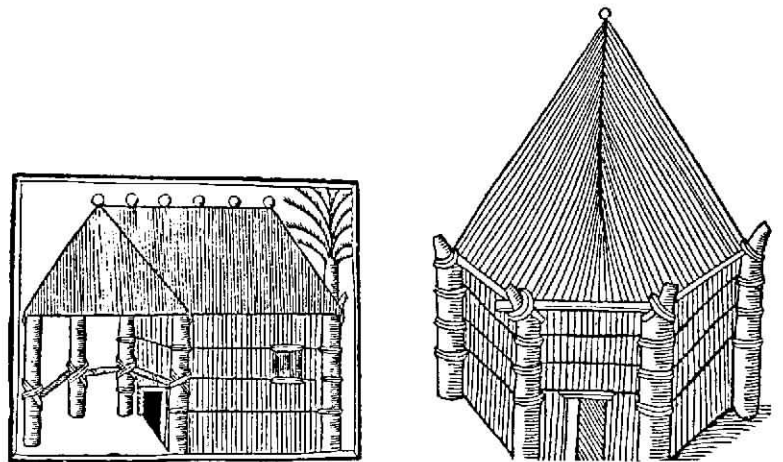


Thatch

Text and Illustrations by Ann Hodges



Preparing Big Thatch for roofing.



Arawak thatch houses drawn by a Spanish chronicler, 1547.

Thatch was one of the earliest building materials used in Jamaica. Arawaks constructed their buildings of wood, and thatched them with the leaves of palm trees which were indigenous to the island.

Many of the enslaved Africans brought to Jamaica came from societies where thatch was also widely used. Most Jamaican slave villages had thatched houses, and it seems reasonable to assume that the Africans adapted some of their practices for use here. Some fusion of Arawak and African styles might also have taken place.

Thatch palm, and other plants used in thatching, are freely available in most areas of Jamaica, especially in the south-west parishes, and techniques for constructing thatched roofs have been handed down from generation to generation. Thatch palm leaves are also harvested regularly to make brooms, baskets, hats and mats.

A small number of 19th and early 20th century houses roofed with thatch still exist, the thatch being renewed over the years, but on the whole thatch is nowadays rarely used on domestic buildings, 'zinc' (galvanized corrugated steel sheeting) having taken its place.

Even those people in St Elizabeth, Manchester and Clarendon who still live in thatched houses express ambivalence about them. One retired builder from Southfield attributed the decline in the use of thatch to 'modernisation'. And yet he was positive about the virtues of thatch. A thatched house, he said, was 'very much cool, very much healthier. In those days nobody was hardly sick because it is so ventilated. When I say ventilated, I say it *cool*'. This was



National Library of Jamaica

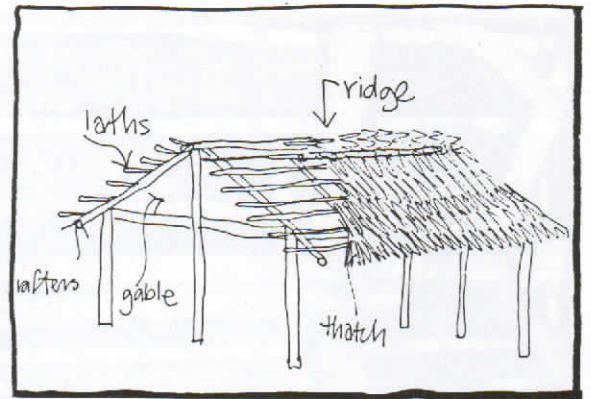
Duperley photograph of thatched houses circa 1905.



House of wattle and daub with thatched roof, St Elizabeth.



Thatch palms and thatched shelters by the pool, Treasure Beach Hotel, St Elizabeth.



echoed by a woman living in a substantial thatched house who said, 'you go inside in the day you late to cook dinner — you fall asleep it so cool'.

Until the relative prosperity and improvement in construction techniques in the 1950s, thatch was the accepted roofing material in rural areas. One informant, Mr Black from Clarendon, explained how it used to be:

My first lickle thatch house — when me become a timekeeper now, an me start to gal out. Other man, he carry gal a bush a night time. Me na go a bush or me ole man house, me build my thatch home. Although my house was a less house than my father house I WAS STILL REGARDED AS AN AMBITIOUS FELLA, buildin sometin on my own rather than remaining under my ole man shed.

Mr Black now has a five-bedroom concrete house with a metal roof, but he has built a rectangular, thatched building to house his business — a pork pit.

While thatch is now rarely used on residences, it is widely used as a roofing material for bars, dance halls, stalls, farm buildings, outbuildings such as kitchens and for construction of temporary shelters in the fields or on work sites. It has also enjoyed a revival as a natural material appropriate for housing tourists looking for the simple life, particularly in Negril.

Construction Materials and Techniques

Materials

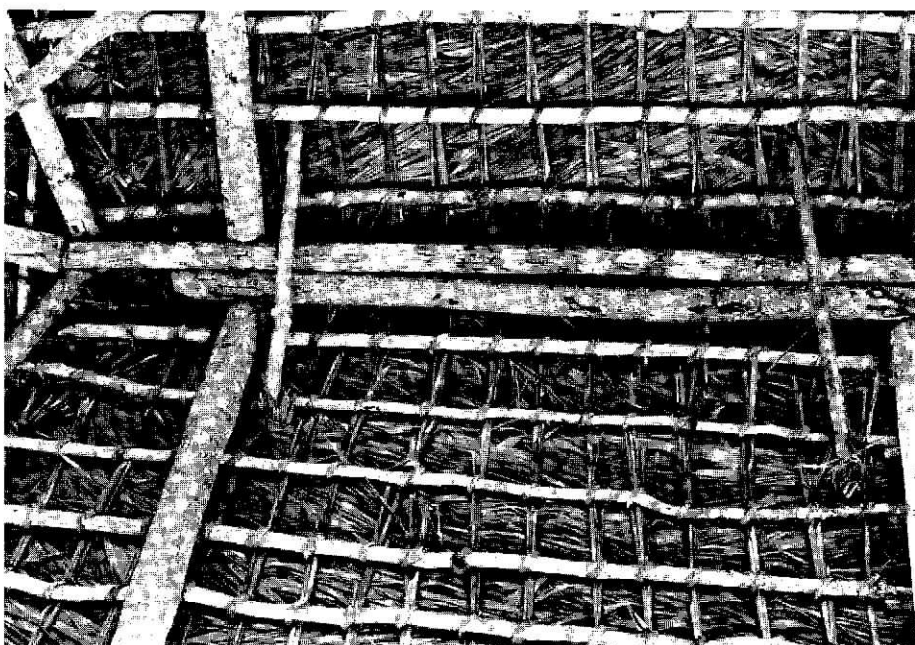
Leaves of the five varieties of 'thatch palm' trees which grow in Jamaica (see Table) provide the material most commonly used for thatching. Coconut is sometimes used though it is less durable than thatch palm. For more temporary shelters, grass, river reeds and cane tops are used where thatch palm is not readily available.

Structural Form

The main elements of a thatched roof are shown above.

The pitch of the roof is important. A steep pitch is best, as the water runs off quickly and does not penetrate. A steep pitch is also good for resisting hurricanes, as is the permeability of thatch which allows for the release of pressure which builds up inside the building during a hurricane.

In rectangular buildings the roof can be gabled (as in the case of tobacco drying houses where the gable affords maximum drying space) but they are more often hipped. In every case I have so far observed, the centre ridge is supported by poles, that is, trussed construction (which uses a structural framework to span between supports) is not used. This is particularly interesting as pole type construction (along with the centrepole circular roof as used by the Arawaks) is used in West



Underside of the ridge of a rectangular thatched roof. Note the post holding ridge on left, and struts which go through the thatch. They are attached on the outside to poles which lie along the roof holding down the thatch which covers the ridge.

Africa for thatched buildings, whereas in England, for example, thatched roofs are often supported on triangular trusses, a feature which is not found in traditional African architecture.

The method of preparing and fixing the thatch is not, however, that used in Africa. There, palm leaves are woven and laid horizontally along the roof, whereas in Jamaica the leaves are laid up and down the roof tied to purlins, in a fashion similar to that of Central American Amerindians (close relatives of the Jamaican Arawaks).

Preparation

The thatch leaves are cut using a sharp knife or machete to slice through the shaft or 'bone'. Where trees are tall, notches are cut in their trunks to provide footholds to make cropping easier.

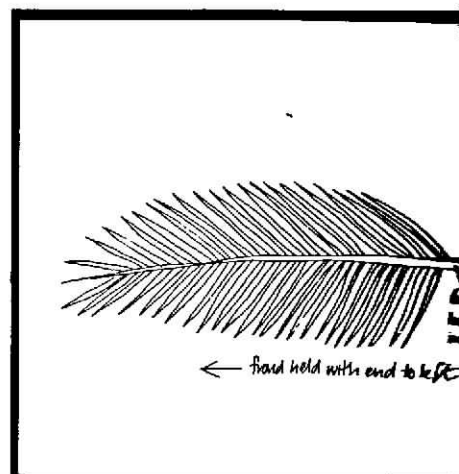
When cut, the leaves are firm and green. They are then left to 'quail', that is, to become limp and flexible in which condition they are fixed in place. If the leaves dry out, they become brittle and cannot be handled without breaking. The larger, stiffer, Big Thatch and Bullhead thatch leaves must also be flattened while they quail, by weighting them with poles.

Long Thatch and coconut are woven in preparation for use, the fronds from one side of the spine being woven into those on the other side to make a dense strip of fronds down one side of the base.

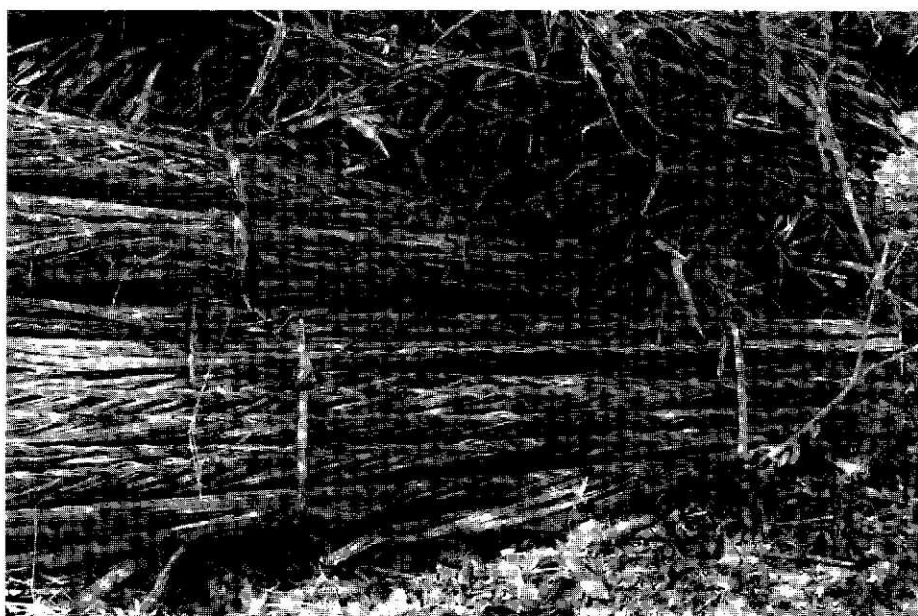
Fixing

Thatch is attached to the laths by three basic methods: (1) 'split and tie' by which a strip is split from the sheaf of the leaf and used to tie the leaf to the lath; (2) using twists of the fronds to make the tie; (3) using withes to bind the leaves to the laths.

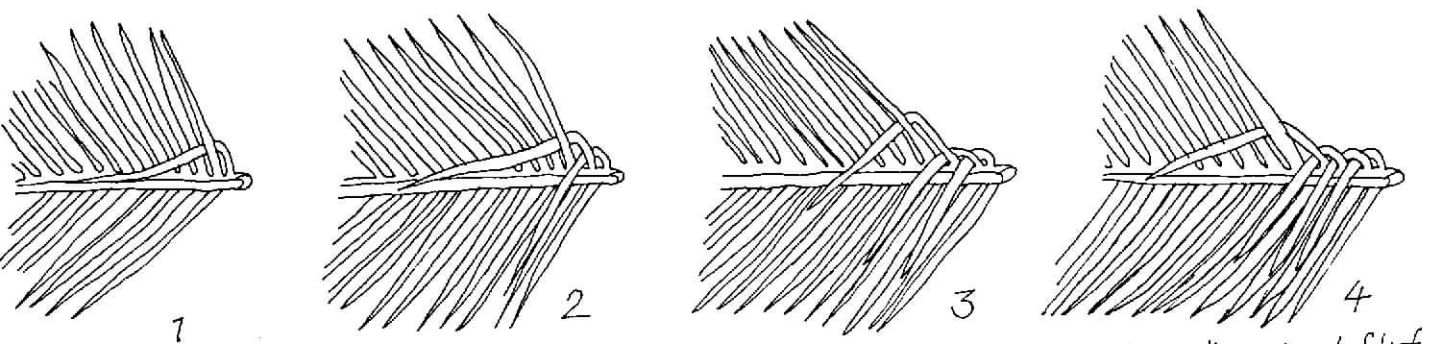
Split and tie is used for the larger thatches — Bullhead and Big Thatch, where the shaft of each leaf can be up to three inches wide. Using a sharp knife, the thatcher trims the shaft to



Badly overcropped Bullhead Thatch trees. Note the notches in the trunks to aid climbing.



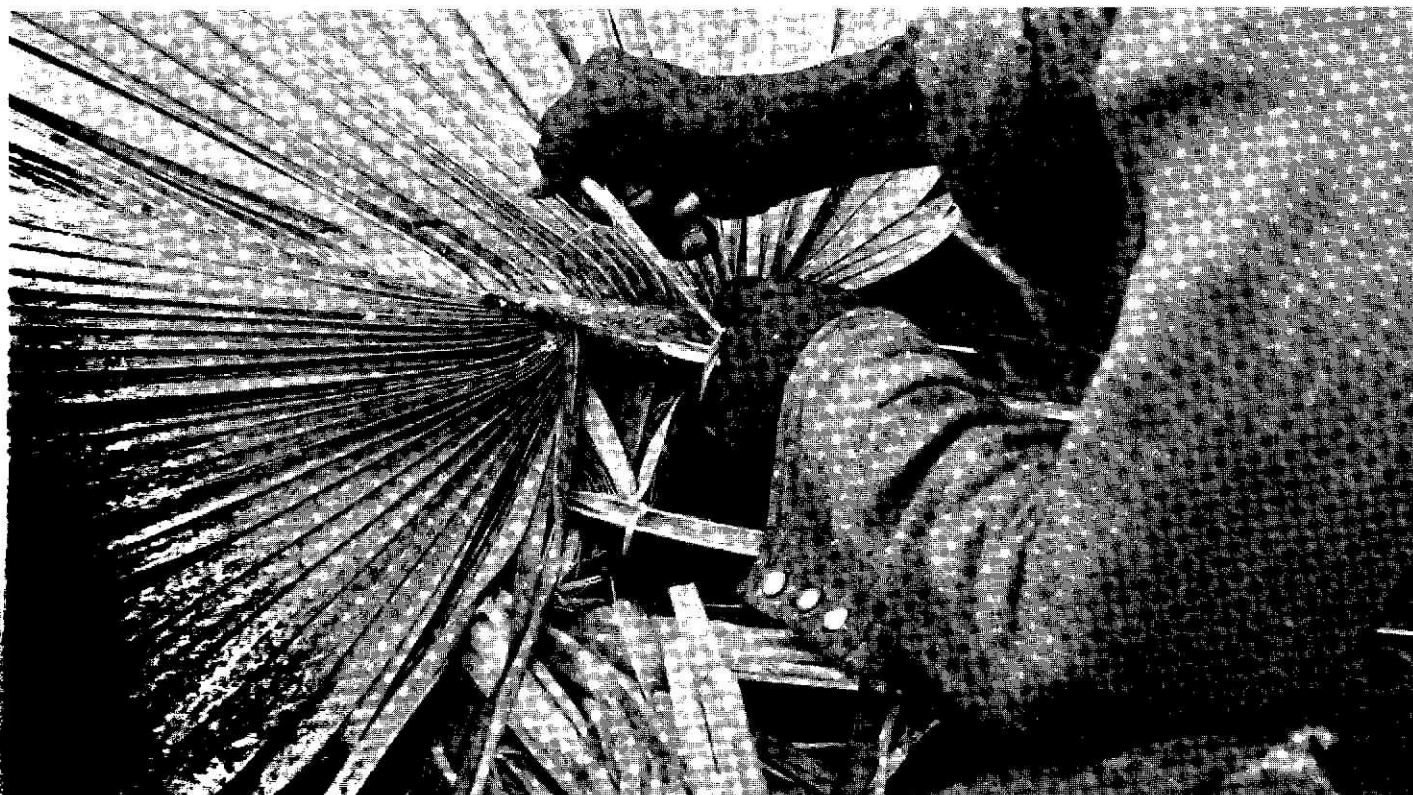
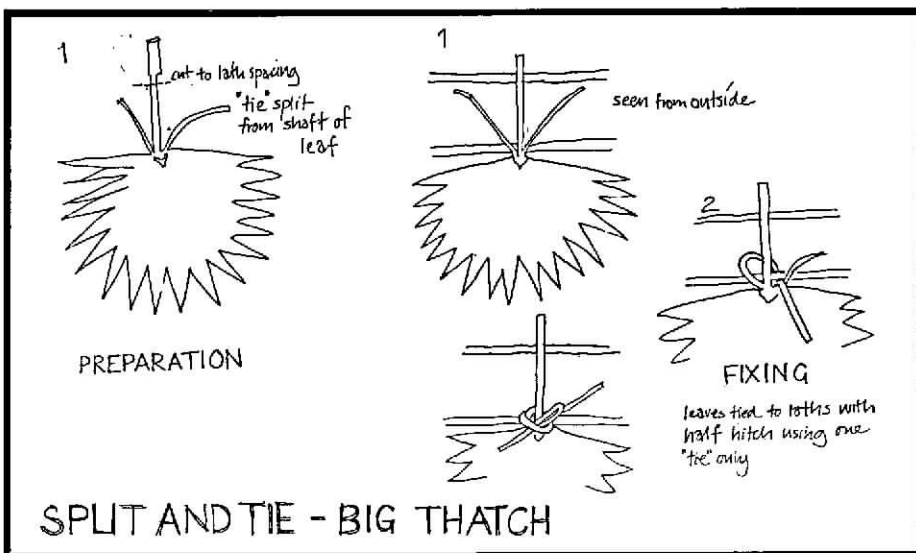
Bundles of Long Thatch with fronds woven for use.



PREPARATION OF LONGTHATCH

approximately one inch wide, and splits a quarter inch strip from each side of the shaft, attached at the base of the fronds, for use as ties. The shafts are then cut to length to suit the lath spacing, usually about one foot.

To tie the leaf to the lath, both of the split ties can be used, crossed below the lath and then tied on top of the leaf shaft. Alternatively one tie is used, wrapped diagonally around the lath and shaft and tied to itself on top of the shaft, as in the example shown. In this case the second tie is still made, but just remains as a 'spare' in case the other breaks. A small bunch of the fronds is combed to one side as each leaf is laid



'Split and tie' technique using Big Thatch.



Underside of a roof thatched with Long Thatch tied on with wiss.



Thatchers at work on a Negril restaurant using Silver Thatch.

and, depending on the skill of the thatcher, can form a neat pattern when seen from below.

In the second method, **twist and tie**, the fronds are used to tie the leaf to the lath. This is the quickest, requiring least preparation, and is used for the smaller, round thatch leaves. The leaves are used double, or in some cases in threes to give sufficient bulk. The shafts are slotted together, and then small bunches of the fronds of the leaves are twisted together and the twist is used to tie the thatch to the lath. Several different knots are used, sometimes using one twist, sometimes using a twist from each side of the shaft.

The third method uses withes (known as 'wiss' — usually the aerial roots of the mangrove) to tie bunches of Long Thatch or coconut leaves, reeds, grass or stripped coconut. A large 'blanket stitch' is used to tie the thatch material to the laths, each bunch being packed close to the one before.



Thatchers at work repairing a roof in St Elizabeth.



Thatchers at work on roof. Note thatch being hauled up by a rope.



House of Spanish walling with thatched roof, St Elizabeth.



Thatched community building, New Broughton, Westmoreland.



Thatched house and buttery, St Elizabeth.

At the ridge of a rectangular building, leaves are laid along and over the ridge pole, and are held down by round poles on each side, which are themselves held down and together by short struts passing through the thatch, to which they are tied (see p. 30).

Organisation

Thatch has to be cut and prepared in advance of use. This is sometimes done by the thatcher who will be doing the work, or for more commercial jobs as in the case of the tobacco companies, it is bought from independent cutters.

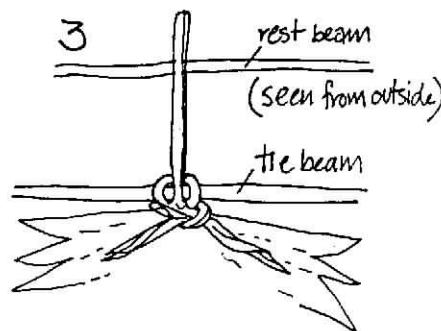
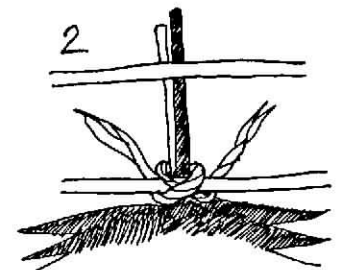
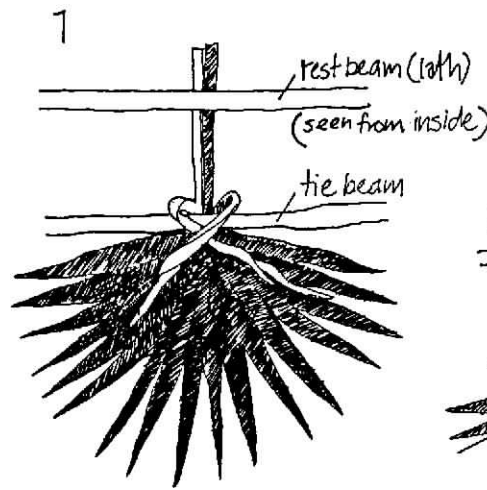
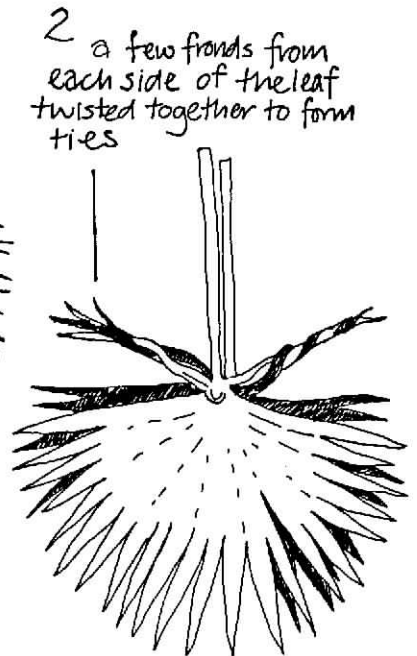
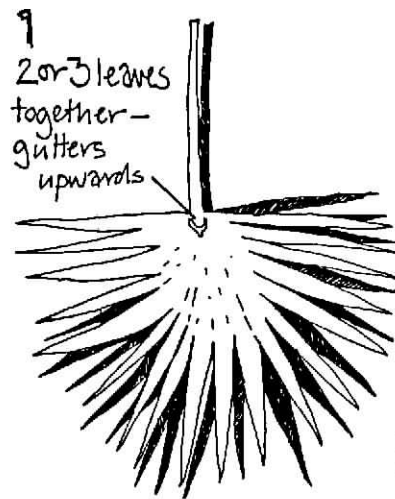
Thatching a house is a social activity. Apart from the thatcher in charge, one or two other men are employed for fixing the thatch, and other hands are needed to lift the thatch to the roof. This is sometimes the women's job. In addition there is food to be cooked.

Although each thatcher has his own method, on each job one method is used throughout, determined by the thatcher in charge.

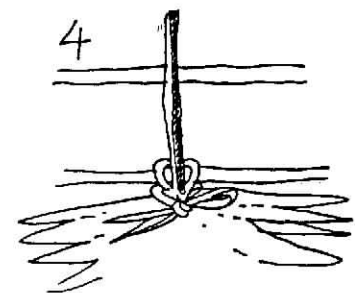
The Future

Thatch as a building material does have drawbacks. Although a thatched roof can be watertight for many years, it must be maintained at times by replacing areas which begin to leak, and this is a very dusty process. It is claimed that these roofs harbour rats and lizards, although I have not heard this complaint from anyone actually living under a thatch roof. More serious could be the danger from fire.

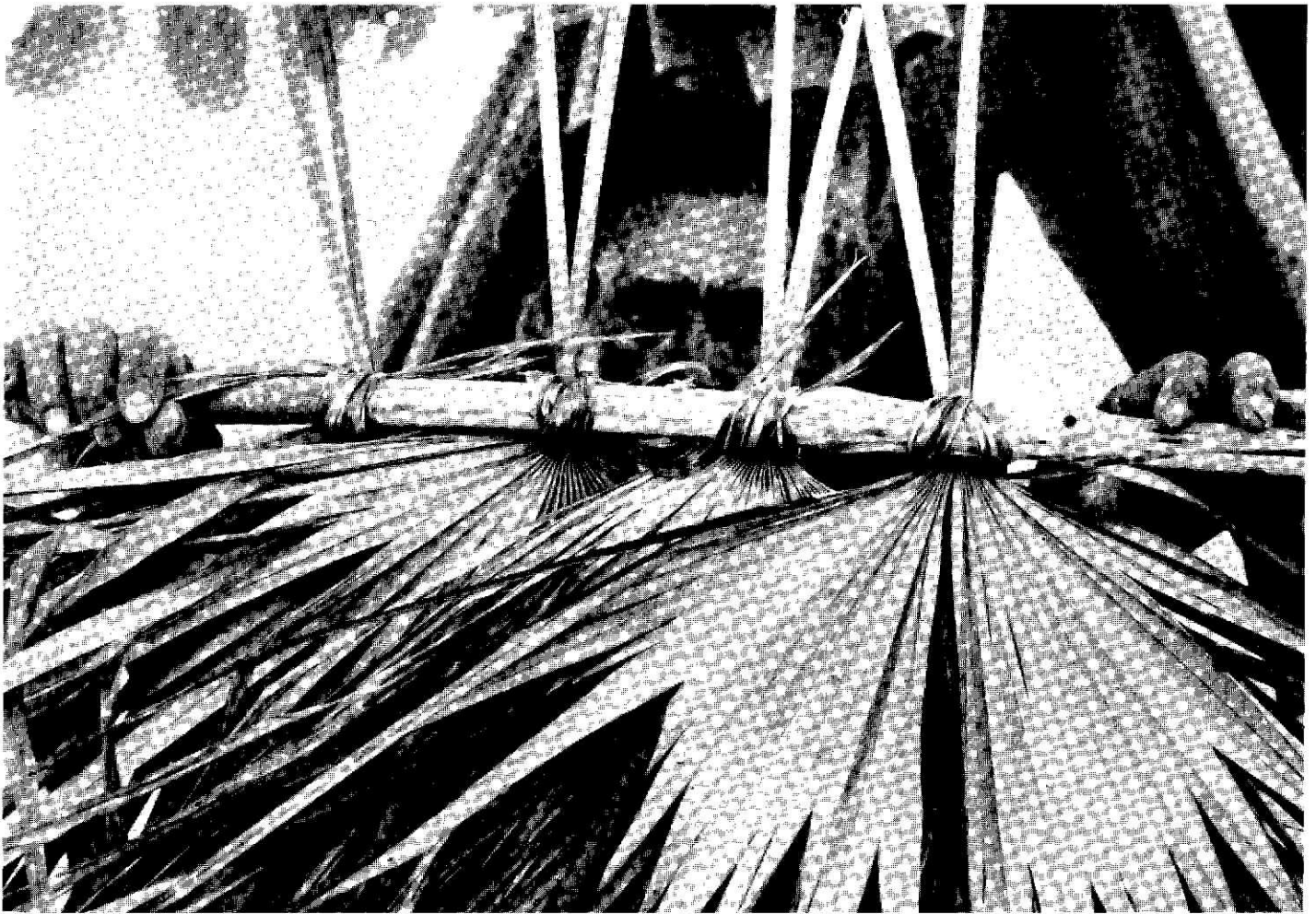
It is claimed that a thatched roof can last up to forty years and has the advantages of good insulation, no clatter from rain, good hurricane resistance and at present clear cost benefits, especially



FIXING



TWIST AND TIE - SILVERTHATCH



Demonstration of 'twist and tie' technique.

if one crops the leaves oneself. However the disadvantages and social responses to the material, suggest that in future thatch will continue to be favoured for bars or other recreational areas but not for houses.

There is therefore an urgent need to conserve the few really old thatched houses which have survived. These buildings demonstrate the ingenuity of the peasant and artisan descendants of slaves, and complement the buildings of the more prosperous classes. The small buildings also deserve to be recognised and conserved as part of our national heritage.

The generation of craftsmen who are currently repairing and building thatch roofs and houses are well into their sixties and seventies. While a few young men are building the occasional bar or shelter, these tend to be crude affairs. Unless some younger people learn the craft from the skilled craftsmen before they retire or die, the attractive, long-



Beach bar thatched with Long Thatch.

lasting thatch roof could become a thing of the past.

Conserving the Trees

For thatch to be readily available as a building material, a supply of leaves must be maintained. Thatch palms grow very slowly. Professor G. Sidrak of the department of botany, University of the West Indies, estimates that a thatch palm tree takes twelve years to reach maturity. He recommends that only every other leaf be cut; the tree can then live and produce for over ninety years. If the tree is overcropped, it will die prematurely. Unfortunately, overcropping is frequently seen.



Thatch is still widely used to make tobacco sheds. Mr. Linval Lewis stands in the doorway of one of the sheds thatched by him. Other photos show the gable end of one of these sheds (below) and sheds in the field in Clarendon.



Twelve years ago the botany department was asked to experiment with establishing plantations of palms for use in basketwork. The trees planted then now form a jungle in the grounds of the University of the West Indies opposite the Mona reservoir, while the instigators have long since forgotten the project.

Perhaps it is time to think again about restocking the countryside with these useful and beautiful trees, so that we will have ample mature thatch to provide baskets and roofs into the 21st century, and maintain our stock of historic thatched buildings.



Shelter thatched with cane tops, Hanover.



Thatched house near Santa Cruz, St Elizabeth.



Two thatchers at work on a roof in St Elizabeth. Most of the craftsmen are now in their sixties and seventies; few young people are learning the skills.

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Jamaican Thatch Palms

Type of Thatch	Botanical name/ Distribution	Size	Habitat	Lath Spacing	Method of Tying	Leaf Spacing	Roof Pitch	Example
Silver Thatch	<i>Coccothrinax jamaicensis</i> endemic	6-25 ft. high; Trunk 2-8 in. (diameter); leaf 3-5" wide. Grey to silvery underside of leaf.	Common in limestone areas along south coast, 900-2000 ft.	8"	in pairs, twisted, wrapped and tied	4"	? deg	Negril, Westmoreland
Crab Thatch Butter Thatch Broom Thatch Thatch Pole	<i>Thrinax parviflora</i> endemic	3-30 ft. high; trunk 2-5.5 in. (diameter) leaf 27-55 in. across	Very common in central and western Jamaica on well drained limestone S L-3000 ft.	6"	leaves in pairs, fronds twisted wrapped and tucked	4"		Tobacco houses Clarendon
Bullhead Thatch Sea Thatch	<i>Thrinax multiflora</i> Florida, Mexico, Cuba, Belize, Hispaniola Bahamas	6-30 ft. high; trunk 3 - 5 in (diameter). leaf 4-5ft. wide	Common in thickets and exposed areas on coastal limestone S L-250 ft.	12"	split and tie	4"	30-90 degrees	houses St. Elizabeth
Big Thatch Bull Thatch	<i>Sabal jamaicensis</i> endemic	30+ ft.; trunk 1 - 1.8" (diameter) leaf up to 12 ft. across	common SL - 1700 ft.	18"	split and tie	4"	30-90 degrees	houses St. Elizabeth
Long Thatch	<i>Calyptronoma occidentalis</i> endemic	20 + ft.; leaf 9-12 ft. long	Damp woodlands locally in lowland swamps S L-2250 ft.	6" 6" 1 ft. 1' 6" 1' 6" 1' 0"	plait and tie with withes	touching	45-80 degrees	Negril, e.g. Cosmos