be done. But in the beginning most of the studies were micro-studies. An extensive Survey of tribes of India was launched on 2nd October 1985. The objective of the project was to present descriptive anthropological profile of all communities of India.

The total number of tribal communities in India are 461, of which about 172 are segments. The total population of scheduled tribes in India stands at 84,326,240 (census 2001) they constitute 8.00 per cent of the total population. They are spread in all the states except Punjab, Haryana and union territories Chandigarh, Delhi and Pondichery.

Out of their total Tribal population of the country, 93.80 per cent live in rural areas. Hence their houses are of traditional style. Traditionally houses were constructed with **mud, wood, bamboo, slates and mixed material.**

There are tribes in India with very large population. The largest tribes are Gond, the Bhil, the Santhal, the Mina and Oraon. Some tribes have very small population and can be said to be dying, such as the Haisa, the Tangsa, the Katin Tangsa were having a single person (census 1981).

Three hundred and twenty-six tribal communities (51.3 per cent) are spread in two or more states. This indicates that tribes inhabit in well-defined territories that cut across the administrative boundaries of adjoining states. Tribal people inhabit in all climatic zones. About 52.4 per cent of them live in area of moderate climate and 33.5 per cent in area of warm and temperate climate. The impact of climate is visible on house types.

About 63.4 per cent of the tribal communities live in hilly terrains. They also

inhabit in deserts 0.2 per cent, the semi arid zones 1.6 per cent and in the islands 2.2 per cent. There are four racial stocks from which Indian tribal communities are derived, these are the Negrito (the Great Andmanese, the Onges and the Jarwas), Proto-Austroloid (the Munda the Oraon and the Gond), The Mongoloid (the Nagas and tribes of North-east) and the Caucasoid (the Toda, the Rabari and the Gujjar).

The proportion of the scheduled tribes to the population of the state/union territory is highest in Lakshadweep (93.82 percent) followed by Mizoram (93.55 percent, Nagaland ,(83.99 percent, Meghalaya (80.58 percent) Arunachal Pradesh (69.82 percent Tripura (28.44 percent). Uttar Pradesh has only 0.21 percent. While Kerala and Tamil Nadu each have 1.5 percent tribal population.

The dominant forms of the tribal families, are nuclear (91.4 per cent) followed by the vertically extended (49.7 per cent) and mix ended type (25.8 per cent), the latter two occurring usually with the former. Most of the conflicts arise on account of property. In 479 tribal communities inheritance is male oriented, eleven tribes follow the system of matrilineal inheritance and in 56 tribes property is shared equally by the sons and the daughters. Tribal women participate more in work force than women of non-tribal communities.

Various forms of private property have emerged in the tribal societies all over the country except in the north-east where a good part of the resources are still controlled by the community. There is the shift among the tribal communities from the traditional to the new occupations. Hunting, trapping of birds, and animals has declined to negligible point. Agriculture and agriculture labor has become the main occupation.

Type of family, system of inheritance, climate, land, hilly terrains, type of occupation, ownership of property, religion and conversion, rules and regulation of the state and interference of the state are the pivotal factors in influencing the typology of house. Except in a matrilineal system, women have no right to property; only a right to maintenance. Eleven tribes follow the system of matrilineal inheritance. There are 56 tribes where property is shared equally by the sons and the daughters. The tribes are mainly landholding community. However the landlessness has increased, and almost the

entire tribal economy is in the vortex of market forces. Dependency on the market and the middlemen has increased.

In last decades there has been the shift among the tribal communities from the traditional to the new occupation. The number of communities practicing hunting and gathering has declined as forests have disappeared and wild life has diminished. There is increase in horticulture, terrace cultivation, settled cultivation, animal husbandry, sericulture, and bee-keeping. Tribal communities are settling down as peasants.

Tribal communities are not only peasants, but also craftsman. Wood carving, (58 tribes) basket making (279 tribes), wall painting (56 tribes) and drawing (39 tribes) have emerged as major forms of art in recent years. Nearly 215 tribes are engaged in weaving, 57 communities in embroidery, and in pottery 36 communities work.

There is a sharp rise in number of tribal groups, who are employed in government and private services, self-employment, etc. Many tribal crafts have disappeared and spinning in particular, has suffered. Related works such as weaving, dyeing and printing have similarly suffered. Skin and hide work, etc have gone under; stone carving has declined. But the number of tribal persons employed in mining and masonry has gone up. The material available for constructing the house and other factors have gone under drastic changes, these are identified here.

The primeval hut is designed for recumbent sleeping, or at most for human beings to sit but not for a man standing erect. Hence primeval architecture used to form the concept of 'bedroom'. The architecture among tribal communities shows certain diversity on the basis of the ground plan and type of roof used. The architecture can be classified in terms of its historical process.

In Paleolithic age mobile groups lived and moved from place to place according to seasons for survival. Later on in the process of evolution settlements emerged.

People of one clan settled in one area and of other clan settled in nearby area. In the beginning a hut might have been built and than other huts might have been built by near relatives. For constructing a small sector people observe following criteria:

1. A land where house can be constructed.
2. Where the material for construction is available.
3. Water is most essential part for construction and living.
4. Security to the dwelling and to domesticated animals.
5. Food and other resources must be available nearby.
6. It is not only living place but place of working, storing, social activities and religious activities.
7. The main living place is separated from the wet ground and the danger of flood.
 - (a) It enables better airflow in and around the house. Due to this reason tribal communities prefer to build their house on mounds or hilly tracks.
8. Place for storing wood and other material and space for children playing is necessary.
9. Tribal communities like their traditional cooking method— earth oven—, which utilizes lot of bush material as fuel. Separation of cooking space from a main dwelling has evolved because (a) It provides a woman's independent domain (b) it isolates the smoke and hazards (c) it leaves the main house free from food and vermin.
10. Houses type over water are common near sea and lakes, they create comfortable living space.
11. A cluster of dwellings may use common utilities and ensure collective security. The space around house is open to common use.
12. Three types of space are observed, they are enclosed, semi-enclosed and open. Principally enclosed is for night time use and semi-enclosed for daytime living, and open space for outdoor work.
13. Verandah and open space under a house is of greater use. It is useful in every season as the weather is hot and humid throughout the year.

14. Verandah is the major shaded space provided by building elements. Tall trees as coconut and betelnut palms provide good shade without disturbing air circulation.
15. While building the house durability is also thought out. Durability is much shorter in tribal houses, but thatching panels is convenient in replacing and repairing parts of the construction.
16. Fire risk of these materials is a great problem, but the wide space between houses in tribal settlement isolates the hazards.
17. Among tribes they have house building tradition, co-operative assistance is exchanged for the major construction work. The knowledge of how to build a traditional house is shared by people. They use some prefabrication method for structural frame and finishing panels, which make the maintenance and repair work easier.
18. Roof is the most critical and expensive part of the house. But with new technology roof panels are available to people easily.

Indian architecture shows certain diversity according to ground plan, material for construction used and sort of roof used. Architecture among tribes can be divided among following areas;

1. Houses in Himalayan area of Gaddi, Gaddi Rajput, Khampa, and Kagati tribal community of Sikkim state.
2. North East region presents a picturesque landscape, a landscape of hills and ravines, steppes and slopes. Rich varieties of flora and fauna are found in the plateaus of the hills and the impenetrable forests. This eastern region, criss-crossed with rivers and mountains, has been aptly called "The Red River and the Blue Hill." The cultural heritage of the diverse people inhabiting the hill and the plains provides an equally inviting texture of ethnic interest. The region with its diverse population, speaking different languages and professing divergent faiths,

may be regarded as an epitome of India. It is the land of those waves of immigrants Tibeto-Burman and Mongoloid stocks have met and woven with aboriginals a pattern of common tradition and heritage. Variation in inheritance system also created different typology of housing.

3. Dimasa houses are arranged on high level and usually they are roofed by thatch, having a low mud plinth. The Rooms for keeping livestock are built on piles. Their houses are built on highest levels are fitted with wind-breaks-a device to check a strong gust of wind. In this area Adi, Anals, Chiru, Gangte, Khasi, Jaintia, Kuki, Mizo, Nagas, Nishi, Tangsa, and Tripuri tribes and their many sub division live. They build beautiful houses and youth houses in their villages.
4. Houses in Assam tribes have influence of North-Eastern tribes such as Garo who live in Meghalaya, Assam, Nagaland, Tripura and West Bengal. The architecture of tribes of Madhya Pradesh and Chattisgarh is dominated by Gond tribes, which is largest in India. They are spread from Madhya Pradesh to Karnatak and Maharashtra.
5. Bhils live in four states, Rajasthan, Madhya Pradesh, Gujarat and Maharashtra having specific type of architecture.
6. Tribes who work with bamboo build their houses mainly walls with bamboo mats. In Gujarat Kotwalias tribe and also in Bengladesh house structure is made with bamboo strips.
7. In Rajasthan Mina is a large tribe and construct beautiful houses with decoration. They construct house with solid walls and decorate them with drawings.
8. Those tribes who live in geographical areas with heavy rains build houses with larger shades. The Todas of Nilgri have unique type of houses for themselves and their buffalos.

In the next chapters we will discuss about the architecture of Indian tribes and compare them with African style of houses.



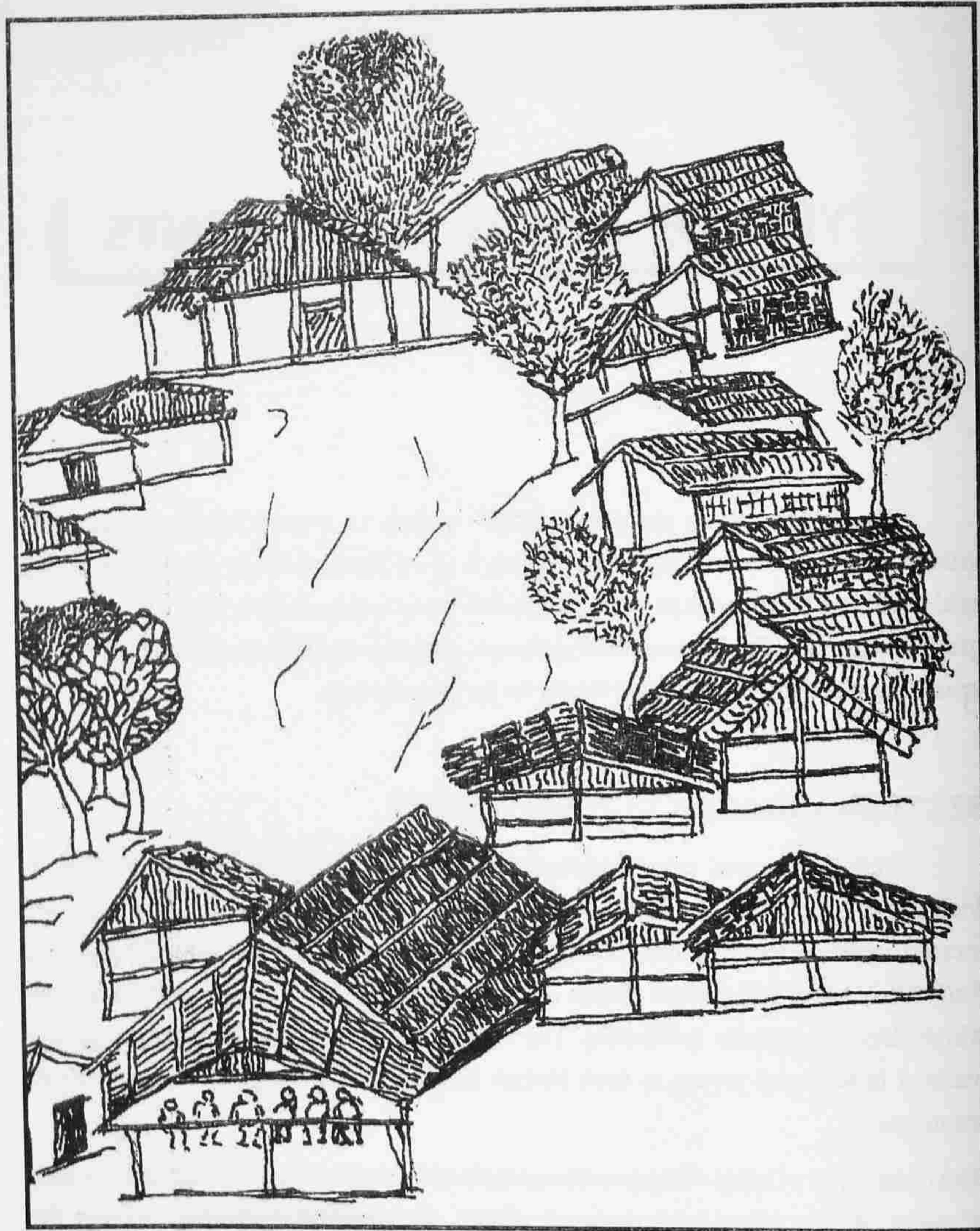
TYPES OF TRIBAL SETTLEMENTS

The settlement is a place occupied by settlers, i.e a small village or part of the village. Tribal settlements are small having 8 to 10 families living at one place. This settlement can be one village having a specific name in which a few families of one kin group like to live. The hunters, food gatherers, pastorals or cultivator's villages are kept apart from one another in isolated blocks for the convenience.

SETTLED AND AGRICULTURAL TRIBES

Bhils are settled tribal communities and they are spread from Rajasthan to Maharashtra including the state of Gujarat and Madhya Pradesh. Their villages are located on hills or mounds. They reside in cleared patches of the forests and hills and their *Falli* (sector of a village) are always set up within easy reach of the agriculture plot, which they are actually cultivating. The settlements of agricultural tribal groups are planned in scattered groups as their interest lies in their agricultural fields and water resources.

The main factor of tribal villages is the nearness to the cultivating plots and to the source of water. A few tribes have compact village, and even in a compact village the arrangements of houses are dispersed in such a manner so as to provide space for rearing of livestock and for kitchen garden of each of the houses.



A Naga village

WARRIOR AND HUNTING TRIBE

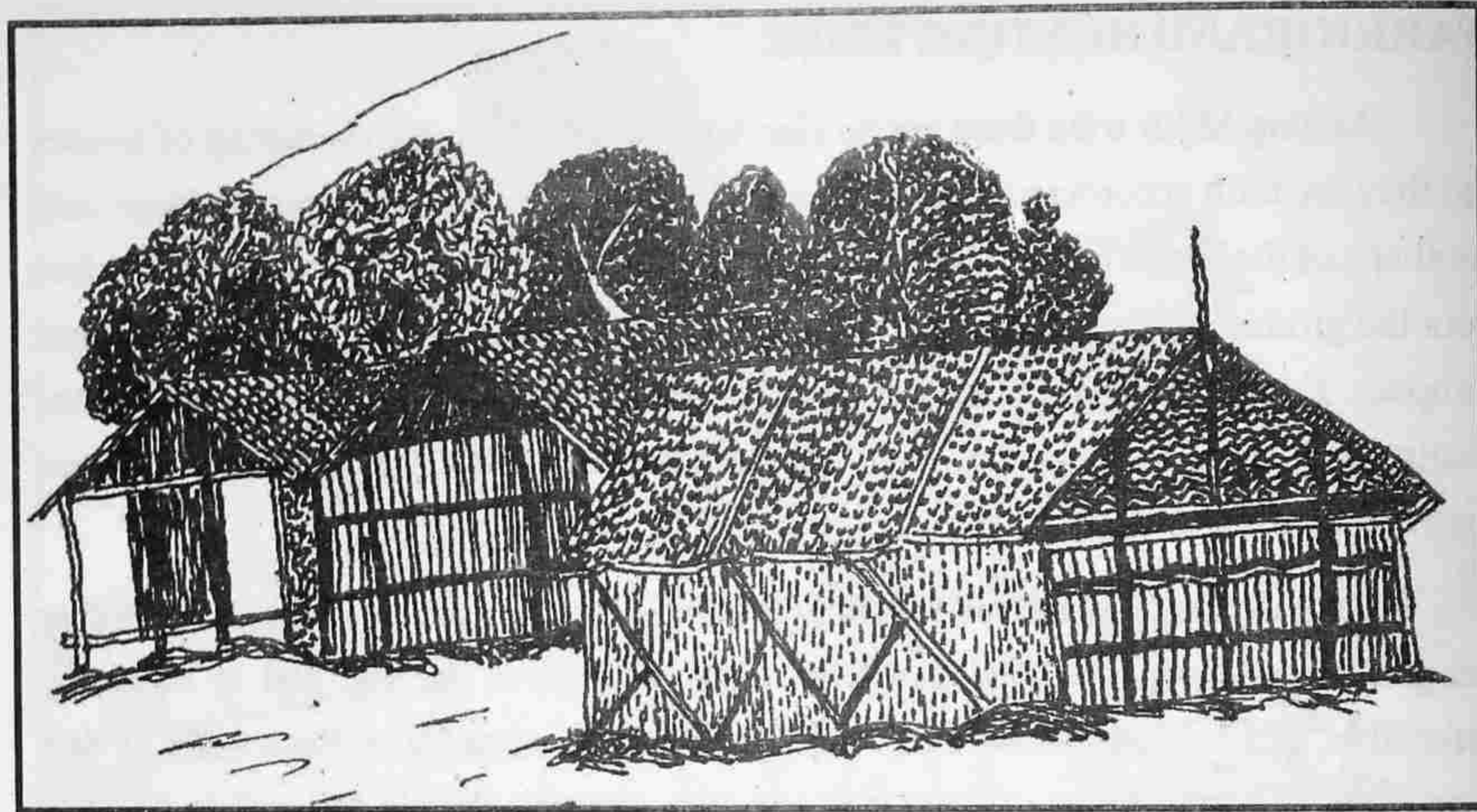
Among Mikir tribe there are no clan wise or sub-clan wise clustering of houses and they are built according to the convenience of the individual. Houses are large, and the shape of the house looks rectangular and the structure as a whole is raised 3 to 4 feet from the ground supported by stout wooden posts. The houses in Mikir villages are not compact. Every family requires large open space for the sheds, to keep pigs, goats, poultry and buffalos. These are kept on the plinth of their Chang-house, which are common in Mikir villages.

For selecting a place for founding a village most important is security. Among Rengma Nagas two essential conditions were required 1. the site had to be easily defensible, and 2. it had to have a tree suitable for use as a head-tree. Such a site having been found, a party of men of more than one clan, carrying shields, proceed to it with a dog to drive away evil spirits. A cock or boar for sacrifice, and some water from the spring of the parent village is brought. The sacrifice of cock and boar is done by a male member of the community at the ritual of planning the settlement. The senior most member of the tribe lays founding stone. The division of the Naga village is known as *Khel*. An Ideal site for a village is a flat-topped spur from which the ground falls away steeply at the sides.

The paths up from the fields in the valleys are often shaded with oak trees to keep the afternoon sun off the workers toiling up the steep slopes after the day's work. All round the village is a deep belt of trees carefully reserved for wood. The Eastern Rengmas, on the other hand, surround their villages, wherever the land is fairly level, with a broad belt of gardens containing garlic and a few vegetables, all carefully fenced to keep pigs out, with narrow paths left between the fences to give access to the granaries beyond.

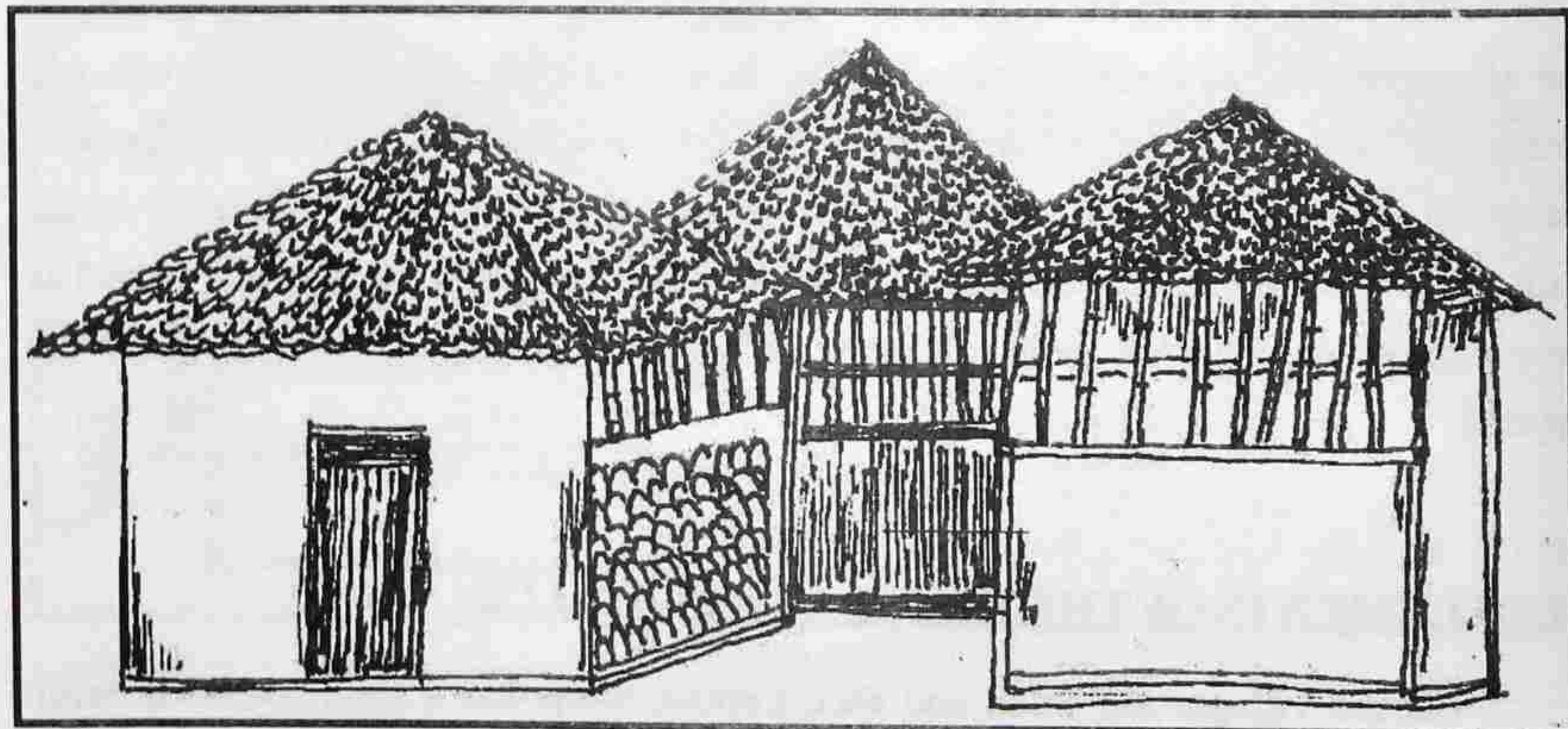
SETTLEMENTS OF THE HIMALAYAN VILLAGE

Lepcha villages are small and each Lepcha house has a field fenced in with bamboo, it is called garden, and in it are raised those vegetables and roots which are used

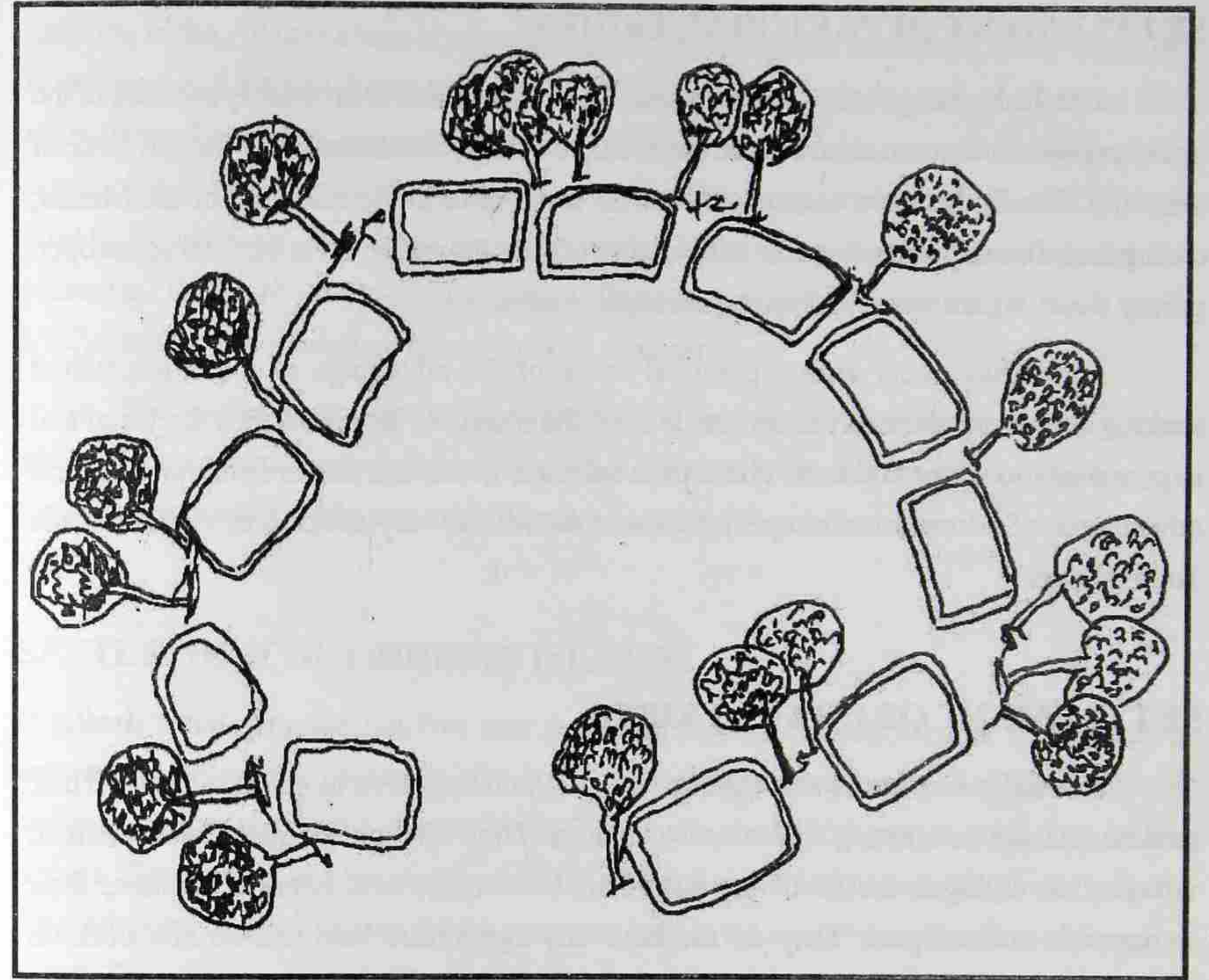


Houses in a village in Western Kameng

for flavoring food. When new settlement is founded, first all there is a Lamaist book called *Aachet Zai Putta*, is consulted which contains general rules of a very minute nature, indicating what sites are lucky, and what are unlucky. The following is small selection of these very detailed regulations.



House in Central India



A Kotwalia Settlement

'A good site is, if there is a mountain to the south and below the slope. It is good if there is a stream on either side of the slope and trees in front. It is good if there is an outcrop of rock to the east and a flat plain to the west and a waterfall opposite. Roads from the east and north are good, but those from south and west should be avoided as they are used by the fever devil.'

Thus the settlement is planned according to traditional rules. When the site is finally determined upon the lama carefully replaces the sample of earth, and then offers *chrkem*-that is mixed grains floating in strained chi- which is thrown on to the ground so as to gratify the devils which have taken up their abode in the neighborhood so that shall not trouble the work of founding a village in progress.

SETTLEMENT OF PASTORAL TRIBES

The Toda village is known as *Mand*. The village itself is invariably situated in the open, exposed to the sun almost from daybreak to sunset, but sheltered by the full force of the wind. The Todas have been credited with some taste in the selection of the Mands; owing to the beauty and often romantic nature of their situation; invariably on some open grassy slope, where wood and spring or rivulet combine.

Todas have very strong practical sense of the advantage of localities; whilst seeking shelter for themselves and cattle from the monsoon storms, with a dry bit of soil in proximity to water and fuel. The area is selected which has pasture and have natural advantages of a lovely landscape, a harmonious whole, very striking to visitors of the Toda villages.

SETTLEMENT OF CRAFT TRIBES

Kotwalia is a craftsman tribe in Gujarat, and they live in small villages. Their settlements are interesting and close to nature. They live on plains in well-planned villages. As villages are small having 10 to 15 families and being craftsmen, their settlements are compact. They do not have any agriculture land and do not work on cultivation. But they need bamboo forest around their village so they can get raw material for their craft of making baskets. Most of their villages are in round shape and they keep single entry in the village. Houses are box type and large. The central open ground is surrounded with houses and it is used for many purposes. The most important function is working on bamboo-craft. After bringing bamboos, men and women prepare strips of the bamboos for making baskets. Bamboos are cut in the required sizes and then strips are made out of the pieces. Kotwalia craftsperson nit the bamboo strips in form of small to large baskets. The place is also used as play ground for children. Children also learn to make items with bamboo by observing their parents at work and helping.

The central ground is used to observe each other as people can solve the family problem. Community festivals are organized like group dance and marriage etc. For

entering in the villages a lane is prepared by joining it with the main road. They do not live in isolated and intense forest villages, as crafts persons always require buyers of their craft-items. Kotwalias are good planners of settlements and they could not like Indra Awas plan as the houses under this plan are built in very unplanned manner. Houses attached with each other have common walls. There is no central ground under this planning. Trees are grown around their village and they keep a watch on these trees. Craftsmen use the shadow of tree to work in summers.

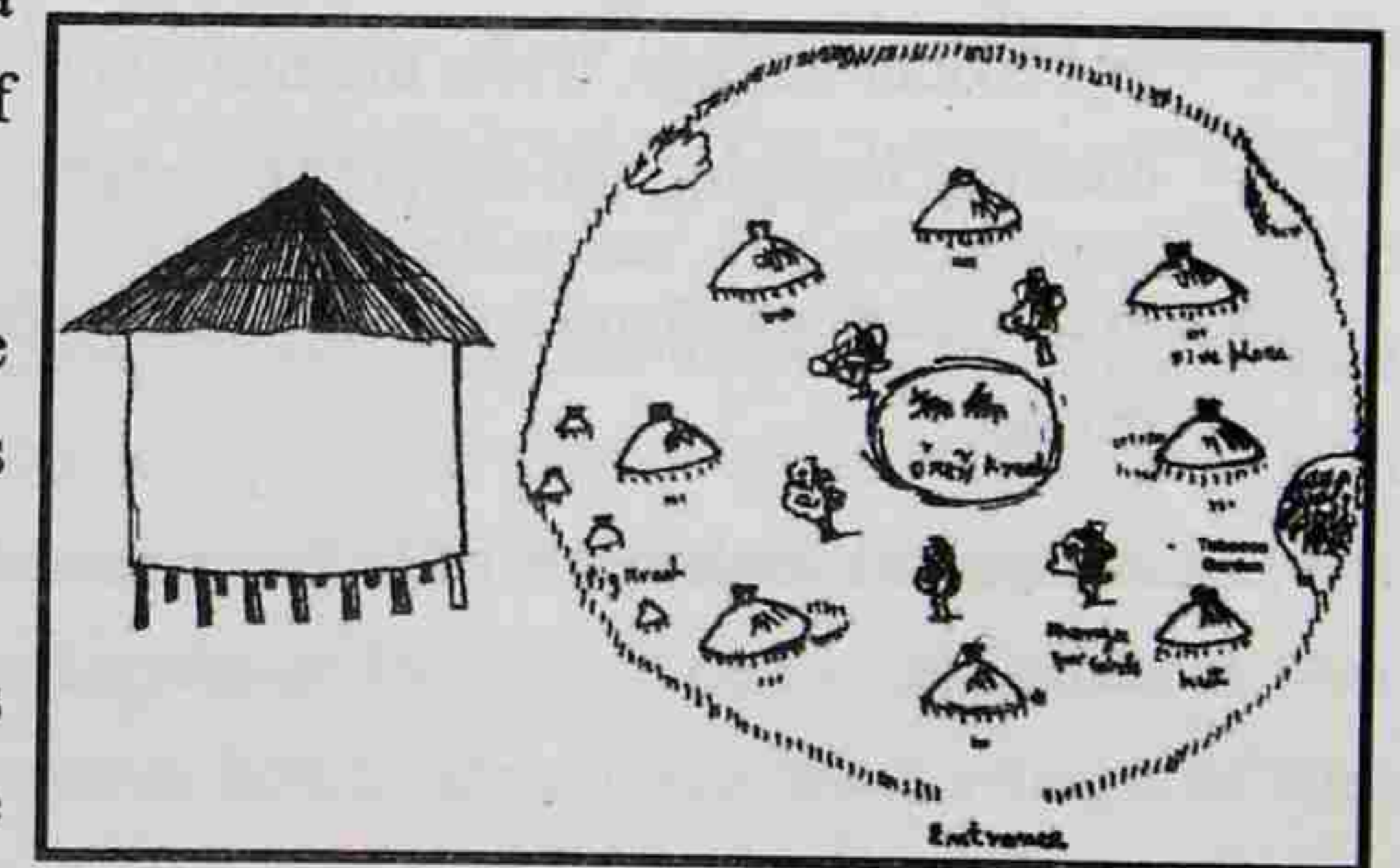
The bushes around the village are used for lavatory. Kotwalias keep their houses and common ground neat and clean. Though Kotwalias are good planners and builders of their houses, master crafts persons still treated as primitive community.

SETTLEMENT OF TRIBES IN ISLANDS

In islands tribal communities live near ocean. In Andamans and Nicobar islands live a few tribes. The small communities have their settlement in neighbourhood of the harbour. The islands have dense forest. There are small Villages having five or six houses. Grassy hills and beaches backed by a belt of scrub and palm trees partially form the environment. It is not easy for the common man to reach to settlements of Onge or Jarwa. The rains, grass, and trees hide the settlements.

Some Important characteristics of tribal settlements

1. Generally each tribe has a distinct geographical area of their residing.
2. A distinct tribe does not settle in close proximity to villages inhabited by other tribes.
3. The Nomadic tribes temporarily settle near the place of their work and move



A Settlement in South Africa

out as soon as their earning is not possible there.

4. Tribal settlements are small, of 6 to 10 families of the same clan.
5. A few settlements form a village and given a name.

The nearby settlements form a village and have a youth house where boys and girls of different clans stay at night or attend social cultural activities.

Village in Western Kameng

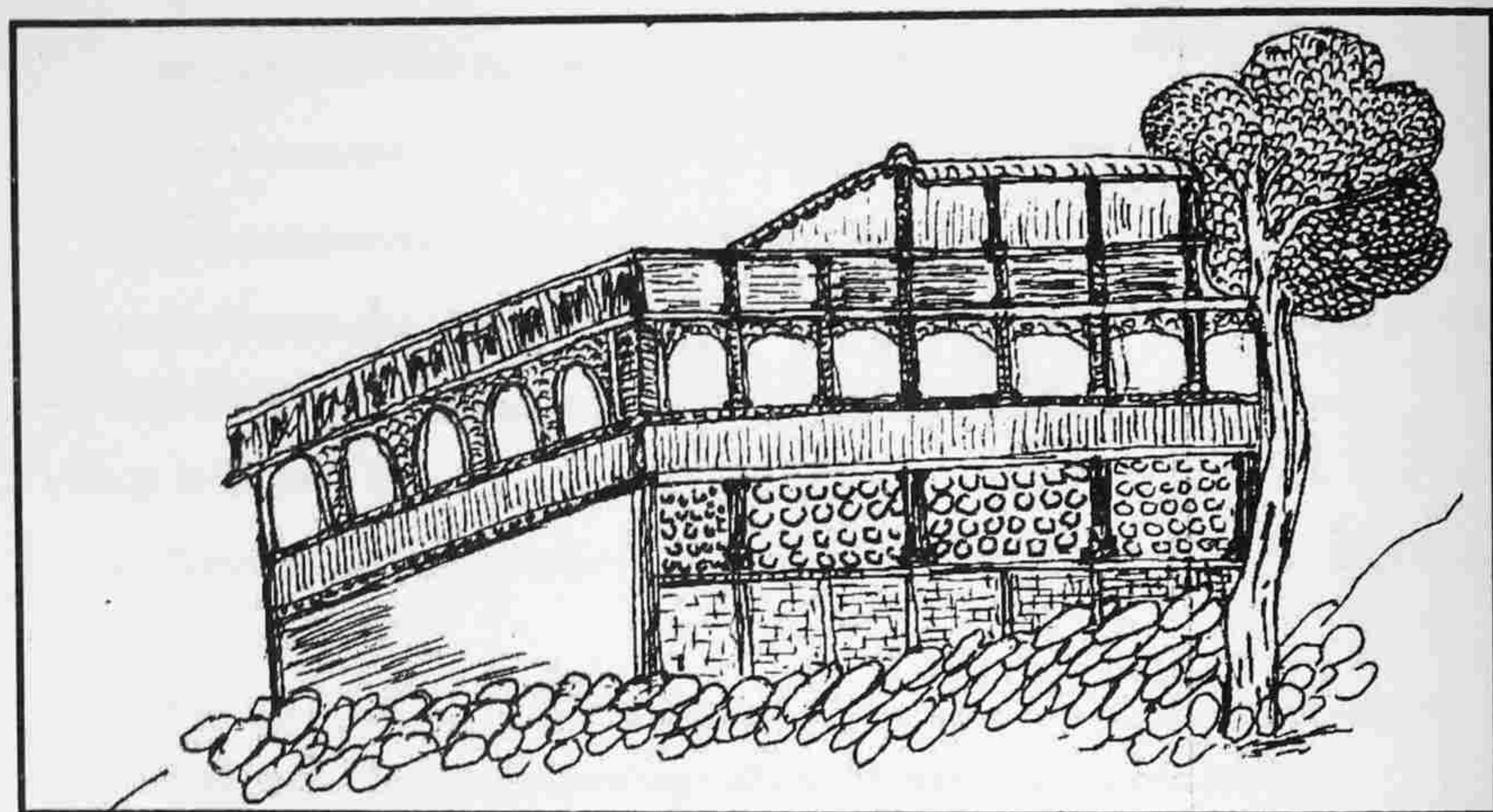
1. Tribes earning out of their crafts always like to establish their settlements closer to roads or towns.
2. The tribes inhabit in the forest areas where there is a maximum possibility of obtaining plentiful game and availability of smooth, soft wood trees.
3. Allmost all the tribes like to prepare local drinks with *Mahua* flowers or *Tari* with *Tad* tree.
4. Pastoral tribes plan small settlements, as they have to keep their cattle also.
5. There are new trends of settlements as tribal families have started migrating from forest areas to cities.
6. Tribal communities live in small nuclear families and thus each family has its own house.
7. Some of the tribes have double storied houses. The ground floor is used for cattle and fodder-storage, while the first floor or upper story is used by the family for cooking, lounging and sleeping purposes.
8. When families attend festivals and fairs they move in groups and generally cook in open.
9. Around all settlements there are trees and bushes which are important for their daily life.

TRIBAL HOUSES

HOUSES IN KINNAUR IN THE HIMALAYAS

As the climatic condition between upper and lower Kinnaur varies so does also housing pattern. Lower Kinnaur has an abundance of forests and rain while upper Kinnaur is deficient in both. But one thing common to both is that all the houses are built facing the sun.

Generally speaking most of houses in Kinnaur area have two storeys. But the houses of nobles or landlords comprise more than two stories. Except in the new constructions, each storey has one living room: usually the ground floor is used for cattle sheds, except where there are workshops as in the case of ironsmiths. The first story is used for living purposes. It has extended wooden balconies. The material used for the construction of houses is different in lower and upper Kinnaur. Generally stone and wood are used. In the lower Kinnaur, where wood is available in abundance, the wooden frame is made first and the gaps are filled with stones. Mortar was not used in earlier times. In the upper Kinnaur where wood is not readily available the houses are constructed with stones. But after the devastating earthquake of 1976 the wood is carried from lower Kinnaur to the upper region. Now wooden houses are constructed in villages of upper Kinnaur. Most of the houses are low roofed, where the height of the wall does not exceed



A Typical House of Kinnaur in Himalyas

two meters. Great significance is attached to the main beam of the roof. It is laid almost parallel to the boundary of the main door. It is considered inauspicious to set it otherwise. There are small holes for letting out smoke. Windows and ventilators are not provided due to extreme cold. Each storey comprises of only one room, there are no separate bathrooms and kitchens. The hearth called *mieling* is set in the center of the room and a hole called *dusrang* is provided in the room for the purpose of letting the smoke out and admitting the light.

The inside of the houses is plastered with mixture of mud and cow-dung, and white washed by a shiny kind of mica. The roofs of houses are mostly flat and are made of wooden planks covered with *bhojpatra* and overlaid with earth.

The floors in lower Kinnaur are wooden while in upper Kinnaur floors are plastered with mud and cow-dung. The *urch* (granary) is constructed for storing food grains at a distance from the main house, to avoid destruction by fire or house collapse. It is constructed in square or in rectangular form with clay and cow-dung mixed with straw.

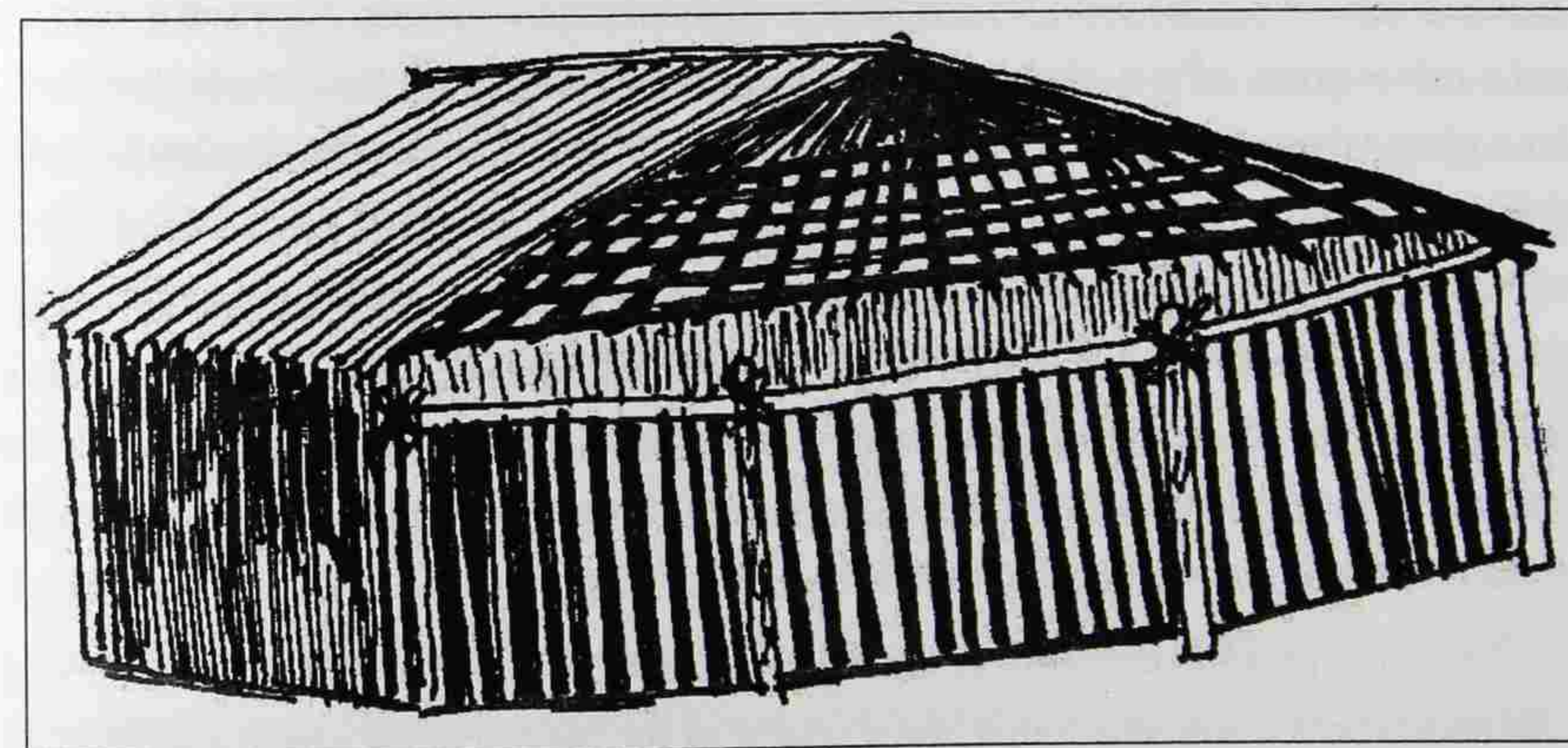
At the time of laying of foundation stone and fixing of the main door, worship

and, *parsad* (offerings) and some wine is offered near the door and foundations. On the completion of the new house *gorasang* (house warming ceremony is done on the auspicious day. After worship and chanting of some verses, the Lama formally escorts the owner inside the house.

The mason who constructs the house is invited to the house warming or *Gorsang* ceremony for a feast. The mason and his family receives gifts in a plate *thali* with ghee filled up to the brims along with some money. His wife receives a pair of *dhaglo* (bangles). The mason should be satisfied otherwise it is feared that he may curse the house owner. Now carpenters and masons are employed on daily wages.

HOUSES OF LEPCHAS OF SIKKIM

The Lepcha live in Sikkim on a very mountainous land. The average height of the hills is about 12,000 ft. The temperature varies considerably at the different heights. The settlements are situated in valleys particularly Teesta and Talung rivers valleys. For example twenty-two settlements with distinct names, some of these consists two or three houses are part of the villages. The houses are isolated in the fields and forests or gathered in small groups of three or four houses. Geoffrey Gorer (1938) writes, Lingthem



A House of Lepchas of Sikkim

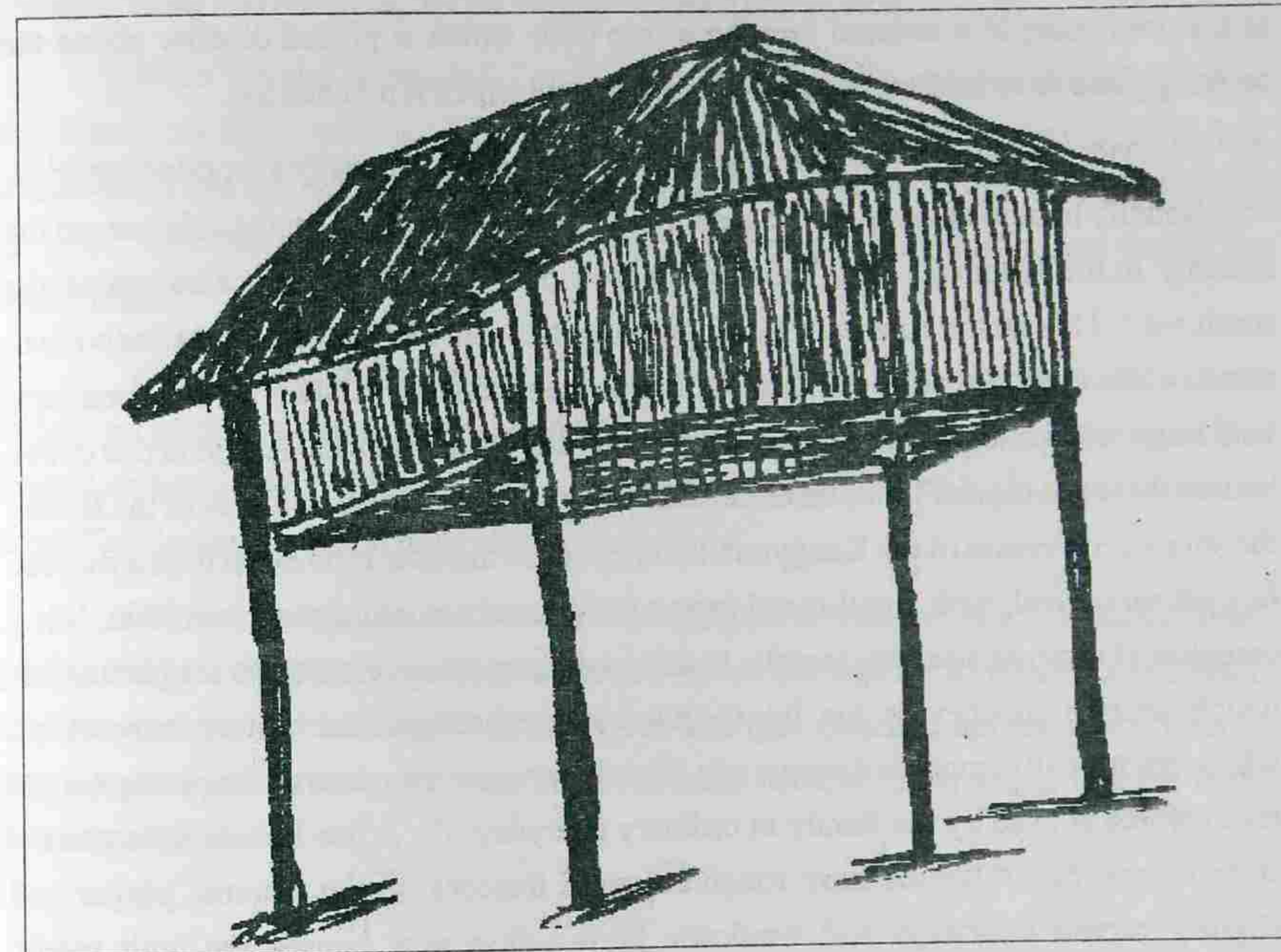
(village), where I lived, consisted of 33 houses; it is the biggest village on the Talung side.

When three or four houses are grouped together they are usually given distinctive names. People living in adjoining houses may be closely related, or they may be completely strangers.

Lepcha houses are rectangular buildings raised about four feet off the ground on stone piles which go round three sides of building; the east side is left open, and the space underneath serves as a shelter at night for domestic animals. The building is made of wood, plaster, bamboo and thatch. All buildings have their entrance to the east and face north; the north-south is the longest. The first portions of the building to be erected are the five upright supports, one in the center and one each corner; they consist of roughly shaped tree-trunks. For the erection of these supports and for the building of the stone wall an overseer is necessary; for the rest of the building no consultant is used. The floor is made of woven bamboos, but some of the rich people cover the bamboo with smoothed planks; The walls are always bamboo covered with plaster, occasionally with wooden supports. Generally the south and west walls are blind; the entrance, which is reached by a pair of notched logs or rough steps, is always on the east; and round the east and north side runs a balcony of plaited bamboo. The north wall is mostly open to the balcony but there are usually wooden shutters which can be closed when the nights are cold. The balcony is used a great deal; for gossiping in the daytime or during the warm evenings, for a great variety of household tasks, since there is seldom much light inside the house, as a place where fowls can roost, and as a latrine for infants, invalids, the drunk or the lazy.

The roof is made of reeds hung over bamboo and supported on a wooden frame; the north and south sides of roof cover the whole space between the roof-tree and the top of the wall, but the east and west sides are somewhat inserted at a slightly lower angle, so there is a triangle on the east and west sides under the roof-tree which is meant to provide ventilation and an escape for the smoke.

The great majority of Lepcha houses consist of two rooms and an attic; a few of the poorest have only one room, and a couple of the biggest houses have a third small



A House situated in a cardamum field

store-room beyond the *de-ong*. The first room on entering from the east is the *thop-song*-the kitchen. Round the side are either slightly raised selves or a bar set into the wooden floor, which marks the sleeping places of the members of the household. During the day the beddings are rolled up and put away in boxes and are only brought out just before retiring to sleep. Except for the sleeping places of grand parents or parents-in-law, which are avoided out of respect, these sleeping places serve as seating place in the daytime.

In the center of the dividing wall is the cooking place; this is built-up square of pounded earth and clay, perhaps five feet in each direction and raised about a foot off the ground; into this, while it is still soft, are inserted four upright stones to support the cooking pots over the logs of the wood. Above the fire-place is a drying ledge woven bamboo hanging from the rafters. There is a very fragile ceiling of bamboo which serves

as a store-house; it is entered through a trap door which is placed directly above the cooking place so as to allow the smoke to escape and which is notched log.

The dividing wall which separates the two rooms is usually a wooden partition, occasionally bamboo partition with a door or at least a door frame, in the side nearest the balcony. In the house of Lamas and of the more pious laymen there is an altar against the south wall. This altar varies enormously with wealth and inclinations of the individual; some of the most elaborate are miniature reproductions of the altars in the monastery, with large metal images and musical instruments and other decorations; and in one or two houses there are pigeon-holes on either side containing in sixteen volumes of the *Boom*, the shortened version of the *Kangyour*. In other house the altar is no more than a wooden box set up on end, with small metal image inside, and sometimes not even that. It is a ceremonial room as a private temple. In this room numerous ceremonies are performed, which occur in life of every one. It is the place where distinguished visitors are received, where emotionally important events of a slightly ceremonious nature take place; it is not room which is used by the family in ordinary everyday life. A few houses have narrow store rooms. Some houses have rough coloured frescoes on the external plaster and slightly carved doorways and windows. Now-a-days new houses are built rarely. Ordinarily the members of a Lepcha households do not separate, if the family gets too numerous the household will split and the land be divided.

New houses are built always in the late autumn months, after the gathering of the harvest. This date is dictated by two reasons; at no other period people will have sufficient time and other dates would be ill-omened. The intending builder will gather materials for some months beforehand. Omens are decided by Lamas and the books, it is good if there is mountain to the south and below a slope. It is good if there is a stream on either side of the slope and trees in front. The site for house is decided by a number of metaphysical considerations. The Lamaist book '*Sache Zai Putta*' gives details of rules. Which site is good and which is bad, which is fruitful and which is barren, where children can be born, and where they cannot.

Omens and horoscopes are consulted and suitability is decided. Most important is to be near the stream and to have suitable ground for a field-garden, and, if possible, to

be near friends and relatives, but the verdict of Lama comes first.

When the site is decided, Lama carefully checks the sample of earth so as to devils may not create troubles. The building should always start from the east. The four corner-posts and the center post are setup, and the low stone walls, on which it will rest are built. After that building proceeds, the walls, flooring, ceiling, rafters and finally the thatch is built.

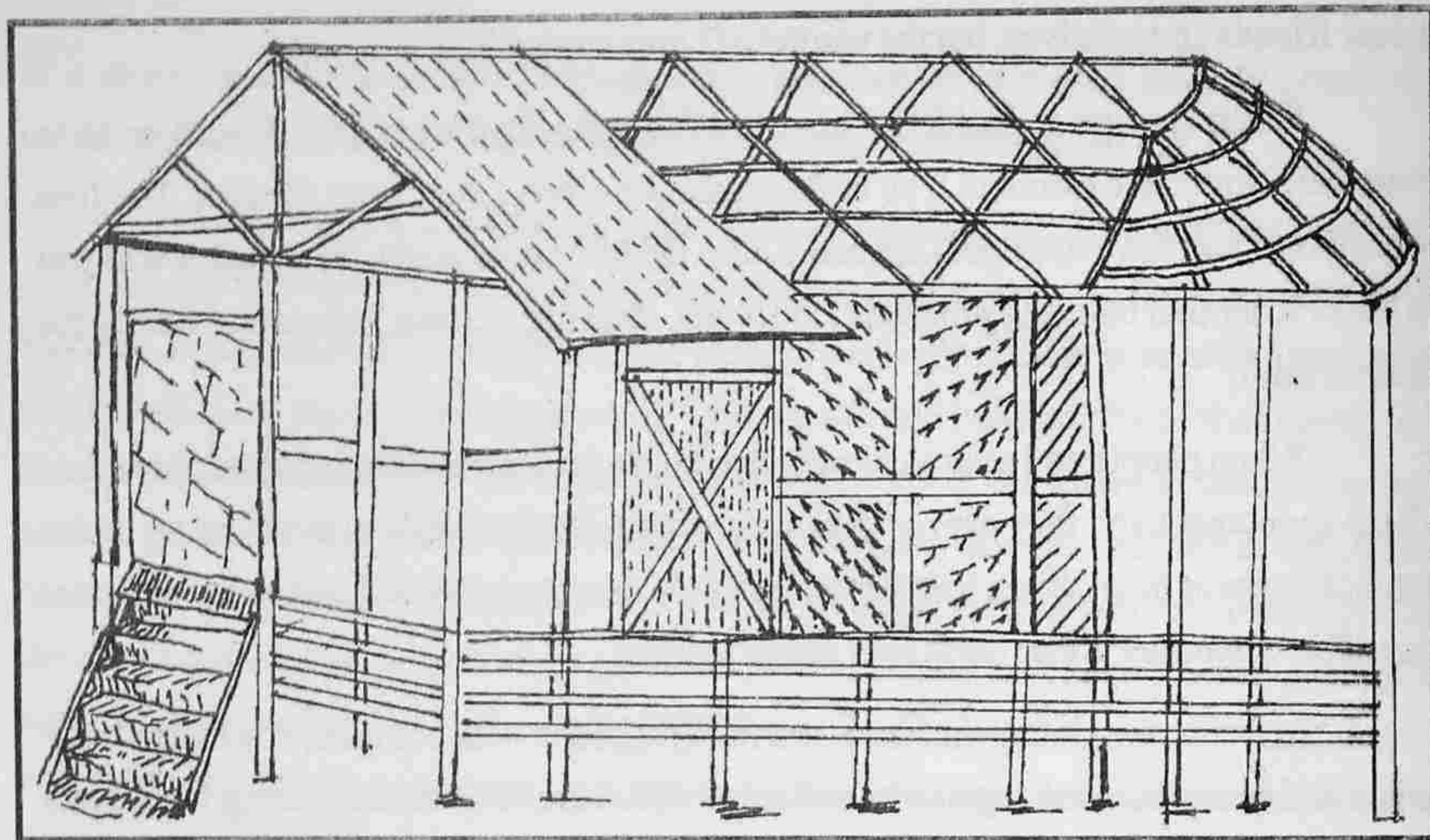
When people and relatives know that house is being built or repaired they come to help spontaneously; they are not given any wages except meals in the evening. It is a mutual system of help. When house is completed, the ceremony of *Tashi chene*-a feast is done. This ceremony is also done after major repairs.

In front of each Lepcha house is a field fenced in with bamboo; it is called '*sing*' garden and in it are raised vegetables and roots which are used for flavouring food. Near the house usually a small number of fruit trees- oranges, peaches, apples, pears, plums, tree-tomatoes-and occasionally one or two shrubs, usually roses, are grown for their flowers and fruits.

THE MIKIRS HOUSES

The tribal settlements are small, planned by their elders but not compact. Traditionally their houses used to be on hills and were connected by footpaths. The house is as a rule divided lengthwise by a partition into two or three rooms with one portico on one side in Naga hills. The house is divided into '*kam*' or a room for outsiders or guests which is always on the right side where the only door into the house leads to, and another which is known as a '*kut*' is meant only for the family. In the '*kut*' a platform or *chang* about 2ft. high called *tibung* and raised above the floor runs along the walls and used as sleeping apartments for the members of the family, that is, for the young, for the unmarried sons, or in some cases, for the married couple.

Outside the house along the wall of the '*kut*' but attached to the house is a place called '*biroi*' in which fowl and goats are kept. There is a fire place called '*mehip*' lying at



A Mishmi House

the back of the '*kut*' and by the side of the fireplace is the '*damthak*' where the heads of the family—the father and mother sleep. Here also stands a paddy receptacle made of bamboo. Behind the fireplace there is a place called '*dambuk*', which attached to '*damthak*', where the young and unmarried girls sleep. The front verandah is known as '*hong-kup*' in which are kept loin loom, baskets, fire-wood, mortars and pestle, vegetables etc.

The floor of the house is usually raised about four feet or more above the ground and is supported by strong posts on all sides. The whole structure of the house including the side walls is made of split bamboo finely woven and knitted together so firmly that no mud plastering is necessary.

The roof of the house, which always consists of two sloping parts are thatched with sun grass which is generally replaced after lapse of four or five years. The floor of the house is covered with knitted bamboos arranged as above and fastened at each end to the posts which support the roof of the house. The inside of the house is rather dark except for the scanty light filters through the openings in the split bamboo walls. There is no window or chimney—the main door and the tiny slits in the bamboo walls act as sources of

ventilation. There is no lavatory or latrine in the house. Only nearby jungle offers a good place for the latrine. Some Mikirs have lavatory or latrine at one corner of their house away from the main rooms.

HOUSES IN ADI TRIBE

Formerly, the Adi community along with its sub groups was known as Abor, An Assamese word, which applied to all hill tribes around the Brahmaputra valley. They disliked the term because it meant 'unruly' or 'savage'. The Adi are concentrated in the East and West districts of Arunachal Pradesh. According to 1981 census the total population of the Adi tribes (including all groups) was 121,052, grouped into 35 sub-tribes, a number which was not covered by the field survey. The Adi tribe is divided into 15 sub-groups, Ashng, Bokar, Bori, Gallong, Karko, Komkar, Milang, Minyong, Padam, Pailibo, Pangi, Pasi, Ramo, Shimong, and Tangam.

The legends relating to the original home of the Adis suggest that they came from the north. The cause of their migration could have been natural upheavals or large-scale racial movements. Adi language is part of North Assam group of the Tibeto-Burman family of languages. The Adi language is spoken by 1,11,833 persons but it does not have a script. Most of Adi villages are located along the courses of rivers and their tributaries.

Houses: Generally hilltops are preferred for settlements for reasons of security against inter-village feuds. A majority of the Adi settlements are uni-ethnic. The houses are made of bamboo and thatch and are strengthened with wood and cane strings.

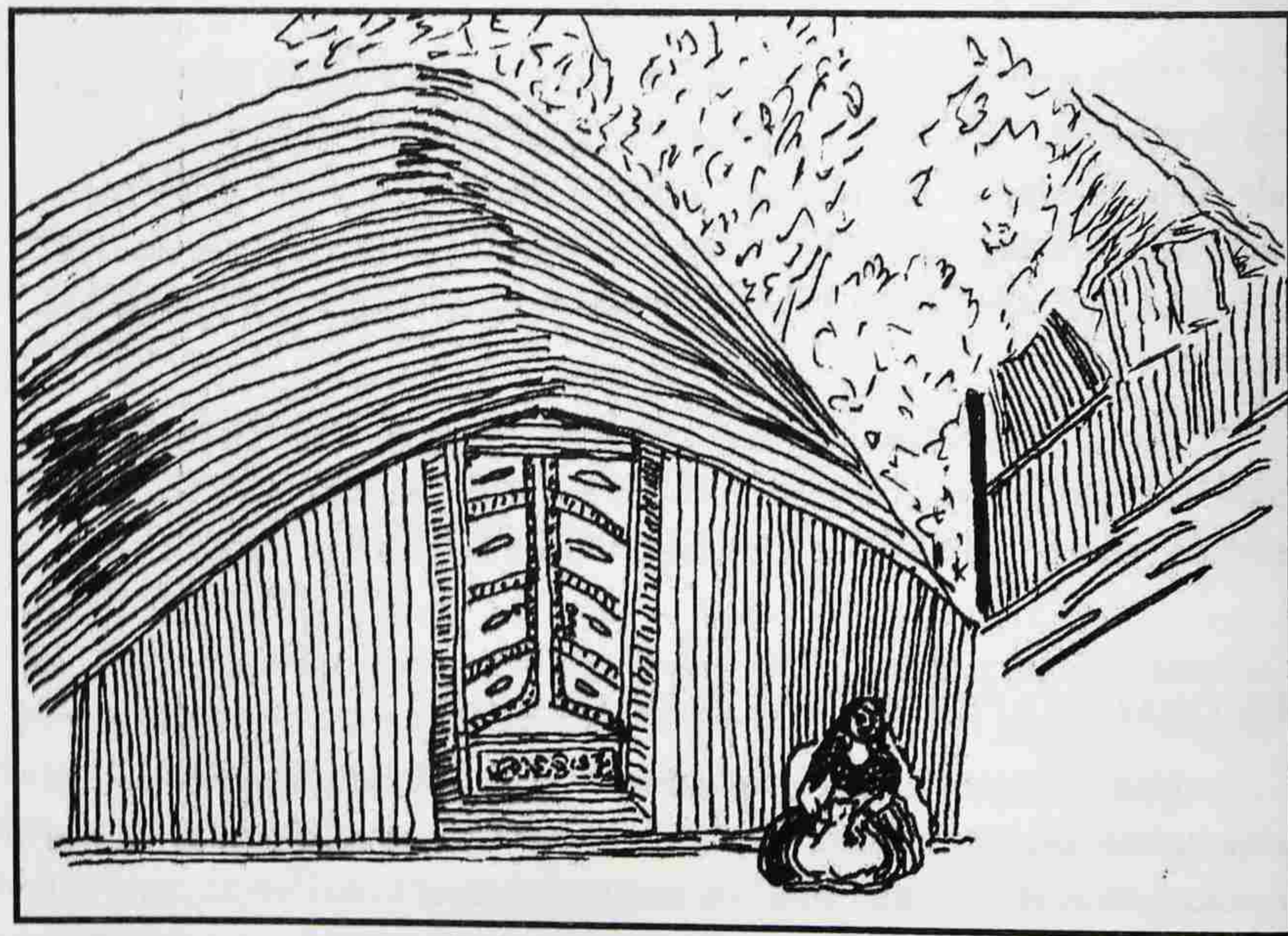
THE OVAL SHAPED HOUSES IN KHASI TRIBE

Khasi resides in hills of Khasi and Jaintia districts of Meghalaya. Khasis are Austro-Asiatic language speaking people who recall their migration from South East Asia into the hills of North-East India. The total population of Khasis is 6,28,104 (1981 census). In Meghalaya. They are generally short-stature. They have an oblong tending

towards broad head shape with a round or oval face and nose of moderate breadth. They are divided in number of exogamous clans. Marriage is by choice after crossing teens. Residence after marriage may be matrilocal or neolocal.

The entire range of hills receives abundant rainfall. The Khasi economy is a market economy, one in which women play important role. The Khasis are producers and sellers.

Khasis traditional houses are oval-shaped. Generally their house used to be divided into three rooms, a porch, a center room, and a retiring room. The houses of the Khasi people are cleaner. They were as a rule substantial thatched cottages with plank or stonewall and rose on a plinth some 2 to 3 ft. from the ground. Only window is a small opening on one side of the house, which admits but a dim light into the smoke-begrimed interior.



Oval Shaped Khasi Tribal House

The beams are so low that it is impossible for a person of ordinary stature to stand erect within. In olden days the fire used to always burn on an earthen or stone hearth in the center. There is no chimney, the smoke finding its exit as best it can. The firewood was placed to dry on a swinging frame above the hearth. In the porch fuel is stacked.

The pigs and calves are generally kept in little houses just outside the main building. In olden days the Khasis considered nails as taboo, and only used a certain kind of fender which surrounds the hearth; but they are not particular now-a-days. In large villages and towns walls of the houses are generally made of stone.

In 1906 Sir Charles Lyall saw a house in Jaintia Hills which measured 74 ft in length. The house of the Siem priestess at Smit in the Khasi Hills was 61 ft. long and 30 ft. broad.

In front of the house used to be a little space fenced on two sides, but open towards the village street. The *syntengs* plaster the space in front of house with red earth and cow-dung.

The Khasis observe some peculiar customs when they build a new house. When the house is completed they perform, *kynjoh-hka-skain*, and they tie three pieces of dried fish to the ridge pole of the house and then jump up and try to pull them down again. Sometimes a pig is killed and fixed to pole, and then endeavor to dislodge it. When the house is completed two fowls are sacrificed one to deity Narshingh and one to Biswakarma. Biswakarma is the architect of the Hindu gods, he is worshipped alongside the Khasi deity Ka Siem Synshar. The house is plastered as a preventive of fire, arson in these hills being a common form of revenge.

Amongst the Khasis, when a daughter leaves her mother's house and builds a house in the mother's compound, it should be built either on the left hand or at the back of mother's house.

Among Khasis priestess is the important religious figure, women perform ceremonial dance in front of a large post of oak in the midst of the priestesses' house on the occasion of the annual goat-sacrifice ceremony.

Modern houses are according to modern architecture, with roofs, chimneys, glass windows and doors. But traditional and inexpensive houses have the roof, which is thatched with leaves of a palm called *u tynriew*, is hog-backed and the eaves come down almost to the ground.

The houses of Pnar-War, a tribe live on these hills are peculiar. The roof, which is thatched with leaves of palm leaves, protects the house from rains. The houses are built flush with the ground are made of



A Khasi Girl

bamboos. In the villages of War tribe small houses are erected in the compounds of the ordinary dwelling houses called *ieng lcsuid* (spirit house). In these houses offerings to the spirits of departed family ancestors are placed at intervals.

The central part of the Khasi hill is occupied by the main Khasi group, whereas

the peripheries are occupied by the Khasi sub-groups. Khasis are cultivators but there are some Khasi craftsmen adept in basket-making, weaving, blacksmithery, brass-smithery and pottery. The crafts have developed and thrived in the Khasi and Jaintia hills backed by favourable and ecological conditions. Thus the main Khasi hill has abundant iron ore and so we have there a number of villages with blacksmiths.

Some houses are built on a platform, the main house resting on the hill-side and the portion on the platform projecting there from, the object being to obtain more space, the area for houses in the village sites being often limited owing to the steepness of the hill-sides.

The Bhoi and Lymngam tribal houses are generally built on fairly high platforms of bamboo, are frequently 30 to 40 ft. length, and are divided into various compartments in order to suit the needs of the family. The hearth is in the center of the room. There is a platform at the back of the house, and in front of the house. It is used for drying paddy, spreading chilies and for sitting for rest.

Khasis build their villages on the extreme summits of hills, but little below the tops, generally in small depressions, in order to obtain some protection from the strong winds and storms, which prevails in these hills at certain times of the year.

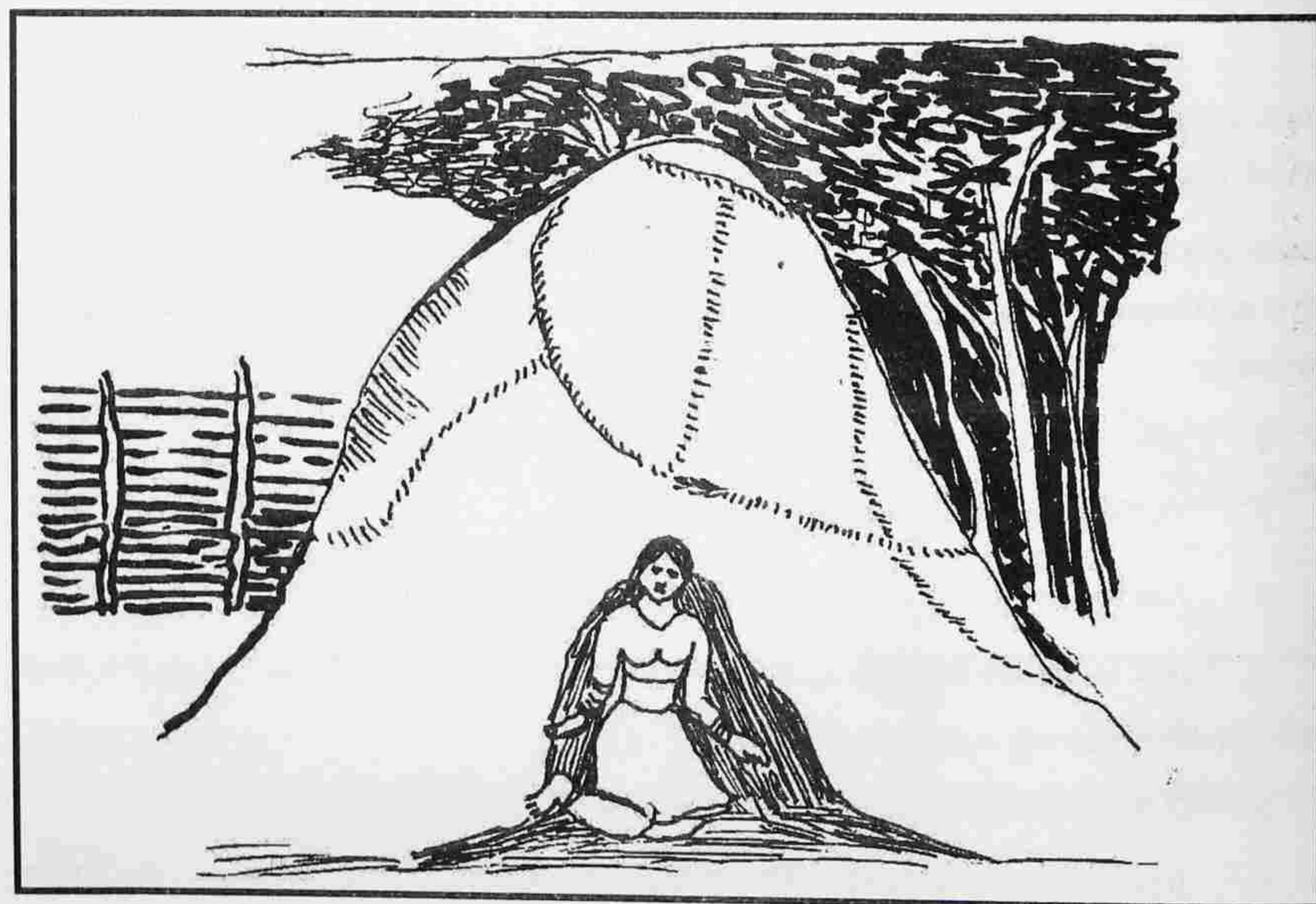
Lalung is a tribe who live on plains have chhamadi-beachlor's dormitory. Plain Lalungs live in compact villages. Khasis observe following restrictions (taboos) in building the house:

1. Not to build a house with stonewalls on all four sides.
2. Not to use nails in building a house.
3. Not to use more than one kind of timber in building the hearth.
4. Not to build a house with resinous timber. Only the Siem family can use such timber.
5. Not to cut trees from a sacred forest for building a house.
6. It is a taboo for the husband of a pregnant woman to thatch the ridge of the house

at such a time, or to fix a handle to an axe.

JATAPU TRIBE OF NORTH EAST AND THEIR HOUSES

Jatapu tribe is in Eastern Ghats of Andhra Pradesh, in the district of Srikakulam situated on the extreme eastern tip of the State. It is surrounded by Orissa State in the North and the West, with the Bay of Bengal. Most of the area is hilly tracts. Pareek has studied Jatapu village. A village has a typical pattern of houses and streets. After moving down from hills to villages in valleys, Jatapus constructed houses. Thatched-roof houses with mud walls lie joined to each other with common outer walls in between, in a single row. In front, there is invariably a street varying width from 4.5 to 9.7 meters, which ends up width-wise at the opposite row of houses. The street in-between serves as a courtyard for men and women to relax and work and for children to play. Though there are separate cattle-sheds to secure cattle at night, in a quite a few villages with wide streets such as in Tadipai, some prefer tethering their cows and buffaloes to posts installed in the middle of



A Gadaba winter dormitory

the village street one after the other in a straight line, to avoid theft during the dark hours. The village streets or courtyards are kept scrupulously tidy at all times, like every house which is broomed any number of times during a day, both inside and outside.

A Jatapu house has very few possessions —only the bare essentials. There are baskets and mats of various shapes and sizes made of split bamboo leaves of the palmyra palm which serve as containers for storage and carriage. Ponaka a drum type container is meant for storing grains. These Ponaka are also used to divide the space of the cottage in sleeping room, front room and kitchen.

In a home there are baskets, winnowing fans, sieves, trays, handless umbrella, domestic utensils—mostly earthen pots of assorted sizes, which are used to cook and keep food and liquor. The use of mixed-alloy, brass and copper vessels is also not unknown to tribal families. There is hardly any furniture in a Jatapu home except a few loosely stringed cots and old wooden benches and boxes. The poor do not have even this furniture. Jewellery and other valuables and money are kept in a steel or wooden box.

Jatapus do always raise new houses from October to April. Old houses are periodically maintained. Maintenance of the house is carried out by its lonely owner. In olden days clansmen always helped each other mutually in house construction and such other tasks without any return for their services, but not now. Old houses require periodical maintenance. The roof-thatch should be changed or repaired each year, failing which, at least in the following year. Bamboo and wooden beams and poles also need replacement in five to six years. Similarly, the mud walls should be patched and plastered with cow dung and earth to keep them standing.

The Jatapu house is completely different from the thatched houses in the plains, those conical and circular one-roomed constructions without any windows which one sees in the Andhra Pradesh. In fact Jatapus consider their houses superior to those in the plains, and often have a dig at them. In one of the Jatapu wedding songs, their women taunt the bridegroom from the plains like this:

“You hit the low-gabled thatch-roof as you enter.

Inside, the ceiling is so high, you cannot touch it

Home, therefore, you do not reach to dusk when the sun sets.

You borrow a ten-rupee note to survive,

As there is a hole in your 'Dabbu-petti'." (saving box)

Utmost care is exercised in the selection of a site for the construction of a new house. Seven grains of rice are placed in a circular form over the tentative site and covered with a large leaf of a pumpkin creeper, late in the evening. There is no prayers or offerings, though village astrologer may be present. On the following morning, members of the family anxiously rush to the site to see the result of omens. If all seven grains are found intact in their original position, it is an auspicious site. It is at once selected happily without any doubt or else a search for another site may be necessary. People believe that a house can be auspicious and worth living only when it had adequate stocks of grains. A Jatapu house is well designed to provide a small front porch; a small verandah on a raised platform, which is that of main house. The main sleeping room serves as the storeroom for valuables. The house has kitchen-cum-store room for domestic utensils and a running foot-wide platform right at the back of the house under the rear gable to keep fuel-all this under the sloping covers of an angular roof. The front and rear doors provide enough ventilation. There is also a clearly designed loft under the gabled roof, for extra storage.

The houses are not separated, but they all stand in a single row, usually 10 to 15 in number, under a long spreading common thatched roof. In many villages, the front verandah is also common. It presents happy community spirit. Each house has private kitchen and living room. Each house can also be easily secured and locked through its doors.

The walls are made of clay and plaster is done with a mixture of clay and cow dung. In some villages, the outside front walls under the verandah painted with a beautiful ashen color prepared out of a mixture of cow dung and clay and ash from the hearth. The decoration which the Jatapus draw are, the various floral and geometrical patterns designed with white lime by their women outside the house, after the Telugu houses in the plains.

The Saoras who live near Jatapus have very rich wall paintings and icons. They paint many themes-man and women harvesting, a ploughing scene with bullocks, a peacock with beautiful plumage dancing or perched on a tree, a man charging a tiger with spear and other hunting scenes. These icons have ritual and religious significance.

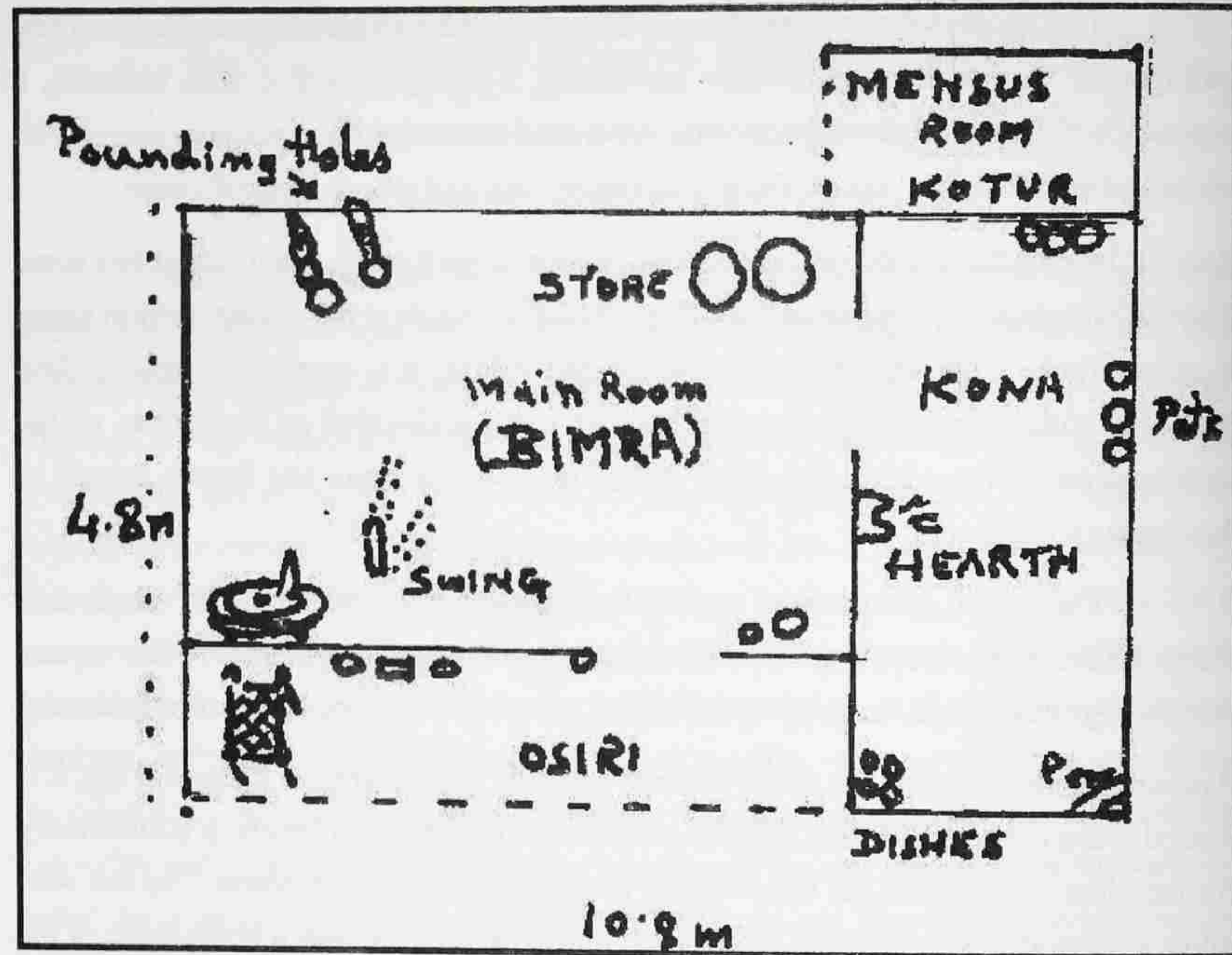
Among Jatapus the worship of Jakeramma-goddess is performed. Each village has some place of worship-either in one of the village streets or outside at the village outskirts under a tree or rock. When the shrine is raised in the village, it is normally a square clay-platform with rough-and-ready large boulder rocks embedded at four edges of the construction. In the center, two small stones representing male and female couple of Jakamma are placed.

The Jatapu crematorium located well outside the village, is also rough-and-ready affair. As the bodies are cremated, no big graveyard is required. A few square meters of ground near a stream or by the side of trees, serve as crematorium for the dead.

Ancestral house and land are major items of property to be shared. If a house is big, it is shared, otherwise each brother shifts to a new house with his own family. It is customary for the elder to surrender the house to the younger brother on separation. The son who gives a support to his widowed mother and unmarried sisters, gets a lion's share of his father's property.

THE GONDS AND THEIR HOUSES

The Gonds traditionally live in scattered villages. Gonds live in states of Madhya Pradesh, Karnatak, Maharashtra and Andhra Pradesh.. Most Gond houses are built in traditional style conform closely to one pattern. They are rectangular in structure about twice as long as broad, with low thatched roofs, mud walls, but no special orientation. They usually comprise kitchen, living room, a front verandah and small annexe at the back for women in their menstrual period and in the state of ritual uncleanness following child-birth. But sometimes there is no front veranda, and a separate shed is used as a place of gathering.



A map of Gonds House

Many houses have dais built up by stones and mud, to a height of two feet above dust of summer and mud of rains, but in others the cow dunged floor is raised up to two ft. The roof is carried by two forked posts, spanned by a short ridge-pole, and these are jointed by mortise and tendon; six or eight side posts support cross and long beams. The roof is constructed of slanting wood and bamboo rafters clamped between horizontal stays, the thatch is laid from eaves to ridge-pole in overlapping layers and held in place by a light super-structure of bamboo. The eaves hang low and protrude two or three feet beyond the walls, thus protecting the house against rain and sun. The walls, built independently of the roof, are not structurally important and when the framework is complete, coarse wattle screens are lashed to the house-posts and plastered with mud and cow-dung on both sides together with the floor. With years of plastering the level of the floor rises and the walls take on an appearance of solidity, the joint between floor and

wall being gradually evened out. Many houses have wooden door frames and few also wooden doors with peg-and-hole hinges and iron lock and chain, but more frequent are doors of stout closely woven wattle swinging on bamboo lashings.

The front veranda (*osiri*) runs along two-third of the house; well protected from the glare by the low eaves and yet open to every breeze, it is the man's favourite place of rest and work during the hot weather, but in the rains and the cold season it is closed in with bamboo matting and then it is used all for practical purposes an additional room, where the men folk often warm themselves in the glow of fire. A small door leads from the veranda, into the main room (*bimra*) which is a long veranda, and has two doors, one giving on to the street or courtyard at the back, and the other opening into kitchen. In this room, are the stone mortar-blocks where, with heavy pestles, the women husk grains and the circular stone hand mills on which the women, singing, grind the grain for making gruel or bread. There may be one or two store-baskets in the room, and household implements are usually found leaning against or hung upon the wall. Quite often there is also a swing; this may be a wooden seat slung on iron chains from the rafters, but generally Gonds are content with a few looped lengths of rope. Women do much of household work in this main room, particularly in the rains when the courtyard is too muddy, and it is here that the family takes its meals. Husband and wife usually sleep in this room, but in the households with grown-up married children and women seldom sleep in the front veranda, no rule is to who should sleep where; it was always matter of astonishment that how perhaps fifteen persons, including two or three married couples, enjoy the night's rest and pleasure into one of these narrow houses.

The kitchen (*kona*), extending along the whole breadth of the house, generally has two fireplaces, built up into horseshoe of stones and mud, but hearths of three stones are also used; in the corner farthest from the door is a small platform where lamp is lit as night falls; it is called the *pen kamta*, the gods corner, and here morsels of food are daily offered to the clan god. The kitchen usually a dark room which even the fires under the cooking pots do little to light but Gond women with their sure hands and ceaseless chatter do not mind the lack of light and the curling smoke which hangs about them while prepare and cook the food.

At back of the house, adjoining the kitchen, but with a separate entrance from the outside, is a low narrow room (kotiri), and it is here that children are born and menstruating women eat and sleep. This room falls under the eaves of the house and is enclosed on the outside by a wattle wall set at the edge of the thatch, which may be extended several feet to form a small annexed.

Gond house contains little in the way of furniture. There are usually one or two cots with wooden frames and string webbing, and a few low wooden stools. Mats are used to sleep and sit on. There are earthen and brass pots in the kitchen, water pots being often set on trestles along the back wall, and numerous baskets and implements in the living room. Most important valuables are his grains, both for consumption and seed, are kept in the attic, which, resting on cross-beams, has a flooring of bamboo poles and accessible from the kitchen by a short portable bamboo ladder.

By 1977 the shortage of thatching grass began to create problems, (the shortage of grass was a serious problem) that it was necessary to find alternative roofing materials. Tiles were used for the roofing, though these were expensive. Most of the tribal houses in India are roofed with tiles, these are purchased with the help of subsidy provided by the Tribal welfare department. Some people use corrugated iron sheets (tin) which are considerably cheaper. Their disadvantage is that they make the houses hot in the summer and cold in winter. Aesthetically iron sheets are greatly inferior to both thatch and tiles, and houses covered with iron sheets look squat and make shift, compared with neat and cozy appearance of houses thatched with grass or tiles.

Some wealthy Gond families have started using of stone houses in Andhra Pradesh. The Rural Gonds saw that prestigious and durable houses could constructed with local materials, and used their earnings from the sale of cash crops to emulate the example of wealthy newcomers. Only a minority of Gond-villages contain houses built of stone, but the fashion is spreading. New dwellings are still small, for example dwellings for six brothers Jugnaka clan built a large stone building divided into six dwellings arranged in a row. Each section consists two rooms no larger than the space in a conventional Gond house but far more permanent and capable of withstanding bad weather and extremes of temperature. The stone masons responsible for building had

been called from the neighboring district of Karimnagar, and the income from twenty acres yielding good cotton crops enabled the owners to pay masons and skilled workers.

HOUSES OF BANJARAS OF KARNATAKA

Banjaras were traditionally a nomadic tribe, and have now settled down to agriculture. They always settle in quarters outside villages, and own lands on their own account. Even after hundred years, they have been preserving their exclusiveness to a wonderful degree. Their migratory instinct is still strong within them. Hardly ever do they build substantial houses in any locality, and even after a long residence they abandon to shift to another place in the belief that their gods no longer like this locality. They like to have their villages near the roadside. A locality generally has 30 to 45 houses. Each house is a hall thirty to forty feet in length and fifteen to twenty feet in breadth, and thatched with a kind of wild grass called Bادهulla in Canarese. Plaited bamboo serves the purpose of walls all around.

It is invariably dark, as there are no openings other than the doors at the front and rear which are not always kept open. There is no chimney nor any opening for the smoke to pass; so everything becomes grime and covered with soot. This however, serves a useful purpose, namely neither mosquitoes nor flies will annoy in such atmosphere.

At one side is the fire-place on the floor, round which are arranged their domestic utensils, mostly earthen pots and a few copper or brass vessels. At the other end are secured their cows and bullocks, each tied to the poll fixed in the ground at short intervals. The space in the middle is used for dining and sleeping in the night.

There is also a ceiling at one end which consists of several cross beams, from which are suspended several baskets of different kinds and sizes to suit all members of the family.

Behind each house, is a small vegetable garden, where they grow the seasonal vegetables. The pumpkin creepers are allowed to flourish on the thatch, which protects it as well. The granary is mostly in front of the house. They have two small temples of their

own, containing their tribal gods Samaraya and Durga. Each family has even now a fairly good number of cows and bullocks.

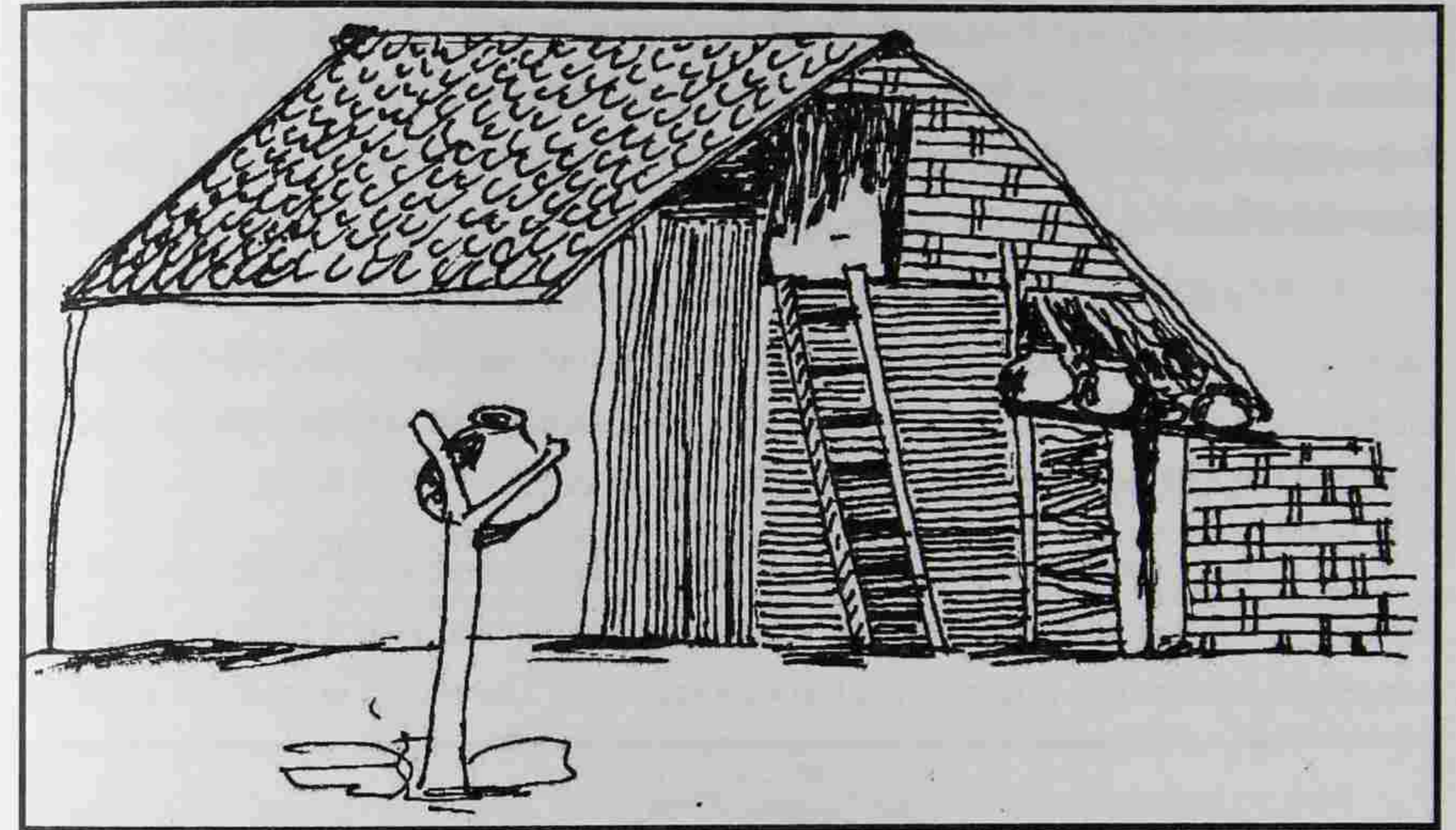
It is said that they are not allowed in tiled houses, and yet some of them are very spacious and have separate cooking, sitting and sleeping accommodation, besides rooms for storing grains. They have large herd of cattle and a separate place to tether them. Their settlement is known as the *tanda*, which is generally selected on a high ground near but outside the village. The reason assigned by them is that their houses should not be defiled by domestic fowls which they do not rear, though they have no aversion to eating them.

Being extremely clannish, they naturally congregate into special quarters of their own choice. The consideration of health of their cattle, conveniences of grazing, housing their cattle and immunity from epidemics, is also other factors in their choice of residence. When once their locality becomes unhealthy, they leave it with least possible delay. Thus their supposed prohibitions against living in substantial houses still betray their predatory habits of living. They have very few articles of furniture and domestic utensils, which are quite in harmony with their way of living. Beyond a few coarse date mats and some earthen vessels, they have nothing else. A few copper and brass vessels are recent additions. The daily routine of women consists in attending to the domestic duties, rearing children and in helping their husbands in their occupations.

BHIL HOUSES

The Bhils live in nuclear family in a small part of village which may contain 6 to 10 families. This small part of the village is known as *fala* or *falia*. When in a family a boy is grown up and marriage takes place, then young husband and wife plan to have a separate house. If the parental house is large enough young married couple, after the first issue, sets up a separate family with his wife and child.

In a Bhil family son or daughter are always welcome. In Gujarat population of Bhils is 3441945 out of it 3790110 are male and 3691043 are female. Bhil boy helps parents when he is young and for daughter parents get 'dapa' cash for marriage. Daughter is very helpful to mother and live with very limited means. She works in agricultural fields and



Bhil Double Story House

looks after younger children of the family. When she grows she goes with parents to work as labourer. For parent's children are assets, hence a couple always thinks and plans for a good or suitable house for the family.

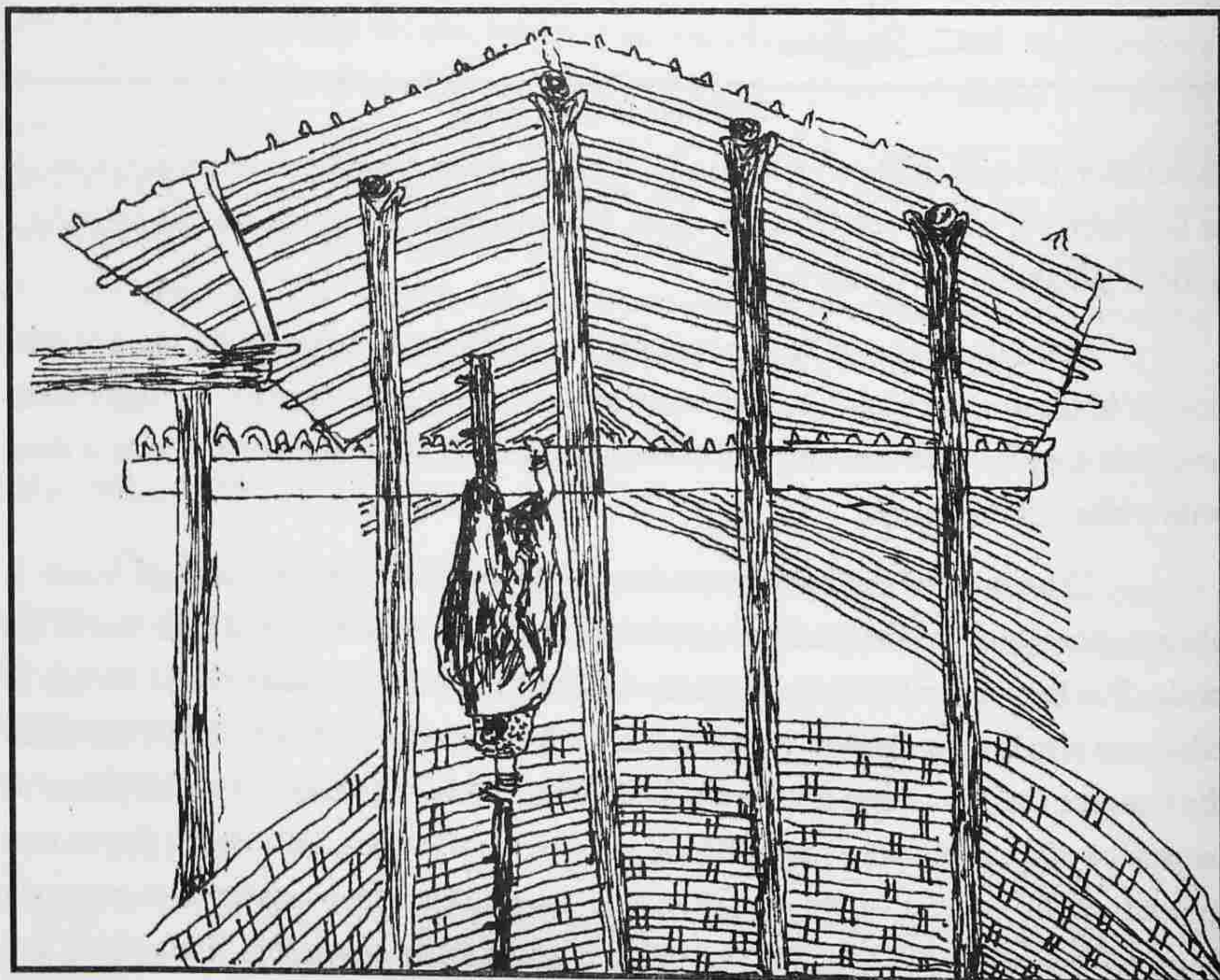
Marriage is one of the most important functions in a family. As most of Bhil houses in forest are 'kaccha', so they renovate the houses at the time of marriage. Walls and floor are plastered with clay and cow-dung solution. Decoration on the floor is done with white coloured paste.

The house of the bridegroom is also decorated. A special marriage booth is always set up close to the bridegroom's house and some times a second near that of the bride. The booths are built of soft, easily fashioned wood of the *salar*, called *Helero* in Bhili and also known as the incense tree. Its bark has characteristically bluish tint when the trees are old. This wood is not used for building ordinary houses as it has no power of resistance and easily falls a prey to the ravages of the white ant. Four stakes driven into ground on the corners of the approximately square. The sides measured from ten to fourteen feet, while the height of the stakes is about six or seven feet. The ends of the stakes form a fork so that horizontal beams can conveniently be laid along the two

opposite sides of square. Five, seven or nine poles are then placed transversely over these beams, forming a support for the roof of green bamboos or other branches, which serves as protection against the sun. Finally garlands of mango leaves are hung all round the edge of the flat roof.

The Bhil houses are rectangular buildings rise above the ground, one layer of earth and stones, with mud walls. The roof rises at an inclination of about 45 degree from the two long sides. The houses are made of bamboo thatch, mud and cow plaster. All the walls are blind except the front one which has a small door.

Some houses have entrances from behind also, though these are strictly private, leading to the kitchen-cum sleeping rooms, no person who is not intimate with the household, can enter a house through such a rear door. The proper entrance is the front



A Bhil woman reaching to roof

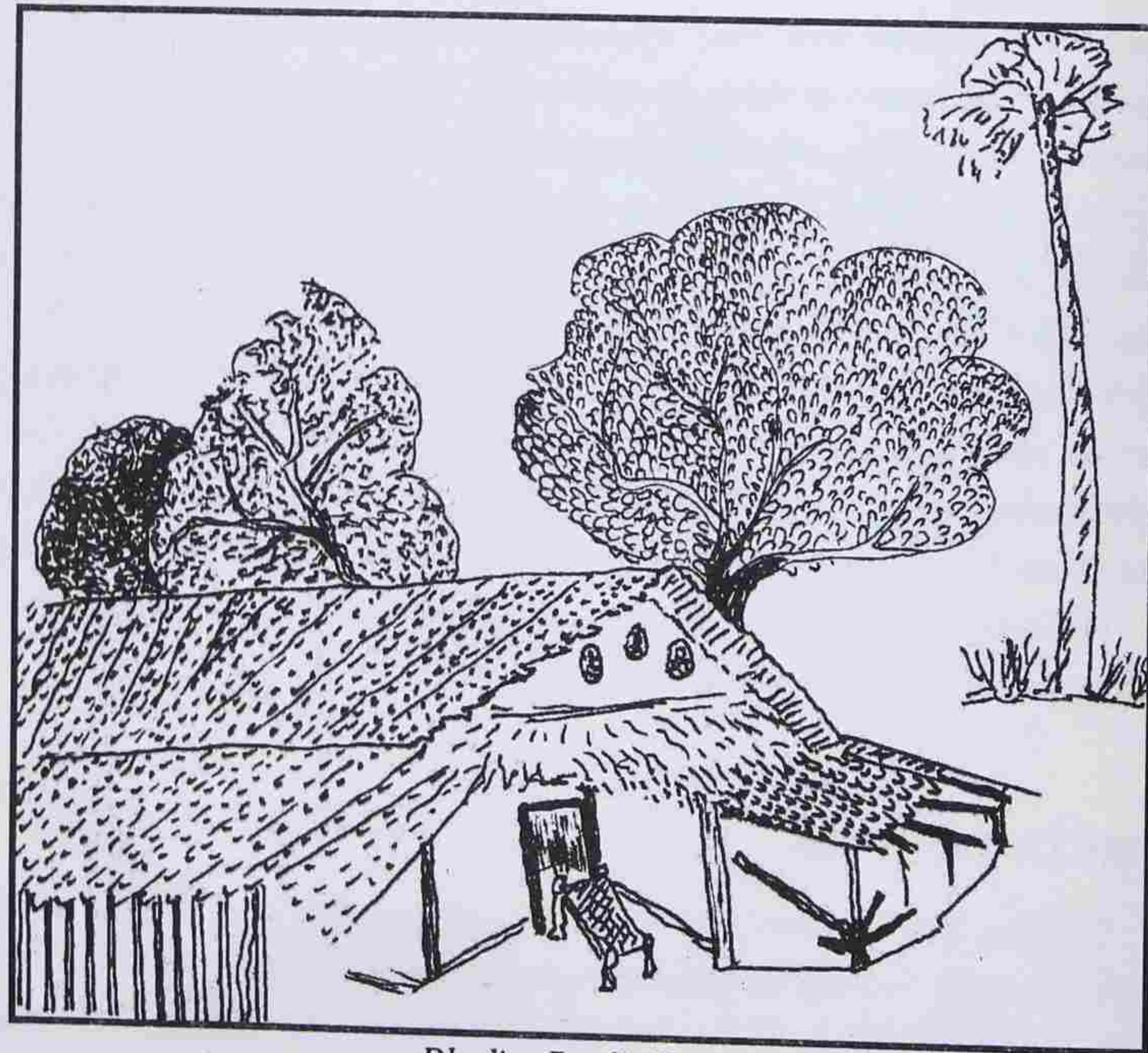
door, which generally remains open but is closed from inside by an obstructing bamboo door at night and padlock from outside when the inmates go out. The Bhil erect a bamboo stand for water 'mohali' just adjacent to the hut, generally in front of the house or at the back of it. Water for cooking and drinking purposes is kept on it. Water is taken out from it with the help of a wooden cup named 'dovi' or 'tumbi' and drunk with the help of palms. 'Dovi' or 'tumbi'-the gourd is not permitted to be defiled by touching the mouth. A thatched cattle-shed *mandva* is also erected in front of the house. In the dry season, hay and grass are piled over this shed. Bhil houses are divided in rooms with walls though they have one common entrance for the house. Many houses are double storied. The staircase is of bamboo wood and are portable. Some houses have balcony-'dagalo' in front of the second story.

Bhils are existing for thousands years and is a strong tribe. They are not nomadic but live in forest area. They invite the specialist for constructing or guiding to construct the house known as '*Ghar-thano-karigar*'. The technician decides the form of the house and with the help of house owner start constructing the Ghar-house. Walls are constructed in two methods one is to use cobs and other is to use bricks baked as well as unbaked. For double storied house, first roof is prepared with wood sleepers covered with clay plaster. The plaster is maintained by re-plastering after every month. The roof is done with the help of bamboos and 'Naliya'-tiles like half pipes. The roof with back-slop is known as '*pachali-parsal*' and front-sloped roof is known as '*agali-parsal*'. The main beam of the house is selected very carefully. In main living room of the house a bamboo at the hight of 6 to 7 feet is posted on two walls so dress, quilts (*pathari*) etc. can be hanged on it. The house is surrounded with wooden logs and in this '*Jhonpa-sudini-bad*' courtyard grass for animals as well as fire wood is kept.

HOUSES OF DHODIAS

Dhodias live in Valsad district and nearby area. The District strip of valleys between the Arabian Sea and the Sahayadri range is known as the country of Dhodias. The entire country is hilly as it is in Sahayadri hill range. These villages are near the

national highway No 8, so communication is easy. The traditional villages are dispersed with mainly clan clusters at places. The houses are lineally arranged. Drinking water is collected from river, wells and now tapes. In traditional villages there are no individual or public latrines in villages. The Dhodias of the traditional villages are mainly settled agriculturists. (67.93%). Other occupations of done by Dhodhias are carpentry, 0.29%, tailoring 0.29% and diamond cutting 0.30% and truck business 2.62%. Among Dhodhias the literacy rate is higher than other tribes. According to 2001 census 67.05% are literate. Literacy has developed urbanization among Dhodhias, large number of Dhodhia families have acquired urban residences and occupations. Those who live in villages and practice agriculture, produce paddy, jowar, bajara, nagli (Eleusine coracana). Kodra (pespalum scorbieulatum) and few variety of pulses and vegetables.



Dhodiya Patel's House



Tribal Village



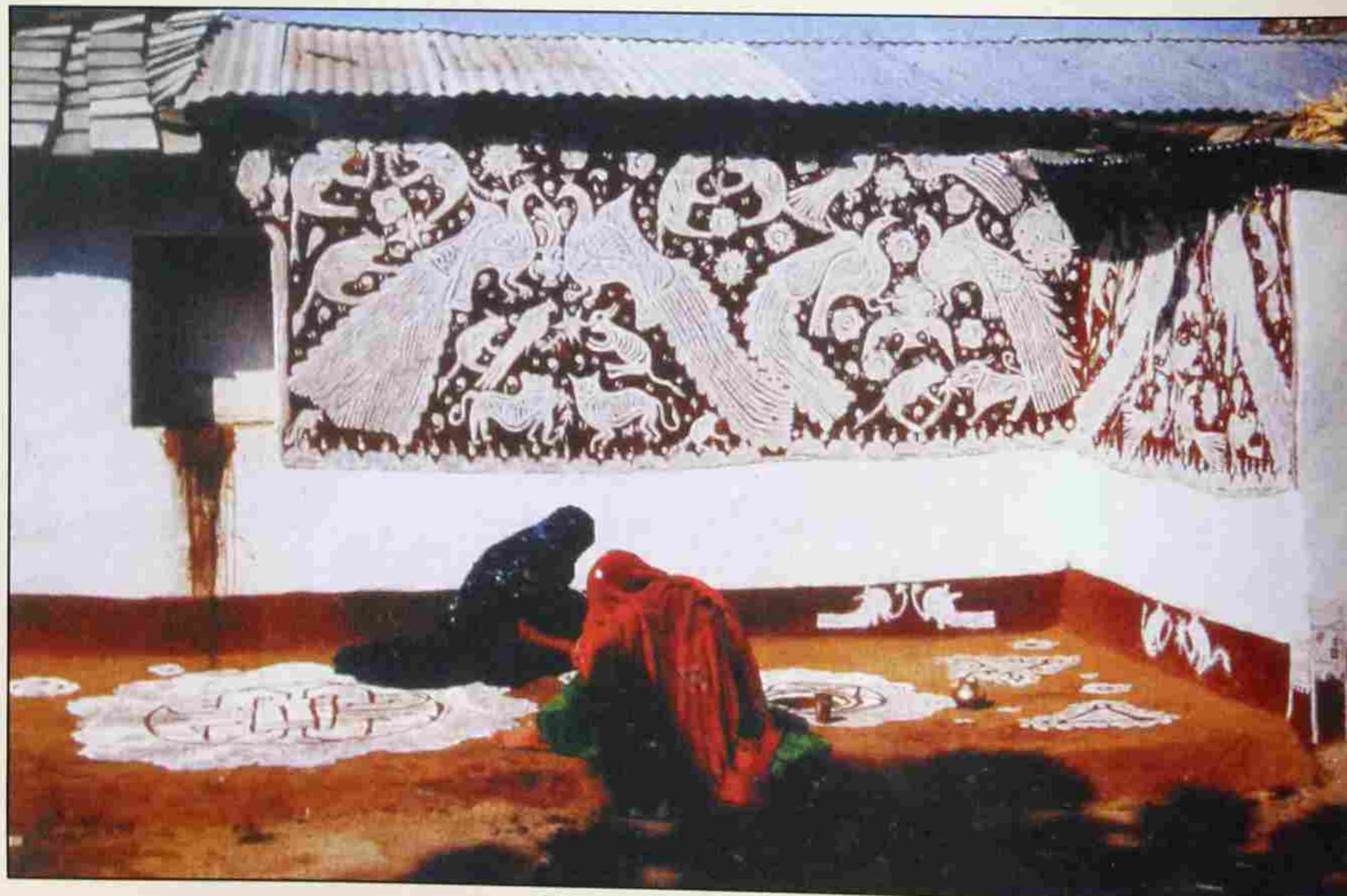
Tribal House



Plastering the floor



Swing in Veranda



Decorating the floor



Interior of a Tribal House



Interior of a Tribal House



Tribal Deities

The houses in the villages are north faced in general. This is due to belief that the house will be productive and safe. The houses are two roofed with narrow veranda in the front. The roofs are either thatched or made of backed-tiles. The walls are made with tampering article like dry stacks of Kodra plants. The floors are kachha in general. Rooms are rectangular, main room is bed-room in which they keep valuables and dresses etc.

The kitchen is another important place where hearth and pan and pots are arranged. Kitchen is used as dining room and water pot is also kept in kitchen. Generally Dhodias like to have kitchen garden around their house and produce some vegetables like brinjals, gourd, pumpkin, chilly, lady fingers etc. The house of agriculturist Dhodia requires place for animals like cows and oxen. Due to the presence of irrigation canals the dry and wet cultivation is used, therefore they get two or more crops from the field. This influences the typology of the house also. It has been observed that Dhodhia earning in industrial complex have agriculture as subsidiary occupation. As such the wages earned at the factory are increasingly used for development of agriculture and gradually the subsistence sector is transferred into commercial sector, which is reflected through their practice in cash crop cultivation.

Interest in money has changed house types. Now they have partly cemented house and use of tiles for floor, and partly earthen house which is traditional. For keeping fowls, cows and animals Dhodhias keep partly mud house. For renting out a portion of house to industrial workers they construct a few rooms with cement. Dhodias are entrepreneurs and find new means of earning, including construction of new type of houses in centers of business and industrial areas.

One observer commented that, "The houses in the village are almost alike with the traditional village-style. Though a few houses are pucca and roofs are either of tiles or of asbestos sheets. The floors are Kachha, only one house is of roof with cement and concrete (R.C.C.). The cowshed is an extension of the main room; sometimes there is a separate place for cattle-shed.

CHOWDHARY HOUSES

Choudhary is a large and important tribe of Gujarat. The total population of Choudhary tribe is 282392 (141512 male) and (140880 female) according to census of 2001. Nearly 55.00 per cent people are literate and the percentage of literate women is also quite high. The house types are rectangular and tile roofed. These type of houses are also found among Gamit, Basavas, Bhil and other tribes. They construct the house on wood structure. Wood is more suitable material for rectangular house construction because traditionally wood is easily available in heavily forested areas. The rectangular ground plan make it easy to subdivide the space by means of half walls. Dividing the space in the rectangular ground plan made it easy to subdivide the space in the rectangular house and is technically very simple. Generally the house is divided into bedroom, kitchen space and store. Some families have one room space on the front floor and have a simple stair case in drawing room.

The drinking water vessels are arranged artistically in the kitchen which is the important part of the house. Generally water vessels, are kept above the ground on the wooden planks. In one corner of the house the Chulah-hearth is placed and in the other corner water vessels are placed. The steel and earthen water vessels are generally used for storage of drinking water, for cooking and serving the meals in metal utensils are used. Plastic goods have been adopted by tribals, which are available in moderately cheaper price.

Most of these houses have the veranda in the front side of the house. Veranda is a multipurpose space and used for many purposes. Veranda is a four cornered platform which is the entry point in the house. It has outwardly inclined roof and remains open on three sides. The Veranda is space for receiving outsiders, guests and to sit and watch outside activities and has many other functions;

1. The veranda is used as a guest room or drawing room.
2. In south Gujarat a bench is kept in veranda for sitting and receiving people.
3. Senior members of family sit, take rest and keep watch while staying in veranda.

4. Children of the house owner and other children play.
5. Domestic work like grinding, processing rice etc. is done in veranda. Traditional manually used grinding stone and other equipments are kept in veranda.
6. Professional work like papad making by Choudhary families and stitching on machine is done by Vasava Bhils while sitting in Veranda. Veranda is also useful for professional work at home.
7. At the time of marriage the veranda becomes community space where various rituals are observed.
8. Dance and songs are performed as community activity in veranda.
9. Veranda is a private as well as a public place. It divides the house into two parts : public or secular place as well as private and sacred place.

They not only live but also store food, dresses, beds, utensils. They have to make arrangement for drinking water. The processing and cooking food is done in the house. The tribal-kitchen has improved much in recent years as more developed utensils have been adopted by them. On the back portion of the house a small platform is created for bathing and keeping water buckets for cleaning etc.

Many Choudhary families have migrated to urban areas and shifted to houses constructed with cement and concrete. Now women have not to work for maintaining and helping in making houses. It is the new area for studying the changing situation and attitude of women about the house.

KOTWALIA HOUSES

Kotwalias are master craftsmen since time immemorial. Bamboo and Kotwalias are so much dependent on each other that Kotwalias are called as Bans+fod, means those who cut and work with bamboo. Kotwalias still work on bamboos and that is their livelihood. The total population of Kotwalias in Gujarat was 19569 out of which 10040 were males and 9526 females in 1991. In 2001 Kotwalia's population was counted as 21453 out of which 10794 were males and 10659 were females. Kotwalia community

includes Vitolia and Barodia tribal groups. Literacy in this tribe is low, only 33.00 per cent are literate. They are treated as primitive tribe. Kotwalia population live in Surat and Valsad districts. In Surat district Kotwalis live in Mahuva, Vyara, Songarh, Mandvi, Valod, Bardoli, Mangrol and Uchhal talukas (sub-districts). The largest number of families live in Vyara sub-district.

Kotwalias are craftsmen and work with bamboo so they make their houses also with bamboos. Kotwalias live in their own community villages and people of other tribal community do not live in their village. The State Government has declared Kotwalia as a primitive tribe.

They make their own house with bamboo strips. The strips are beautifully woven and arranged to construct walls. The strip wall is plastered with the solution of clay and cow dung.

The detailed method of constructing house is given in another chapter. All Kotwalias live in nuclear family, a small family- husband wife and children.

Children start learning bamboo craft in early age and girls help mothers in their



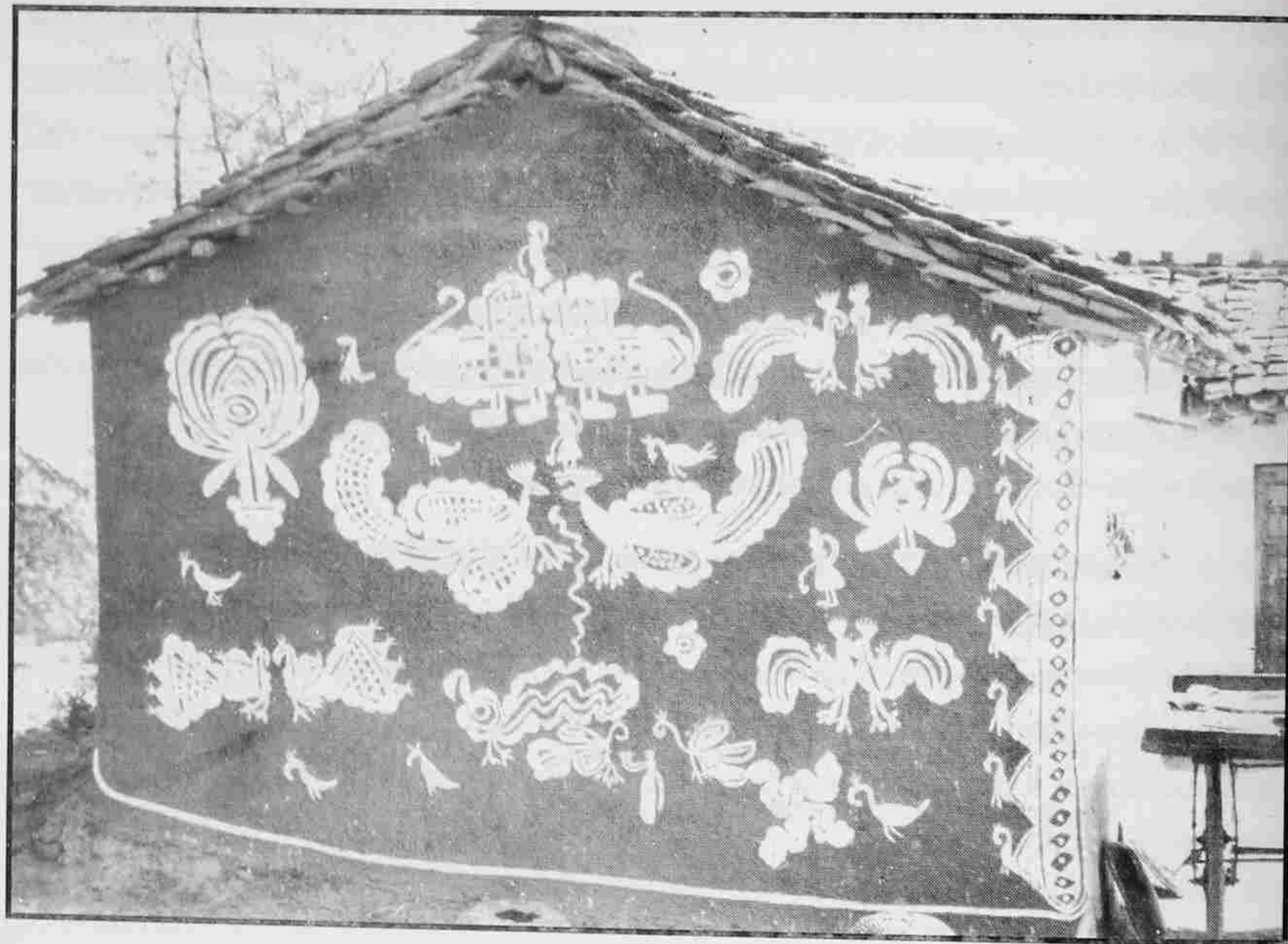
A Kotwalia woman working in front of her house

craft work. Women maintain house and plaster floor and walls. They make kothis and keep them neat and clean. In a Kotwalia falia good constructed houses can be observed. Most of the *falias* are planned in semi-circles and one part of the circle is kept open. The central part of the hamlet is work place for families as well as play ground for children. Kotwalia use bamboos, beams, mud, cow dung and grass for constructing the house. Now-a-days the Manglore tiles or locally made tiles are used for the roof. There exist striking similarities in pattern of house belonging to various tribal groups. The variations and alterations found among the houses of tribal communities may be ascribed to the general socio-economic status of the individual family.

The house is constructed with a plinth of 18 to 20 inches. The thatched roof of a tribal house is inclined and its edges extend beyond the walls and remain a couple of feet above the ground. This type of inclination of the roof and its extension protects the house from the rain-water. This type of slanting roof also serves as a shield during extreme warm months of summer. The scorching sun rays do not reach the interior of the house, thus keeping it cool.

MINA HOUSES

Minas are concentrated in of Jaipur, Sawai Madhopur, and Tonk districts of Rajasthan. They are tall-stratured, long headed and show a long nose form which more often is of narrow variety. Generally they are non-vegetarian but many have adopted vegetarianism. They are monogamous and generally acquire spouse through negotiation. Divorce is permissible and divorcees, widows, and widowers can remarry. They have more nuclear families rather than the extended families. The sons inherit parental property. They have two groups- Chaukidar and Zamindar Minas and land owning tribe. They are believed to have been rulers of the Jaipur area and lost it to Rajput groups. They live in earthen houses in villages and adopt cement and stones as they get economic opportunity. Mina earthen houses are beautiful and women take keen interest in decorating the houses. The rectangular house is constructed with mud and stabilizer material. Walls are thick and cobs are used for building the house. The cobs-roundish



A House of Meena Tribe

lumps are forcefully laid in row to make a wall. Mina houses are generally single storied, but many have a small room on the first story and open space in front of the small room. This small room is called as "Medi" and used for guests. On the ground floor most of the houses have a boundary with 6 to 7 feet wall with a small wooden door. In night the door is locked as there is always a fear of wild animals.

Outside the main door platforms on both sides are constructed known as "chabutra" which are used for sitting, working, group singing, playing for children and cleaning wheat, jawar etc. Women work hard in agricultural fields, at home for maintaining houses and decorating them with their beautiful drawings. The drawings-"Mandnas" by Mina women are most artistic though they only use one color-white on red ochre wall. As the area is close to tiger sanctuary they draw variety of tigers, peacocks, birds and wild life on the outer walls of their houses. They have bed-room,

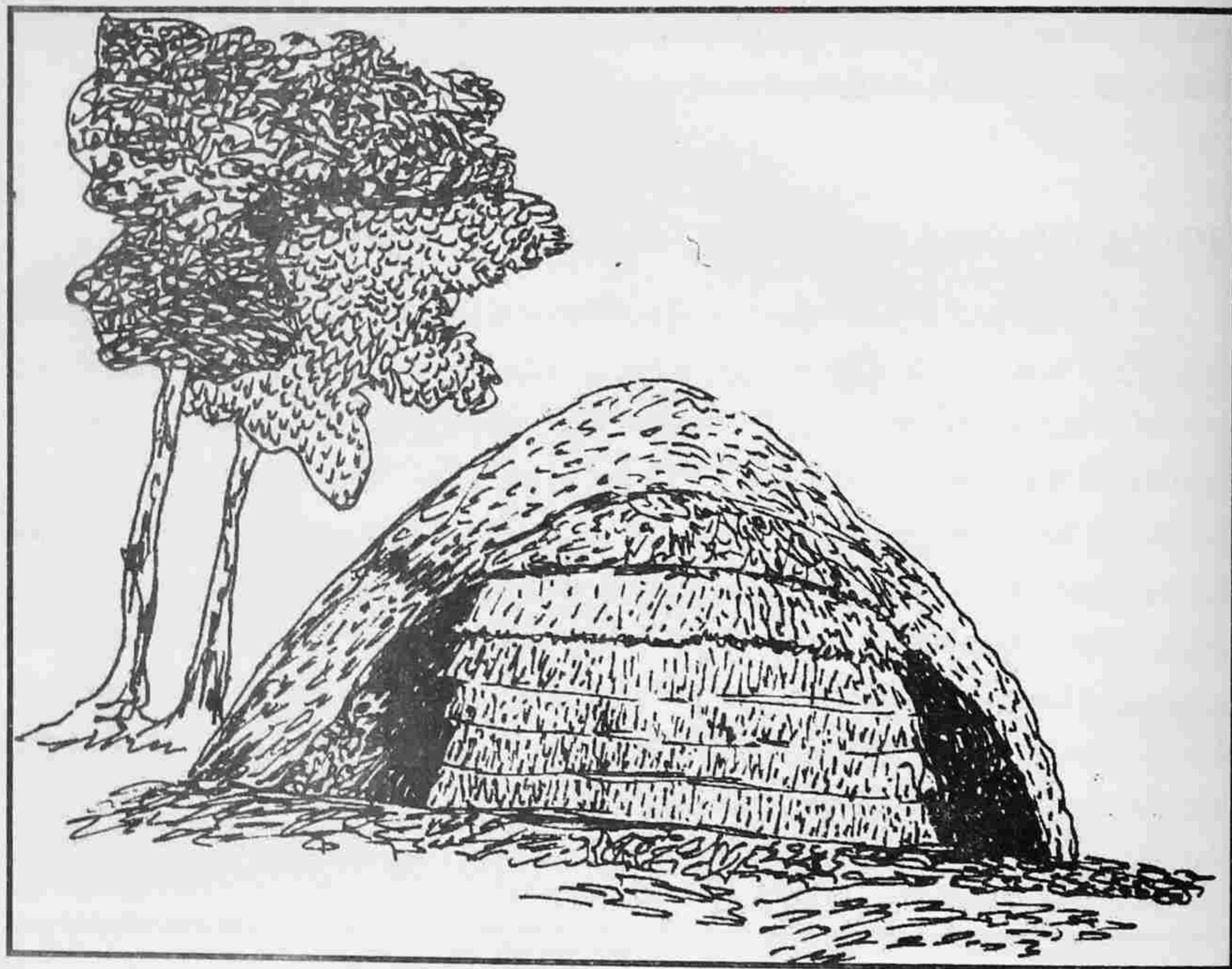
kitchen and space for family rituals. Kothi-grain stores of Mina tribes are very beautiful as they put colors on it and decorate with small pieces of mirror.

HOUSES IN CAR NICOBAR AND ANDMAN ISLANDS

The houses in these islands are also scattered and there are large number of trees around the houses. All the buildings stand on pile-heavy beam driven vertically into ground as support for building. These piles are 6 to 7 ft high. The living - house-patti roughly 20 ft in diameter, and 15 - 20 feet in height from floor to apex, were of shape something between an inverted basin and a pie-dish. Covered with heavy thatch of lallang grass. Without windows or visible entrance, the interior is reached by a neatly made ladder of bamboo, or notched pole, through a trapdoor in the floor, which works on hinges and has a alarum attached, so that any nocturnal intruder will make his presence known. The top of each pile is fitted with large, circular wooden disc, to prevent the entry of rats and reptiles. Beneath the house, in the shade, there is generally a swing, and also a platform of springy cane that serves as a lounge. Baskets, bag-shaped and white-meshed,



A Andmans & Nicobars Houses



Onge Hut at Little Andamans

hang from the piles, and in these the hens are put when it is egg laying-time.

Inside, the walls are generally neatly lined with battens of palm area attached horizontally; up in the roof, a kind of attic is formed, by means of a light shelving of areca or other palm wood, having a square aperture left in the center for entrance. On the floor, which is also grated, are the wooden clothes-chests that contain family possessions, betel-boxes, the mats of areca palm leaf, and the wooden head rests which are used when sleeping. From the walls hang baskets, spears, crossbows, suspensory contrivances made from small branches with part of the twigs left and also tobacco, coconuts, and piece of pork-the offering to spirits.

The kitchen has a ridged but curved roof, an oblong floor, rounded at the back and in front, and a platform, and a semicircular projection of roof to shade the doorway.

At the end fire place is situated. A flat block of wood is hollowed out and covered with sand and clay, and huge clay pots- often with a capacity of many gallons- stand above it, on pieces of stone, raising them clear of the coconut husks which are the principal fuel.

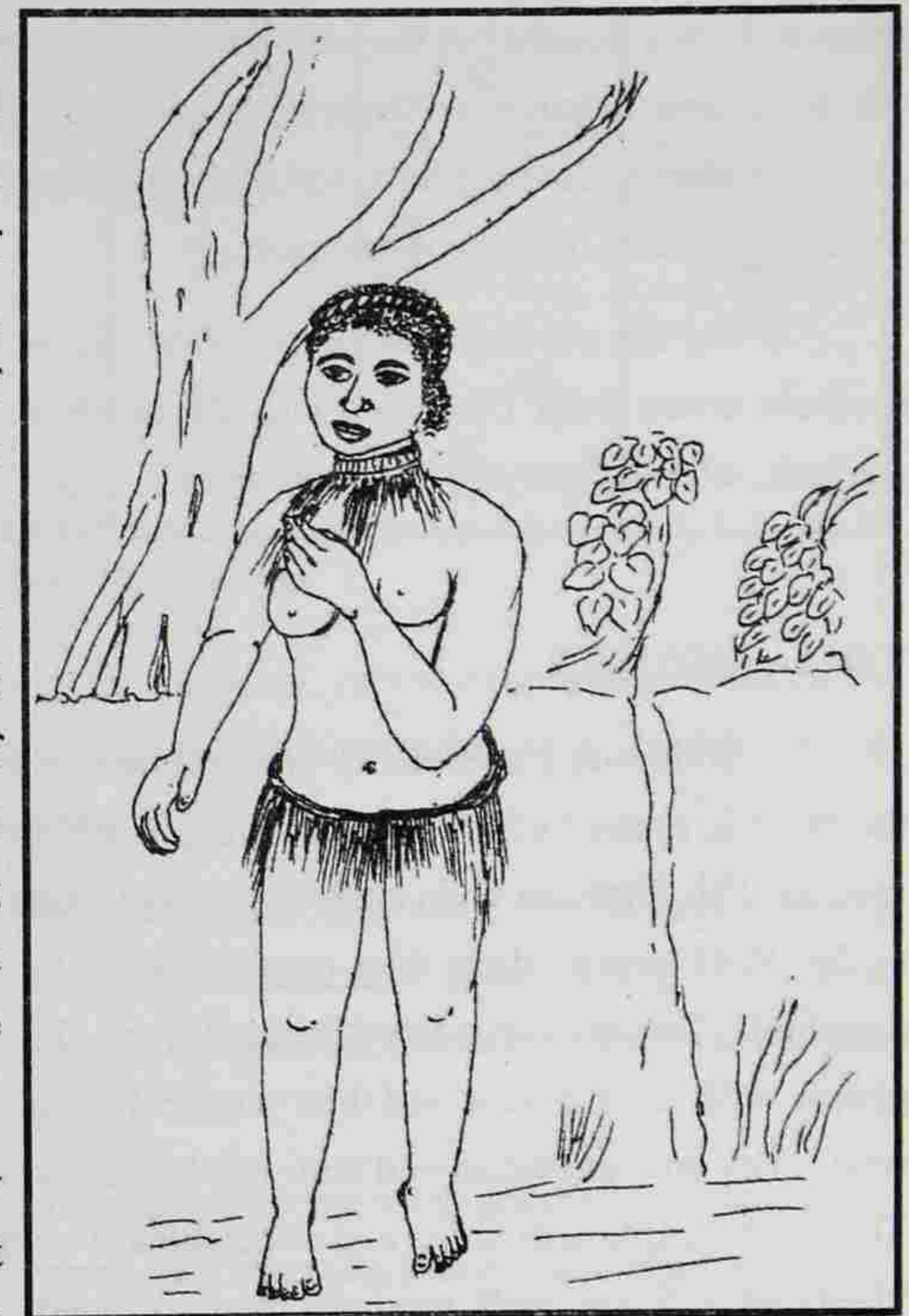
Up in the roof, are stuck, between the thatch and the rafters, hollowed out wooden troughs, in which the food of pigs, dogs and other animals is prepared. Across the beams, are hung coconut shells-joined in pairs by a short rattan handle- which contain the day's supply of water.

The house is generally thatched with lalang grass, but sometimes palm leaf-is fastened to a framework, with vertical rafters of the mid-ribs of the coco palm, joined cross-ways by battens of areca wood. Now nails are also being used in making the house.

Houses stand in groups, on open sandy ground, and interspersed with them are plantations of bananas, melons, and sweet potatoes-protected from the numerous roving pigs by zigzag fences of rails piled horizontally. Variety of fruits are grown- coconut, orange, lime, shaddock, soursop, jack champada, tamairind and papaya.

The teeth of all were stained by constant betel-chewing, and, since the blacker the colour the more beautiful is the owner, to produce this effect the teeth are not cleaned.

The buildings used for community activity are known as *Elpanam*. The shape is



A Jarawa Woman

same as living-houses but they are larger. These buildings are the result of efforts of the whole village. Adjacent of these town halls are the stores of the traders. Some buildings are equivalent to the hospitals, and several maternity houses, where women take up their residence shortly before confinement.

On the out skirts are huts called "*Talik ngi*" the place for the baby. To these mothers come from *Elpanam* with the newborn child, and spend several months in solitude, attended only by their husbands.

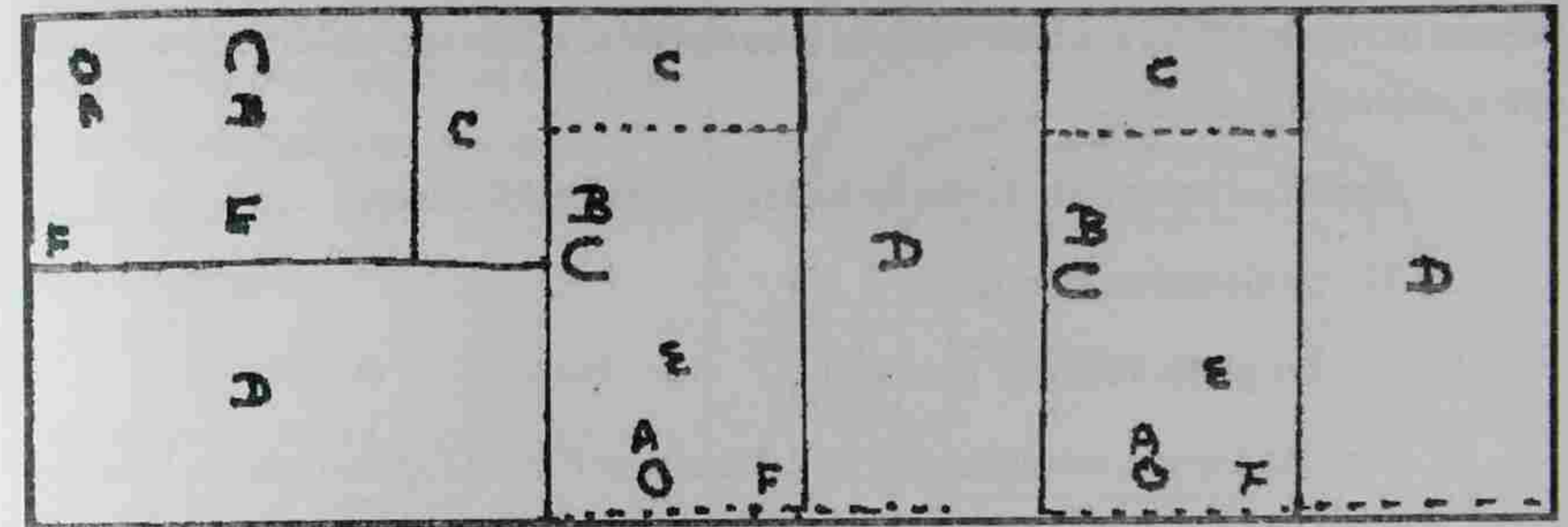
TODA HOUSES

Todas are traditionally pastoral race, occupying themselves almost entirely in the bucolic pursuit of herding buffalos, of which they are in possession of a very fine species. The Pastoral Toda made the Nilgiri Hills of Tamil Nadu their home. According to the 1981 census their total population in Tamil Nadu is 875 (434 males and 441 females). They are considered Proto-Aryans. The Todas are of tall stature, longheaded people with narrow nose and their physical features confirm to be of the Mediterranean type. They are vegetarian and their staple food is rice, which has largely replaced millet. Their consumption of fruits and vegetables is moderate; roots and tubers are also eaten. Plenty of milk and milk products are consumed, as well as coffee laced with opium is taken. The Toda men regularly consume alcoholic drinks. Snuff is popular among the men and women and it is applied on the gums rather than in the nostrils.

Toda families reside in permanent villages- *Mand or Madd*-having each a certain tract of grazing ground surrounding it. Each minor division of the family has a house live-*Arsh*- in the *Mand*, and share of the village land.

Nearly every *Mand*, however, has its duplicate, some times its triplicate, to which the entire body of the inhabitants migrate in certain seasons of the year, both for the sake of fresh pasturage and with the view of escaping the inclemency of situations which become exposed to the west-monsoon rain and wind.

The storm drive at times with such intense severity over the wilds, that although



Map of Toda Three Houses

at the time, the actual thermal state may be far from low, yet the evaporation induced by the extreme violence of the rain is known the lower the temperature of the body so as frequently to cause death of man and animals.

The people have much difficulties due to storms as their dwellings are poorly constructed. The rooms get cracks and become uninhabitable. Todas, living in elevated climate, have far more to fear from cold than from heat, they have to preserve the infant life.

When these houses were originally built, they were designed with a room only. This can be judged, partly from the Toda name for a house and for a room being identical, and in part from the symmetrical arrangement of the door and verandah: also, like an after thought, out of keeping with the original design, and holding an awkward positions in a house whose roof is continuous over the ground. It can be deduced that with the number of increasing members in the house the design of the house is changed.

A very small part of the house is utilized for cooking, eating, and sleeping purposes. Traditionally the room was 8ft. long, 8 ft. broad, and 8 ft. in height, and as many as eight people used to board and lodge in this diminutive space.

The plan of the Toda house shows the mode in which room is economized. Against the walls, at a convenient height over both store and fire-place, slips of split cane are fastened vertically, so as to form slings; into which fire-wood is neatly inserted, and in which it rapidly dries. The women are careful to supply dry wood in this manner. They

use one or two dry sticks at a time. As there is no smoke so adults and children do not have eye-complaints.

Important items in the house including kitchen are following:

- a. The pestle and mortar- Kudi
- b. The fire place-Vorsh, or Vorshkall.
- c. The store space, measuring 4.5 by 2.5 ft in which brass cups and plates, bamboo milk-pails-Honnu- are placed.
- d. Raised bed of clay, measuring 8ft. by 3.5 ft., for the elders.
- e. Vacant space on the floor, 5ft by 3 ft., where the family eats and where the juniors sleep.
- f. The door.

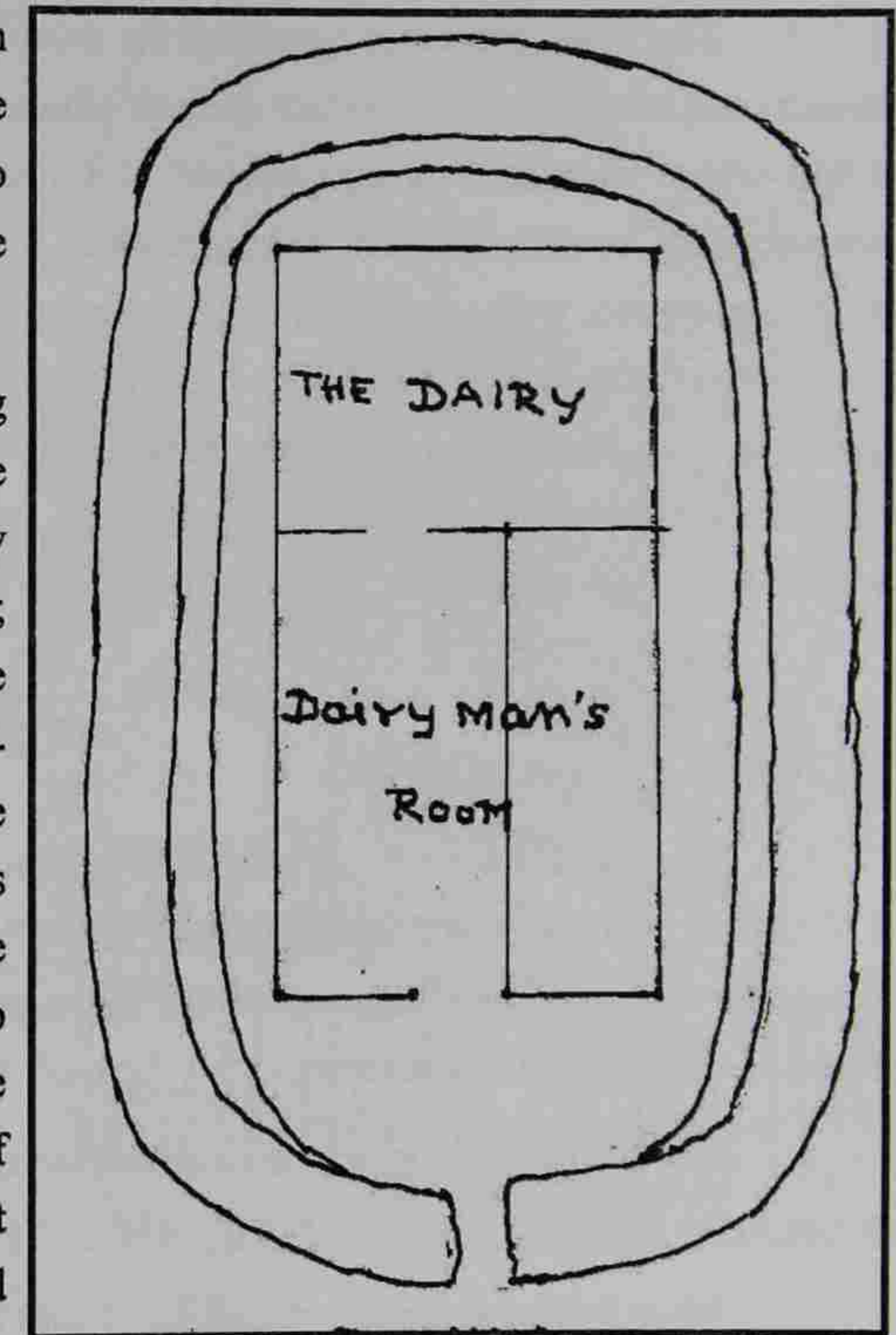
Nearly every Mand, and in some instances each house, is surrounded, at the distance of three paces by a low enclosure wall-Tar- built neatly with mud. This wall, which looks old is low about 3.5 ft. high. It is to defend the house from man and wild animals.

In close proximity of Mand we will invariably find the pound or pan- Tuel- into which the buffalos-*Esm*, *Er* a female of the village are driven every evening on return from the grazing grounds. The pan which varies in dimension according to the wealth of the community in cattle, is fenced strongly. ; with wall from four to five ft. in height and fence with stout branches. They use fence of stout branches for male buffalos- Tuel.

The heard of buffalos, being competent to protect itself from wild beasts, they are left in the pen without further protection, and indeed, without shelter though calves-Kaon (male), and karr a female- whilst quite young are shut up at night in little huts situated close and contiguous to dwellings of the owners. Deserted cattle pens have a times been mistaken for Druidical circles. When the enclosure wall has been made of large blocks of stones, and from paucity of material it had been constructed of double rows of stone filled it with soil, and the earth had in due course been washed away, then

the stones left standing would remain in very religious form, most attractive to archaeologist who are unable to understand the habit of primitive pastoral people.

In addition to the dwelling houses, every *Mand*, contains a house devoted to the purposes of a dairy -*palthchi*-consisting of two rooms; the outer-*porram-al-g-arsh*- for the residence of the dairy man-*palkapal*- and the inner room-*ulg-arsh*-for the storage of milk-pen and for its conversion into clarified-butter. The building varies in size according to that of the village herd. : From the dimensions of an ordinary house of two rooms and one half. Generally it is situated apart from the *Mand*, and presumably for the sake of coolness-is found on a site which has been partially dug



Palthchi - Dairy

out from the side of the hill, on the slope of which the *Mand* is situated. The dairy is always enclosed within its separate wall, which is built very close to it and the outside of the wall is often of earthen. The outer door is much of the size of those in ordinary dwellings, but that in the partition wall, forming the only means of access to dairy room within, is of the minute dimensions ; probably one cubit high and about half cubit broad.

The plan of-*Mand*-house explains the construction of house and dairy. Toda villages are invariably situated in open, exposed to the sun almost daybreak to sunset, but sheltered by the hill-side from the full force of the wind.

The Todas have been credited for selection of sites for *Mands*; owing to the beauty and often, romantic nature of their situations; invariably on some open grassy slope, where wood and spring combine. Todas have very strong practical sense of the advantage of localities, whilst seeking shelters for themselves and their cattle from the monsoon storms, with a dry bit of soil in proximity to water and fuel.- the whole central area with regard to pasture-obtained. By means of the natural advantages of a lovely landscape, a harmonious whole, very striking to visitors of cultivated tastes. The houses of Todas are specific and dependent on their job. As they are pastoral community so their way of life is dependent on buffalos rearing.

HOUSES IN MALDIVE

There are 204 inhabited islands in Maldives. The population was around 130,000 in year 1975. All settled islands are called 'ra'-meaning island. There are no words for city town or village in Divehi language. Male is the capital of Maldives and focus of all trade, traffic and ideas.

For drinking water, people catch and store the rain falling on their house roofs. A house in the Maldives is a definite entity, a legal residence.

Most houses are made of matting of split bamboo or woven coconut fronds tied on solid wooden frames. There are no jerry-built-slums. Most of the houses are made of matting of split bamboo or coconut fronds tied on solid wooden frames. Until recently, most roofs were plaited fronds, but in the most prosperous islands corrugated iron roofs are now widely used. Houses built on coral stone are increasingly popular, and on some islands the majority houses are of this construction; but on others only one or two local elite can afford masonry houses. It requires great labour to break off coral chunks under the ocean and bring them up, move them by boat to the location, split them into usable pieces, then grind and slake the lime mortar and build straight and plumb walls. These walls usually crack before long. But the desire to have stone houses is not matched by people's income, so all over the country one can see houses partly finished and which may take years to complete.



A House in Maldives

Fine wooden houses were built before this century, and one can still see some of them here and there, constructed with wooden panels in front showing exquisite skill in carpentry. A few mosques, such as Hukuru Muskit in Male, display elaborate wood carving on the door posts, screens and beams, and they may rest basements of finely sculpted coral stone with running motifs derived from medieval Sri Lanka. The mosques of various styles scattered over the Maldives are worthy of an architectural study.

Some of the fine old houses have roofs of Mangalore tiles, imported from Kerala, and gracious homes with fine furnishings suitable for nobility. In Male and the more prosperous islands nowadays, new homes have roofs only of corrugated iron: even the main mosque in Male now has an iron roof, though it was thatched early in this century.

It has been found that iron roofs are highly unsuitable, as they radiate the equatorial heat, hardly any house has cross-windows and roofs also rust quickly in the salt air.

Houses are usually large enough for comfort. There is a main room and back room for storage, and there may even be several bed rooms, or the main room may be portioned into sleeping cubicles; there may be an anteroom or a veranda shed in front too. Cooking is not done in the house itself, but always in a small separate shed in the back yard, cramped and blackened with soot. If there are male guests, women retire to the rear; if not, they may use the front room and the swings.

Most houses traditionally wood have at least one bed-sized swing, but a few even have one in every room. Hosts and guests converse while sitting on the swing and keeping it in perpetual motion, like a boat on the sea. Many houses also have a row of seats, made of a loose rope netting over poles, in front of the house or under a tree in the yard. Devehis enjoy their periods of relaxation, gossip and betel-chewing.

No body sleeps on the floor in the Maldives, unlike in south Asia. It is regarded improper. The floors are usually white coral sand, often smoothed, and covered with fresh sand at festival time. Each house has one or more long wooden bench-beds in the main room, on which family members sleep; these benches are used in the day time for socializing and also as dining tables. Some older houses have a knee high barrier in the front doorway to check evil spirits from entering.

Behind the house and beside the kitchen there is usually a shallow well, the water drawn out with a can (formerly a coconut shell) tied to a pole. There may be a bathing cubicle of plaited thatch near the well, with more prosperous homes having a walled bathing compound in the rear.

There are two acceptable toilet procedures. The most common one is to use the beach, which is not far from any house in the Maldives, though women, and some times men too, are afraid to go out at night. The other method is to use a designated area in the back yard as a toilet, making a small hole in the sand with a stick kept there for the purpose and covering it again. The myriad ants consume the offal, but in crowded places

this practice causes pollution of the fresh water lens which lies not far below the sand surface.

The house (ge) has a compound around it demarcated by stick fence, matting or stone-wall. Over the past few decades very wide streets have been carved out in almost all populated islands. The fruits of the trees that grow in one's compound belong to the house-owner, and in the southern atolls, people grow papaya, banana, tapioca and other useful plants in their compounds. The land itself, however, belongs to the government, and cannot be bought or sold, only allotted to citizens of an island. The house itself, however, is a private property and is inheritable.

Houses at least those of the older families, have names as is true in Kerela and Sri Lanka from where the Maldives derived most of the cultural heritage. A person may be identified by his name. The homestead (goti) in the Maldives is not only the source of one's identity, but it is a refuge, and it is unlawful for one to enter the home of other without permission; doing so will bring punishment from the island chief. One of the attractive features of Maldives is the orderliness of homes and the care with which they are maintained, even by poor people. And it is because of this that villages in the Maldives appear more clean and orderly than in most other parts of South Asia.



YOUTH HOUSES

The youth houses exist in all tribes. These houses are public houses or town halls as well as guesthouses for the tribe. The village dormitories are found throughout the world. These are called the communal barracks of primitive races. S.E. Peal, drew attention to the fact that 'from Bhutan to New Zealand and from Marquesas to the Nigar', the system of village dormitory existed and was distinguished with certain persistent features.'

Firstly except among nomadic Australians, there is a special and recognized building, or buildings, for the unmarried young men and lads to sleep in, and at times for the young women, also in many cases together.

Secondly in barracks without exception there is complete liberty between sexes until marriage.

Thirdly, and most significant of all, these barracks are invariably taboo to the married women.

The dormitories fall into two clearly defined groups- one, of the semi-military 'barracks' type appears to aim at a strict segregation of the boys and is connected with war, hunting, and magic. The other allows or even encourages them to have relations with unmarried girls and possibly aim at regulating the pre-nuptial interests in tribal youth.

Both types of dormitories have artistic buildings. Hutton Webster summarized the characteristics and functions of village dormitories.

The men's house is usually the largest building in a tribal settlement. It belongs in common to the villages; it serves as council-chamber and town hall, as a guest-house for strangers, and as a sleeping resort of the men. They keep precious belongings of the community, such as trophies taken in war or in the chase and religious emblems of various sorts are preserved. It serves as a clubhouse for the bachelors. These houses are guard posts where the young men are confined on military duty and are trained in the arts of war; these houses often become a serviceable means of defense. The religious worship of the community frequently centers in them.

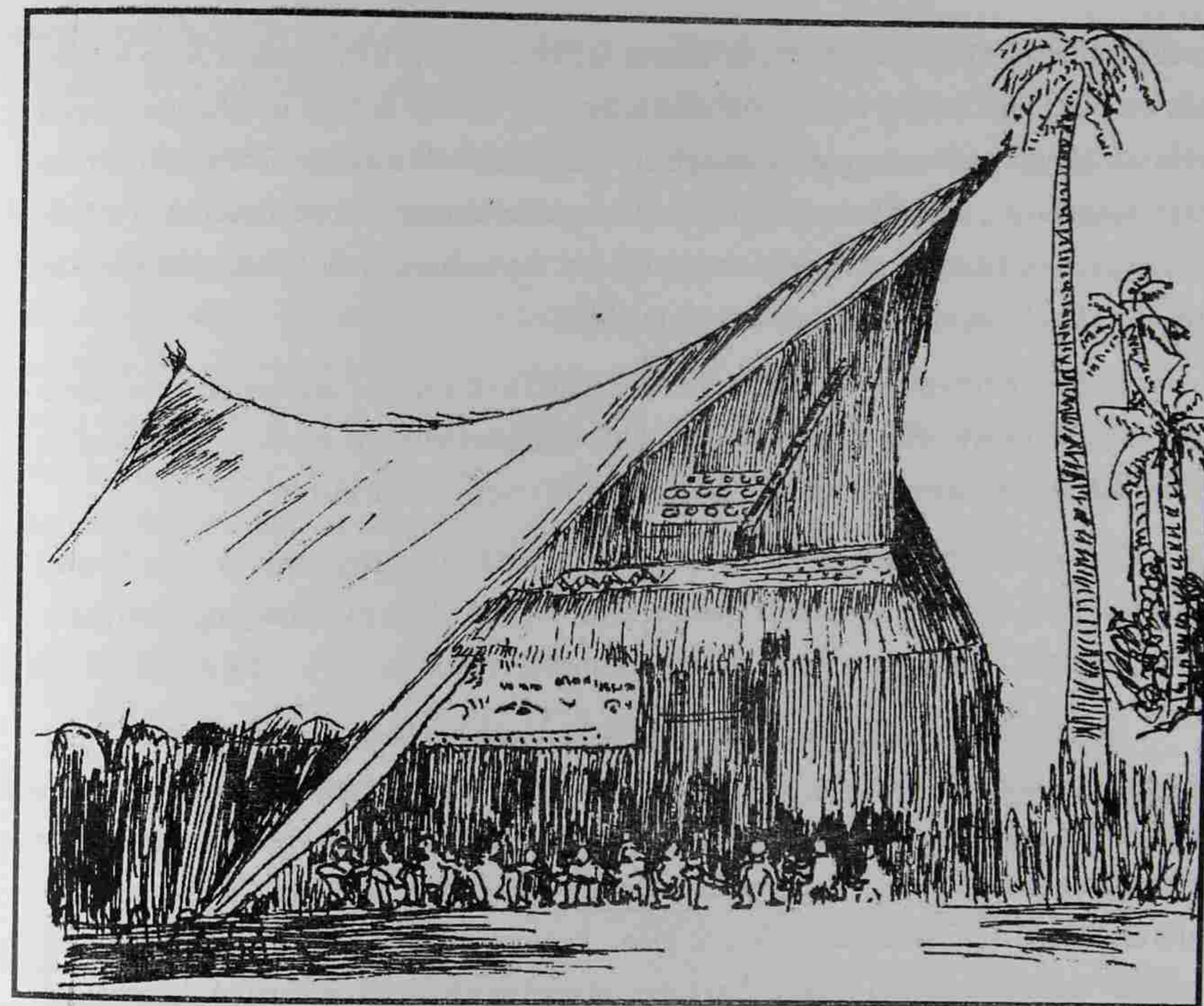
Often they form the theatre of dramatic representations. Among some tribes the men's house is used as the center for puberty initiation ceremonies. Speaking in general terms, these places are tabooed to women and to uninitiated they are used as dwellings or meeting-places of the men, and in them various ceremonies are held: they constitute social, political, and religious centers in the public life of men. After initiation, the young men habitually sleep there and they had to look after the place, keep it in order, fetch water, collect firewood, attend to the fires, and in fact to do whatever the elder men required of them.

YOUTH HOUSES IN MELANESIA AND NEW GUINEA:

Exclusively men's house is reported throughout Melanesia and New Guinea. In all the Melanesian groups it is the rule that there is in every village a building of public character, where men eat and spend time, the young men sleep, strangers are entertained:

Where as in the Solomon Island the canoes are kept; where images are seen, and from which women are generally excluded; the *kaila* of Florida, the *oha* of San Cristoval, and *mandai* of Santa Cruz, the *tambu* house of traders the *bure* of Fiji. In the Banks Islands when a boy began to grow up, his parents send him to the *gamal* youth house.

Eravo of New Guinea seems to be very similar. Boys are separated from the girls.



Men's House in Dollmanhasen Melanesia

Both are described as having an educational purpose. On Mailu Island there is a clubhouse for each clan in a village, and the dormitory is built between each clan-group of houses. The heads of enemies are placed here to look terrible; spears and the regalia of war are hung up and raids are planned and celebrated. This is the *dubu*, where lads sleep from initiation to marriage. These houses are large in size. The house is strictly for man: it served as a town hall 'and all-important municipal council is held there. The Kiwi *darimu* of the Fly River area seems to be of the same type. It is often very large and is used by the unmarried boys or by the married when on ceremonial occasions they must sleep apart from their wives.

The *Ravi* is men's clubhouse and is a center of religious ritual. The *Ravi* of the

Purari Delta says Raymond Firth, is 'a huge thatched house, fifty yards or so in length, built on piles and having as its most characteristic feature in high overhanging open gable which yawns like the gaping mouth of some primeval crocodile. The raising of the heavy main posts, which bear the weight of the gable, demands concentration of effort, organization of labour and engineering skill, and the owners of the house take pride in their size. The large post has many artistic qualities.

In New Guinea certain houses are dedicated to the use of unmarried girls above the age of puberty. The interior with all its paraphernalia of erotic ceremonies is decorated in such a way that strangers are surprised when they go inside.

The *ravi* of the *Purari* delta is a huge thatched house, fifty yards or so in length, built on piles and having as its most characteristic feature a high overcharging open gable which yawns like the gaping mouth of some primeval crocodile.

Boys' and girls' houses are simply furnished with bunks covered with mats. Since they are only used for sleeping, they are strikingly bare. The architecture of Melanesian youth house is quite attractive. The wooden beams and long grass with mud is used for constructing these houses. The wooden sleepers are used to plan large houses and the walls and front is prepared according to plan. Seniors with the help of young members construct these houses. All villages have special houses where all unmarried circumcised males live, and to these houses come at special seasons a girl known as the *iowhanan* whose special task is to initiate the boys into the mysteries of sex. No man can contract a marriage that has not been initiated by the *iowhanan*, and a man may not betroth until she has touched him.

Girls' houses are dedicated to unmarried girls, and are usually houses which, when their owners build new ones, are given over to girls. Boys and girls help in constructing new houses for owners and thus they learn how to construct a house.

POLYNESIA AND MICRONESIA

Throughout Polynesia and Micronesia the men's house is widely distributed,

some times used for the purpose of sexual segregation, sometimes as a secret society, occasionally promoting the cohabitation of the boys and girls.

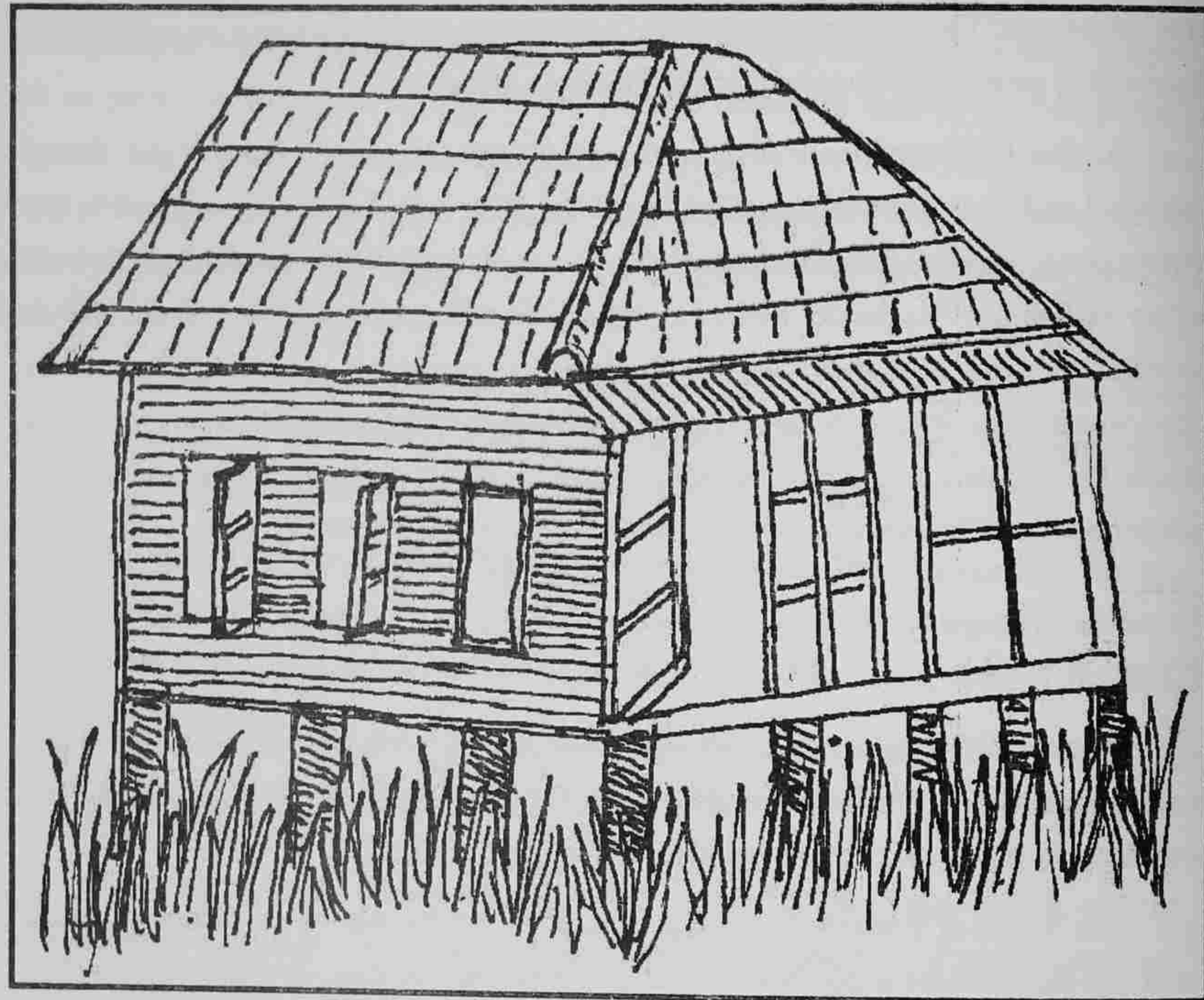
In the Pewleu Islands the young men form themselves into clubs called *kadebekel* and built dormitories called *bai*. A youth is regarded as only a guest in his parent's house; his real home is the *bai*, and he is not supposed to spend the night with mother and father. 'Bachelors barracks' spread from Polynesia to New Zealand was known as the *wharee matoro*, 'the sleeping-place of the young men, and often of the young women too. *Wharee* means 'House' and *matoro* is the advance made by women towards the opposite sex. These *wharee* are also the places where the village guests are entertained. These houses where young people stay are well decorated.

THE FAR EAST

In Jakun of Malaya young and unmarried men were not permitted to sleep in the house of parents, after having attained the age of puberty, but occupy a large house, of peculiar construction, which is set apart for their use in the village.

The Battak of Sumatra have a *sopo* dormitory, where women are admitted, and it is said that they sit there to ply their daily task of weaving. In the central parts of Celebes the men's house is known as the *loho*. In Flores it is called *romaluli*, in the Kei island *roomah kompani* in Timor *umalulik*. In each village of Formosa there are there are one or more *palangkans*, large enough to hold all the boys who have reached the age of puberty and are still unmarried.

The men's house is said to be found between the Moi of Annam and the kha of Siam. Baudesson (A.E. Jenks, *The Bontoc Igorot*, Manila, 1905) says that its aim is to prevent sexual relations between the young men and unmarried girls, but since he adds that 'the Moi seem to attach no importance to female chastity it hardly appears to succeed in its object.

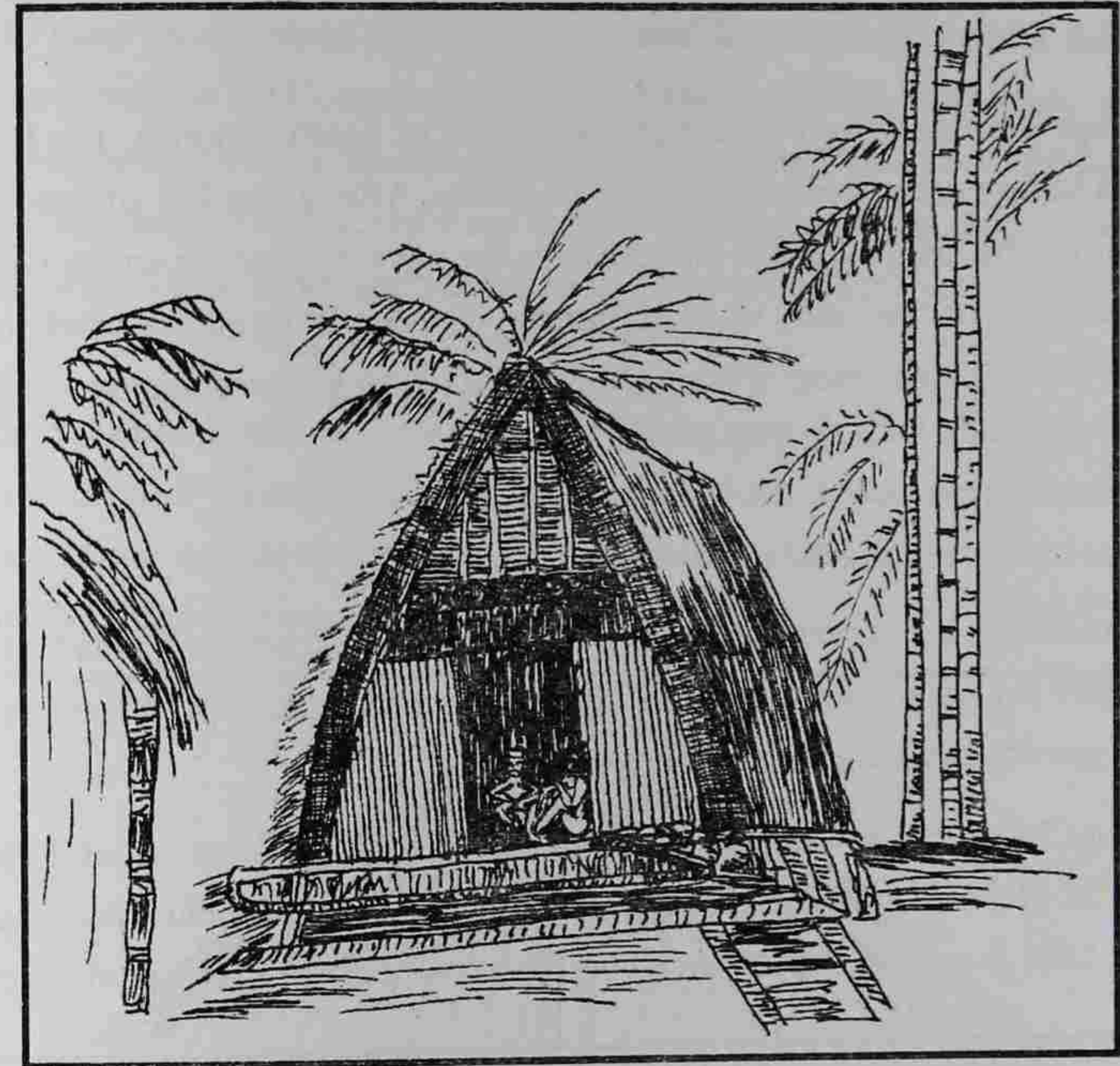


A Dormitory in Fareast

THE PHILIPPINES

In Philippines there are man's club by the day and the unmarried men's dormitory by night. As soon as children attain puberty, both boys and girls are isolated. Lillo de Garcia wrote, "In each village there are two large houses; the maidens spend night in one of them and boys in other. With the later an old man and with the former an old woman act as overseers and take care that no one will slip in or out of the houses during the night.

The youth houses here are known *olag*. Jenks points out that, girls are sent to their dormitory at an early age, and though the boys have a separate house they are free to visit them. The girls themselves entice boys; some times girls steel a boy's pipe, cap or breeches, and he has to come at night to recover his property.



Bachelors House in the Trobriand Islands

The building of youths has changed in their functions later. The boys sleep in *pahafunan* or *favi*, which is taboo to women, and in the day, is the club of all the men. It is a building- a dormitory for men, a council house, a guard house, a guest house for men, a center for ceremonials of the group, and a resting place for the trophies of the chase and war- a "head house".

For the girls there is the *olag*, generally a small stone and mud-walled structure, in which a grown person can hardly stand, with a very small door. It is only used at night and over the floor are boards, which serve as beds for the girls: these are put very close together on a frame about one foot above the ground. Although girls may not go to *fawi*, boys go freely to the *olag* and are entertained there by their lovers.

Youth houses in The Philippines are constructed with mud and wood. Around the main house boundary is built with logs and participants dance and play in the area.

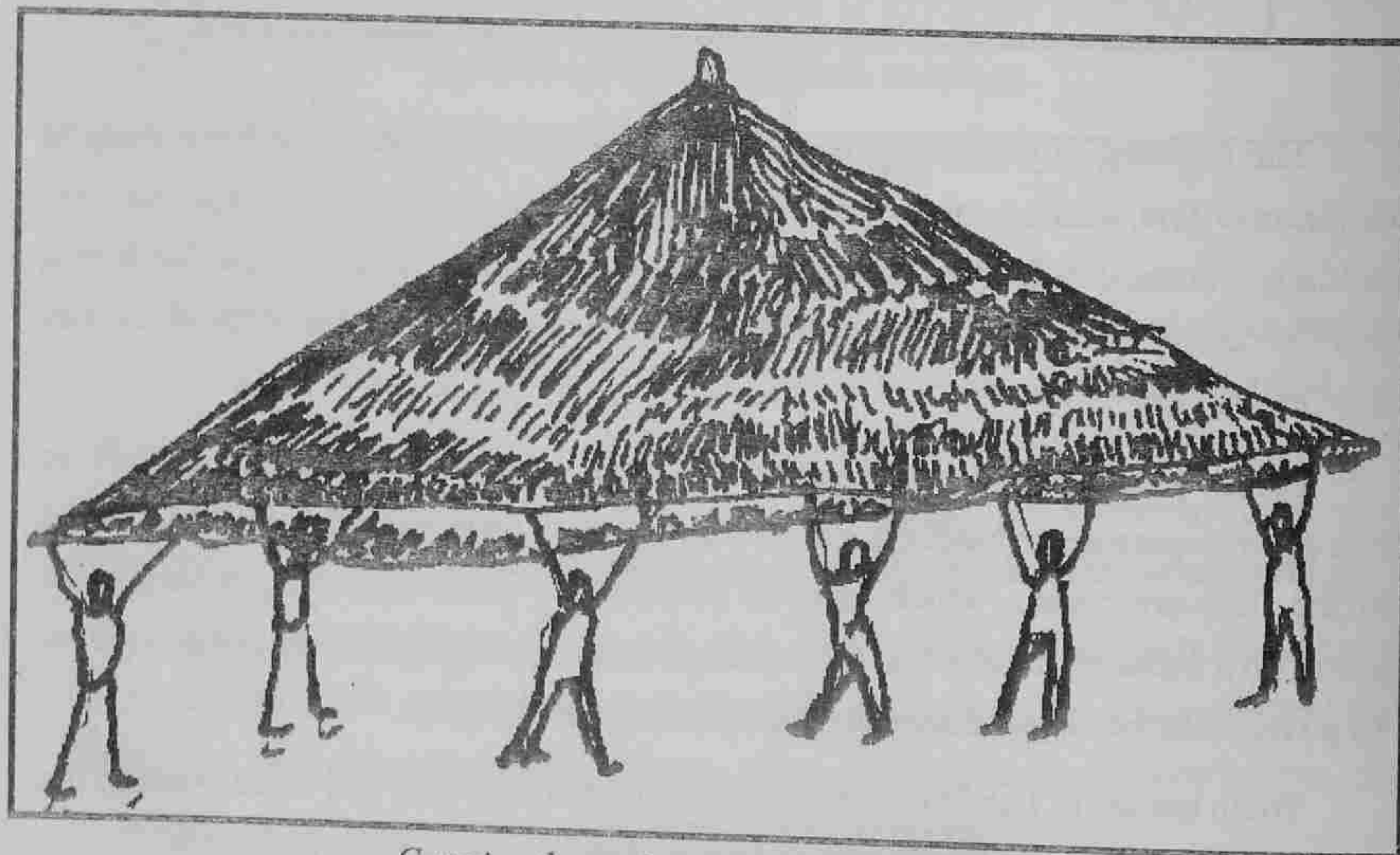
AMERICA

Village dormitories are found in many parts of South America. The Bororo of Brazil has a highly organized men's house or *bahito*. After a boy has attained the age, which is said to be delayed to the fifth or even the seventh year, he enters *bahito* and henceforward only occasionally visits his parents. The dormitory serves as school where the children are taught spinning, weaving, the manufacturing of weapons and singing.

AFRICA

Dormitories are in many tribes of Africa and have arisen as a guard room and training centre for young warriors, and partly to save parents from the embarrassing presence of grown up children in small houses.

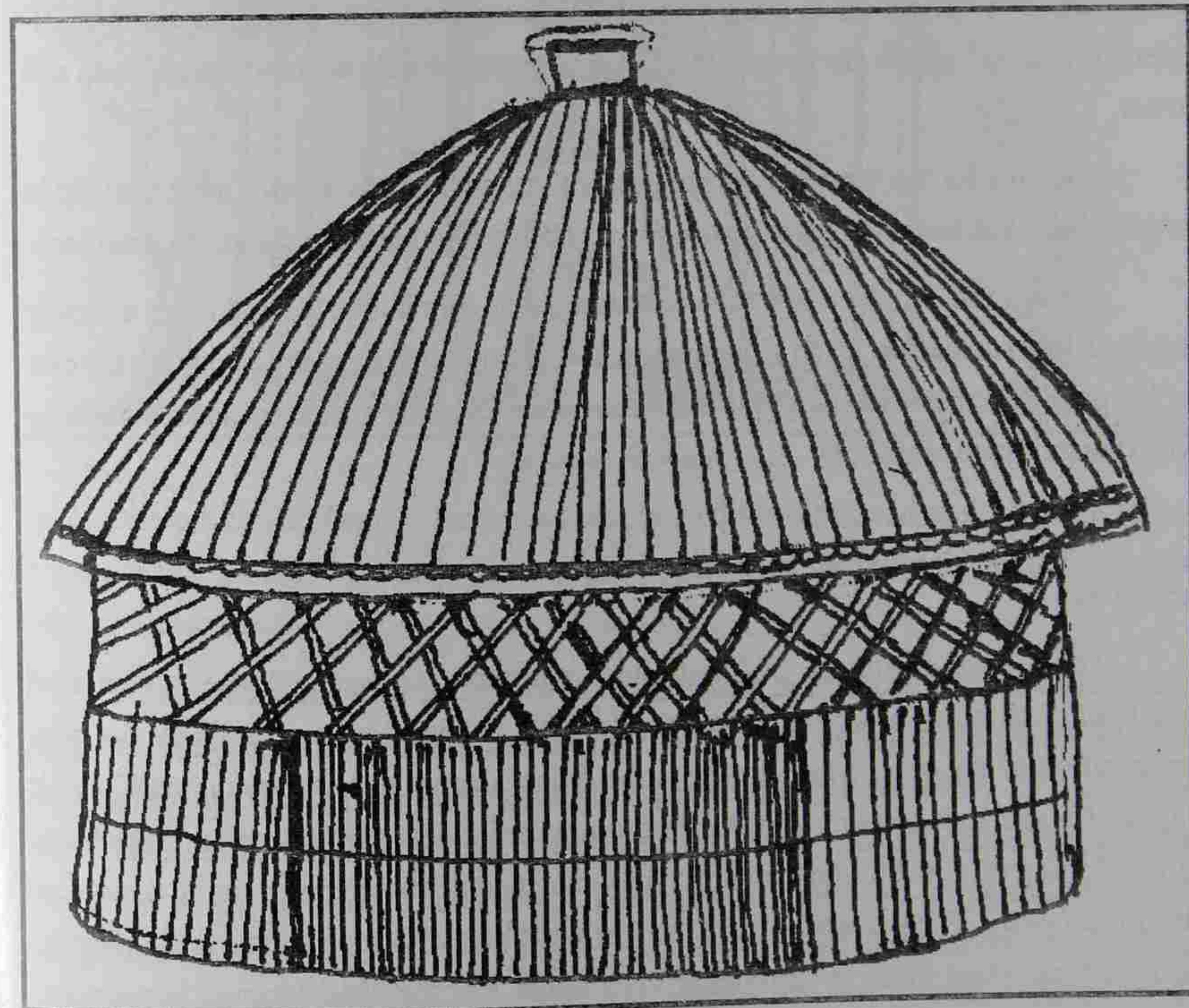
Basuto boys live in separate building and have to perform social duties. The *Wigendo* of the *Hehe-Bena-Sangu* people of east Africa serve as the chief bodyguard and are treated 'Like people in school' receiving instruction in war, sex and development.



Carrying the roof to put on the youth house

Unyamwesi boys eat and sleep in their *iwanza*, and dance and play in the open space. Youth house existed in the Congo among the east *Manyema* and *Mogwandi*, among the *Wapokomo* of east Africa, the *Yaunde* and other tribes of the Cameroons and the western Sudan. *Bari* children of both sexes sleep in their parents hut when quite young, in the goat-houses when a little older, and near puberty the boys build themselves a hut and live together.

The *Bawenda Tondo* is a school for the young men. It is an oblong fortress-like walled enclosure near the entrance of the chief kraal which is used as a guardroom. Here boys are taught etiquette, to bear pain, to be brave in war. The girls are trained separately. They are taught about marriage and childbirth.



Thonga House in South Africa

When Lugwari boys and girls reach the age of about eight years they are put into sleeping-huts called *adrozo*, separate from their parents. These house are often built communally and placed in the center of the cluster. Children of both sexes sleep together in the *adrozo*. Among Madi and their neighbours, the Shuli, buildings raised above the ground are scattered about among the houses of the village. They are like large granaries, but have in the front an oval doorway, and are smoothly plastered with clay. As soon as signs of puberty arrive, the girls sleep in these huts, and boys who have reached maturity have free access to them.

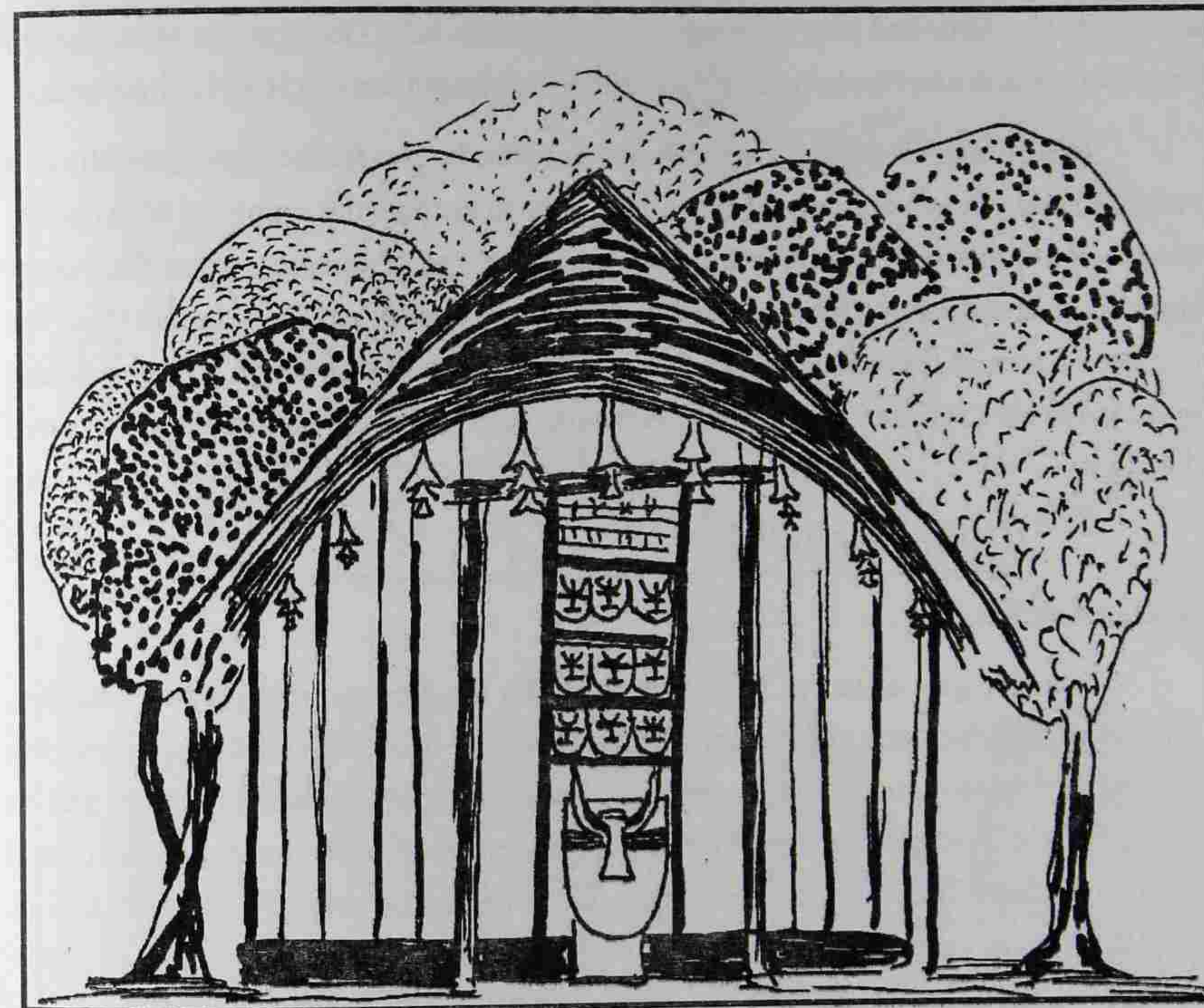
A Manyatta is the cluster of huts of the Masai tribe of Africa, each one of which is built, and lived in, by the mother of one of the warriors. The elder women who are accompanied by their children and especially by the warrior's uninitiated sisters and half-sisters, are there to work for the youths: the girls attend chiefly as their companions and lovers.

The huts for the warriors are not divided into rooms. No warrior used to sleep in own mother's hut, but arranges to go to one of the other huts and calls the girl to him there.

Among the Tanala, a hill tribe of Madagascar, when the eldest child in a family reaches fifteen or sixteen, even if not mature, the father builds a separate house to the east for his dwelling. Tanala explain the institution as a defensive measure of the parents to avoid the nuisance of visitors.

ASSAM

The village dormitory in Assam has importance as a guardhouse, a center of social and religious activities, a school for the young men and a factor in clan organization of the tribe. Man's house is the oldest known as Morung among Konyak Nagas of Nagaland. Morung and the long-drums are oldest cultural traits of the Naga Hills. Morung is large building set apart for young people (boys) on attaining the age of nine or ten years. The parents however still provide him with food and he is obedient to their will, assisting them in cultivating their fields. For the girls' Morung is separate, often on the outskirts of the village. *Morung* is an elaborate building. The Lhota Naga call



A front of Morung

their bachelors house *champo*. Here raids are planned and discussed, and all heads taken in war are first brought here and prisoners of war detained. The building might be 40 feet long, 15 feet in front.

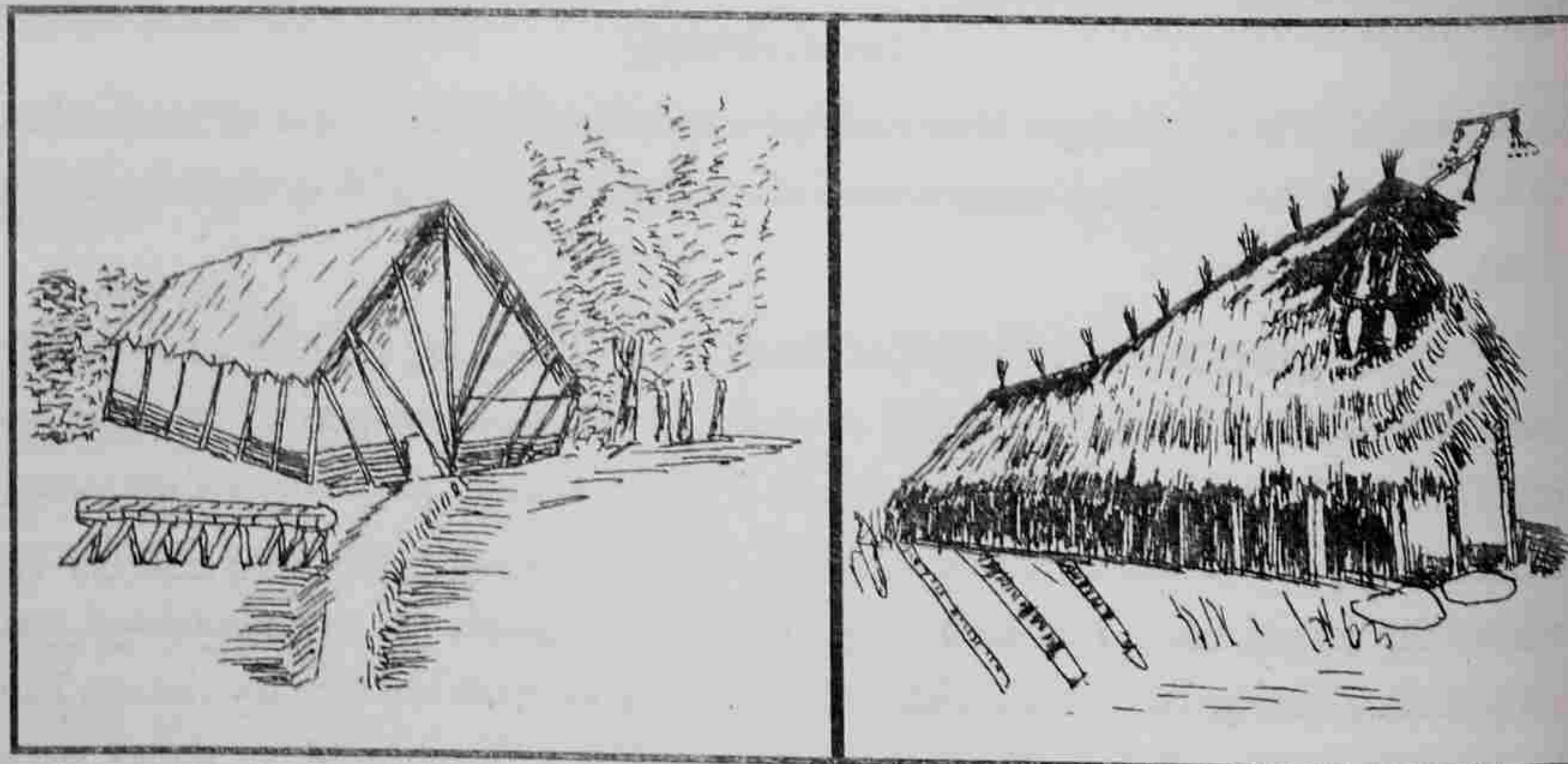
Among the Garo tribe bachelors' house is a lofty building and most substantially built: one half of it forms an open hall in which the village conferences are held, and the chief Lasker holds his court. The remainder is enclosed as the dormitory for the young men. The posts and beams are fantastically carved. Khasi hills also have dormitories where the young unmarried men sleep. Where male guests are accommodated and village festivities go on. Among Mikir tribe formerly the youth had their own house. The boys' club was carefully organized and had regular officers to whom duties were

assigned. The Abor had their *morung*, which is a town hall. This is in the same style of architecture as the private houses, but it is 200 feet in length and has 16 to 17 fire places.

The Lushei, Chiru, and Vaiphei build elaborate houses for the boys, generally on a steep hillside. The young boys of the village have to keep up the supply of firewood for the *zawlbuk*, this duty continue till they reach the age of puberty, when they cease sleeping in their parents houses and join the young men in *zawlbuk*. In *zawlbuk* the unmarried men of the village gather there in the evening to sing songs, tell stories, and make jokes till it is time to visit their sweethearts, after which they return there for rest of the night.

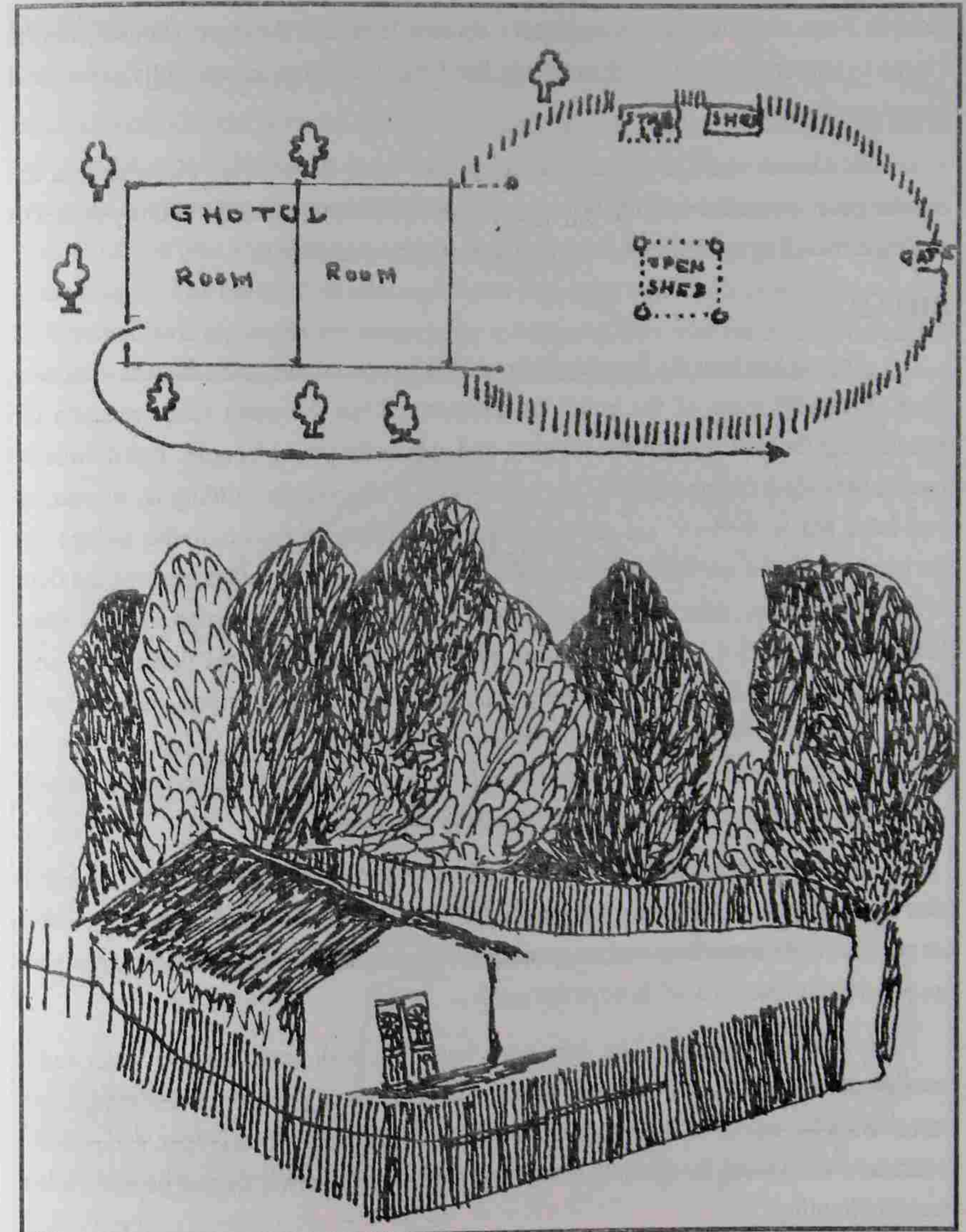
NAGALAND

Near the gate of an Ao Naga village stands the *morung*, really a fine building, often over fifty feet long and twenty feet broad, with a front gable thirty feet above the ground. It is both a guard house and a club house, and plays a most important part in social life of the village. In a Rengma village also the *morung* is the finest and most ornate of the buildings. There men sit and gossip. The old men are primed with drink and by their discourses keep alive the traditions of the village. Of all the *morung* those of the



Naga Morung with Sitting Platform

Lhota Naga Morung



Ghotul and its map

Konyak Naga seem to be finest and most elaborate. In each of these great houses, there is a large xylophone seldom less than twenty feet long. The pillars are carefully carved and sexual motifs abound.

In Almora and Garwal the rambang, like other dormitories elsewhere, is the regular guest-house for visitors. When a resident of a distant part of the country comes to a village, traveling on business, is invited to stay in the guest-house.

BIHAR

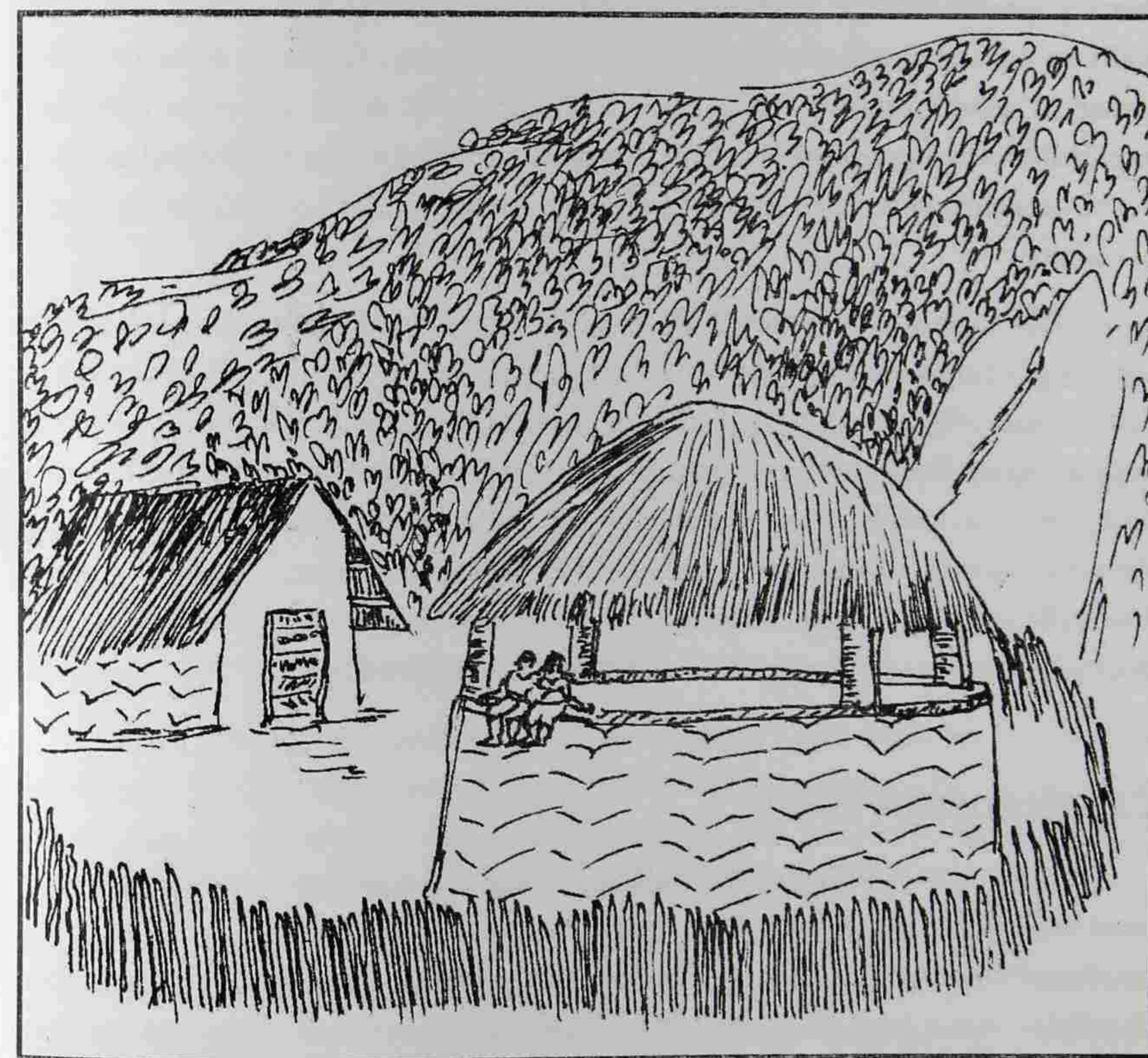
Among Santhals the jog-manjhi house has an open space in the front as a dancing place. Presently most of the buildings disappeared but the open space remains for maintaining the traditions of dance, play, and gossip for young people. The dormitory system prevailed among Saorias. The *jonkh-erpa* or *dhumkuria* building is substantial well-kept hut with door, but no windows, in a prominent part of the village. At Borhambey, there were well-decorated pillars and beams, and the deep grass on the floor covered with mats make a comfortable bed. The house of Kota is supported by stone pillars. In most cases, the youth houses overlook a beautifully-kept dancing ground, sometimes surrounded with stone seats. Inside the dormitories, drums, mats, piles of wood are kept. Village emblems, wooden animals taken out for religious fairs are preserved with great care and attention. They carve in wood elephants fish, horses, crocodiles, and human figures and keep them in youth house.

In Munda tribe there are dormitories for boys and girls separately. They assemble after evening meals, riddles are propounded and solved, folk-tales, traditions and fables are narrated and memorized, and songs sung and learnt until bed-time. In Ho village there are two dormitories for Munda boys and girls.

It also has a school. The dormitory was a hut with open bamboo walls and a wooden door, standing in compound near the village dancing ground. Other tribes have dormitories but not of architectural interest. Small huts with dancing open ground also works as a store room for musical instruments, bows and arrows, fishing nets and other items for hunting.

ORRISA

The dormitory survived among most of primitive tribes of Orrisa-Juang, Bhuiya, Kond, Gadaba, Bondo, Didai, Poroja and Savara. The Orrisa dormitories are of two distinct types; the Juang and Bhuiyas build a large and some times elaborately decorated house in the center of the village. It serves not only as a sleeping-place for the young men but also as a club and council chamber for elders – the girls have a separate house near by. The other tribes allocate houses originally built for domestic purposes to the boys and girls separately anywhere in the village, and the social function of the men's



Bhuiya (Orissa) Dormitory

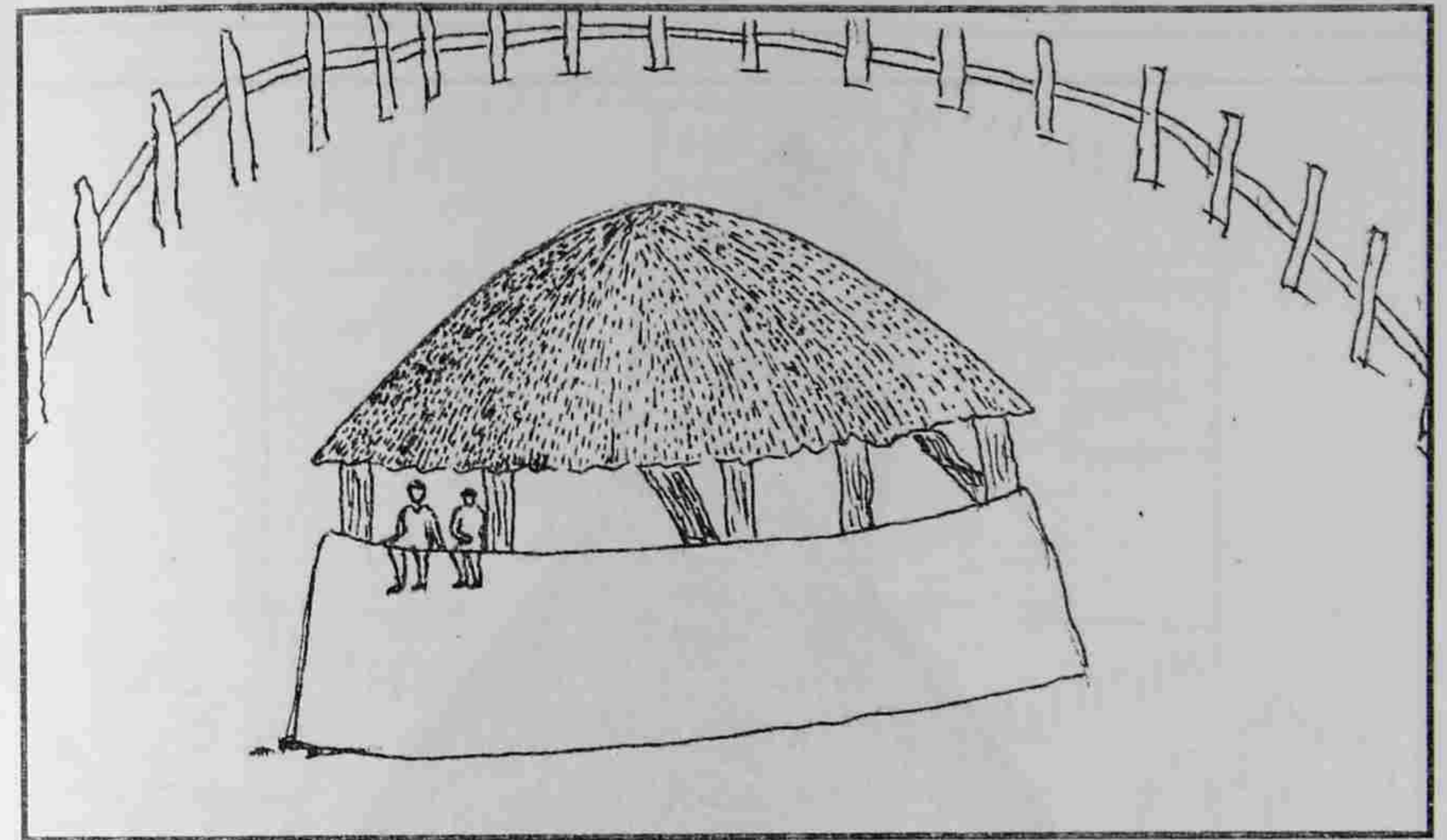
house has the stone seat and platform for the elders which is such an important feature of their cultural life. Juang dormitory has beams and pillars are elaborately carved with elephants, hunting scenes, female figures and rows of women's breasts. Boys are inspired to decorate beautiful little combs as presents for the dhangri-girl. The doors are treated as the sacred and reserved part of the dormitory, is often well carved with conventional patterns.

Bhuiya dormitories in the Bonai, Keonjhar and Lahara States are usually small buildings, but well-made and cosy, situated in the heart of village and had a good dancing-ground with the pillar of Gram Siri (village mother) in front of it. Inside the walls are decorated with the horns of deer and many drums. The Juang dormitory is the center of artistic creation, there are beautifully carved doors, the main pillar had remarkable carvings of a Bhuiya woman with her husband who is represented as a fish, on the verandah are wooden images of the Dihuri and his wife as a compliment by a party of visitors.

About Bhuiya dormitory W.H. Shoobert wrote, "there were small and clean huts capable of holding six people each, and the two for men one for girls, each had couple of cots in them. There were several bachelors' quarters in the village because the huts were not very large. Bondo tribe had the dormitory as a pit roofed over and entered by a tiny door, where the girls lived and entertained boy visitors from other villages. They used to dig out a large pit at Dussera time and roof over with bamboo, matting and palm leaves. The walls and floor was smoothed with plaster of cow dung. The small hole worked as door with bamboo shutter and a bamboo ladder to climb up and down."

CENTRAL PROVINCES

Central provinces include Madhya Pradesh and Chattisgarh as well as nearby areas where tribal communities live. Youth house in this area is known as *Ghotul*. It is a rest-house for travelers, which is occupied by the young men. Russel and Hiralal say the *Gotalghar* was a large house near the village where unmarried youths and maidens collect and sing and dance together at night. Some villages had two, one for girls and

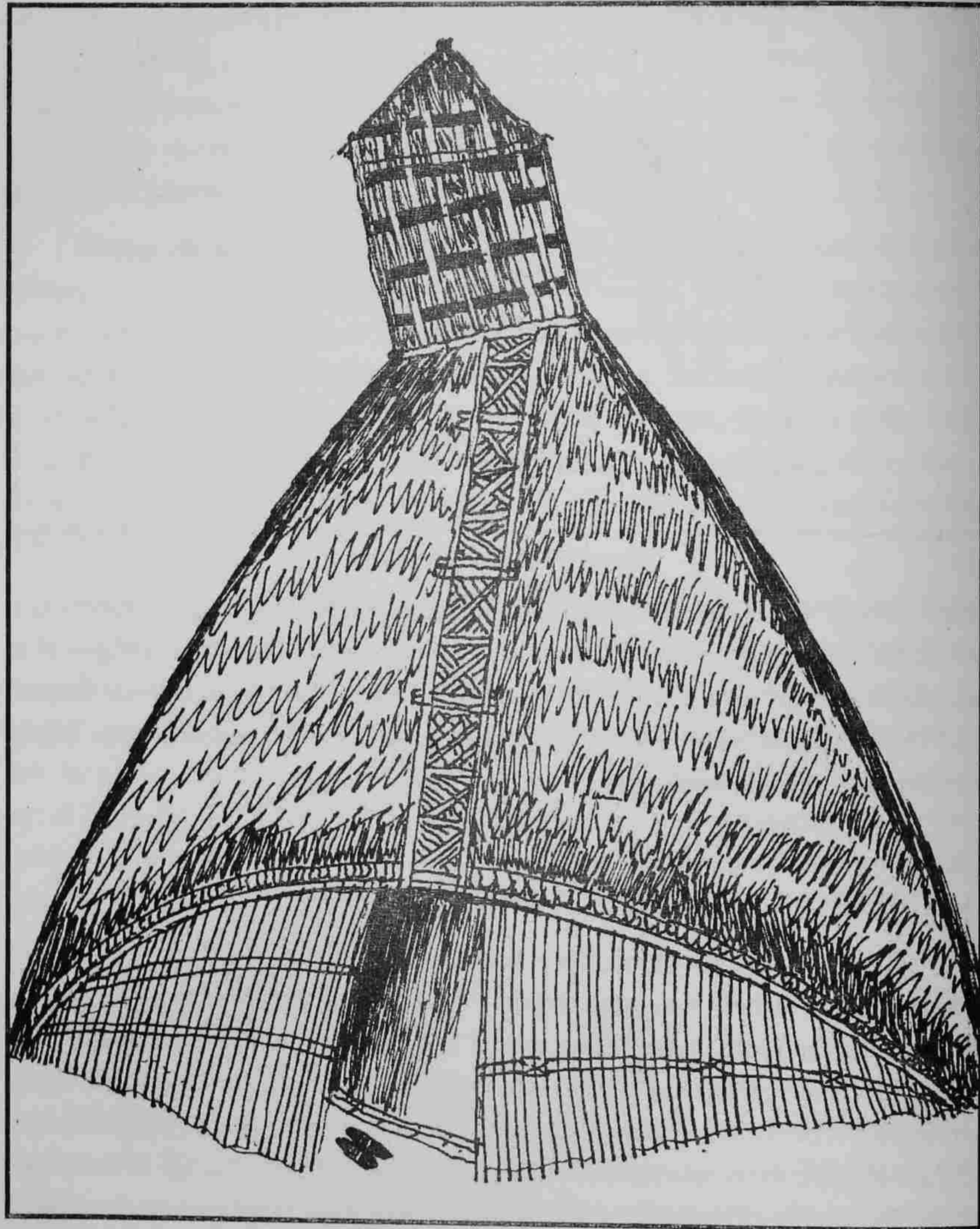


Bhuiya Dormitory Muriaghotul

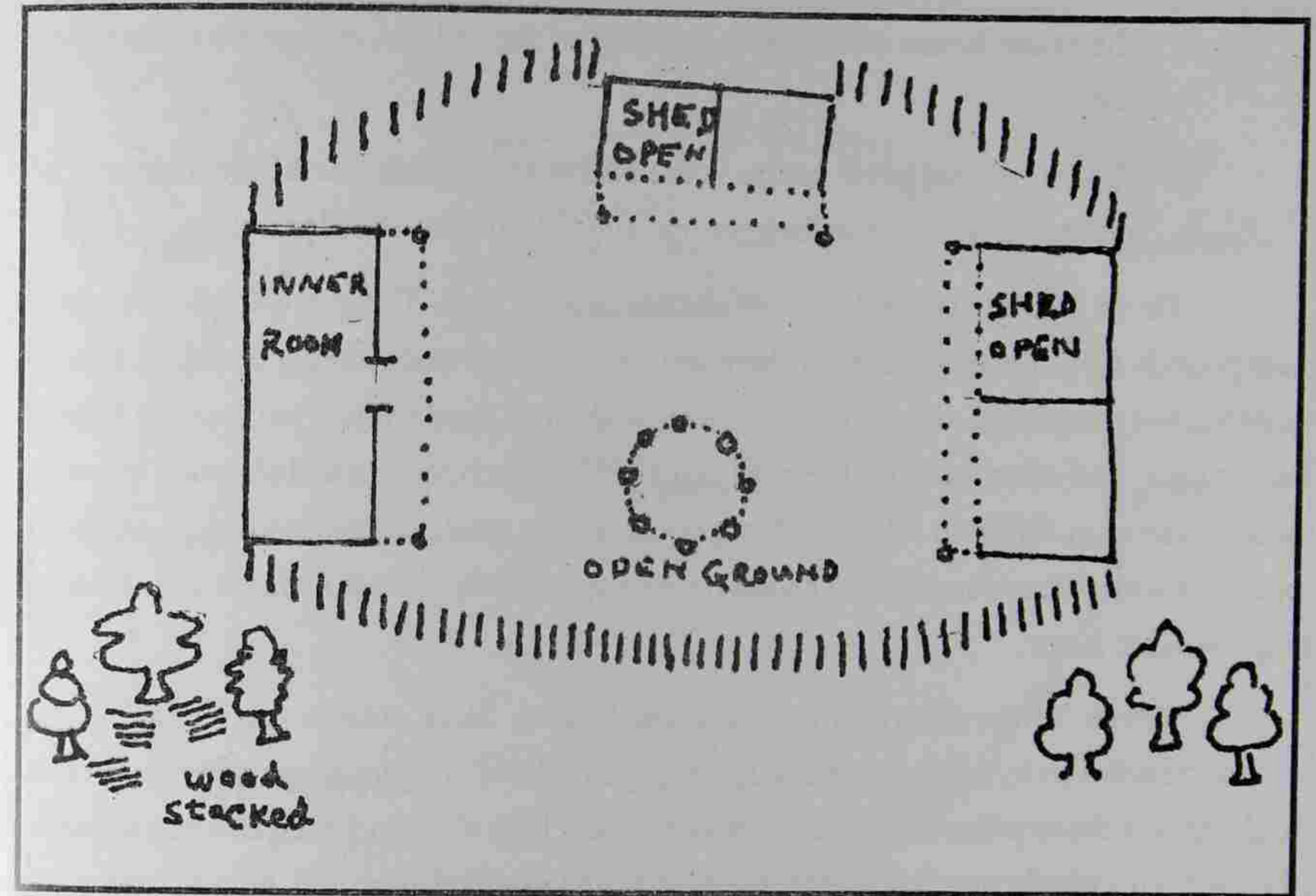
other for boys. Gonds of Kankar state had separate sleeping barracks outside the village, where they meet nightly to play, dance and sing. In Baster the hill Maria have *ghotul* in the middle of every village in the Abujhmar Hills. Verrier Elwin has done study in detail of, "The Muria and Their *Ghotul*". His work is excellent about the youth houses. It may be used for its socio-cultural aspects.

ARCHITECTURE OF YOUTH HOUSES

Tribal youth houses have many functions and the group under the guidance of senior members of the tribe constructs them. Young men and women work as labourer for constructing the youth house, which is used by them. Senior leaders and technicians decide in which direction and at what place the youth house is to be constructed. Elwin wrote that, "The position and architecture of the Youth house is largely determined by one simple fact, the people have to build and maintain a hut for the use of travellers, guests and touring officials. This is an excellent arrangement: it prevents the invasion of aboriginal homes by outsiders, and it means that in every village there is some clean and



Morung House of Phome Tribe of Nagaland



Dancing Grounds of Ghotul

roomy place where disputes can be settled and official business transacted.”

Earlier when officials were not visiting to villages, Youth house in central India used to be a small building on the outskirts of the village, among trees, aloof from the public eye, with secret small door. Where a village consists of several hamlets there used to be large youth house. Around the hut there is a fenced compound in the front or on all sides. Many youth houses have different sleeping-places and a spacious compound. The house with the very deep verandah provides extra room and the open sheds, that is a boon to the children's health. Three plans of youth houses of central India are given here which have specific characteristics.

1. The model with its central house with deep verandah, spacious inner room, larger door, open hut for conference or sleep in the hot weather, and several small sheds, the whole surrounded with fence, is the popular design of youth houses in central India.

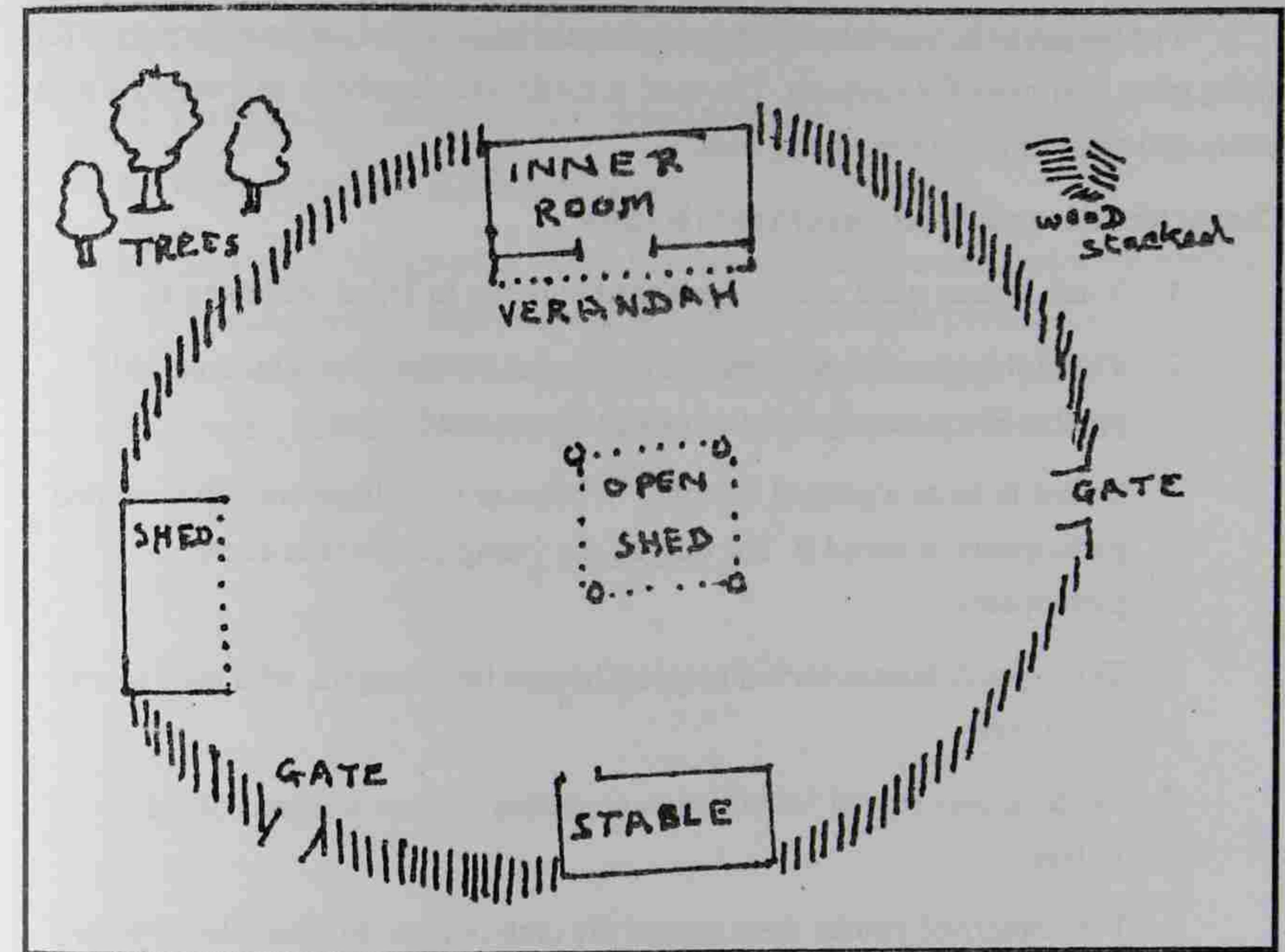
2. The youth house stands in the middle of the village, in a grove of tamarind trees.
3. The traditional youth house is the center of the male life of the village. The men assemble there in the evening, and talk, smoke, drink and sleep.

These Ghotul (youth Houses) are beautifully kept. These are spotlessly clean compounds forty paces square; in them are three or four open sheds, one with finely-constructed round roof and two large houses with thick mud walls. Two roomed houses has an inner and outer room for the boys and girls. The architecture and planning of youth houses varies in different villages. A big house with a small or deep verandah, a central open hut with often rounded roof and two small open sheds, the whole is surrounded by a high wooden fence.

Verrier Elwin describes one of youth houses, 'Here outside the village, in the woods, shadowed by tall sago-palms, is a house lifted well the ground on pillars eight feet high. Above the wooden floor is a low wall two feet high all round, then an open space to the roof. This platform is reached by a ladder. Both the upper room and below it are used; there are fires kept burning in each. The building is built by youth themselves, though the boys often get help of the older men by promising to help in their fields at sowing-time or harvest.'

Girls bring grass for the roof, stones and earth for the floor and when the walls are ready, plaster them with mud. Girls prepare the mud by mixing cow dung and husk with water to build walls. While boys put cogs on the layer of walls, girls prepare cogs and give it to boys to put them in a systematic way.

Before the building starts, the marking on the ground the proposed plan of the building is done. A little pile of rice covered with a leaf-cup. It is left all night and in the morning they go to examine it. If the rice is scattered, it is considered as a bad omen and they change the place for building the youth house. But if rice remains intact they dig holes to take the four corner pillars of the house. They put four pillars into the holes and tie a garland of mango leaves round them. After this ritual the work of building proceeds in the usual way. Roof is prepared with the help of bamboos and grass. For recognizing



Dancing Grounds of Ghotul

the building the symbols and flags are put on the top. The decorations and the furniture vary greatly from place to place.

Doors are some times very small, sometimes large, very light and some times very heavy and, sometimes there is no door at all, it is believed that it is shrine so no one will steal from here.

Elaborate carving is found in many youth houses. Hear boys and girls decorate themselves as well as the wood carvings and wall-paintings. One can find excellent carved pillars with birds, tortoises, moon, sun, boys and girls dancing and elephants. Hooded snakes are one of the subjects for carving. Phallic symbols are common in most of the youth houses. Attractive combs, ornaments and animals are carved on wooden pillars. Youth house is the prestigious building of the village and is built with care.

For building the youth house important material is, wood for boundary, mud for walls, grass and mats for sleeping. The roof is made with bamboos and covered with leaves and some times with earthen plates.

Characteristics and Functions of Youth Houses:

1. Youth houses were used to be largest building in Tribal settlements.
2. The building used not by an individual, but common for all unmarried youths. Some times youths of other villages used to join.
3. It used to be as a council chamber. Whenever the village council is invited participants to attend it. The duty of the young people is to serve participants.
4. These youth houses served as guest-houses for strangers, who used to visit the village.
5. Youth houses served for initiation ceremony to boys and girls of the village.
6. For unmarried youths these houses are club-houses. In these places young people play, dance and sing.
7. These houses are theatres and dramatic representation, are done there.
8. In many tribes youth houses are places to make friendship among boys and girls. The training of sexual act is also provided to younger members by the elders.
9. Here boys and girls select their life partner and then merry with mutual consent.
10. Among tribes who used to fight, the war weapons were kept here and training in arts of war is provided.
11. Precious belongings and war trophies were kept in the youth house so the next generation feel pride for their elders.

12. These houses often used to become a serviceable means of defence.
13. These houses used to serve as guard posts also.
14. These houses are also secret lodges.
15. Thus youth houses were public places but used to remain under the control of young people. Here the creativity of young people used to take shape. They create variety of ornaments, wooden carved articles, paintings, dresses, masks and statues to decorate themselves and youth houses.



ARCHITECTURE OF WORSHIP PLACES AND MEMORIALS

Each tribe in the world has deities to worship and also have memorials to remember ancestors. Spirits are believed to be present everywhere. Offerings are made to them and to the souls of ancestors. The religion of the tribe has both negative and positive aspects. But among many tribes religion is more negative than positive. The shaman of the tribe is expected to know everything as he has direct contacts with the spirit. He knows about the child-birth, rains, situation of the crop and disease etc.

RENGMA NAGAS MEMORIALS

It is a general belief that particular powerful god who lives in the sky and is the father of all living things and earth or some goddess is their mother. Among the Rengma Nagas worship is performed at the house and shaman helps in all religious ceremonies. The sacrifice



Memorial Statue

of buffalo is done. They give more importance to ceremonies rather than temple. The individual gives feast to villagers and his relatives. The head of the sacrificed buffalo is fastened at new post, and the guests feast and dance and sing all night. When the celebrations are over the skull is cleaned and hung up outside the feast giver's house on his cross-beam. In the same way

the second buffalo sacrifice is done and after the final sacrifice, the wife earns skirt on which white lines denote the number killed, and husband earns the right to wear an embroidered cloth. He adds a carved post to his house, and in front of it sets up a very tall bamboo bound with cane leaves, with a chain of bamboo hoops hanging from it.



Memorial Stone

Stone monuments of two types are found among the Western Rengmas. One is of a semi-circular platform built on the bank at the upper side of a path. The outside is built up with horizontal stones and riveted with upright stones, the middle being filled in with earth and rubble. They are meant as seats for way-farers, and oaks are planted on them to give shade. Their object is commemorative.

The second type (*tso kulo* or *along keye*) consists of an upright monolith for the man in whose name it is being set up, a smaller one for his wife, and still smaller one for each of his children. The object is definitely commemorative, a man who has no children, perform it twice in order that his name may be for ever remembered. The erection of the

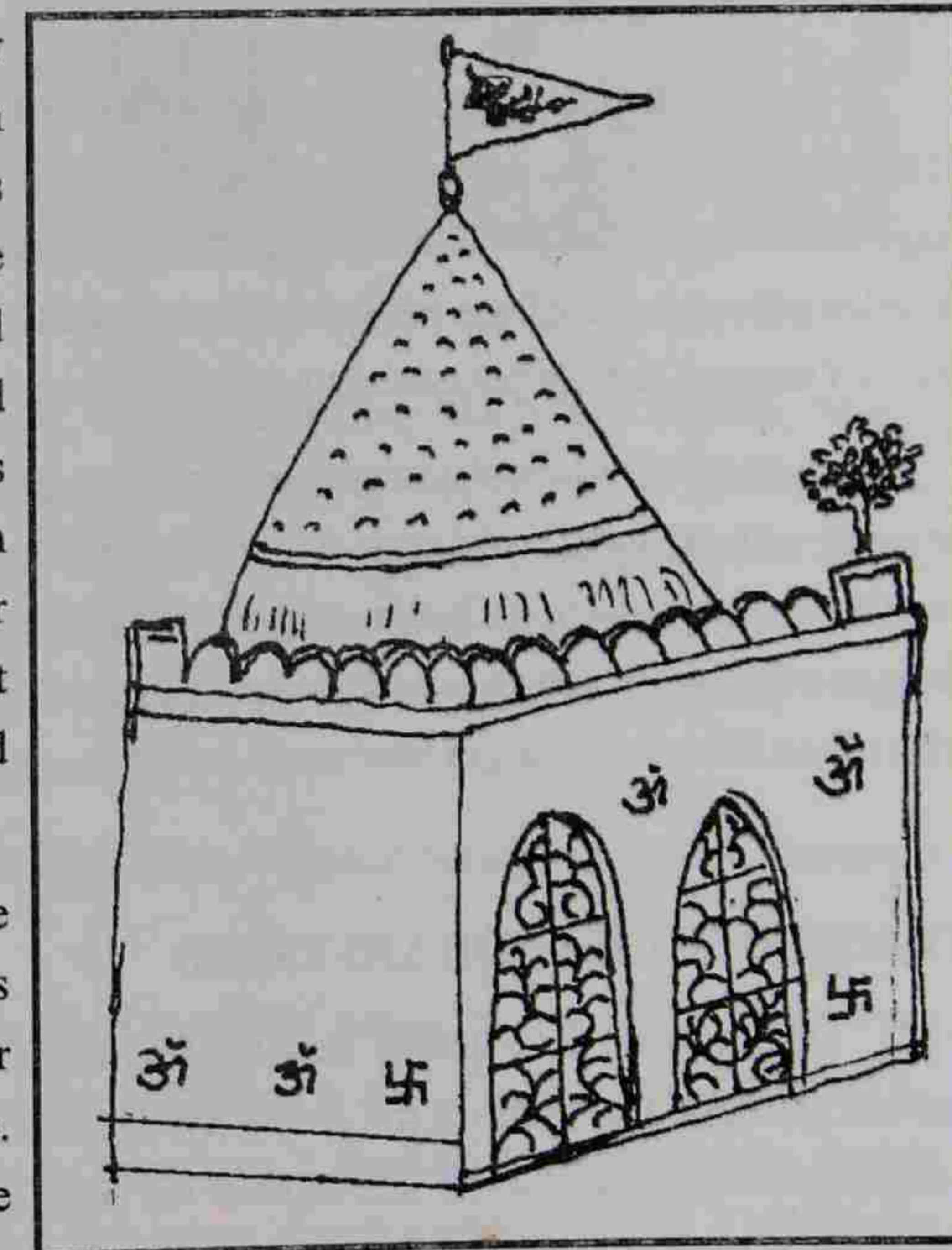
monolith is done with the help of the villagers who assemble to help, dressed in full ornaments. On getting the stones where they are to be erected, the old man begins the digging of the hole, and stones for wife and children are set up. These stones are levered and hauled into position. In the end a rectangular platform of stones is built round the whole. The rare type of this monument consists of a long line of monoliths.

GOND AND MURIA TEMPLES

Temple is a building through which the power in the universe manifests itself and which is specially erected and maintained in order that a right relation may be preserved with that power, the building being such that a man can stand upright inside it. (J.D.Unwin). In a few Muria villages there are no temples. The Platform is of a few stone

seats under saja trees where mother goddess is worshipped. In Kabonga village, the shrines looked like a little village. The buildings are greatly large and well constructed. Some are solid mud houses with strong doors, others are open sheds, a few stand in substantial compounds of their own with pillars and swings in front of the entrance. The furniture and symbols inside vary greatly.

In solid buildings little brass images of horses, elephants and bulls, elaborate litters for Danteshwari- goddess are kept. Flags and very small images are wrapped up and put into an earthen



Shrine in Gonds of Andhra Pradesh

pot hung from the roof. Other symbols of the gods are chains, spears, axes, digging tools, whips of cow-hair and shields.

In the open sheds, the symbols of the gods have to be slung high up very near the roof. At the foot of the central pillar there is generally a flat stone which serves as the seat of the god, and there are several big stones placed together to form a hearth for the cooking of the new grain and pulses or sacrificial animals. The gods are taken outside the temple to be worshipped, at least on all major festivals, but the sacramental cooking is done inside. The temples have memorials in their court yards.

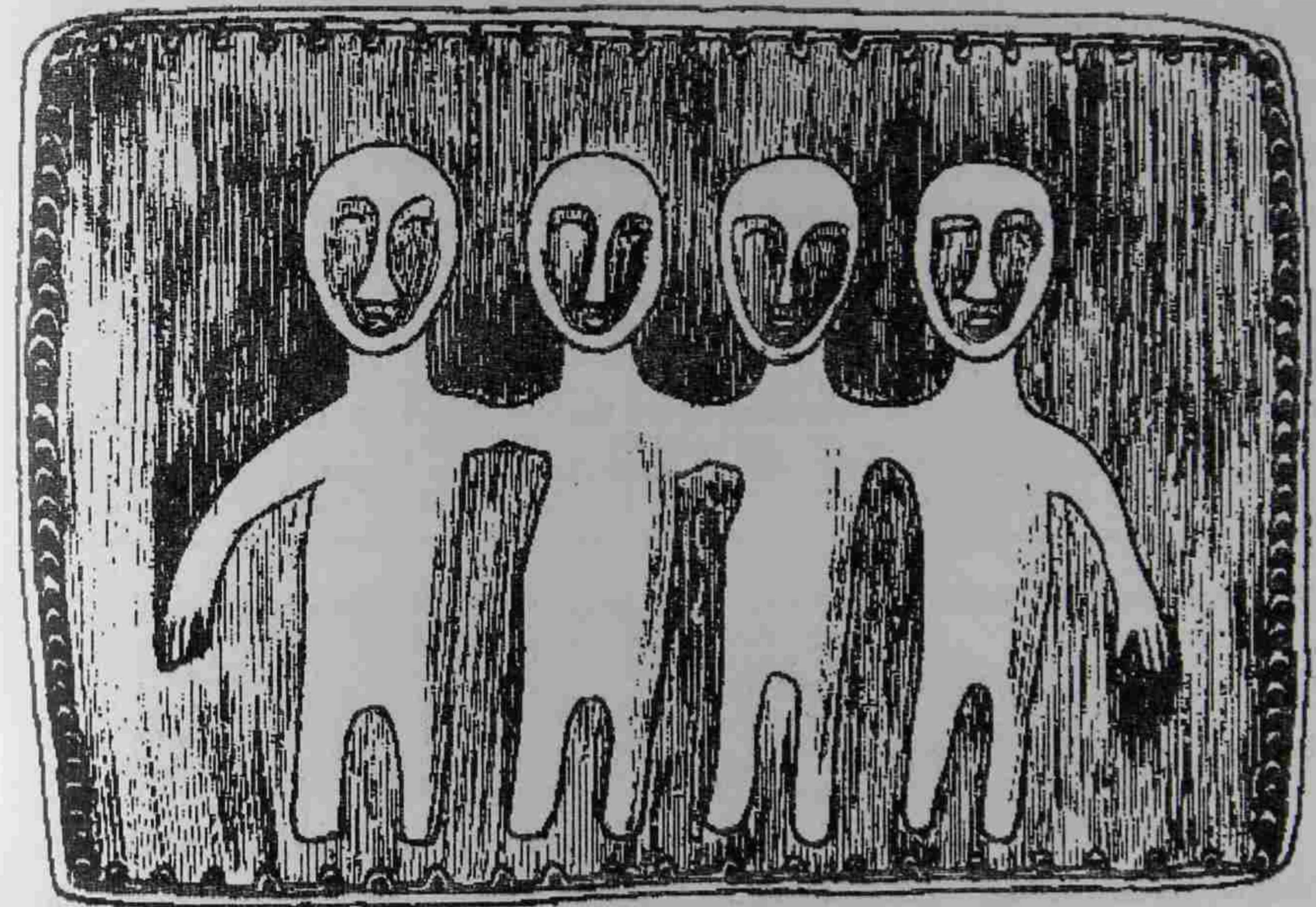
The temple is built with nine wooden pillars, fixed in place by the cla-priest who put iron slag at the bottom of each whole. Bundles of grass called *gubba* are tied to the top of the pillars and then thatching. The roof is then thatched, but no walls are made. Every ten years, the building is renewed.

Just inside the gate of the enclosure there is a line of pillars and four stone seats. These poles are for the convenience of such visiting deities as are represented by poles or flags can be tied to the pillars. Entering the temple, we find a clean open shed with broad wooden pillars on which are carved crude representations of the sun and the moon. From the roof hang an earthen pot containing little bells and a bundle of peacock feathers.

In another village Bayanar there are eight, grouped together round a wooded hill covered with fantastic rocks amid which the little shrines are built. Among Muriya tribe and Gonds temples are built clan-wise. Their deities are also symbolically different but the type of the architecture has common features. With changing times and due to contact with urban life some changes have come in their traditional type of temples.

TEMPLE OF CHAUDHARI TRIBE

Devali Madi is a temple near Mandvi town in south Gujarat representing the mother goddess. The statue of the goddess is situated in deep hole in earth. The temple is built in quite traditional style. The width at the entry and space in the temple, from where devotees view the goddess is very narrow. The area is known for Choudhari tribe



Memorial Statue of Chaudhary Tribe

villages. The temple is in conical shape. while constructing the temple cement, stones, iron, wood and variety of colours has been used. The floor is covered with granite stone. The colour of the statue of the goddess is black. Devotees present oil to goddess statue, and also flowers, incense sticks and sweets. The temple is well maintained. Every devotee presents the sacrificial horse to the deity, as it is not possible to present the real horse people bring earthen horse as a symbol.

On one side of the temple thousands of such earthen horses can be seen presented by devotees.

Near the temple of Devali Madi old memorial stones for warrior ancestors have been kept after collecting these stones from different places. These tablets are based on variety of types; 1. Memorial for warrior ancestors, 2. Memorial for people who died in accidents, 3. Relatives who were killed in quarrels, 4. appeasement tablets, 5. tablets for safe delivery and welfare of pregnant woman and 6. tablet in the memory of a person

killed by the wild animals.

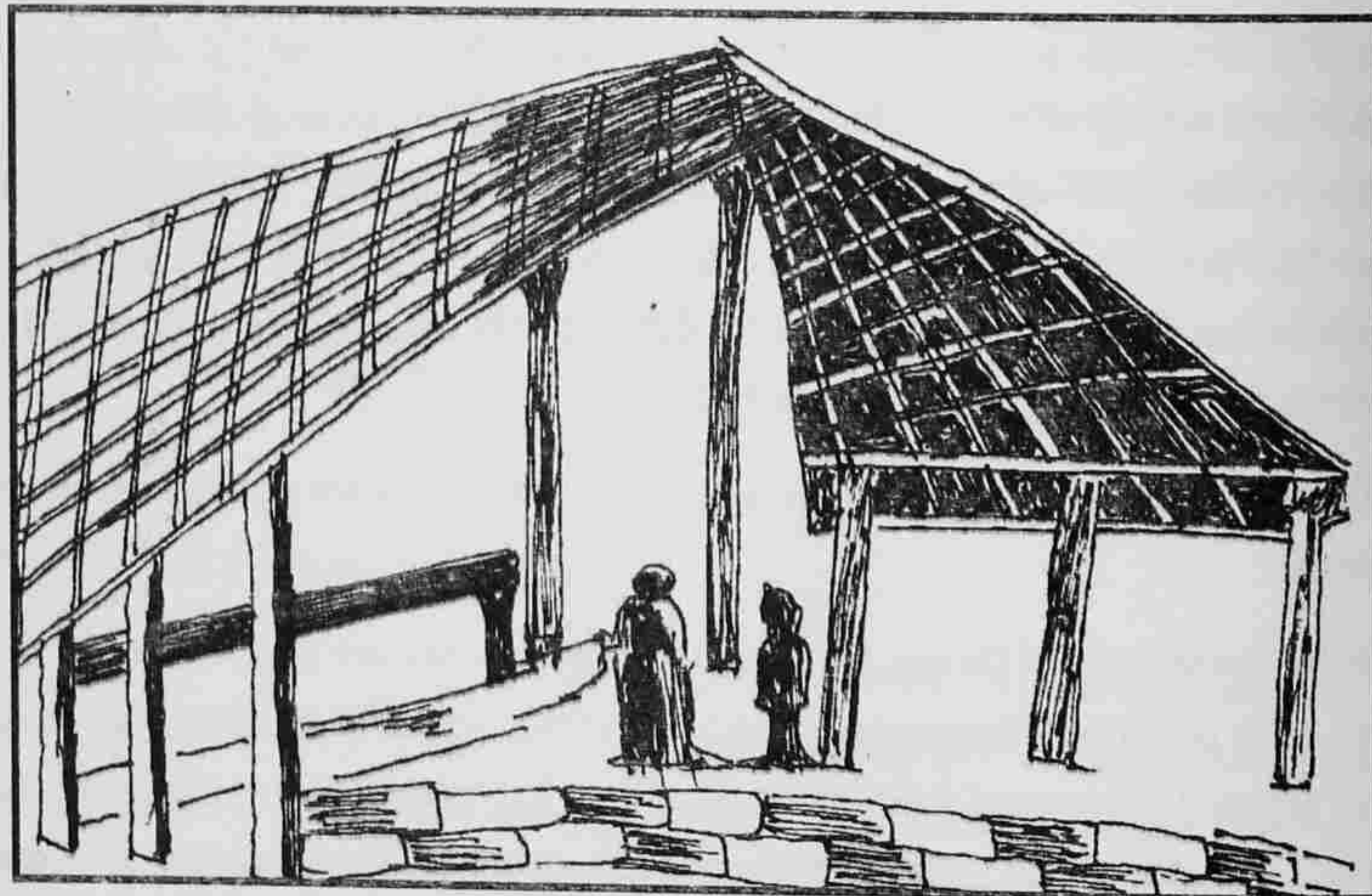
These stone memorials are sacred and treated as deities. These monolithic slabs are made out of a rough quartzite stone. There are wooden memorials also. The wooden panels are carved by tribal carpenters themselves.

Among Choudhari tribe there are carvers and carpenters who make wooden panels and carve Dev-Mogra. On all the wooden panels sun and moon appear on the upper side of the tablet and the horseback below the Sun and Moon. The memorial tablets are usually erected near a highway where, these can be seen by people traveling on the road.

Memorial for tribal heroes are also made in the form of small *Chataries*-canopies.

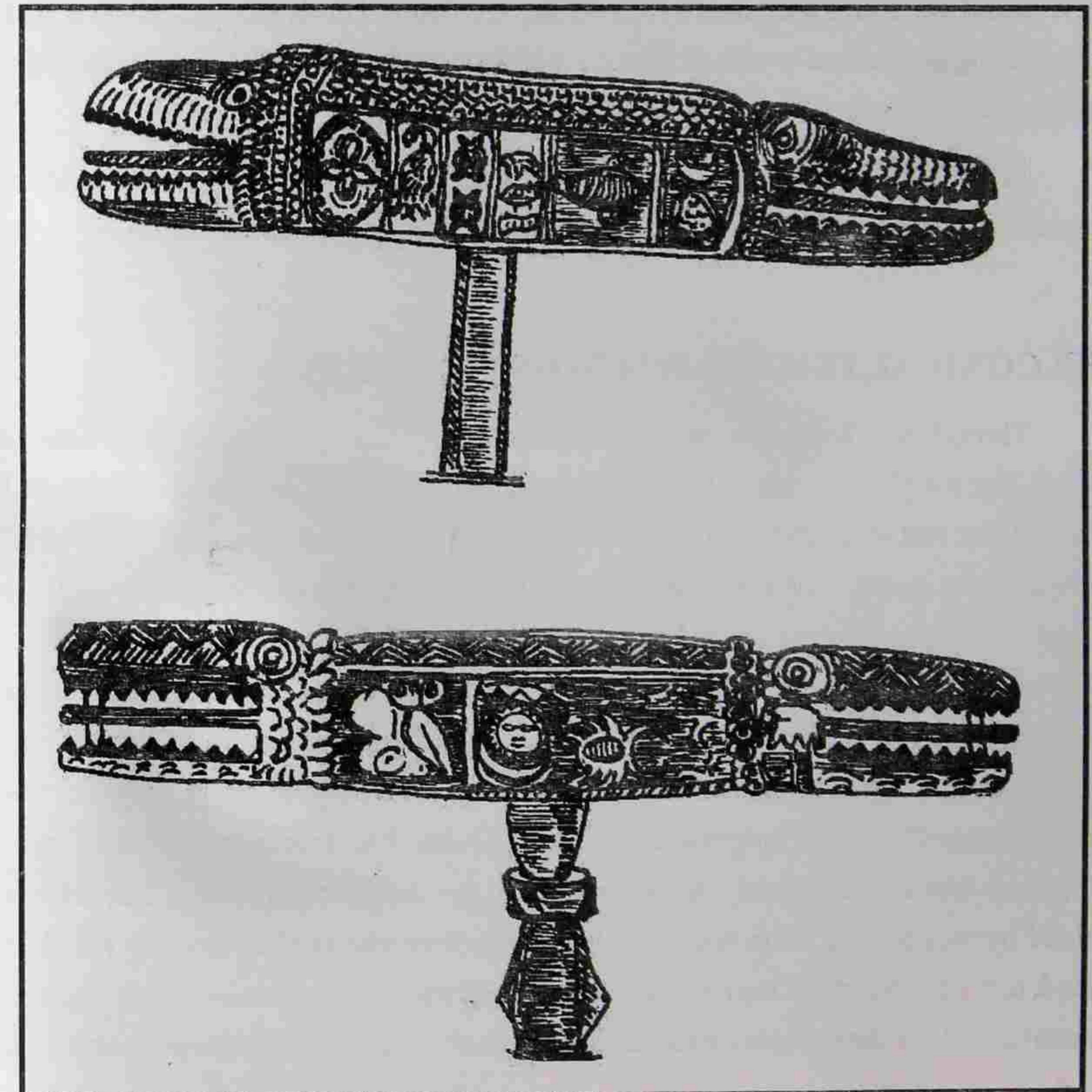
TEMPLE OF MOGIMATA

Mogra Dev is the crocodile deity worshipped by the Choudhari, Gamit, and Vasava tribes. The form of Dev Mogra are two types 1. Dev Mogra- with one head, body and a tail and 2. crocodile deities with two heads in opposite directions with common



Deities on Open Platform

ornamented body. The double-headed crocodile deities are near Songadh area closer to the temple of Devali Madi. Five to six Dev Mogras are installed on carved poles close to a small water source. Dev Mogra is traditional deity about which people do not know much. Dev Mogras are not simply logs of wood but very artistic, rare and depict variety of symbols. In recent years the female crocodile has been named Mogi Mataji-Mogi mother goddess. The form of the goddess has been converted in a statue of a woman holding pitcher. It looks as she has emerged from the earth with water, and a temple of Mogi Mataji has been constructed by establishing the statue. The architecture of the temple of Mogi Mata is interesting and attractive. It is a five-storied building with



veranda around it. The building is built on a platform. It is a modern construction with cement, stone, wood and tiles.

DEITIES ON OPEN PLATFORM

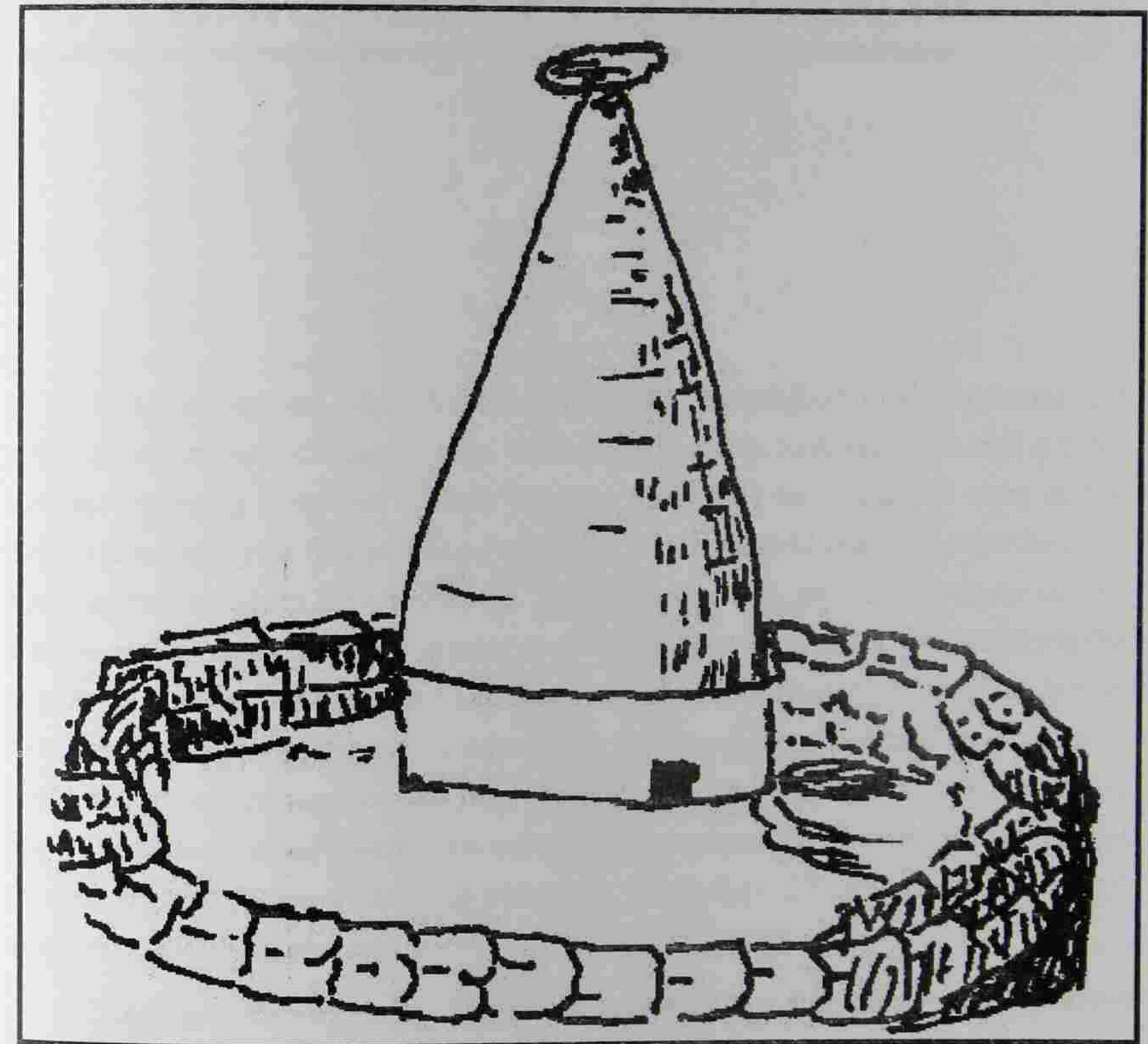
The second largest tribe of India the Bhil community worship their deities in open on a platform, artistically built. The platform which is generally 10 x 7 ft. and in height 2 to 3 ft. the earthen relief statues are arranged. The tribe includes variety of deities for worshipping. The relief plates-in-baked-tiles form are prepared by potters. Due to contacts with Hindu society and potters, Bhils have accepted different type of deities. These baked relief tiles are painted with oil based colours. The devotee purchase a baked-tile depicting deities and establish it on the platform with rituals. The architecture of this type of platform is simple but attractive.

The Bhil tribal people also participate in Hindu religious festivals and treat themselves as Hindus. They visit Hindu temples and have no specific temples.

THE CONICAL TEMPLE-*BOATH* OF TODA TRIBE

Though the Toda tribe is a small community but their temple is artistic and unique. The temple is in conical form with a thatched roof on a circular wall. The wall is generally six feet in height. The whole edifice is some 21 to 22 ft. tall and 12 to 12 ft. in diameter. At a distance of approximately ten ft., the temple is surrounded by a massive wall of uncut stones, arranged together without cement. The wall is three ft. broad and five to six ft. in height. The apex of the cone is crowned with a large stone, placed there apparently with the object of steadying the roof. Perhaps it is put to save weak points from the rains. The door of the temple, faces almost towards south, is very small and narrow-one and half ft. in height and one ft. in breadth. The door is so small that, any for full-grown men can not stand. Devotees enter in the temple by crawling. The temple is divided by wooden partition wall-which extends from the earthen floor in which it is placed, to the full height of the roof-into two compartments of equal size. It is the sanctum sanctorum, where the relics are kept. In the temple of Todas earthenware pots, and a whirl

with which to churn butter by revolving between the palms of the hands are kept. There is no alter or any statue or stone there to worship. The temple of Toda village is 2000 years old and its architecture is unique. Such ruins are also found in other parts of the world. The circular buildings have importance of their own.



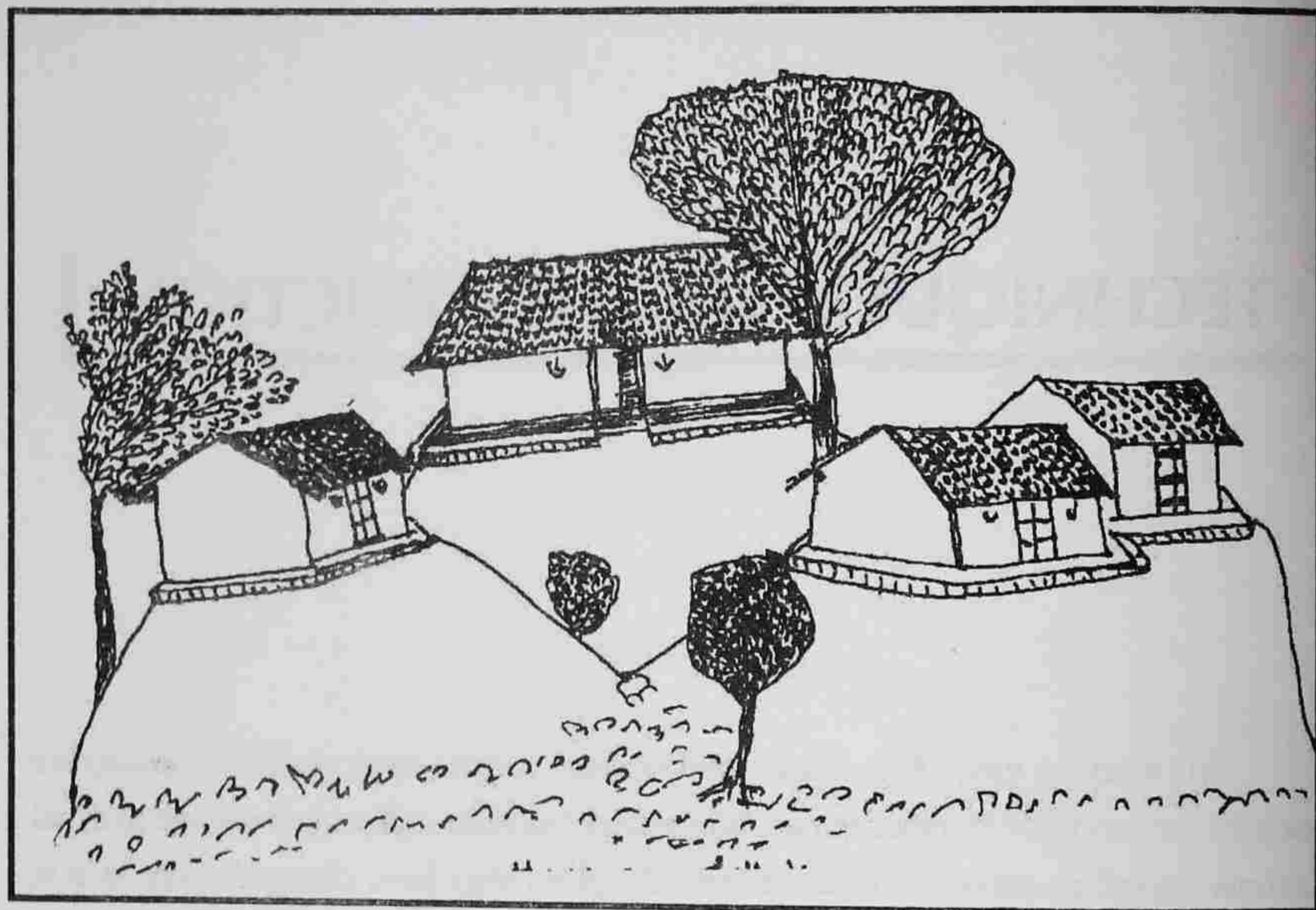
Boath - Toda Temple



TECHNIQUES OF CONSTRUCTION

It is a saying that, "*Roti, Kapda and Makan*" (means food, cloth and house) are essential for survival of human beings. While there has been such a rapid change in tribal customs regarding dress that in these last fifty years they have changed more in that respect than during the fifty preceding centuries. But in the field of architecture the tribal communities appear to have stood still. Their huts (houses) are built precisely as they were in ancient times. It is easy to wear costume of their liking and of availability in the market. It is easy to change dress and food but difficult to alter the style of the house. Tribal communities possess several advantages in this respect. It is comparatively easy to construct. In construction one gets help of all relatives, and locally available material is used. The house remains cool in hot weather. While constructing a house it is planned that in rainy season it perfectly remains watertight. It is believed that house built in round shape can resist the earth quacks.

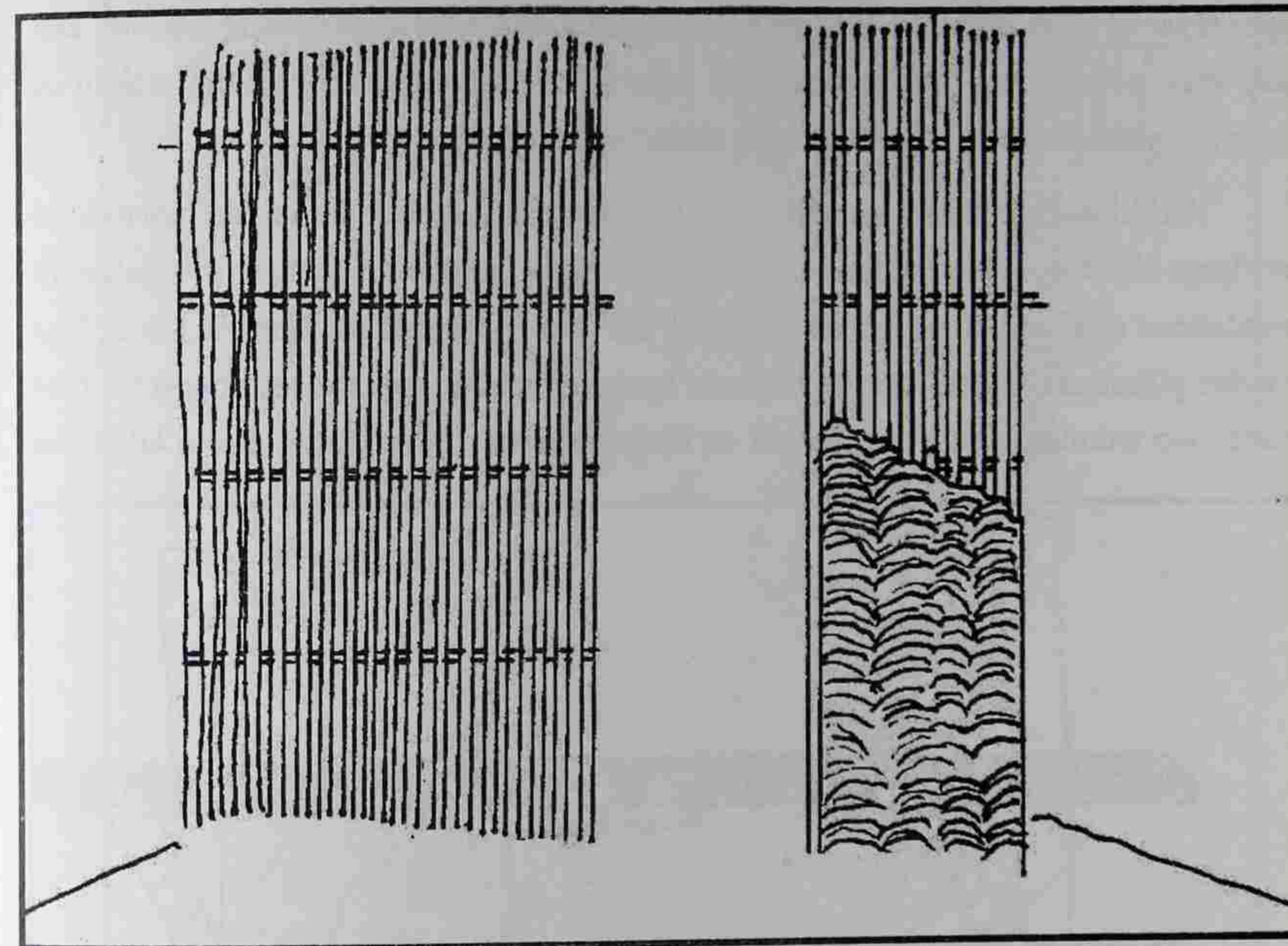
Among Indian tribes the Earthen Houses are used and are popular. As tribal communities still like to live in forests and hilly tracks, their habitats or villages are very small. Six to ten families live in a habitat. Even one family may like to live alone on the top of a hillock. The members of family construct a hutment on the hillock and they can keep a watch on their farm on the slopes. For the tribal persons there are two important things in life, one is the farm and second is his wife, so he always keeps eye on them.



Houses on hillocks

Though wife is his life partner still he is worried about her elopement. Women have freedom to divorce and to choose another partner.

As soon as a young man is married he will like to establish his own home. Husband and wife choose a plot in the habitat or on a hillock with the help of parents or relatives. The husband and his wife do the planning of a house orally. First of all they choose a place in the habitat or nearby hillock where they will like to construct their house. Local deities are placed and evoked, on the place where they plan to construct the house. The deity is evoked with the belief that he will protect the house and family. Either husband or wife will do the evoking work or a shaman is invited. Deity represents some known or unknown ancestors. In the evoking work Gur (Jaggery-local sweet) and a fowl is presented to the deity. Most of the houses have their openings towards north or east so the sun light enters in their house and create visibility. House is constructed in the lean agriculture period so some of the relatives can help them.



Walls of bamboo strips with paste

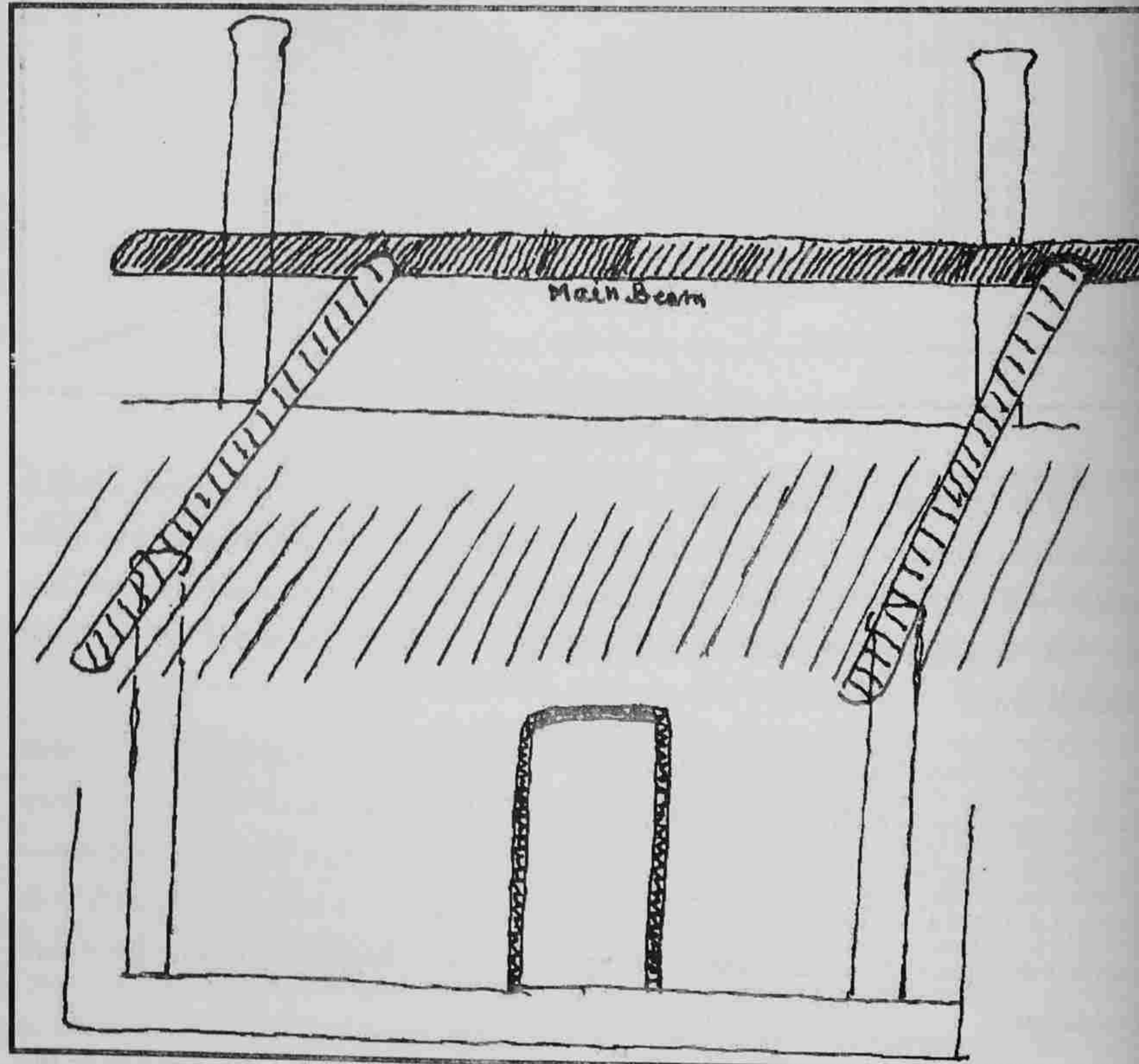
The example of house building of *Kotwalia* tribal community of Gujarat, which is a primitive community, is presented here. The main occupation of Kotwalias is to make baskets with bamboos. For them bamboo is a means of earning hence it is a life-line. They earn with selling baskets made of bamboo and their house structure is also made of bamboo strips.

They plan their house design themselves with the help of senior leaders or tribal technicians. First of all they prepare foundations for the house. An 18-inch (45-cm) deep and broad foundation cum base wall that is necessary to sustain the load of the house above, i.e. the walls, floors, beams and roof etc is prepared. No house is made only with mud but wooden slabs are also used for beams and pillars. It is quite in order to have mud foundation.

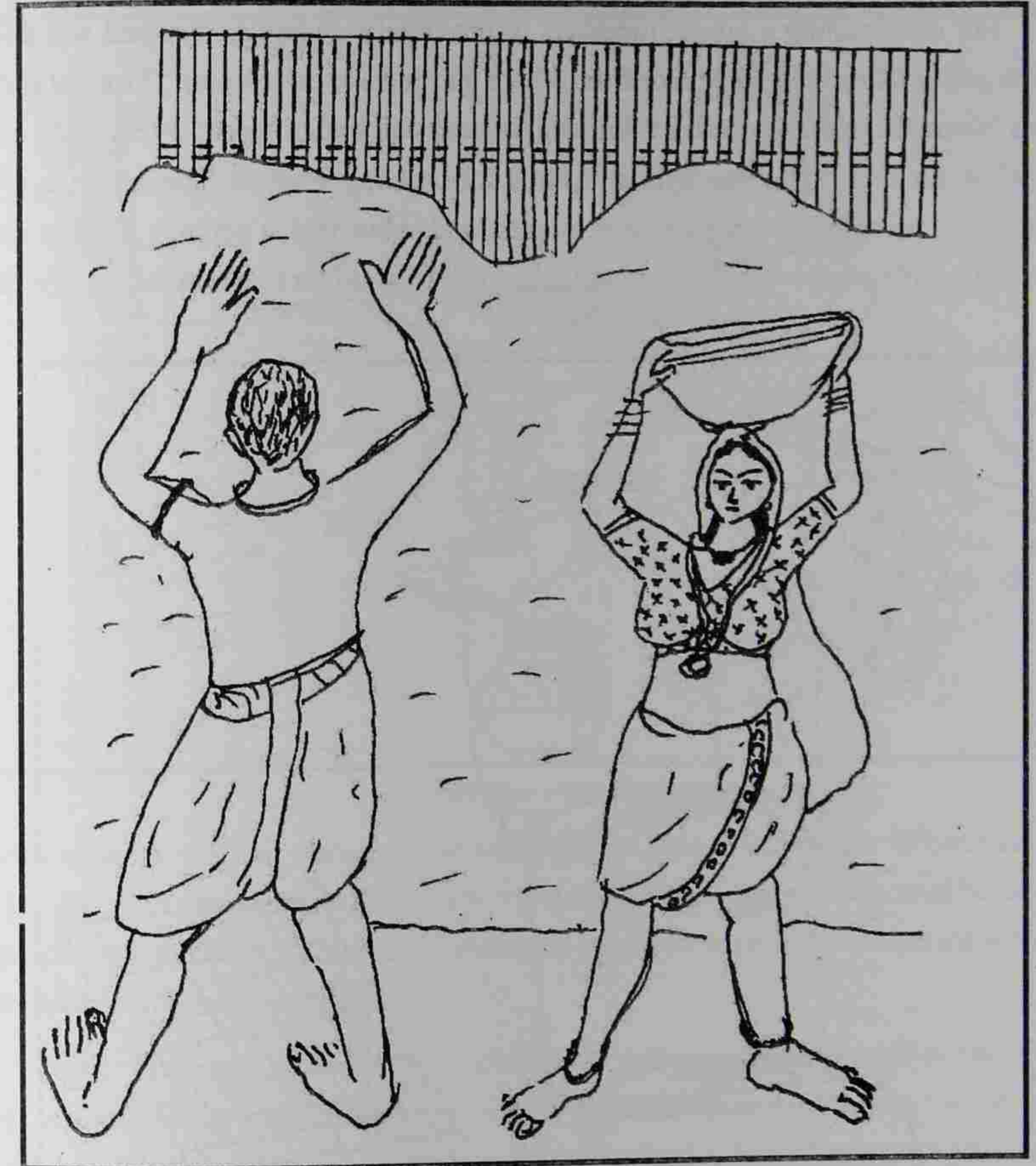
The selection of the soil for preparing mud is done very carefully. The soil on the

upper layer of earth normally is quite soft and not suitable for constructing a house. But there may be reasonably harder subsoil capable of sustaining carrying the weight of single story mud house may be available under the first layer.

As Kotwalias make their walls with bamboo splits, so foundations are not needed very large and deep. They lay foundations by filling the trenches of about 6 to 9-inches. In foundations mud and stone pieces are filled. On four corners of the planned house four wooden pillars are erected. As the walls are made of bamboo splits so to support the roof beam, two wooden pillars are erected on both the sides. In the center also a *khambha*



House structure

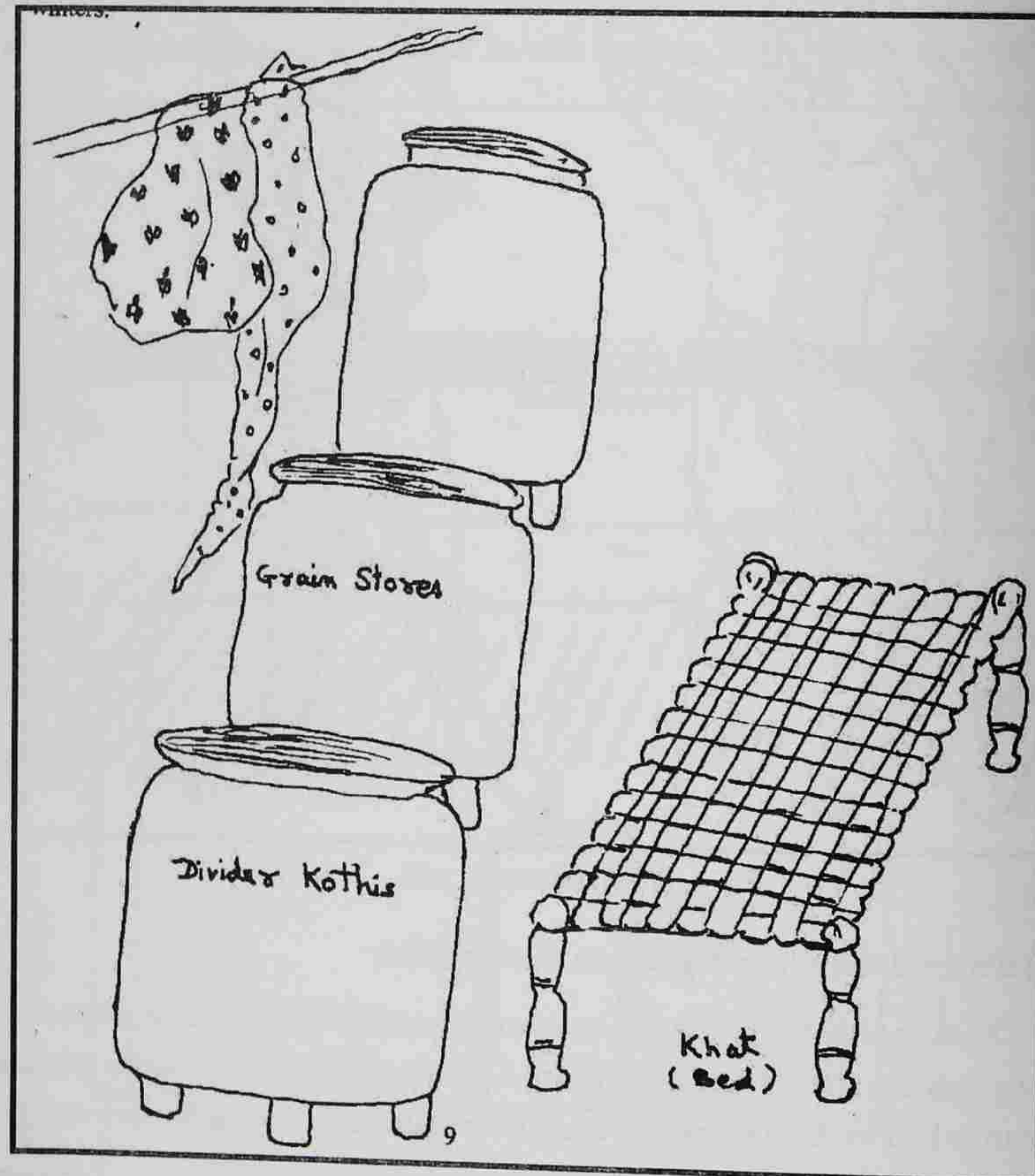


Plastering the wall

(pillar) is erected, this pillar is higher than all other pillars.

The floor of the house is higher, to two to two and half feet above the ground so the rainwater may not enter in the house. Every Kotwalia house has *Chabutara* (platform) outside to sit and work. Many people construct a platform inside the house to use it for sleeping and sitting.

For constructing a house, members of the family, generally husband and wife, work together. They identify a place from where they have to collect soil. The ideal soil is not visible on the ground surface. While digging one can find different layers of the soil, one below the other. The top layer is useless for building a house. The upper layer is organic soil, below it is perhaps a layer of sand, and below that is perhaps a bed of clay. Kotwalia people know which type of soil (clay) can be good for house building. Men dig



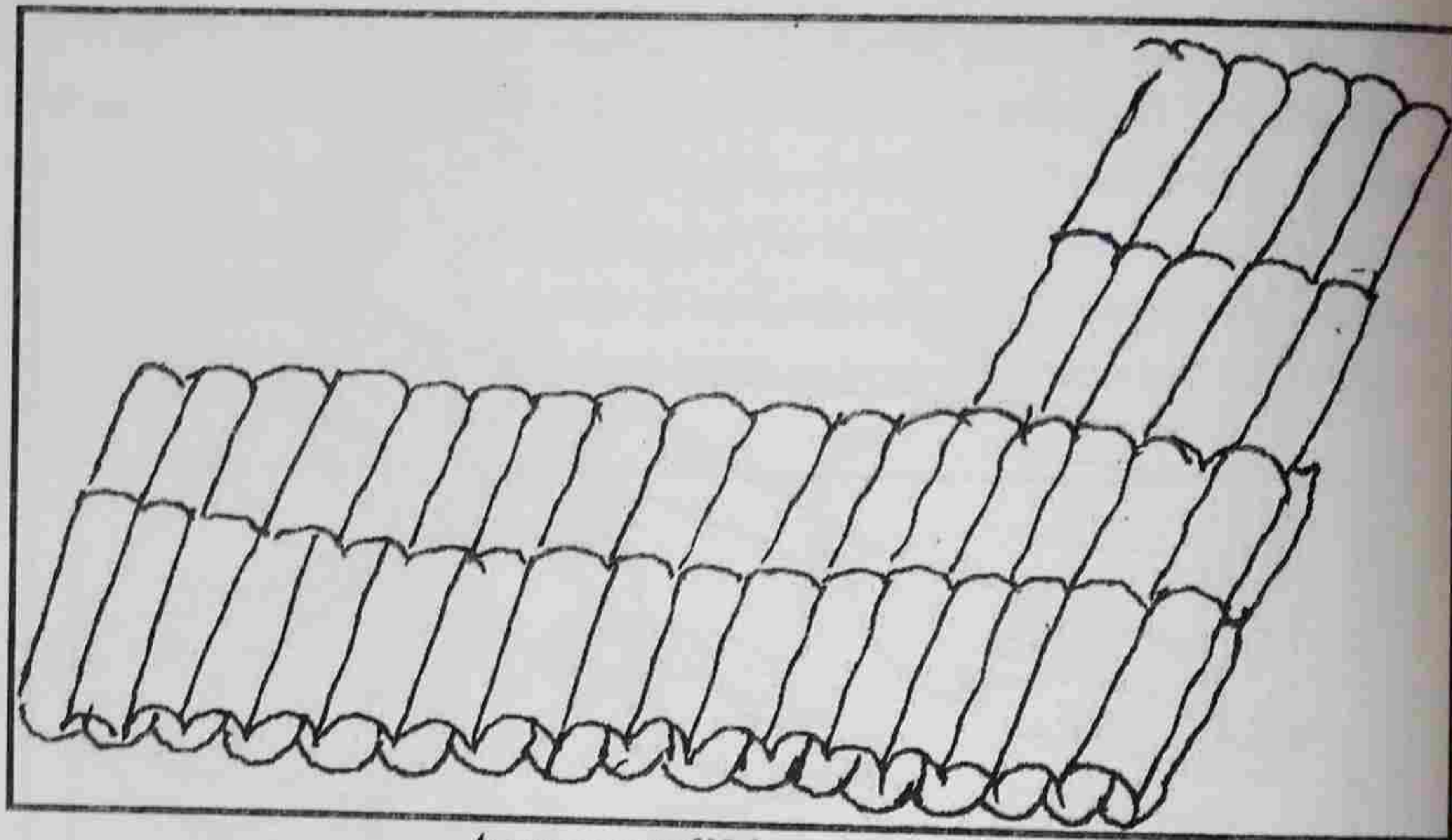
Dividing the house



The lady plastering the floor

the clay or useful soil and women transport the soil on head to their house. When enough soil is collected a mixture with stabilizers is prepared. People know which mud be useful for preparing the mixture. Below two or three of these submerged strata is an ideal paste for building combination of mud.

Color of the soil provides lot of information and indications of good or bad mud. Deep yellow, orange and red, ranging to deep rich browns indicates iron content and almost certainly this will mean there is good building mud. Clays often have a grayish or dull fawn color ranging down to dirty white. Men and women prepare the mud mixing the stabilizers. Straw pieces are mixed with the clay as the straw bits, minimize cracking. People in different areas use "Bhusa"-chaff and various fibers to strengthen the mud. Cow Dung often contains a lot of fibrous material and traditionally is generally used in all sorts of mud work. Cow urine is also used as it has enough urea content and the urea acts as a binder, a sort of glue. Some times sugar and molasses is also used as stabilizer. The most common and effective stabilizer is soil itself.



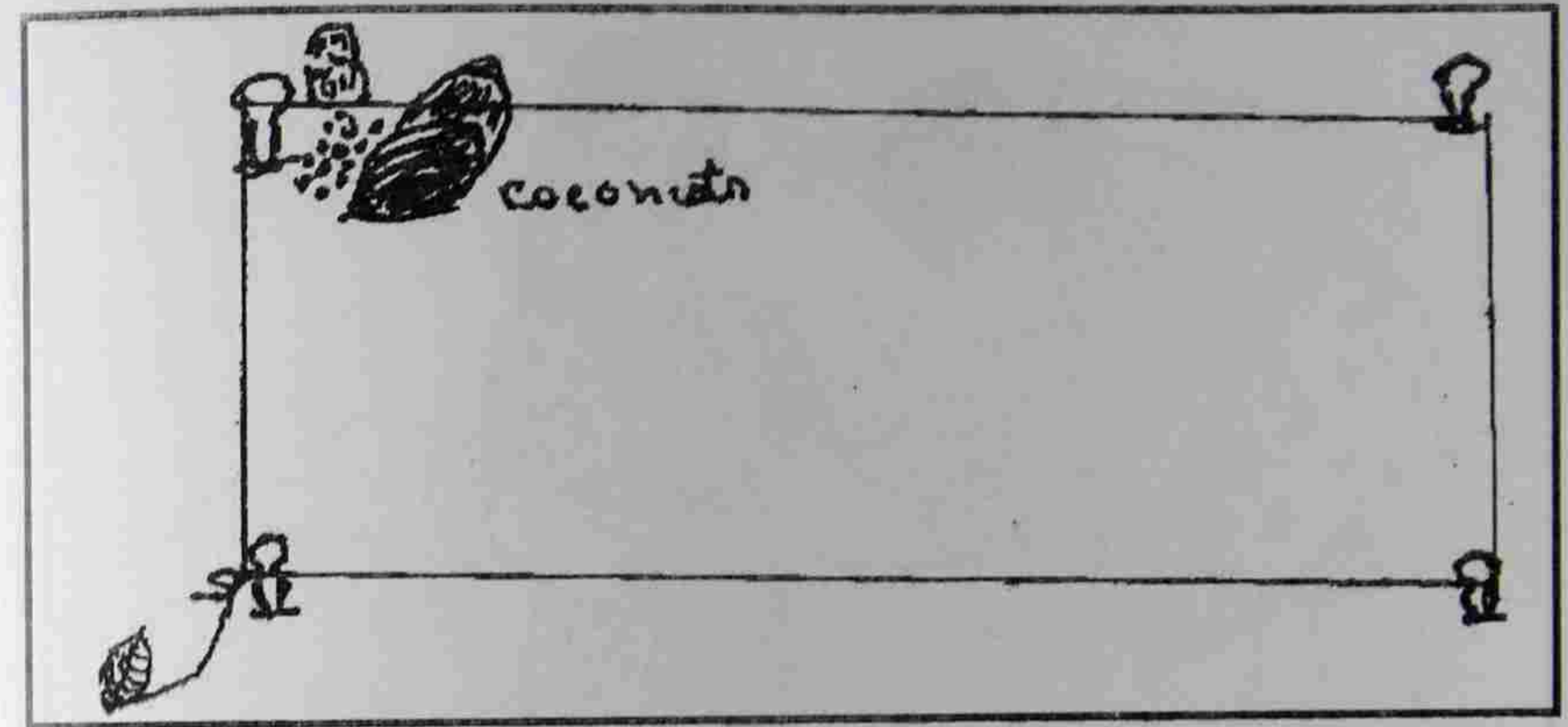
Arrangement of Naliyas on the roof

After collecting the soil and stabilizers, women mix and mesh the paste with foots. They continuously mix the material and put some water so the soil, fiber and stabilizers, become as a paste.

A mat is prepared with bamboo splits and erected on all sides as a wall, round the house which is to be built. The Bamboo mat is prepared with enough precautions so it may remain strong and erected straight. The splits are cut thicker and weaved in such a manner that the mat may not become loose. Husband directs the wife and she weaves the mat for walls.

Men put the paste on bamboo-split-walls and women support them by mixing the material and carrying the material in a 'Parat'-iron vessel. In a few days all the mat walls from inside and outside are covered with the paste. Doors for the house are made of wood which is expensive. Generally a house has two doors, one in the front and another in the back.

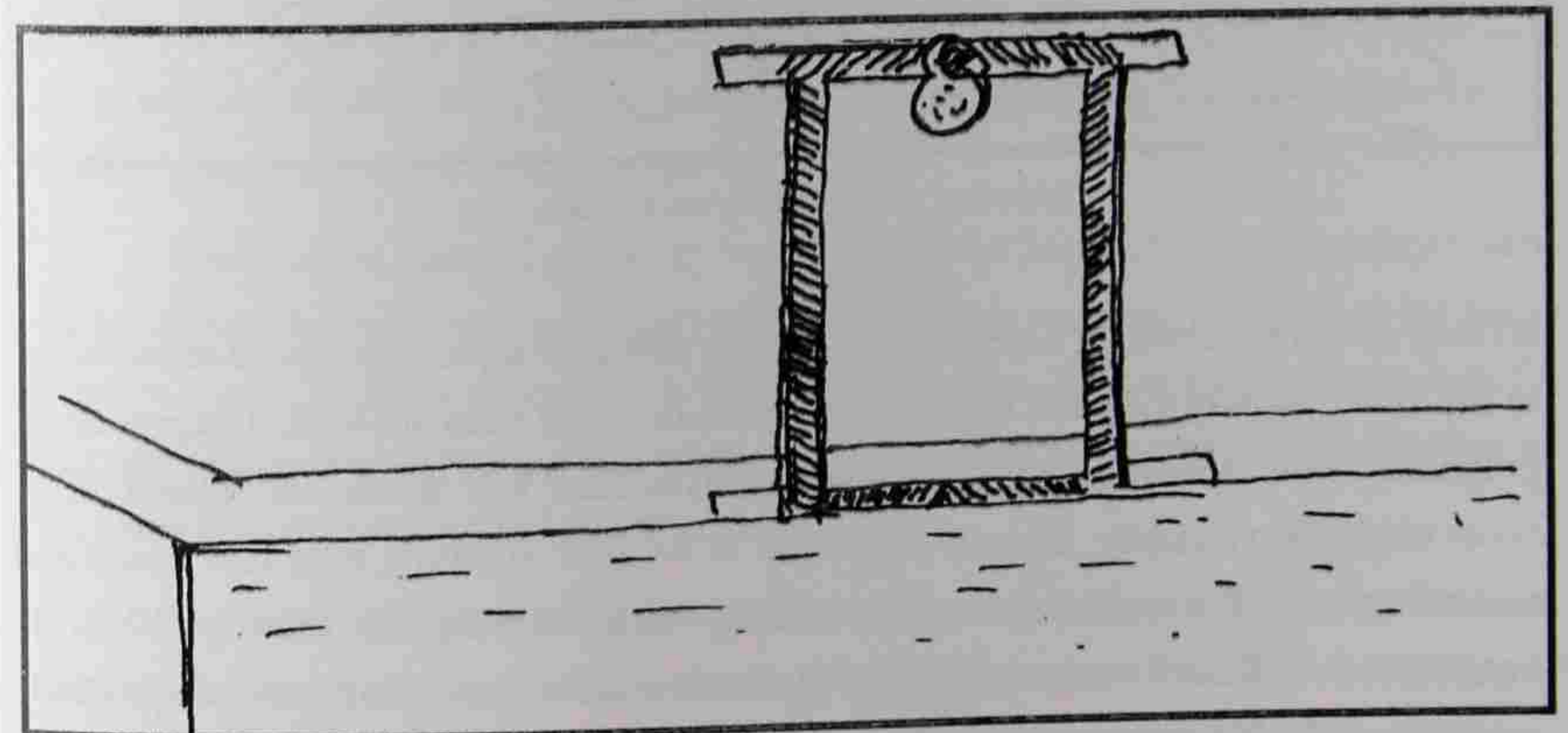
Mostly houses are divided in three parts, which is done with the help of food grain stores (*Kothis*). These *Kothis* are made of earthen material. A family keeps food grain in these stores. They also use these stores for keeping dresses and precious items including



Plan on the ground

money and jewelry. These are generally four feet to five feet in height. These stores are placed in the house in such a way that the house is divided in to bedroom, drawing room and kitchen. Outside the house on gate an "otla"-platform is built where they work. Guests are also received on the platform. Children play and also study there. Children learn to process bamboo and prepare baskets and other items by observing their parents at work.

Kothis are also prepared with mud. The process of building *Kothis* is slow. First of



Arranging the door



Method of preparing the mud by meshing

all they prepare a 'Thala' or base and four legs are prepared separately which are attached to the Thala. Slowly the walls of kothis in square or round form are built. The process of preparing walls is slow as it is done layer by layer, after half drying one layer another layer is placed vertically. Usually water has to be used to mould mud into shape and makes it strong. The walls will remain standing, when that water has dried up. When the construction of Kothis are completed, on the outer walls of these grain stores decorations are made with mud or with pieces of mirror.



Making a cob

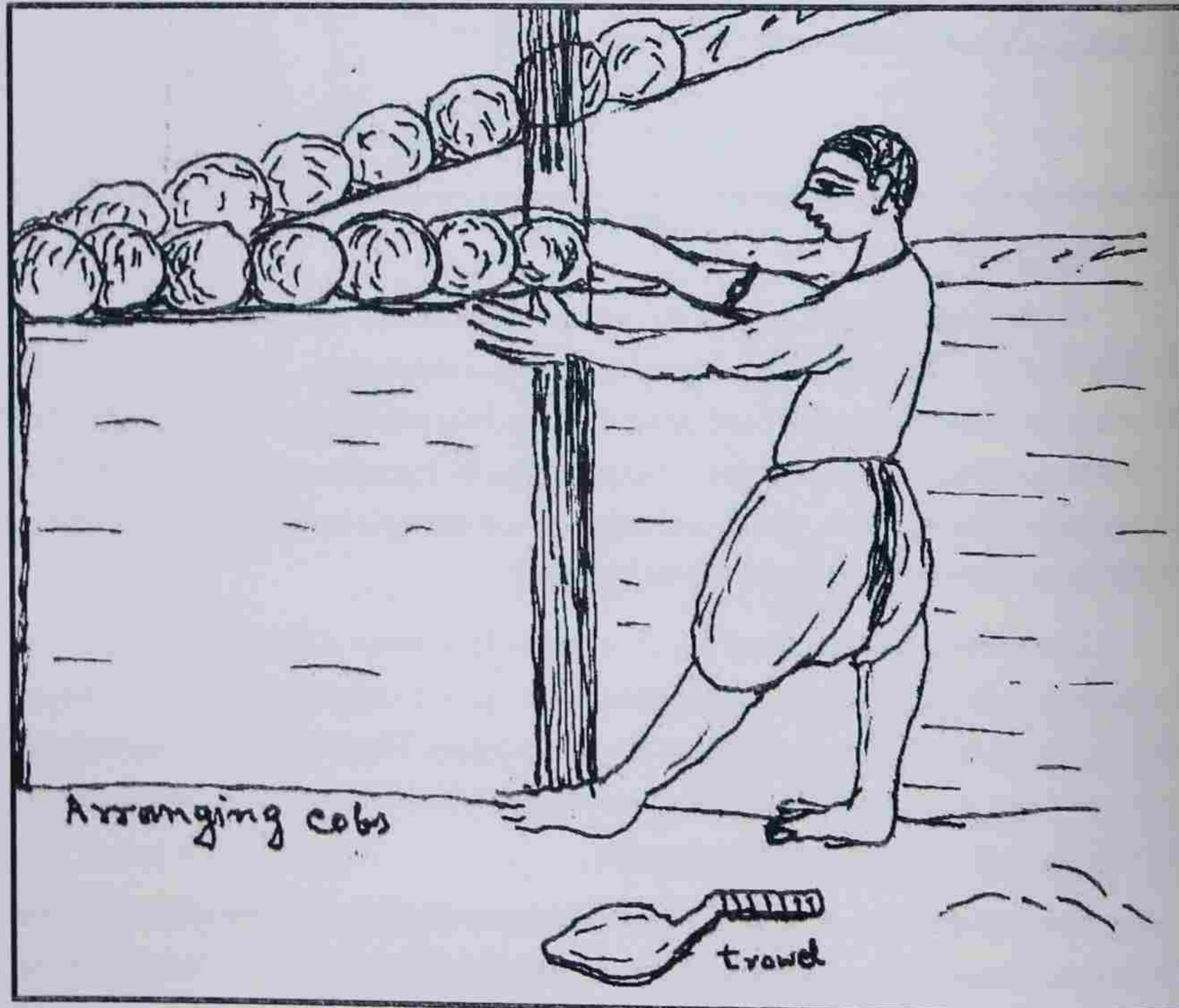
Kitchen has a hearth, some small boxes for spices and salt. Utencils are kept and used in kitchen. The important part of the kitchen is water store. Every house has the water stored in earthen 'mataka' and now a days steel vessels are used to store water. The Kothis are used to keep food grains for the year. Some important equipments of kitchen for example grinding stone, pestle, and tongs etc are arranged and kept. Water is kept in earthen pots in summers and in steel pots in winters.

The house is cleaned every day by woman of the house. After every rainy season the house is to be fully renovated and repaired where it is required. The lady of the house plasters (*lipna*) the floor every month. It is part of her duty. The plastering is done with the mixture of clay and cow dung and other stabilizers. After rainy season in September all the walls both outside and inside are smeared.

The roof is also planned in slanting form to prevent the house from rains. To cover the roof, bamboos are arranged in such a way that between them there may remain gap of two to three inches. Earlier the roof used to be covered with leaves of "Tad" (palm-tree).

It had to be rearranged every year. Now roof is covered with leaves of palm tree and on them Naliyas (half pipe- 18 inches long) or Manglore tiles (Manglore is the city where these Naliyas were first time built) are arranged in such a way that rain water does not stay on the roof. Water is the constant enemy of mud walls, so these should be protected against the dampness with extended roofs. For protection of the house *Chan* (roof) is extended on all sides to cover walls of the house, so rainwater may not touch the walls.

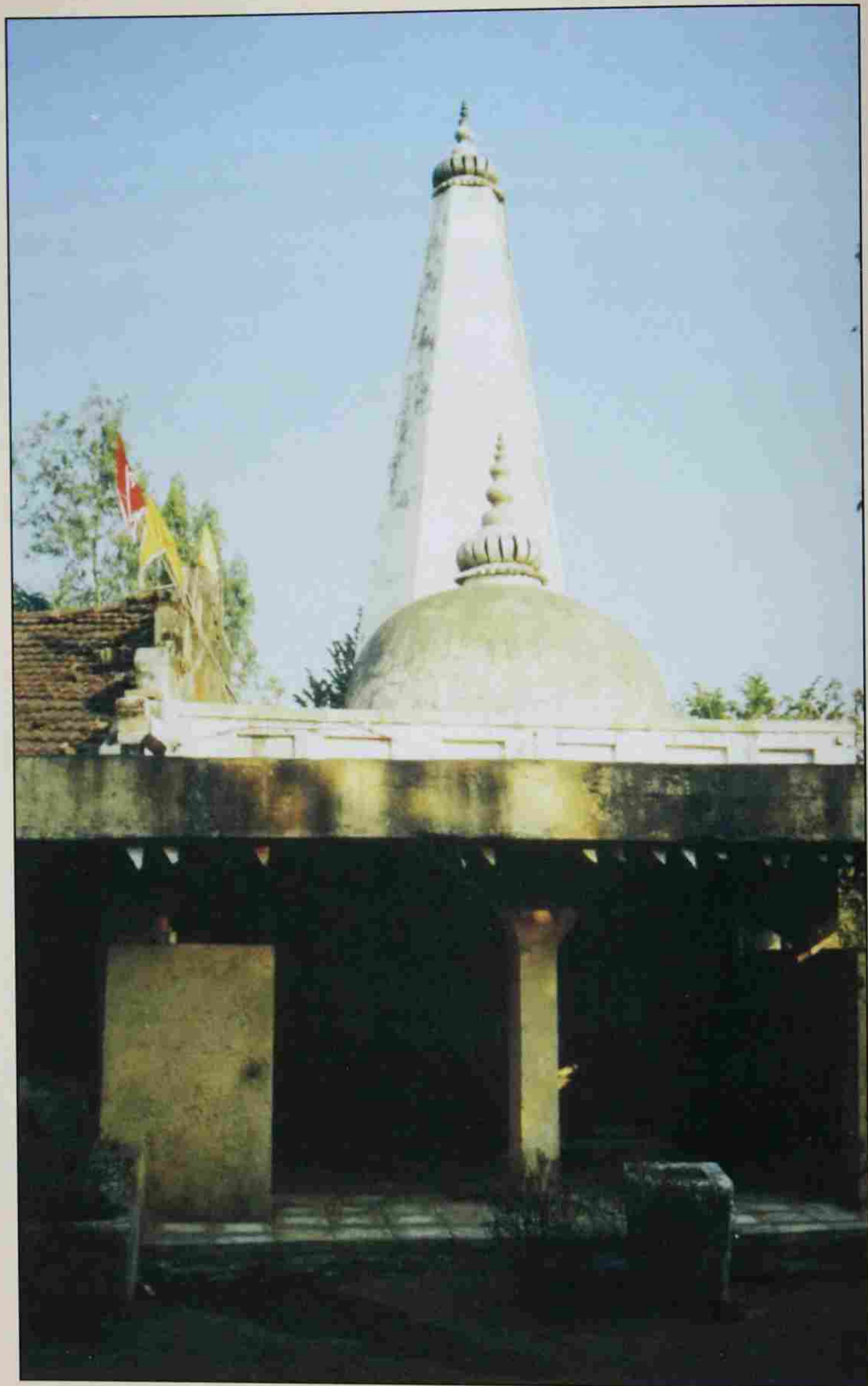
On the backside of the house one of the platforms is used for bathing purpose. Woman under menstruation use this platform for bathing. Generally these houses do not have latrines. People go in open for latrine in nearby forest area.



Arranging Cobs and building wall



Tribal craftsman working in the back of his house



Tribal Temple



Tribal modern house



Church in Tribal Area

Kotwalia houses are comfortable for them as these are surrounded with trees. They generally work under the shade of the tree to avoid sunshine and move from one place to another near their house.

House constructed with solid earthen walls is the trend among Bhil and Mina tribes. In brief the technique of building houses with mud is presented here. Among Gonds the largest tribe of India, and Bhils second largest tribe who live in Rajasthan, Madhya Pradesh, Gujarat, and Maharashtra states and in rural areas, houses are made with solid walls of mud. For these houses only mud (some time stones) for walls and floor, wood for doors, bamboos and backed *Naliya* for roof is used.

The technician of the tribe known as *Suthar* or *Karigar* among Bhils, plans the house. He uses the string (*Dori*) for the design and size of the house. He plans the house mentally and then put the house design on ground. He puts four wooden nails on earth on four corners of the planned house. He ties string around these wooden nails and makes it rectangular.

On an auspicious day and time plan of the house is implemented. To begin the building of the house the auspicious day and time is generally decided by the senior member of the *Fala*-small village or part of the village.

After deciding the "*Muhurat*" (auspicious day, time and place) all the members of the '*Fala*' are invited by the owner of the house for participating in the ritual. The technician and the senior persons advise to the house owner at which place the *Muhurat* is to be done. Mostly one of the corners is selected. Two coconuts (*Shrifal*) and the jaggery (*gud*-local sugar) are used for worshipping the earth and the gods. While worshipping, at *Muhurat* coriander seeds are also essential. Small pieces of coconut, jaggery and coriander seeds are distributed among those who are present and this *Prasad* is distributed also to relatives and village people.

The tribal technician plans out the house and this planning known as *Ghar Chokana* (mapping the house) is done. Most of the houses among Bhils to face to the East.

After the *Ghar Chokana* ritual is done, the close relatives of the house owner help



Jhunpa - small huts

in digging the foundations for the house. They dig 2 to 3 three feet deep and 2 feet wide trenches for foundations. The foundations are filled with mud and small pieces of stones varying from the size of a pea to that of a coconut. For foundation soil sticks when wet-silt is mixed and stone pieces are used. When the foundation reaches to two feet high than the ground, a ritual under the supervision of the technician, "*Darvaja Baithana*" (fixing the doors) is performed. In the process a wooden frame is fixed for the main door. On the upper part of the frame, a copper coin, a cowrie (small shell) and Akha (rice) in red cloth are tied up. It is believed that it will protect the house.

Now the process of wall making starts. The Bhil and Mina tribes they divide the house in rooms. Each room is known as *Gala*. Women prepare the mud for making walls. Clay plus sand or silt plus stabilizer are good for making the walls. Among tribal and rural communities people have the knowledge and experience of earthen houses. It is to be remembered that long enduring mud walled houses have been used all over the world for thousand of years. Our forefathers, by trial and error, had found different types of stabilizers, and better ones have endured till today.

For building earthen houses tribal technicians use, cow dung, urine of cows and small pieces of straw are used as stabilizer with clay plus sand. Women mesh the material with their feet for two to three days. This process is known as *Gnudhana* (kneading). The main object of it is to make the wall strong at the height of man and, having reached that height it must be capable not only of standing up but also of carrying the weight and thrusts of a roof.

The first, simplest and almost certainly oldest system is called "COB". With only a little water to form a very stiff mud, a large lump of it - as much as one can hold together between one's two hands roughly moulded into the shape of a huge elongated egg. Bhil men and women are very strong and stout to work according to need. The *Karigar* usually hold the cob in size of anything between 12 to 18 inches, (30 to 40 cms) long and about 6 inches (15 cms) wide.

A row of the cobs of mud are laid neatly side by side-preferably some what pressed together. Than another row of cobs is laid on the top. This second layer obviously lies in the depressions between the lower rows of cobs. When three or four courses have been laid, one above the other, the sides are smoothed over so that the holes and cracks disappear. The *Karigar* sometimes uses hands only and some times a *Karni* (an instrument) to make a very smooth flat surface.

In practice the experienced wall maker literally throws the cobs with accuracy and force so that the cracks and holes between the cobs are almost non-existent. One of the experienced *Karigar* (skilled wall maker) told that the mud be kept stiff. Wall

building is better if done slowly. After laying two or three layers of cobs all round the house they wait until it has hardened and set a little before carrying on with the next two or three rows. Among Bhils while wall making some stones are also put in cobs. It is for protecting the wall against thieves. If you make walls with baked bricks thieves make whole easily to enter the house.

For keeping the wall straight and vertical the *Karigar* stands astride while he works. Wall's surface is smoothed and removes holes and crevices with hands. Soon after completing the wall only the hands are used for smoothing the wall. The main and very big advantage of cob is that anyone and everyone can have a bash at it and special tool or molds or other equipment is not required.

While making the walls wooden pillars (*Thambalas*) are erected in four corners of them. These pillars are for supporting the roof. On these pillars *Kumi* (wooden bracket) is placed on which the (*Pat*) beam is to be fixed. In a house one main beam is planted and two supporting beams are also put so these can bear the weight of the roof.

For making roof, first bamboos are put into slanting way. The walls on both sides make standing triangles. So it is easy to make roof by putting the main beam on top of the triangles. Among Bhil tribes some times only son or two sons stay with their parents, so in the new house building structure is divided in *Galas*- rooms by erecting walls. The division of the house is done according the need of family members. 95% of tribal families like to live as nuclear family.

In Kutch area small earthen houses are constructed in the round shape. To build curved- or circular walls 'cob' is the ideal system for doing it. These circular huts depict about a simple culture. They use sticks and leaves, materials are bendable and lend themselves to curved solutions. In Kutch area most of the huts are built by women alone. Julius F. Gluck says, "this inclination toward the division of labor was presumably a universal human institution at the beginning of culture." These huts are light and not very durable. The huts serve only nuclear families. The diameter of such a structure measures from 3 to 5 meters. The roof is conical and made with grass and bendable material. Due to climatic demands, none of these structures survives longer than three to five years.

They believe that earthquake does not destroy these houses. The Kutch area is under earthquakes, four years ago there was a big earthquake in this area and cemented houses were destroyed with big losses of life and property. While reconstructing houses, in this area cement and concrete is being used which is dangerous in this area.

In the last earthen houses of Meena tribe of Rajasthan is presented. These houses are of solid walls of earth. The Houses have bedrooms, kitchen and an verandah. The maintenance and decoration of the house is done by women. Women not only maintain and plaster the floor but also plaster inner and outer walls every year on Holi and Diwali festivals. They make very fine drawings on walls of their houses. They draw drawings with white color on red ochre wall. The area is close to Tiger sanctuary so they draw variety of drawings depicting tigers, peacocks, birds and wild life.

In the end a poem is presented in the honour of the earth or mud;
written by - Amit Sharma :

*Mud is another name of Earth,
It never gets tired, giving birth,
To dwellings in Bamako or in Perth.
It is one of the few sources,
Which does not require artificial forces,
And easy to use, if used in courses.
Buildings that use mud,
Have a lot of strength,
Depending on requirements can have any width or length,
Or height, which may reach floor, eighth, ninth or tenth.
For thousands of years it had been used in a simple way,
But now they have started, experimenting and play,
With different percentages of sand, silt, aggregate and clay.
You can learn how to use it, without going to school,
It follows certain principles, and one simple rule,
That while building with mud, you have to keep your cool.*



TYPES OF TRIBAL HOUSES

We should not forget that simple huts of less durable material also perform as the sample work of architecture as a part of culture, which has used the huts at one time or another. Without these small huts all later development remains unintelligible. Tribes in India are cultural entities and they live in simple houses. Though their homes are simple and vary in form still have unique designs. Simplest is the hut constructed by primitive tribes. It also depends on availability of material for construction of houses. Huts are simple in form but these huts are forerunners of modern architecture. In later time less durable material has been replaced by durable and expensive material. For simpler cultural levels the construction of house is always the most expensive item of their material culture. The hut is most costly for the family and the group or community who adopt it and approve it. In India not many efforts have been made to preserve tribal architectural heritage. There is a need of anthropological interest in documenting the traditional architecture and to investigate and record local types of tribal construction. The tribal architecture is to be studied in the light of its aesthetic, social, religious, and historical importance.

Here types of tribal houses are presented. The base of the present study is documents prepared by administrators, studies done by various researchers and through written literature. In the process of synthesizing available literature, about different

tribes and photographs of their houses have been used. A few line drawings are prepared on the basis of old photographs of houses of tribal communities.

Indian tribal houses can be classified according to the ground plan and sort of roof used in course of its historical process. Examples of tribal houses from other continents particularly Africa have been taken.

1. The dwelling pit.
2. The Circular hut with circular ground plan.
3. The Cylindrical conical roofed structure.
4. The gable-roofed hut with rectangular ground plan.
5. The clay-box-house
6. The cone structures.
7. The bamboo-strip-walled-house.
8. The double storied gable roofed house.
9. The oval-shaped house
10. The houses with platforms.
11. The Naga Houses
12. The pyramidal roofed house
13. The Toda hut
14. The Slate House

1. THE DWELLING PIT

It is the most primitive type of residential place which primitive communities prepare to protect themselves. The pit is used for sleeping and keeping some tools and items of use for the family. The caves can also be categorized in this type of housing. Fishing, hunting and food gathering economy was the base of this type of

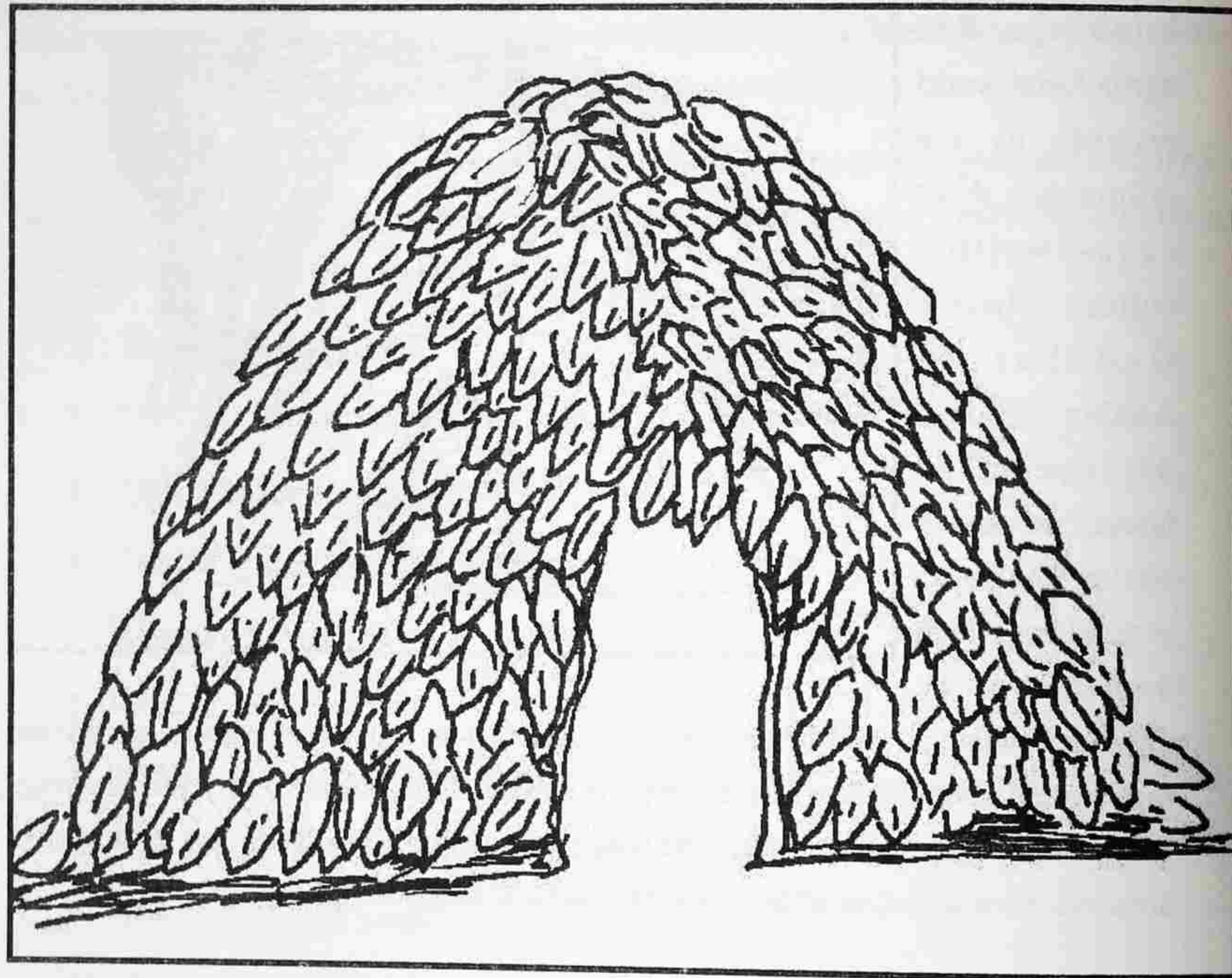
housing. Pre agricultural world provide us the information about cave-dwelling culture. Among Gadabas of Andhra Pradesh this type of pit houses are used in winter. The house is small one which they construct by



digging a whole in a earthen mound and plaster it on outside and inside. In winter they do not need windows in this type of house, which is used only for sleeping. Earth work is important aspect of the house and not much wood slippers or bamboos are used. Now such type of houses are extinct and rarely used.

2. CIRCULAR HUTS

From nomadic life style when tribal communities became settled they constructed huts in circular forms. The circular huts were based on experiences of men, who were not much aware about angular forms, on the other hand the materials were easy to control. In Kutch area people employ sticks and leaves, materials which are bendable and lend themselves to curved solution. In nomadic communities, the huts are erected by women alone. Julius F. Gluck says, "This inclination toward the division of labour was presumably a universal human institution at the beginning of culture. We find traces of it today, moreover, in our own culture: the kitchen and bedroom are still considered the special provinces of the woman". In Kutch area of Gujarat and in Barmer area of Rajasthan, the cylindrical conical roofed huts are



built. Both areas are of semi desert type. The huts serve only to nuclear family-parents and children. The diameter varies according to the size of the family. For material storing another hut attached to main hut is also built. The floor of such huts may total as much as 15 square meters.

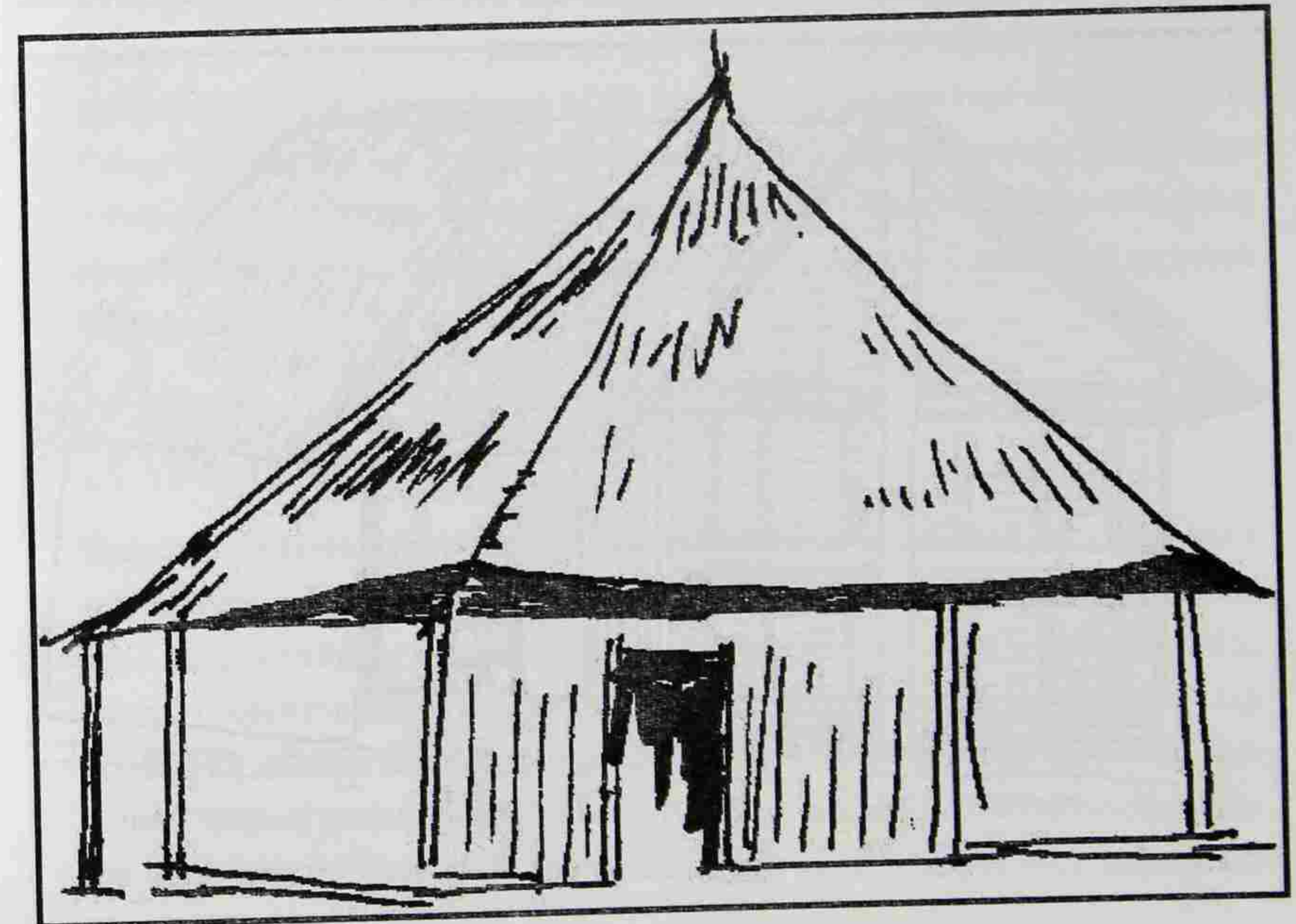
The temporary architecture, which is raised in one or two days is created by wandering groups. Family moves for a week or so for another place and construct a hut to stay for a week or so.

3. CYLINDRICAL CONICAL ROOFED STRUCTURE:

When nomadic communities become sedentary cultivators they construct new form of huts in the beginning and slowly develop architecture of their requirements. The cylindrical conical-roofed structure with its body like rounding preserves an inner

relation to the round ground plan. The cylindrical construction has a timber or bamboo framework, which is plastered with clay. The clay protects residents from the cold and heat of nature. The plaster on walls of huts is done by women, and every year on festivals of Holi and Diwali the walls of the huts are freshly plastered. The diameter of huts measure from 3 to 5 meters; thus the surface area circumscribed does not exceed 20 square meters. The peak of the roof rises 4 to 5 meters above the ground. This type of structure needs wooden sleepers for roof. To support the roof a wooden pillar is erected in the center of the hut. These huts are not durable, because of considerable climatic demands, none of these structures survives longer than three to five years.

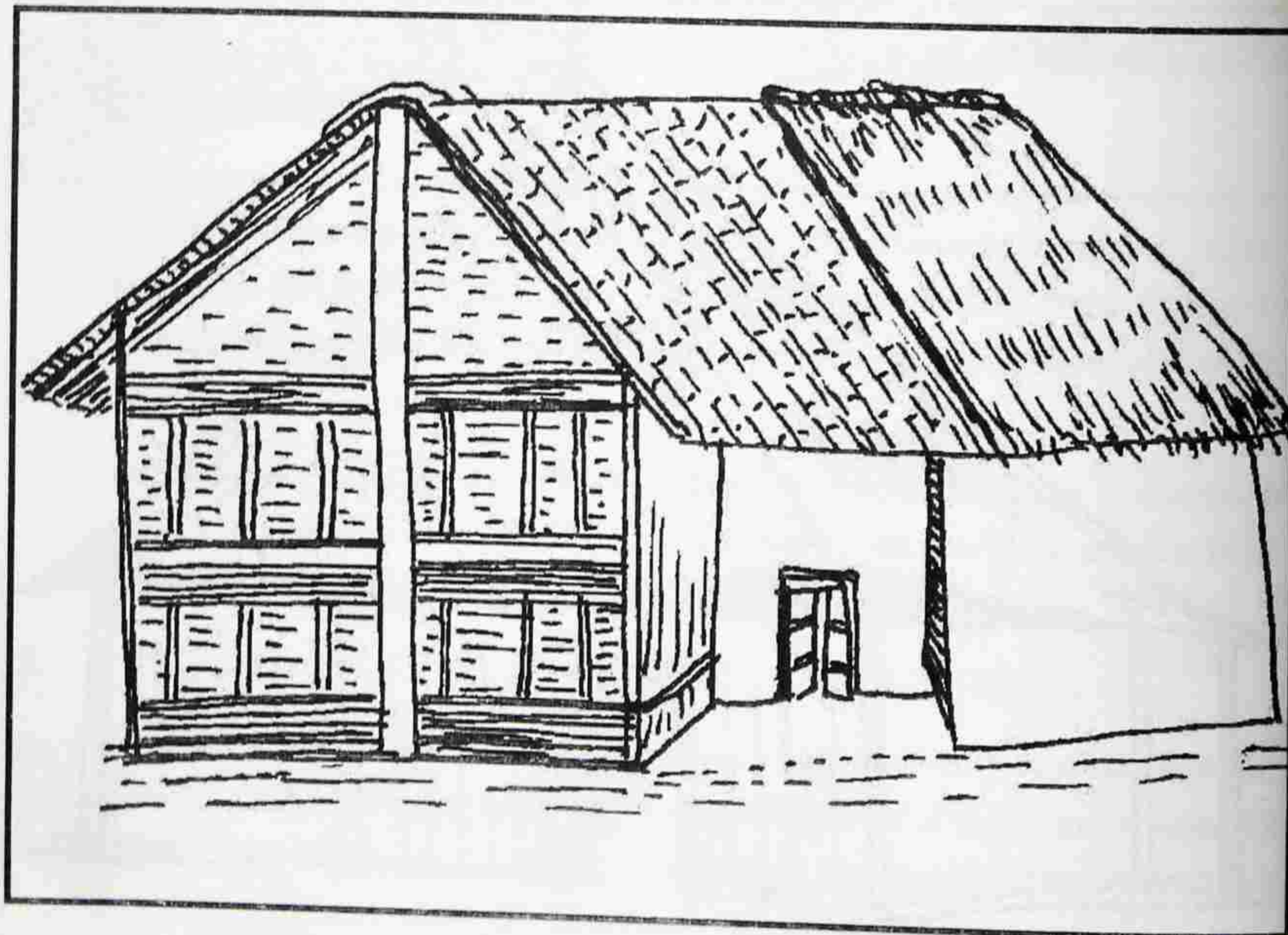
As the construction of these huts need variety of material and their size is large so woman alone cannot construct such huts. The planning and casting of framework is done by the men, while the women help in the clay plastering. Relatives and kin



members help who are co-resident of the habitats. The close connection between architecture and society is visible in these simple relationships. It is interesting to explain that conical-roofed huts are also found in the central Sahara and in Sudan from the Atlantic in the west to the Nilotic tribes in the White Nile area. In Ethiopia and from there southward as far as East Africa, among the Pare and Chaga, in the Kongo and Zambesi area and in Angola this type of huts are found.

4. THE RECTANGULAR GABLE-ROOFED HOUSE:

Tribal communities who live on the flat land, construct gable-roofed houses. Gonds of central India, tribal communities of Rajasthan, Gujarat and Maharashtra build their houses in rectangular gable-roofed style. The cross-sectional spatial measurements are generally 8 to 12 meters, hence 40 to 60 square meters. This type of house has been built by tribal communities who adopted the life style of a settled



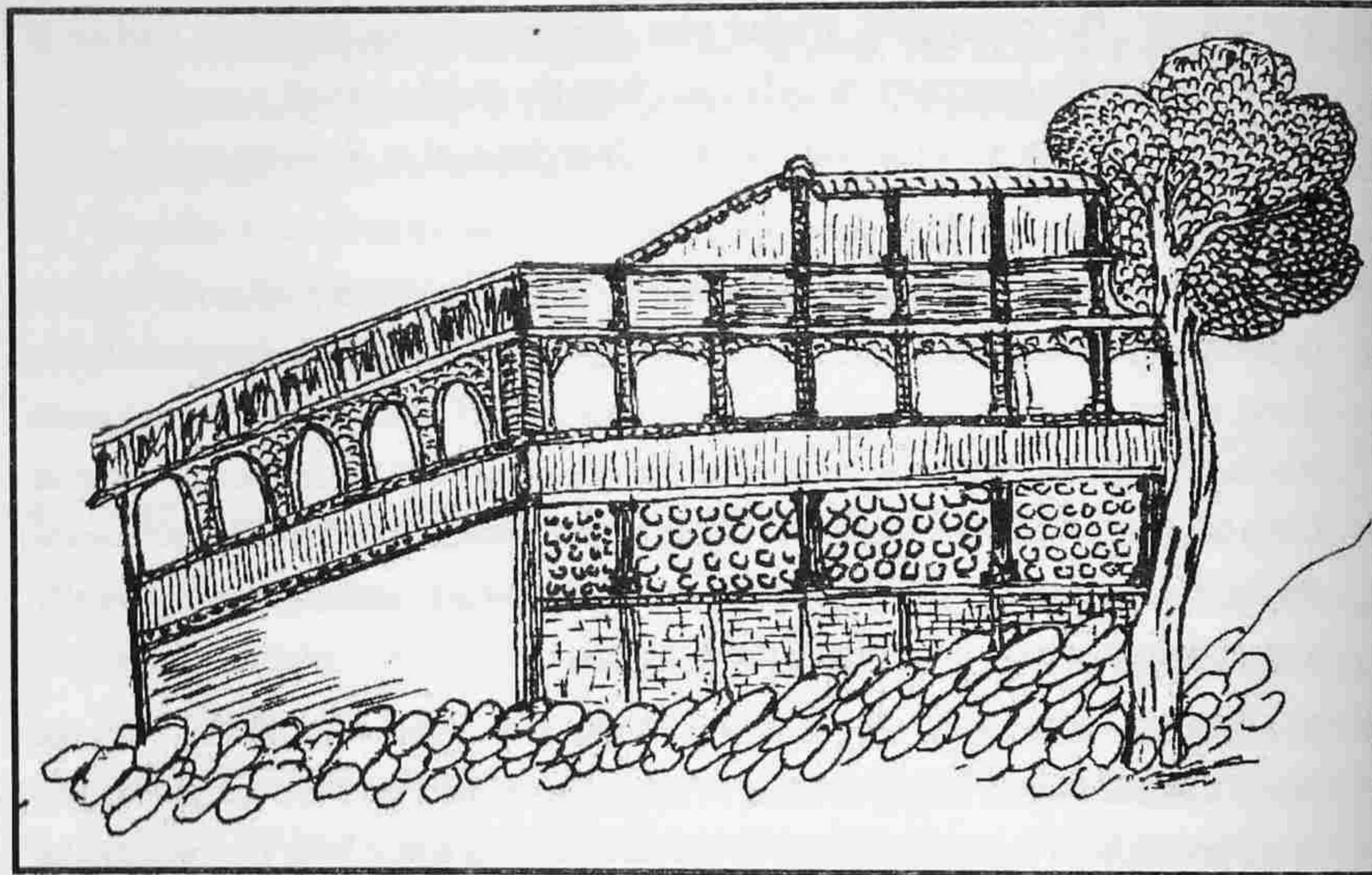
community. The rectangular ground plan demonstrates an expedient trait-as is always proper for emigrants-entirely apart from the fact that wood, a more suitable material for this type of building, stood at their disposal in abundance in heavily forested areas.

Generally this type of construction does not have the compound plan as the tropical primeval forest imposes limitations. On the other hand, the rectangular ground plan made it easy to subdivide the space by means of half walls or by keeping grain stores. In Africa several similar huts beside one another are constructed, while in India habitats are small and only a few houses are constructed. At one habitat houses for families of kin are built. The expansion of this type of construction is technically very simple, in which one prolongs the rectangle.

In terms of construction, the rectangular house with gable roof differs from the round conical roofed house because of the pillars which bear the ridgepole. The same principle is encountered also in the *turtlebacked* house with the rectangular ground plan. Here over two posts are laid a bent ridgepole whose central point is approximately over the midpoint of the house. In Africa this type of houses are in Congo and nearby areas. Rectangular shape of houses are most popular among large tribes of central and western India. Veranda is built in most of the houses in tribal communities of South Gujarat. The veranda gives artistic look and social approach to the house.

5. CLAY-BOX-HOUSE

The clay-box house is popular in Rajasthan where the rainfall is very low. It has a rectangular ground plan with flat roof. The house with rectangular ground plan and solid earthen walls has flat ceiling. For ceiling wood of sufficient length are used as beams. In between beams clay as a filling for thickening material or the dried-clay bricks with its static function is used. Some people construct upper storey on such houses. Without great difficulty and with sufficient labour force, juxtaposition allow the inhabitants to have more rooms under one roof. Most of such houses are



windowless. Families who live in such houses have separate area surrounded with walls and may have small room in the boundary. This area is known as 'Nohara' where they may have bathing place, place for keeping cow and laboratory. Most of such houses are in small towns.

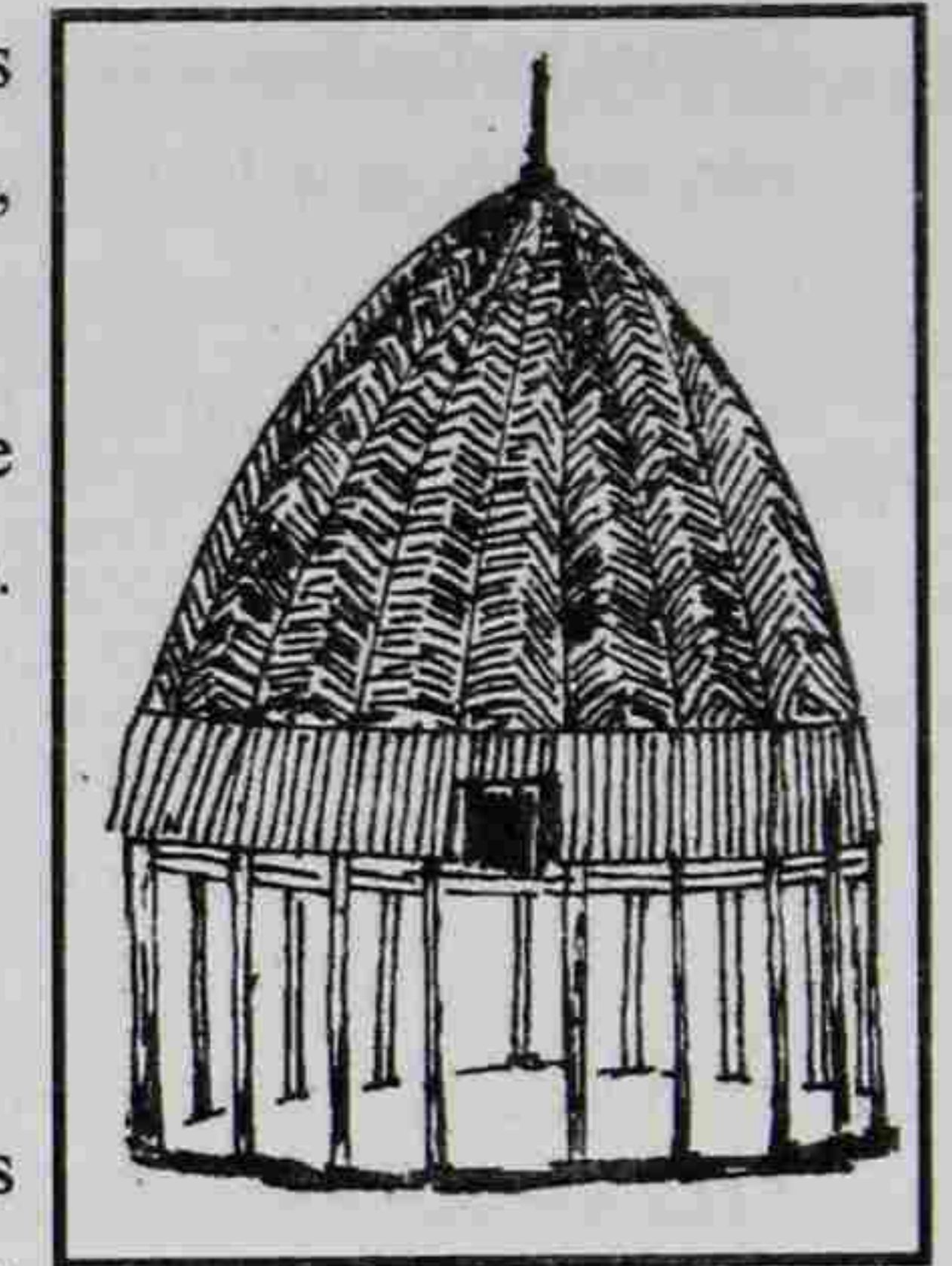
The clay architecture underwent a very attractive development in Africa with the influence of Islam. Mosques in Sudan and Mali are worth mentioning where Islam took over the earthen construction principle for its buildings and the dimensions were expanded in length and width as well as in height.

6. CONE STRUCTURES

The house plan with usually circular base and tapering to a point consists generally of a timber framework and has circular walls of clay. In higher cultures, the constructive elements of the conical-roofed hut experienced its climax in the round tower in the vertical shape. Some huts are used for dwelling and some buildings

serve as barns for the small or younger animals or as cookhouses. Other huts serve as bedrooms, menstruating women and as storerooms

Some tribal groups had clay structures, which are copy is of to Junta tribes' houses made with sun grass. Here for building roof the clay is used.



7. THE BAMBOO STRIP WALLED HOUSE

Bamboo strip walls houses are popular among tribes who work with and make items of bamboos. In Bangla Desh, Myanmar and India this type of houses are constructed. Walls are built with bamboo-strip-mats and then plastered with mud, which has enough stabilizer of cow dung. Basically the materials used for the construction of the houses are bamboo, wooden slippers for beam and pillars, mud, cow dung and sun grass. In south Gujarat and other parts of the country the Mangalore tiles or locally made tiles are used for the roof. It can be said that there are variety of patterns of houses among tribal communities based on the general socio economic status of the individual families.

8. DOUBLE STORED HOUSE

Before Independence of the country in India every one was not allowed to construct a house with many stories or



a house higher than king's house. People of lower castes had to follow this restriction very strictly in villages and towns. But tribes living in forests and on hill tracks do construct double storied house. Such house provides more space on limited land and security against wild life. The single roof structure protects the double storied house from rains and sun. There can be permanent stairs of mud in the house or can be portable wooden-stairs. In double storied house generally kitchen is placed on the upper story. The height of the upper story room is only 6 to seven feet. The whole construction is based on mud, wood, bamboo and backed tiles.

9. THE OVAL SHAPED HOUSE:

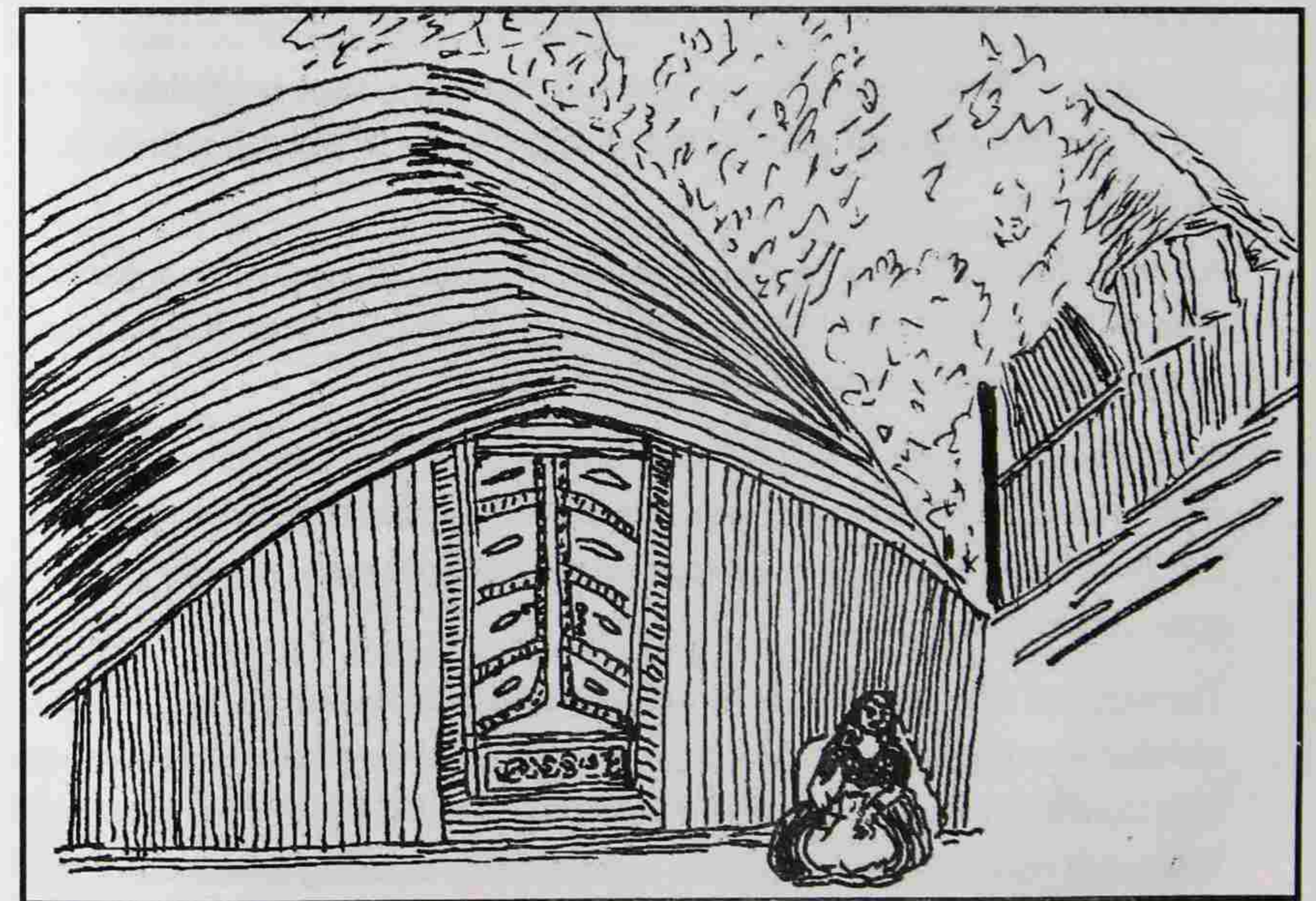
Khasi resides in hills of Khasi and Jaintia district of Meghalaya. Khasis are Austro-



Asiatic language speaking people who recall their migration from South East Asia into the hills of North-East India where hills receives abundant rainfall.

Khasi had traditional houses in oval-shaped. Generally their house used to be divided into three rooms, a porch, a center room, and a retiring room. The houses of the people are cleaner. They are as rule substantial thatched cottages with plank or stonewall and rose on a plinth some 2 to 3 ft. from the ground. Only window is a small opening on one side of the house, which admits but a dim light into the smoke-begrimed interior.

The beams are so low that it is impossible for a person of ordinary stature to stand erect within. In olden days the fire used to always burn on an earthen or stone hearth in the center. There is no chimney, the smoke finding its exit as best it can. The firewood was placed to dry on a swinging frame above the hearth. In the porch fuel is stacked. The pigs and calves are generally kept in little houses just outside the main



building. In olden days the Khasis considered nails as taboo, and only used a certain kind for fender which surrounds the hearth; but they are not particular now-a-days. In large villages and towns walls of the houses are generally made of stone.

In 1906 Sir Charles Lyall saw a house in Jaintia Hills which measured 74 ft in length. The house of the Siem priestess at Smit in the khasi Hills was 61 ft. long by 30 ft. broad. In front of the house used to be a little space fenced on two sides, but open towards the village street. The Syntengs plaster the space in front of house with red earth and cow-dung. The Khasis have some peculiar customs when they build a new house. When the house is completed they perform, *kynjoh-hka-skain*, they tie three pieces of dried fish to the ridge pole of the house and then jump up and try to pull them down again. Some times a pig is killed and fixed to the pole, and then they endeavor to dislodge it. When the house is completed two fowls, are sacrificed one to Narshingh and one to Biswakarma. Biswakarma is architect of the Hindu gods, he is worshipped alongside the Khashi deity Ka Siem Synshar. The house is plastered as a prevention against fire; arson in these hills being a common form of revenge.

Amongst the Khasis, when a daughter leaves her mother's house and builds a house in the mother's compound, it should be built either on the left hand or at the back of mother's house.

Among Khasis priestess is the important religious figure, women perform ceremonial dance in front of a large post of oak in the midst of the priestesses' house on the occasion of the annual goat-sacrifice ceremony.

Contemporary houses are akin to modern architecture, with roofs, chimneys, glass windows and doors. But traditional and inexpensive houses have the roof, which is thatched with leaves of a palm called *u tynriew*, is hog-backed and the eaves come down almost to the ground.

The houses of Pnar-War, a tribe who live on these hills is peculiar. The roof, which is thatched with leaves of palm leaves, protects the house from rains. The houses are built flush with the ground are made of bamboos. In the villages of War tribe small houses are erected in the compounds of the ordinary dwelling houses called *ieng*

lcsuid (spirit house). In these houses offerings to the spirits of departed family ancestors are placed at intervals.

Some houses are built on a platform, the main house resting on the hill-side and the portion on the platform projecting there from, the object being to obtain more space, the area for houses in the village sites being often limited owing to the steepness of the hill-sides.

10. HOUSES WITH PLATFORMS

The Bhoi and Lynngam tribal houses are generally built on fairly high platforms of bamboo, are frequently 30 to 40 ft. length, and are divided into various compartments in order to suit the needs of the family. The hearth is in the center of the room. There is a platform at the back of the house, and in front of the house. It is used for drying paddy, spreading chilies and for resting.

Khasis build their villages on the extreme summits of hills, but little below the tops, generally in small depressions, in order to obtain some protection from the strong winds and storms, which prevails in these hills at certain times of the year.

Lalung is a tribe and Lalung who live on plains have chhamadi-beachlor's dormitory. Plain Lalungs live in compact villages.

Khasis have following taboos in building the house:

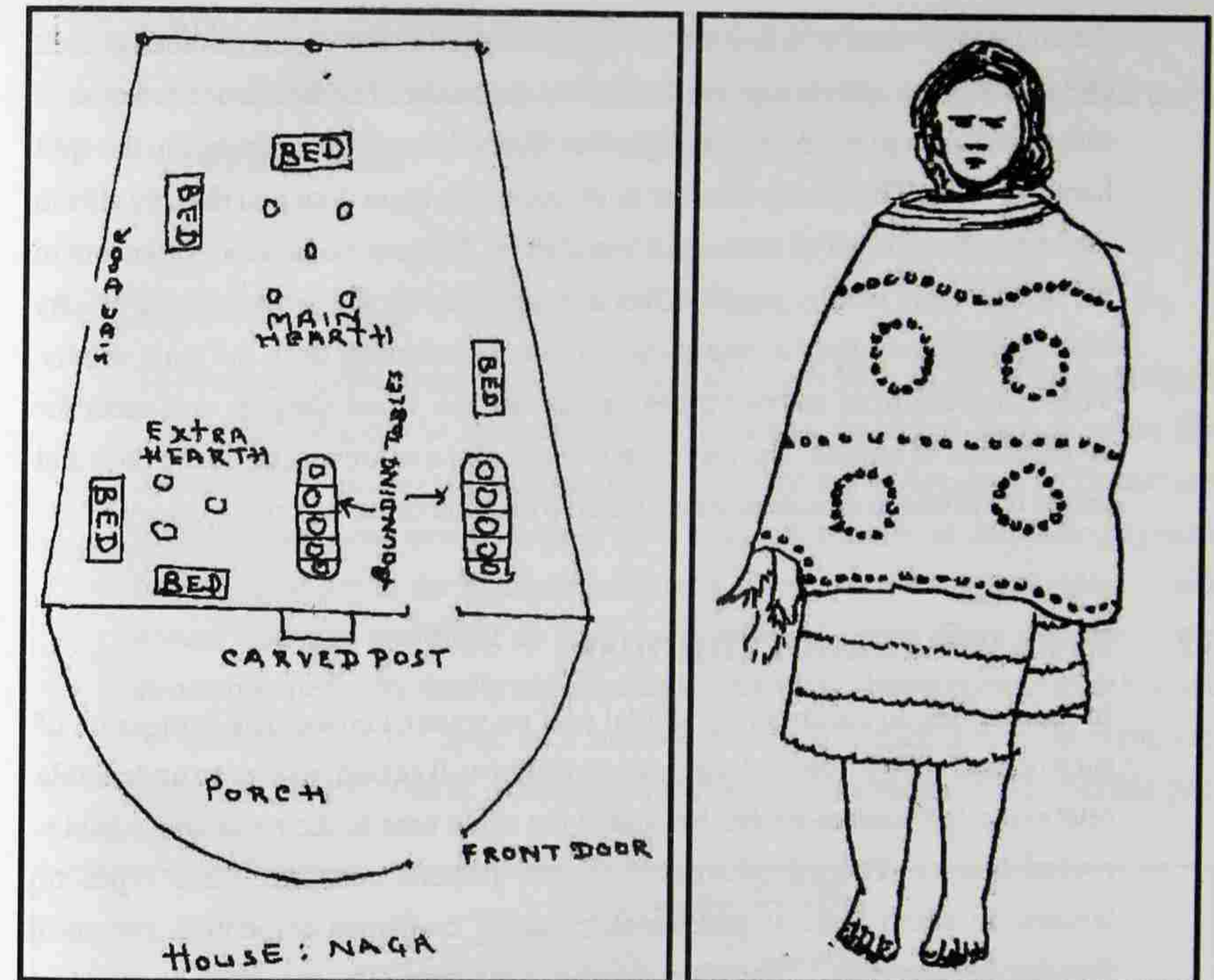
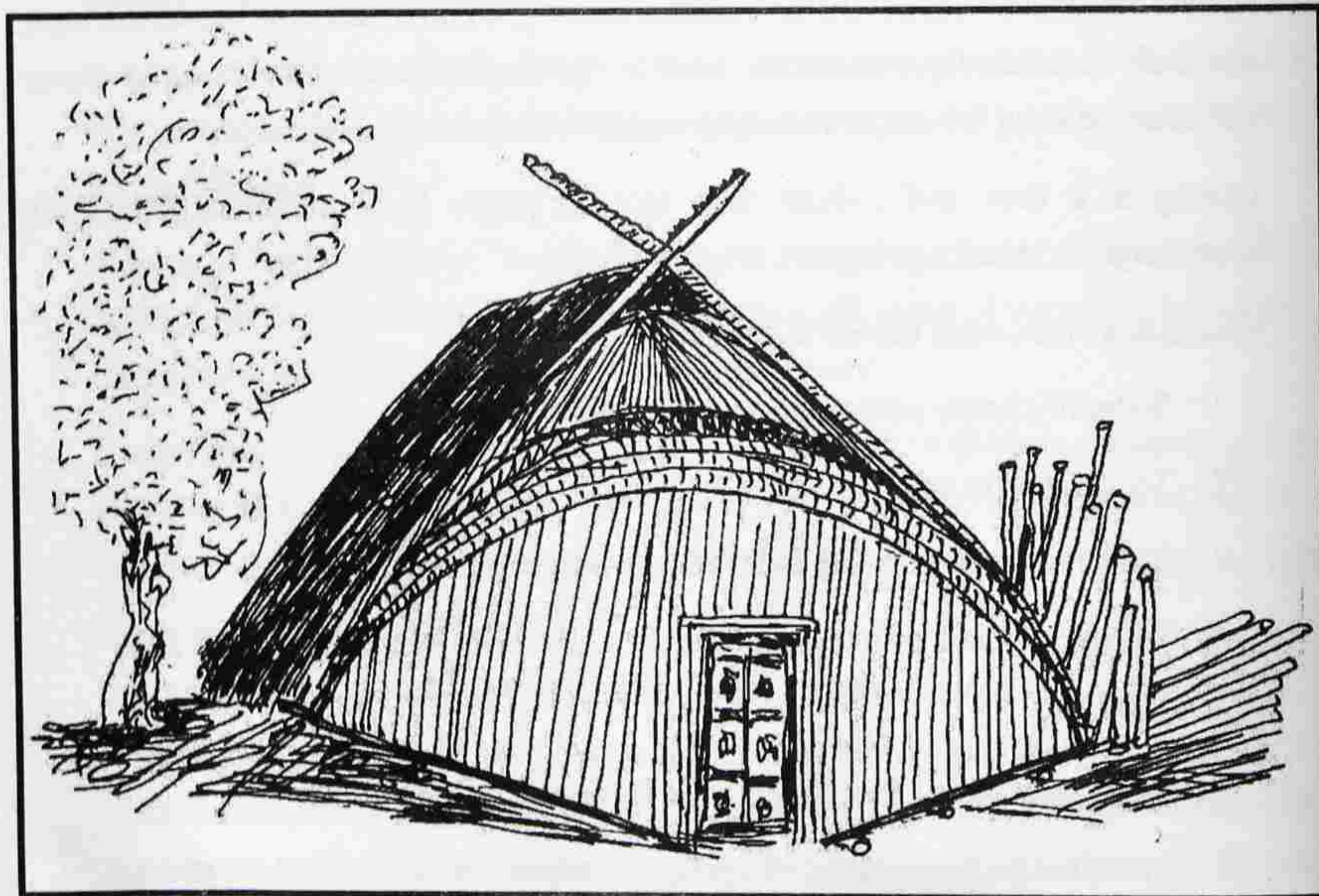
1. To build a house with stonewalls on all four sides.
2. To use nails in building a house.
3. To use more than one kind of timber in building the hearth.
4. To build a house with resinous timber. Only the Siem family can use such timber.
5. To cut trees from a sacred forest for building a house.
6. It is taboo for the husband of a pregnant woman to thatch the ridge of the

house at such a time, or to fix a handle to an axe.

11. THE NAGA HOUSE

The tribal settlements are well planned but small and houses are scattered. Traditionally their houses used to be on hills and were connected by footpaths. The house is as a rule divided lengthwise by a partition into two or three rooms with one portico on one side in Naga Hills. The house is divided into 'kam' or a room for outsiders or guests, which is always on the right side. In the 'kut' a platform or *chang* about 2ft. high called *tibung* and raised above the floor runs along the walls and used as sleeping apartments for the members of the family, that is, for the young, for the unmarried sons, or in some cases, for the married couple.

Outside the house along the wall of the 'kut' but attached to the house is a place called 'biroi' in which fowl and goats are kept. There is a fire place called 'mehip'



lying at the back of the 'kut' and by the side of the fireplace is the 'damthak' where the heads of the family—the father and mother sleep. Behind the fireplace there is a place called 'dambuk', which is attached to 'damthak', where the young and unmarried girls sleep. The front verandah is known as 'hong-kup' in which are kept loom, baskets, fire-wood, mortars and pestle, vegetables etc.

The floor of the house is usually raised about four feet or more above the ground and is supported by strong posts on all sides. The whole structure of the house including the side walls is made of split bamboo finely woven and knitted together so firmly that no mud plastering is necessary.

The roof of the house, which always consists of two sloping parts, is thatched with sun grass which is generally replaced after lapse of four or five years. The floor of

the house is covered with knitted bamboos arranged as above and fastened at each end to the posts, which support the roof of the house. The inside of the house is rather dark except for the scanty light that filters through the openings in the split bamboo walls. There is no window or chimney-the main door and the tiny slits in the bamboo walls act as sources of ventilation. There is no lavatory or latrine in the house. Only nearby jungle offers a good place for the latrine. Some Mikirs have lavatory or latrine at one corner of their house away from the main rooms. These houses are of warrior tribes, which use the wood sleepers and earth for construction of houses. The carved wooden sculptures are placed on the door and inside the house demonstrate an aesthetic will of the constructors.

12. PYRAMIDAL ROOFED HOUSE

In India tribes do construct pyramidal roof on square houses. The expression of such houses shows from its technical control as well as from its size an undeniable relation to the conical-roofed hut and at the same time to the rectangular gable-roofed houses. Trained 'Mistris' -technical masons construct these types of houses. In south Gujarat traditionally trained craftsmen-carpenters and roof thatcher are employed. They buy finished structural elements-such as wooden pillars and roof framework, then transported to the construction site and there assembled. The walls are stroked smooth inside and out with clay which applied is by help of women.

The roof consists of a framework composed of four triangles lashed together. Over this, parallel to the ceiling is which close to the ceiling, is placed another wickerwork disk smaller in circumference and nearer to the peak. The characteristics of the buildings of tribes of South Gujarat can be summed up here:

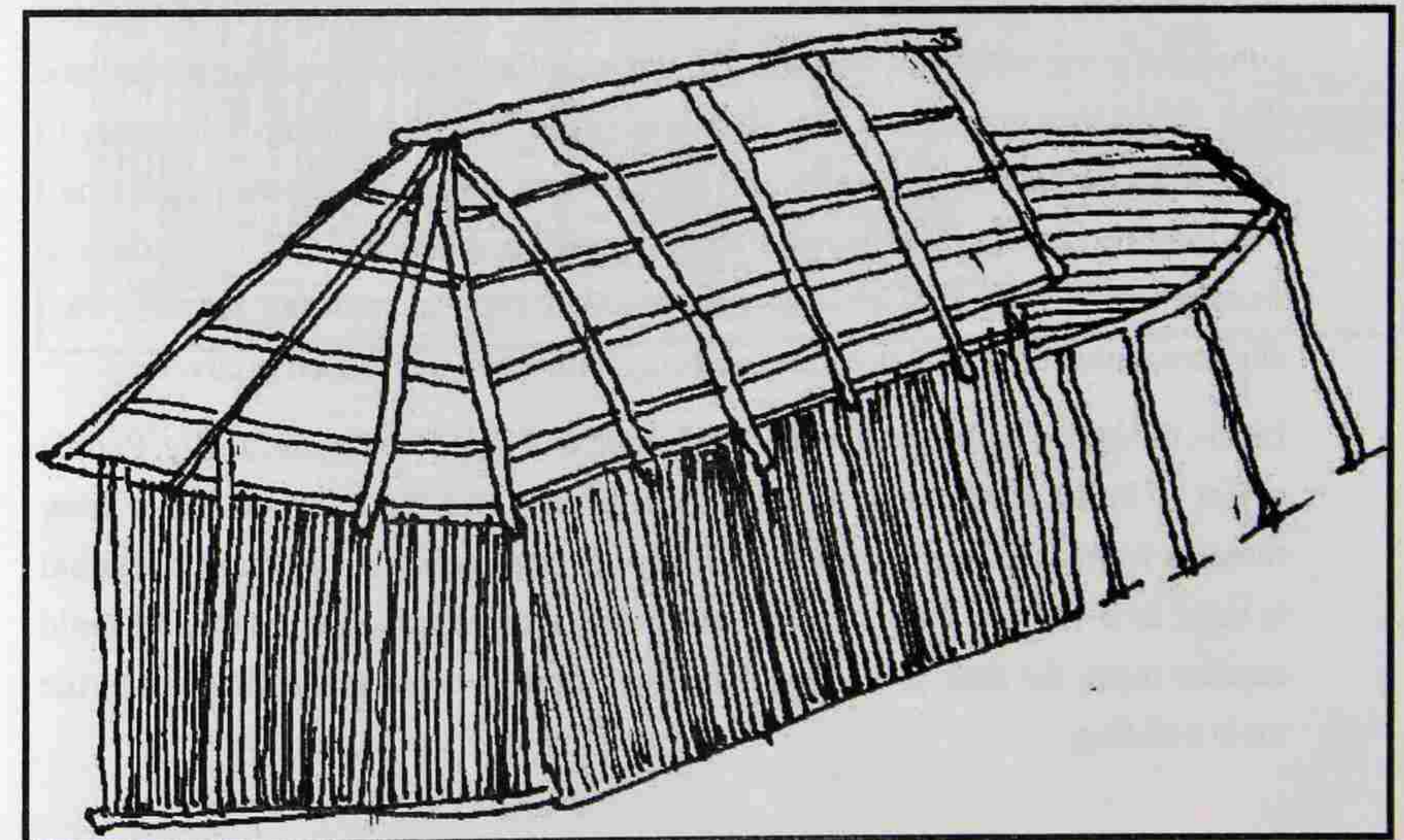
1. The vertical is placed in service.
2. The built-over surface area may amount to some thing over 50 square meters.
3. The structure is surrounded by extended 'false' roof.

4. Wood and earth are used for construction.

5. Kothis made of earth are placed in house in artistic way, and are functional part of the architecture.

13. TODA HOUSE

The pastoral tribal community Toda lives at Nilgiri Hills of Tamil Nadu state of India. They shared the area with Kota, Kurumba, Irula and Badaga tribes for centuries. The Todas are considered a group of the proto-Aryans. The Todass are of tall stature, long headed people with a narrow nose form and their physical features conform to the Mediterranean type. Their community is divided in two groups and has pat lineal as well as matrilineal clans. They construct two structures one for the family and another for buffalos. They construct their houses on table-land, on the apex of a solitary mountain, which are in its complete isolation of some 7,000 ft. in altitude, whose surface is evergreen. The buffalo pen

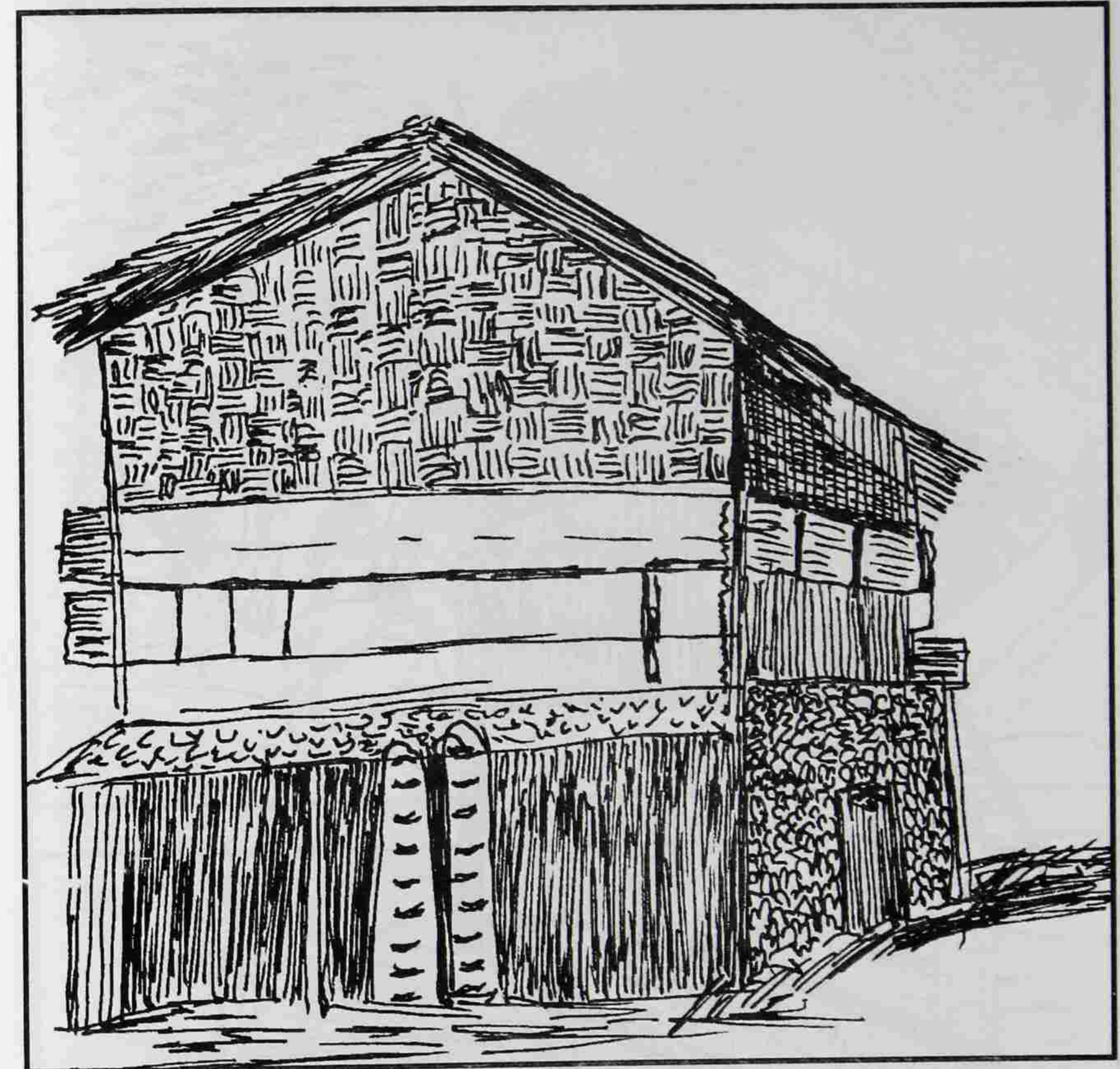


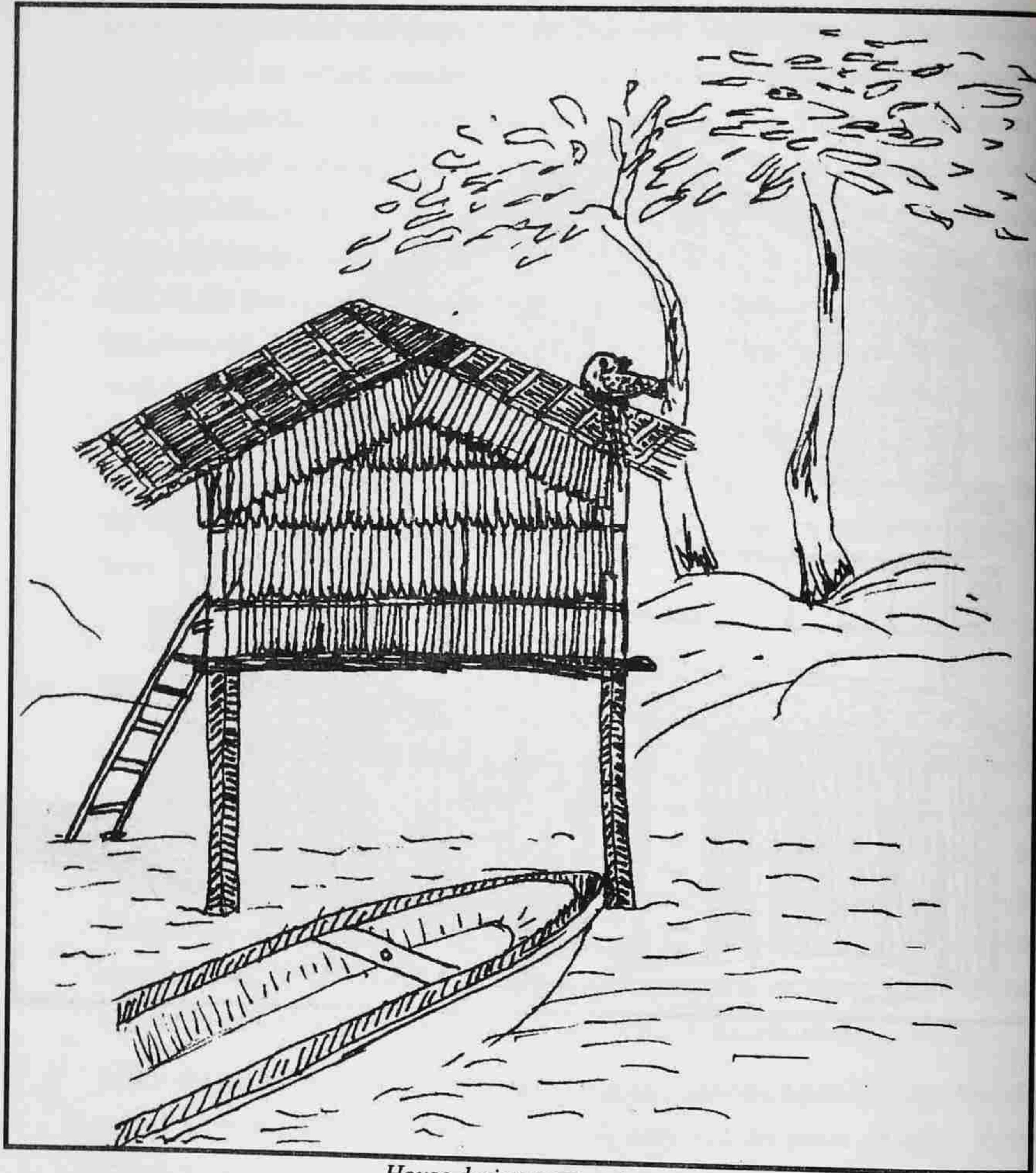
is constructed in half oval shape with the little door. The community is pastoral so they migrate at certain seasons of the year. They have duplicate and triplicate villages where they have their houses and pens for buffalos. They construct small rooms in identical design. The symmetrical arrangement of the door and veranda form the Toda house. The first room, which has the door, is utilized for cooking, eating and sleeping purposes. Rooms are eight ft broad, 10 to 12 ft. long and 8 ft. high. In the first room against the walls, at convenient height over both store and fire-place are arranged. The house for residence is built with earth and wood. The roof is covered with straw and bamboos. They construct in addition to the dwelling houses, a house solely to the purposes of a dairy-*palthchi*-consisting of two rooms. The outer room is for the residence of the dairyman and inner room for the storage of milk. This building varies in size according to that of the village herd.

14. HOUSES MADE OF SLATE

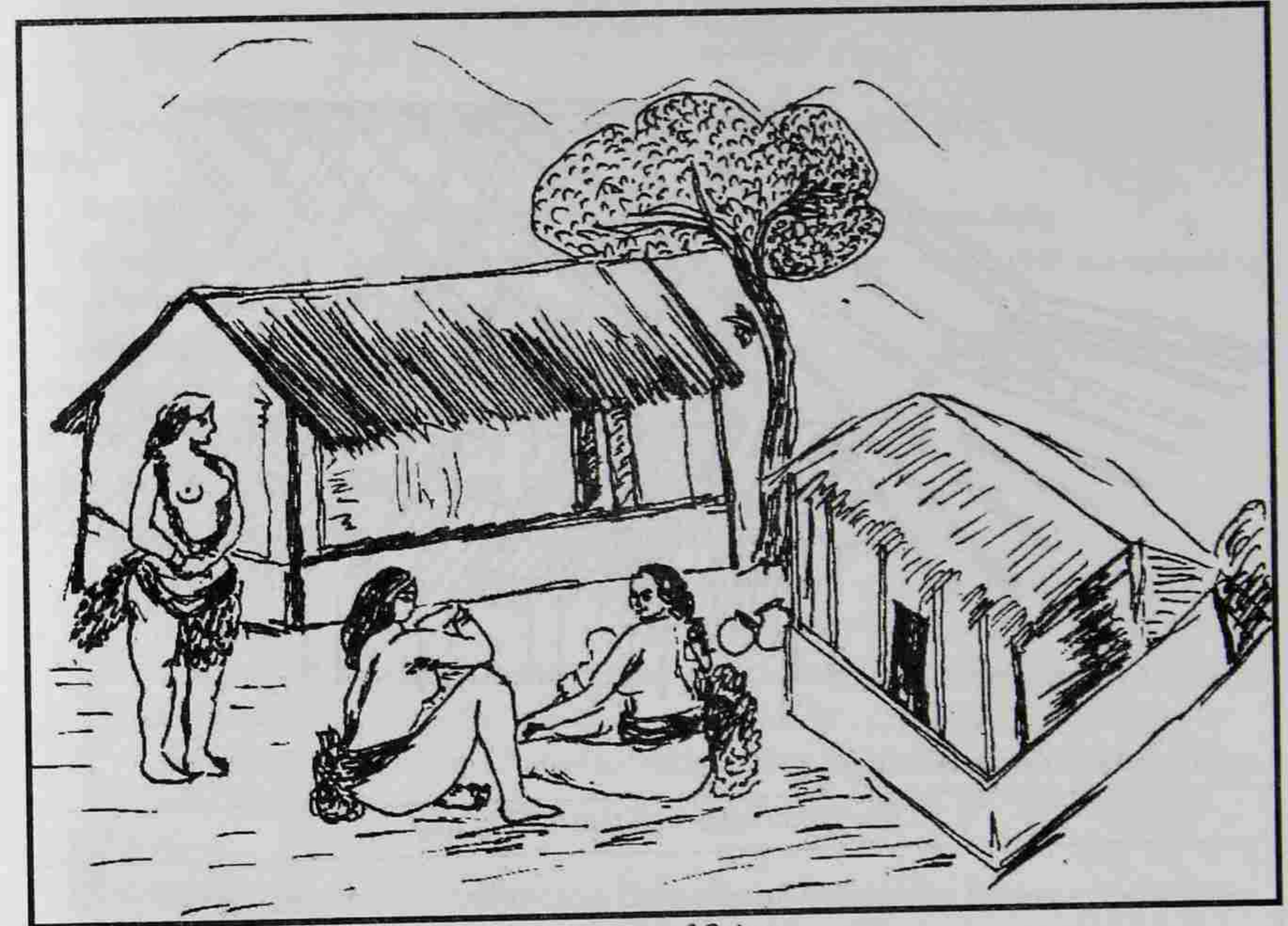
In Himalayas region slate stone is available and tribal communities of the area construct house with slate stones. Slate stone are flat and their width is around one inch. They arrange slate stones, forming walls for constructing the house. In between each slate they put wet clay but in a very thin layer. Houses have small windows because the area has low temperature. Door and windows are made with wooden slabs. The roof is built with wooden slippers and gap between two slippers is packed with slate stones and clay with stabilizer is used to cover it.

Inside the house walls are thatched with mud and smoothed periodically. People prefer to build double storied house as it is easy and the room on upper floor remains warm. Generally a nuclear family has two rooms, a portion of one room is used as a kitchen cum store-room. In this area people rear goats and build smaller room for their protection. The goat room is constructed attached to the main building.

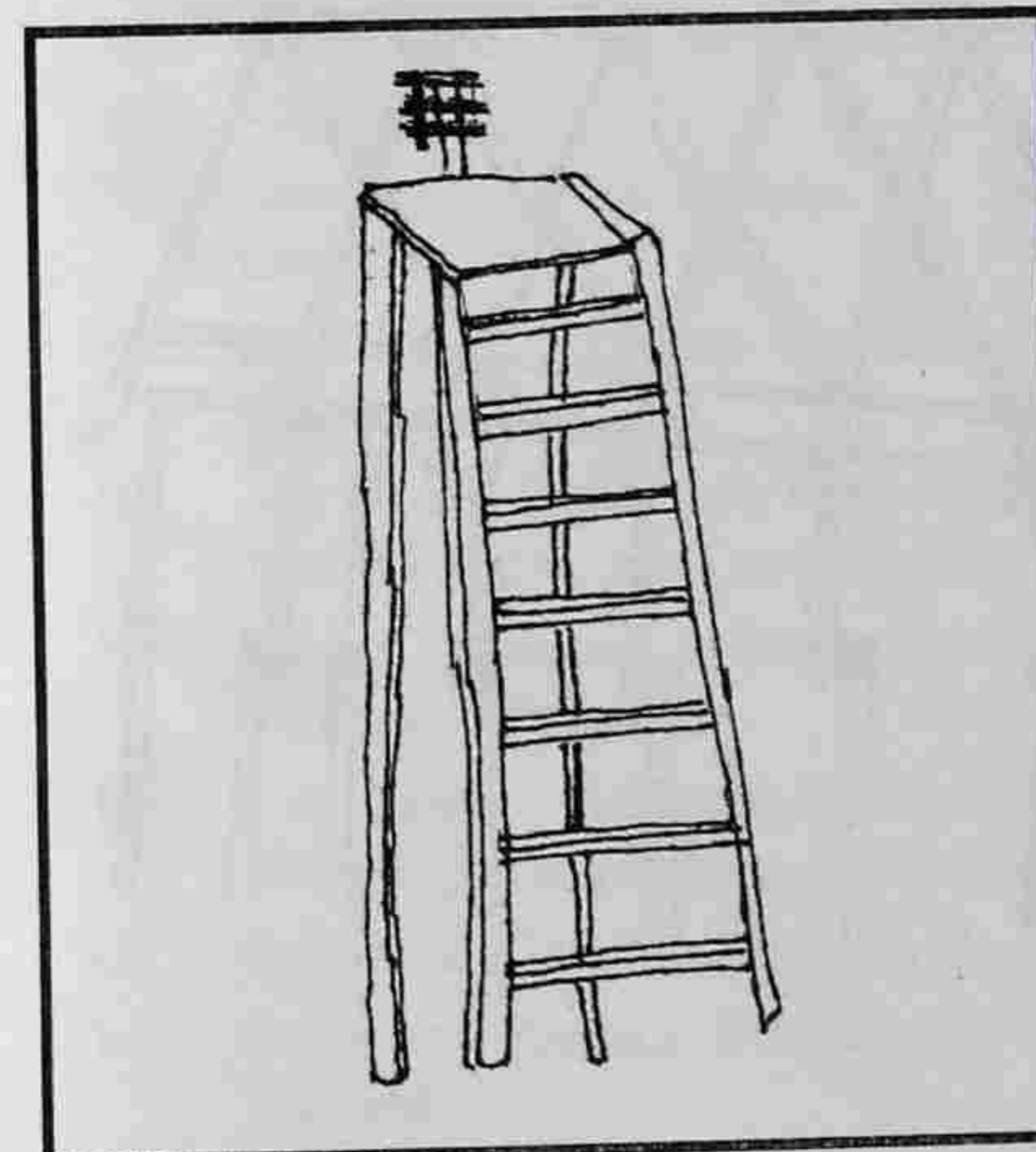




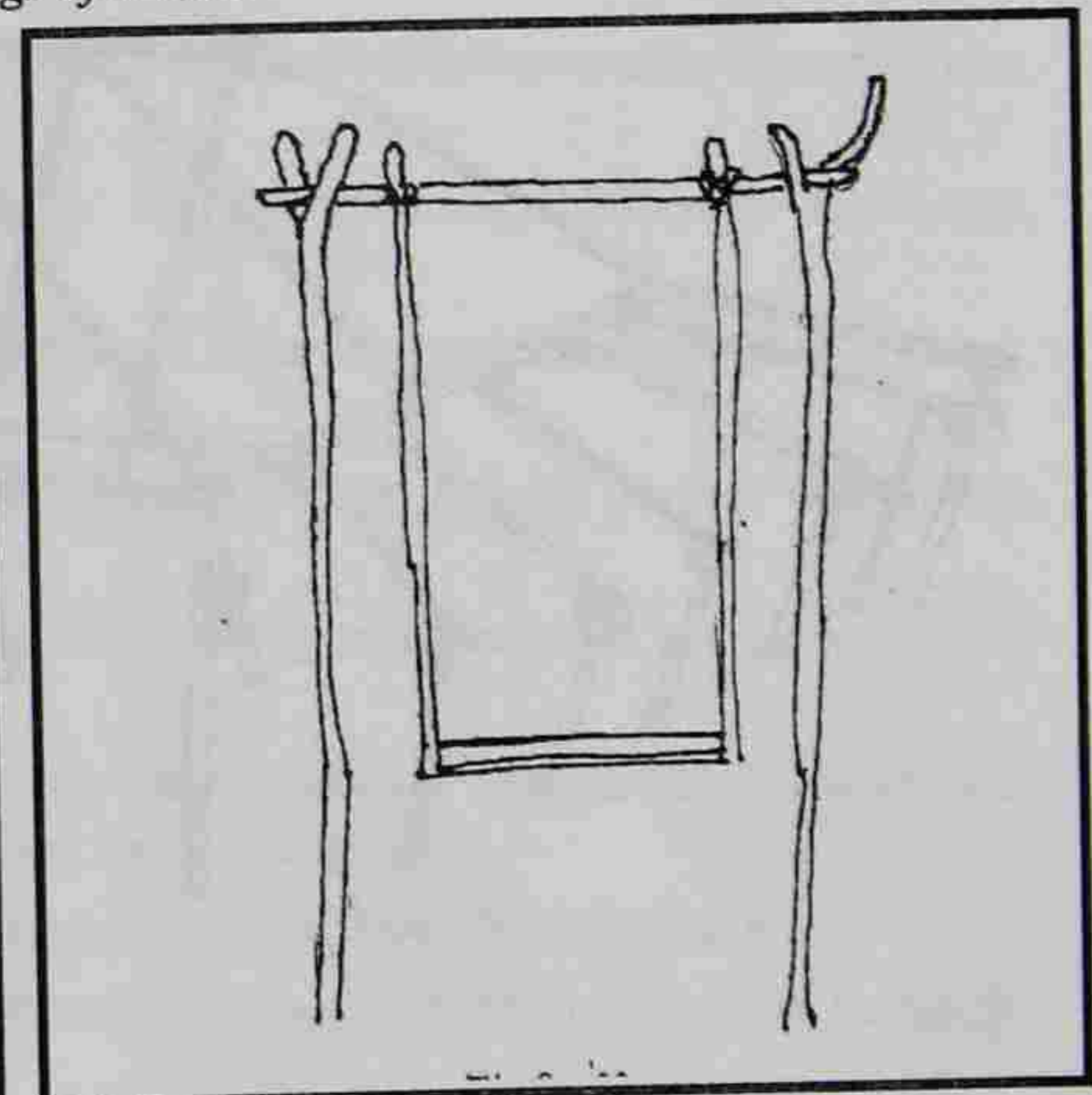
House design near water



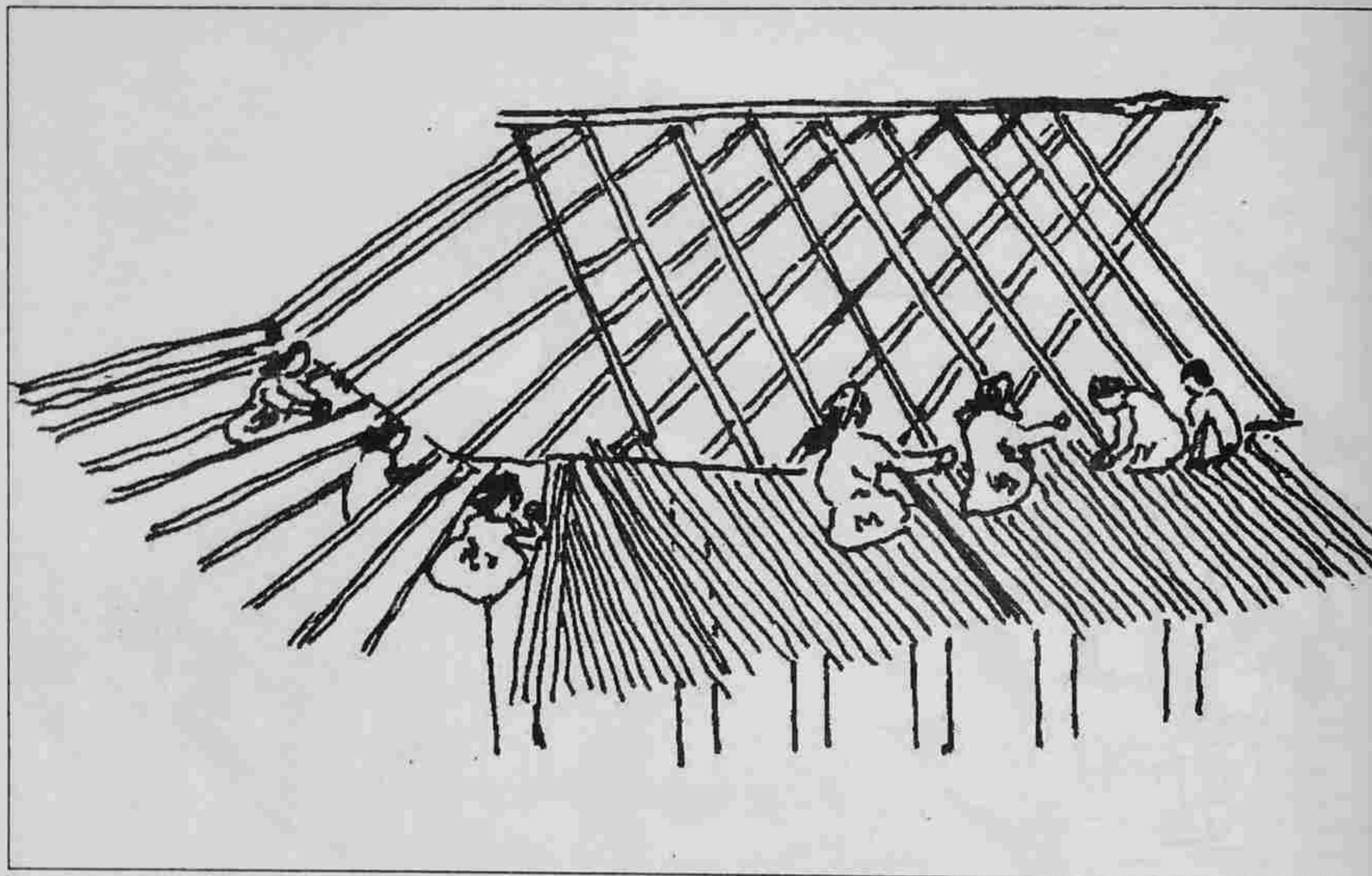
Juangs of Orissa



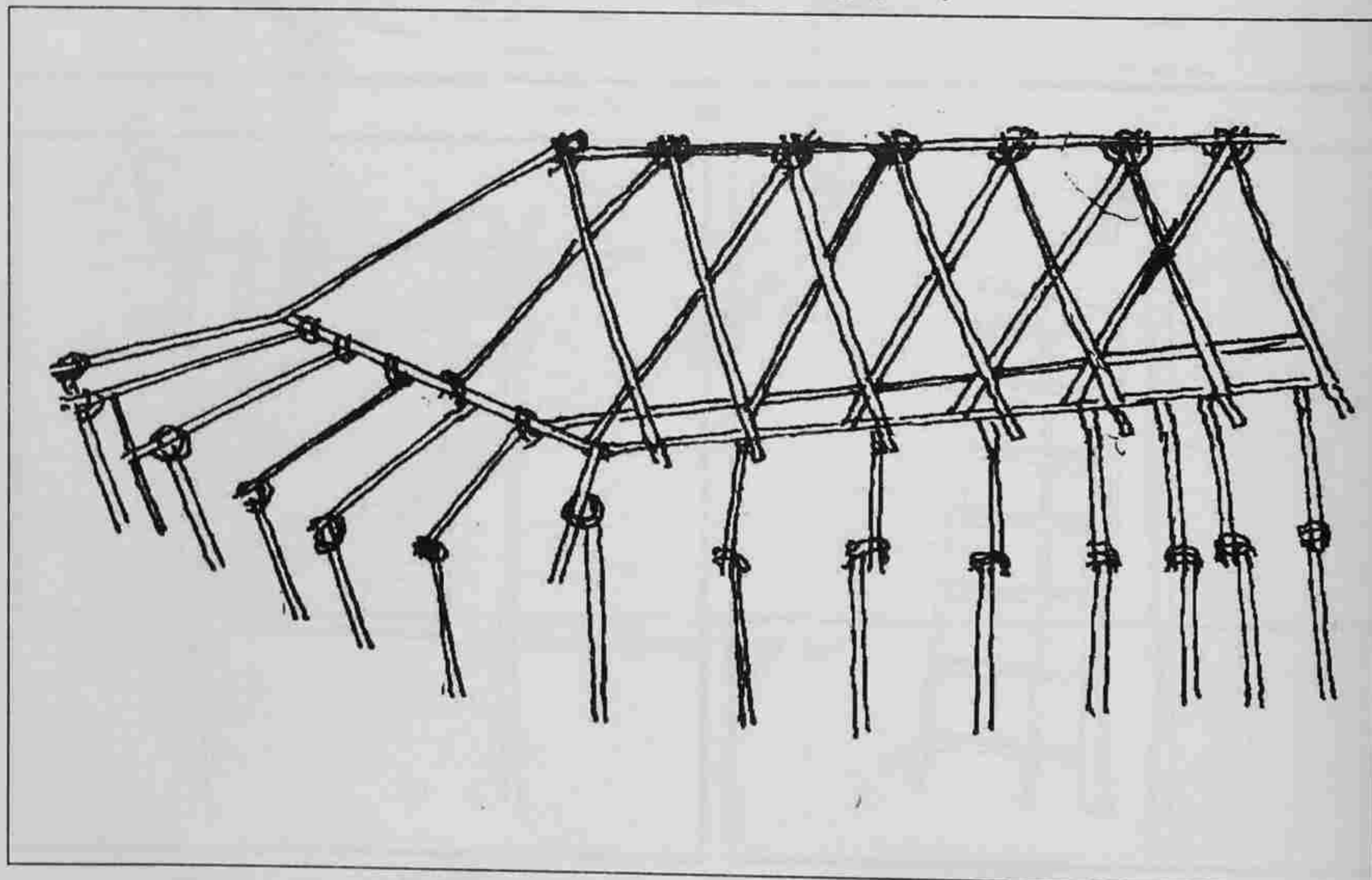
The Magician's Ladder



The Magicians's Swing



Everybody helps with thatching of roof



Everybody helps in preparing the roof

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- Lee Z.N.
Deputy Director, Urban Planning Dept.
Economic Planning Council, Republic of China
1. Johnson T.E., University of Hawaii, Honolulu, Hawaii
 2. .
 3. Verschure, H, Asst Prof. Dept of Architecture, University of Leuven, Kasteel Arenberg, BELGIUM
 4. Dewar. D Sr., lecturer Dep. of urban and regional planning, University of Cape town, Cape town South Africa
 - 5.
 6. Yagi K, Department of Architecture, University of Queensland, Brisbane, Queensland Australia
 7. Hanna M.M., Professor of structural Engineering, Ain Shams University, Abbassia, Cairo, Egypt
 8. Janseen B., Sonnenschein, U., Institute fur Raumplanung, University Dortmund, Germany
 9. J.S.K.Rao, Department of civil Engineering, California State University, Long Beach, California, USA
 10. Jere. H.E., Community Development office, American Friends Service Committee, Jambia Programmes, Central Africa.
 11. Dias. E., Assistant Lecturer, Demographic Training and research Unit, University of Shrilanka Shri Lanka
 12. S.A. Hasnath, Assistant Professor, faculty of Architecture and planning, Bangladesh University of engineering and Technology, Dacca, Bangladesh.
 13. Oestereich J, Institute for Urban planning and research, Essen West Germany.
 14. Policy and Planning Division The National Housing Authority of Thailand Bangkok, Thailand.
 15. Ehtrington Associate Dean, Faculty of Built Environment, University of Technology of

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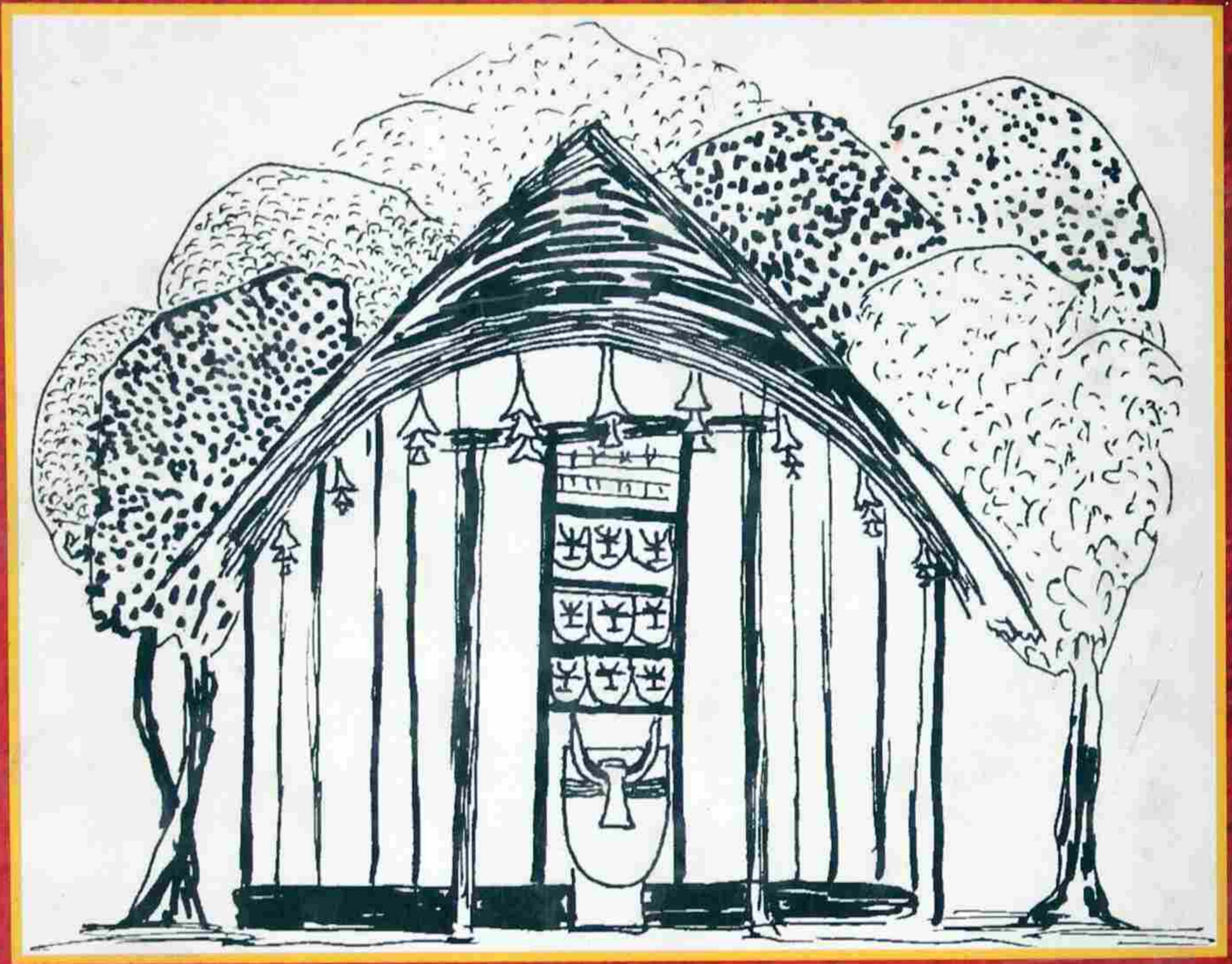
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