

\*Beinn Donnill.

LOCH FLEET.

Loch Tarbhaidh.

Loch Laoigh.

Loch Lannasaidh.

Loch d'Ghiubhais.

\*Creagan Asdale.

RHIAN\*

\*Beinn Bhreac 214

Cambusaurie

Cambusaurie

A9(T.)

Balvaid Mains

Skelbo Castle.

Ferry links

Littleferry

Forestry

Road.

Achormarie.

River Evelix.

Achvaich.

\*Hut Circle.

Achosnich.

River Evelix.

Rearquhar.

Badninish.

Achavandra Muir.

A9(T.)

Birichen.

Gashagich

Fleuchary

A9(T.)

Princes Castle.

Prancy

Tretham.

Duchess Countess Plantation

Embo Burn.

EMBO

Embo House

Embo Pier.

Embo Street.

Balnopolis

The Pillars.

Pitgrudy.

Golf Course

DORNOCH.

Dornoch Links

Dornoch Sands

Dornoch Point.

Gizen Briggs.

FIRTH.

Cothill Sands.

Loch Evelix

Lake house.

Polvrossie

Loch Ospisdale

Skibo Castle.

Overklibo.

Clashmeigach.

Clashmore.

Ospisdale House.

Whiteface.

Newton Point.

Black Wood.

A9(T.)

SPINNING DALE

DORNOCH



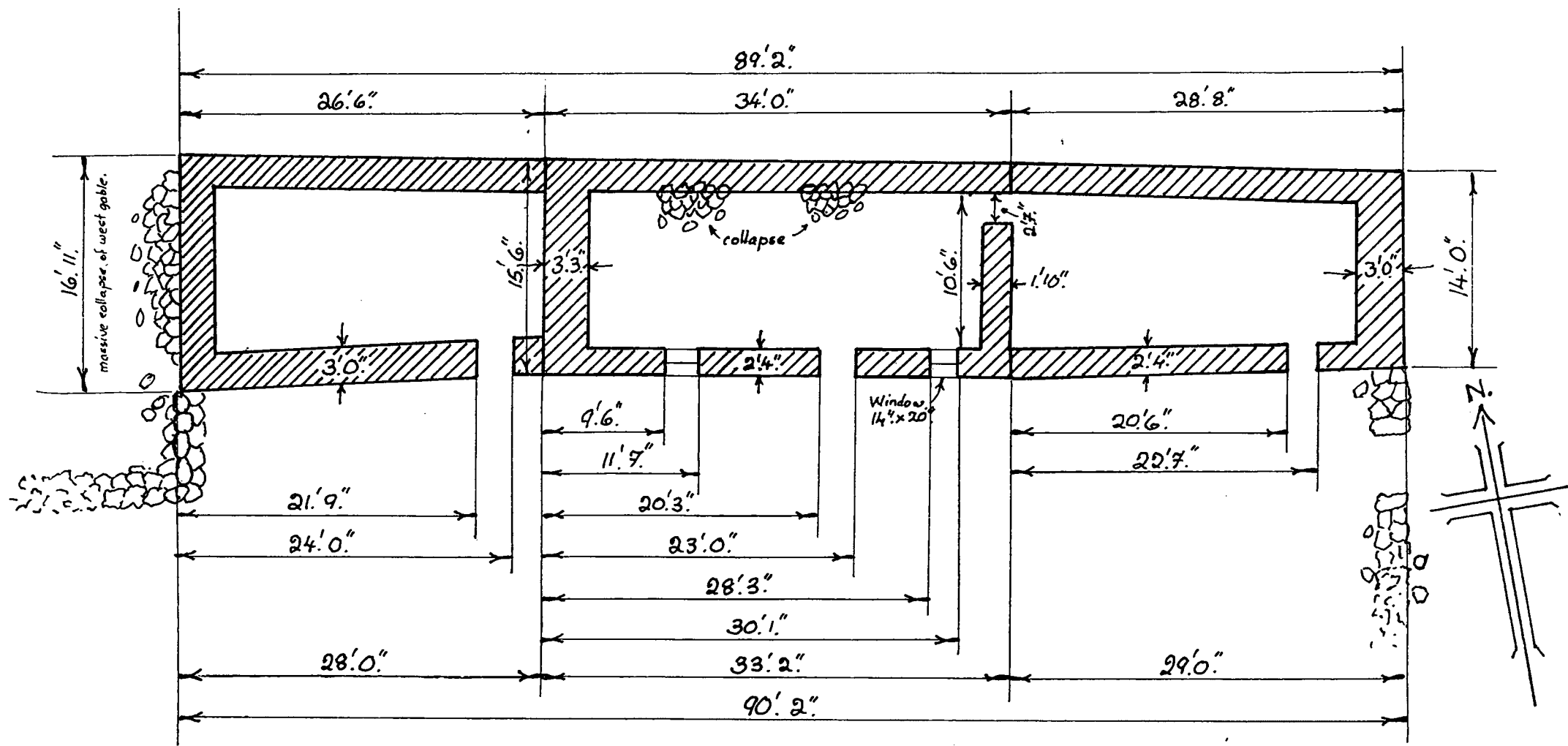
SUTHERLAND is a County in which the prehistoric population probably far outnumbered current figures, for a count of the myriad hut circles, alone, would seem to substantiate the theory of the ambient temperature and weather of those days being considerably warmer, and more clement than it is today, to be able to support so large an agricultural population. Progressively more modern houses do reflect both an increasing grasp of construction technique — and the need for enhanced shelter and warmth, with the deteriorating weather pattern. The thirty; or forty foot hut circles with their vulnerable high, and relatively vast roofing areas readily gave way to the Viking-inspired long-houses with much lower and narrower roofs, built end-on to the prevailing wind, or recessed into the hill-sides for shelter, indicated active adaptation to an increasingly stormy climate. In their turn, the wall lengths — lacking the mechanical stability of the circle — demanded heavier and more solid construction, to be seen in the transition from the lighter, largely turf-walled building to the heavy dry-stone walled construction, as an inevitable response. There lacks archaeological evidence of any form of intermediary stage of architectural development between the Neolithic hut circle and the Viking long-house: an extremely long space of time. Initially, the lack of tools, and technology for stone-dressing rendered the early stone long-house a rather amorphous affair, with rounded ends from the lack of square-cut blocks, and the need to utilise the stone more or less the way it was found: while the turf gave way to a hearth of smaller, rough, binding stones and clay as proofing to wind and weather. Windows, when they came, were small and wooden-shuttered, as light was prized less than warmth, and glass panes were not yet available. Roofs were thatched with heather, or other locally available material, pinned down with divots of turf, and roped to weighting stones to withstand the wind. A central hearth exhausted smoke through a central hole in the roof, and the pervading sootiness and grime may have given rise to the term "Black House". Such housing was still occupied until within this century, in the remoter, and island regions, and Miss Grant, in her "Highland Folk Ways" (1961) has delineated such buildings and their evolution, delightfully, and from whence — as well as from elsewhere — the inspiration for the exhibited pen sketches has been derived.

RHIAN : A Croft-house of probably some 300 years standing, in the valley of the Evelix River, in East Sutherland, is a discrete dwelling set in its own field-system, with its own corn-drying kiln a hundred yards or so from the house. It is of interest in that, while of dry-stone construction, with clay hearting, it epitomises the utilisation of more modern dressed-stone vertical walls, with right-angled corners using interlocking corner blocks, and so may be taken as a further transition stage between its largely turf-walled progenitor and the cement-and-stone construction of its current counterpart. Its generic predecessors were the sloping-walled, right-angled cornered, dry-stone houses of Miss Grant's illustration, and the round-ended version, of similar construction, there being no hard and fast demarcation in the evolution of the Highland Croft-house, though the central and east Highlands tended to anticipate more modern construction earlier, being less remote from the civilising influence of trade with the Continent, and were considerably less bleak. One would, however, have tended to equate the use of dressed stone, in association with rectilinear construction with such concurrent advances as, possibly, recessed fireplaces and intramural stone-lined chimneys, but Rhian highlights a definite phase in Highland house development where the roof treatment lagged behind the advancing capabilities of more modern masons : or was it simply a matter of economy ? Again — there are no traces of roof crucks.

# RHIAN.

Croft, on the south bank of the River Evelix, where Creich Parish marches with the Parish of Dornoch.  
O.S. Sheet 21. 1:50 000 Series, Grid Ref: 708.939.

SCALE to approx. 2.5mm = 1ft.



A dry-stone building, with right-angled corners, hearted with clay. The main, central building has an out-house abutting onto both ends by simple butt-junction construction, with no interdigitating stonework, suggesting they were of later construction. Both outhouses are sloping away, slightly, from the main building, the eastern one having an interconnecting doorway, while that at the west end is discrete. South-facing, there are no north windows or entrances. There are no obvious roof-crucks, and no signs of a wall-fireplace, or chimney. There is much decay of all walls, with more massive collapse, in two places, of the inner wall, and especially at the entrances and windows. The stone-work of the main house is excellent: that of the out-houses of more rough construction.

Sketch by:—  
Stanley T. Robertson,  
Ternmouth, Dornoch,  
Sutherland,  
2-2-1994

RHIAN [Gael: "The Gentle Slope".]



[Photo: S.J.T.R. 87/1/32A-33]

The front facade of the Croft : "Rhian".

The view is from the south-east, looking towards Acharmlarie, which croft is seen in the distance, together with the new Forestry road snaking over the hills towards Loch Buidhe.

The four highest peaks of masonry indicate the four corners of the main house. The west end byre is seen sloping towards the left side of the photograph, with a glimpse of the Evelix River behind it. Towards the right side of the picture, the east byre, or extension of the main house is seen descending among the reeds to its narrower east gable.

Despite the massive collapse of the front of the building, especially about the main entrance, and windows, a small (14" x 20") window, complete with its lintel remains (1987), and an idea of the excellence of the craftsmanship of the old stone-masons is apparent.



## RHIAN : THE ANTERIOR CORNERS.



[Photo: S.J.T.R.: 87/1/33A-34].

The south-east (front) corner of the main building block, taken from the south-east, showing the right-angled corner construction, originally neatly blocked, but the victim of the ravages of collapse. The butt-join of the eastern byre to the original house, the extensive collapse of the front wall, together with the near-intact remains of a small (14" x 20") window, complete with lintel, are seen.



[Photo: S.J.T.R.: 87/1/34A-35].

The south-west (front) corner of the main building block, from the south-west, showing detail of the excellent masonry-work, the rectilineal construction with right-angled corners, and the butt-junction of the west byre wall - now practically a heap of rubble. It must approach 200 years or more, of dry-stone construction with clay hearting and is a monument to the building-craft of its day.



## RHIAN : THE MAIN HOUSE.



[Photo: S.J.T.R.: 87/1/35A-36.]

Viewed from the south-west corner of the main house block, Achvaich farm steading is visible on the extreme left, with the River Evelix hugging the shoulder of the hill in the middle distance. Outstanding is the interconnecting doorway between the main house and the east bye, or extension. Mr James Bell is inspecting a gap in the wall, probably a collapse artifact as it is too narrow for a wall-cupboard.



[Photo: S.J.T.R.: 87/1/36A.]

This view towards the east end of the main house block was taken standing on top of the north-west corner where the wall seems to be intact and showing its full height. The inward bulging and collapse of the north (back) wall, together with the massive collapse of the front facade, and the crisp construction of the door-way into the east bye, or extension, are well displayed.

# THE ARCHITECTURAL DEVELOPMENT OF THE SCOTTISH CROFTER COTTAGE.

The entire valley of the Evelix River, from its source in Loch Laro, in the hills behind, and north of Bonar, has been heavily settled with primitive agricultural traces down to the more modern small farmers and crofting folk, from Bronze and Iron Age times, and examples of most types of house construction from the pre-historic Hut-circle through to the modern cement-and-stone built, slate-roofed cottage may be found, together with several interesting and well-preserved examples of more modern corn-drying kilns, making the entire catchment area of the Evelix River an open-air museum of crofting and pre-historic architecture.

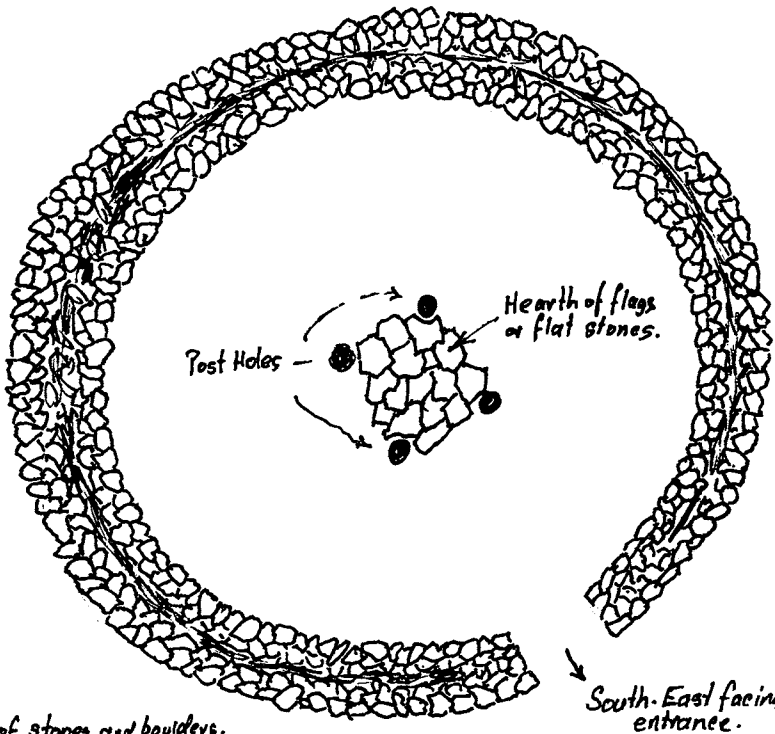
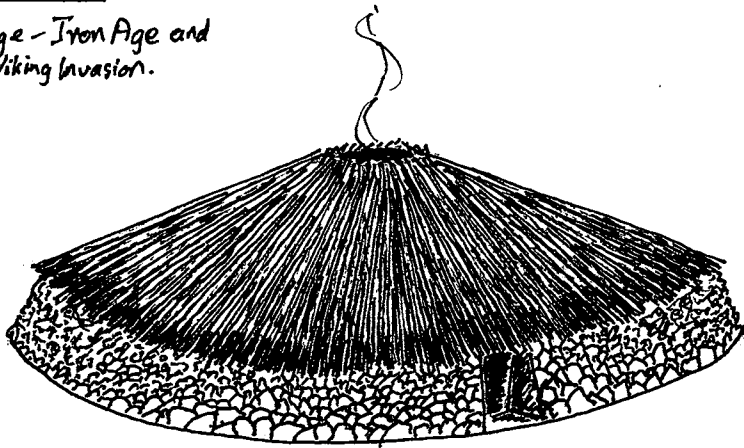
Rhian was probably inhabited within the current hundred-year span, and has been taken as a good example of Phase III croft-house construction; a review of the development of design since the Vikings introduced the "Long-House" architectural concept after the withdrawal of the Romans, is outlined in the pen-drawings below. Many of the families of these old crofting cottages spread throughout the valley are traceable in the 1841 Census returns for the County of Sutherland.

These little pen-drawings have been based upon Miss L.F. Grant's Highland Folk Ways (1961), and other sources, and while descriptions of the older ones tend to vary on certain points, from source to source, historical anecdote remains almost the only evidence to base any concept of construction upon.



# HUT CIRCLE

Bronze Age - Iron Age and  
up to the Viking Invasion.



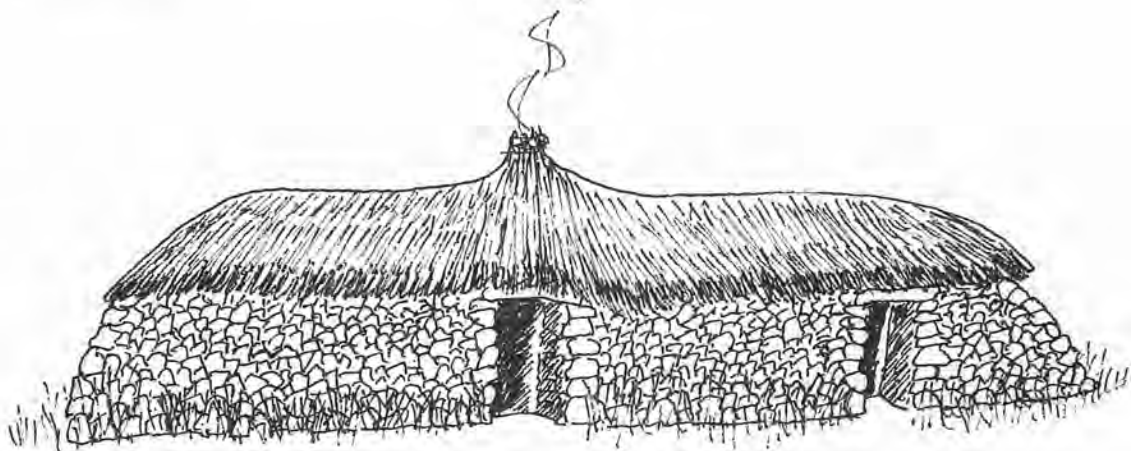
Foundation - of stones and boulders.

Walls. - dry-stone +/- turves.

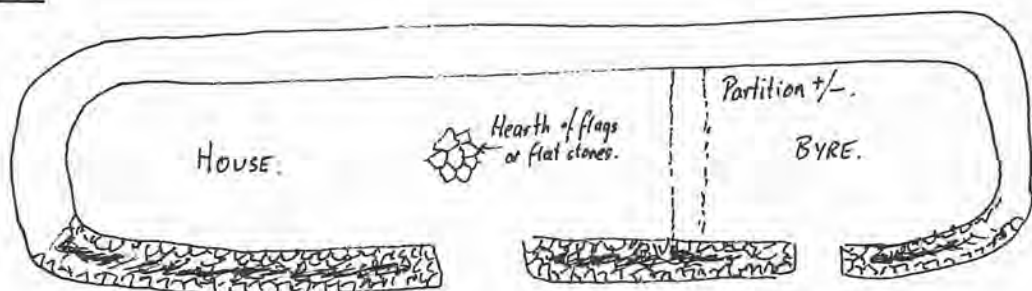
Roof. - Four central poles carried a square wooden frame from which rafter poles radiated and were set into the walls. The whole was thatched with whatever material was available: heather: reeds: bracken: wattle - interlaced with saplings and turf.

Heating - Central stone-flag, or flat stone hearth, with square hole in the roof to let smoke escape.

## PHASE I - The "LONG HOUSE" (Viking Influence).



### PLAN:



Foundations — usually none: just bare earth.

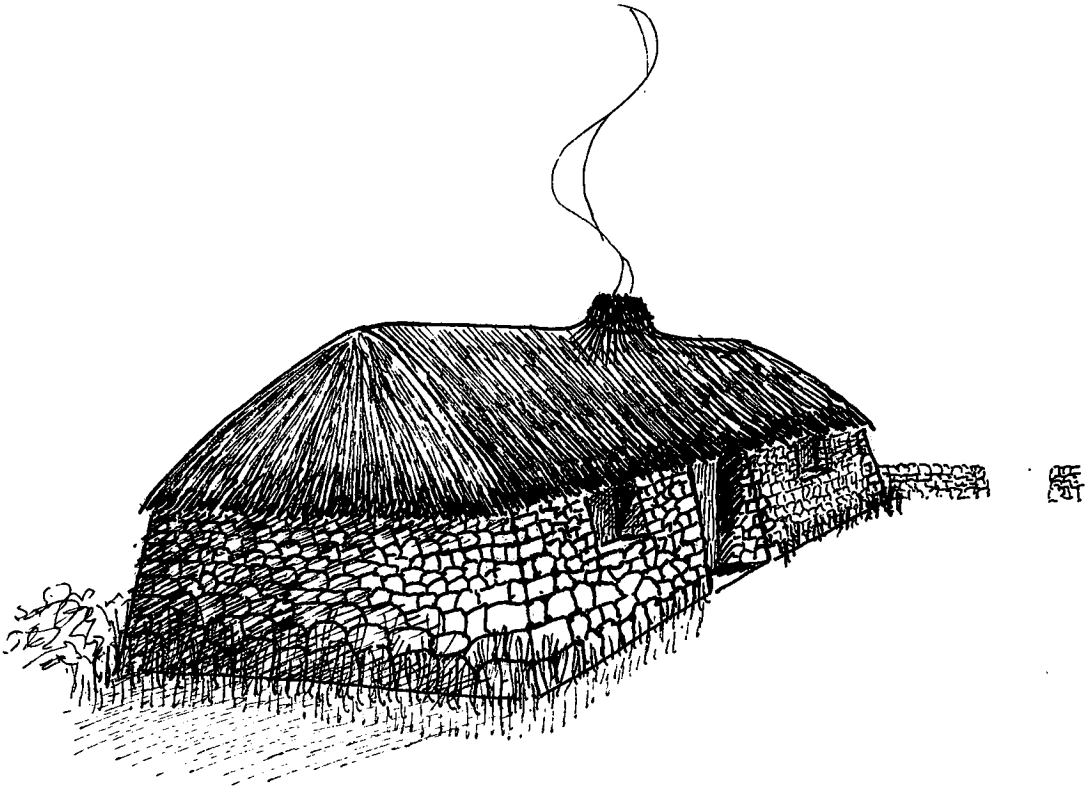
Walls — of turf and stones. Often recessed into a hillside. Rounded corners.

Roof — introduction of standard roof-tree and rafter pattern — probably with tie-beams — though of rudely shaped boughs, and thatched with any available material — usually heather and divots of turf. Thatching usually roped and weighed down with heavy stones.

Heating — Central stone-flag, or flat stone hearth, with hole in the roof — the first "Black Houses"?



## PHASE II - Dressed Stone Introduced.



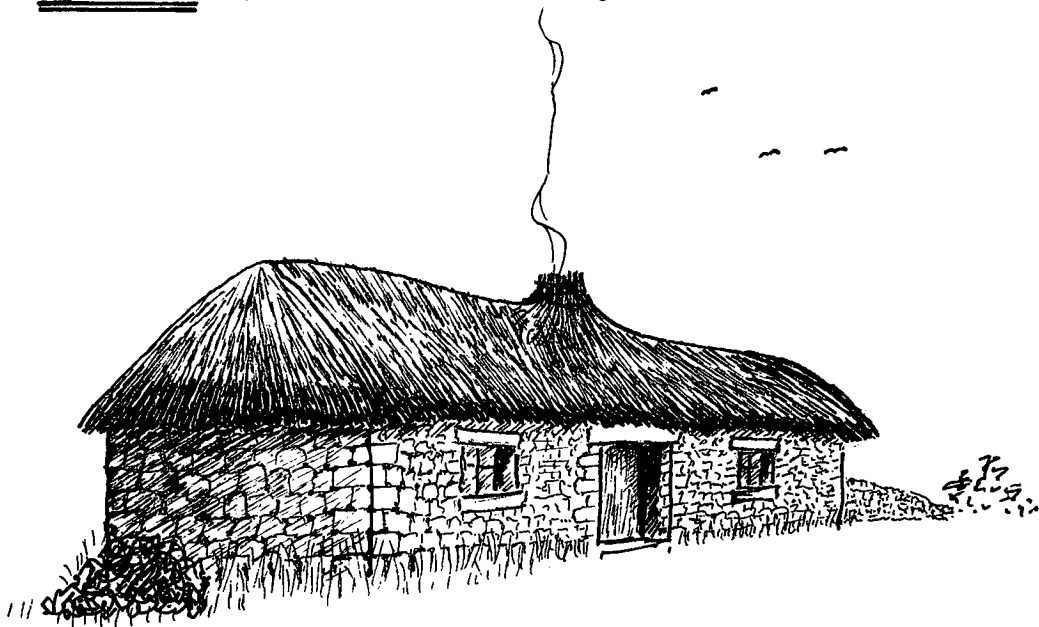
The introduction of roughly-dressed stone meant both an economy in the use of that material and the emergence of the right-angled corner. The walls remained sloping for both strength and stability of the piled stones and were hearted with clay. Windows, however empirical, had arrived: these were wooden-shuttered vents in the walls, as glass was not yet available.

The communal house-cum-byre began to see the segregation of beasts from man, into an outhouse, or extension byre, partitioned off, and usually at a lower level for drainage purposes, though still communicating with the main building so as not to lose valuable animal warmth.

Bare-earth floors with a central flogstone, slate or sandstone hearth below a central hole in the thatched roof aided smoke dispersal.

### PHASE III

### The Vertical-Walled Building.



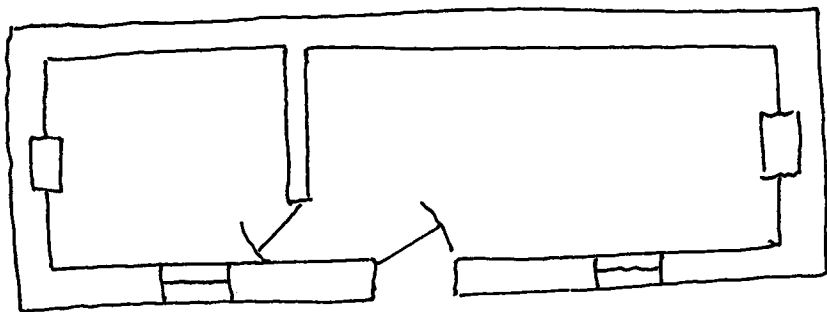
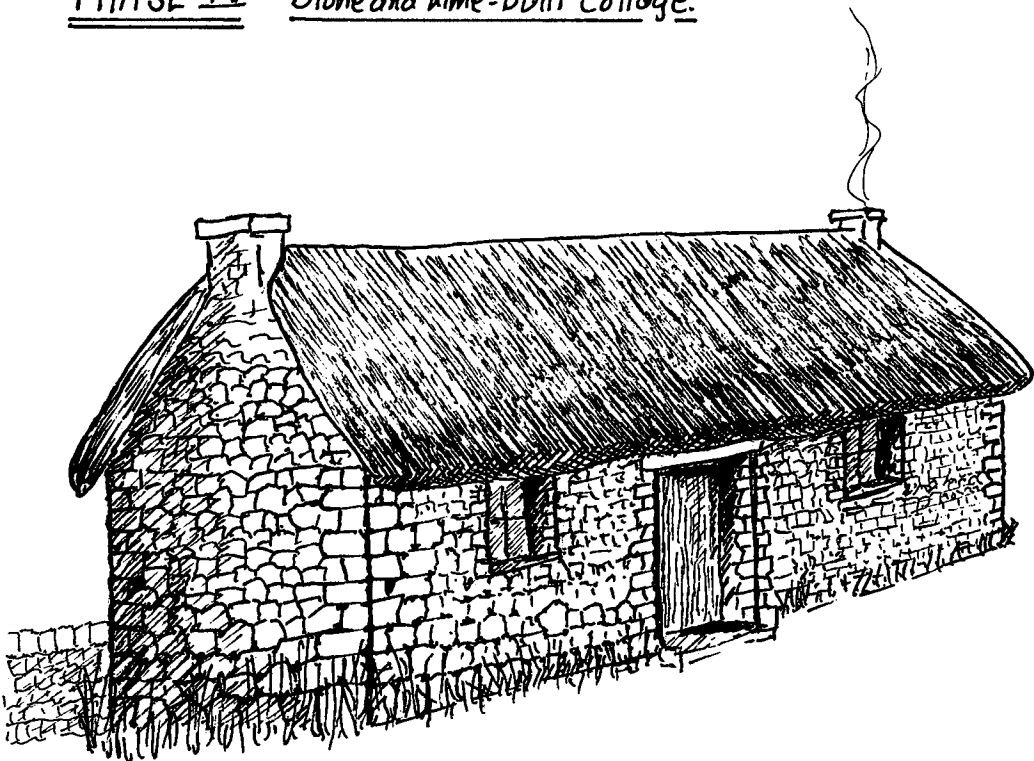
Roof : is still thatch, using heather or other locally available material, and with a central chimney-hole. The thatch was secured by slabs of dried peat or divots of turf, pinned or roped down.

Walls : are dry-stone, but using dressed corner stones, and we have the completely rectilineal building - but without gabled ends. The body of the walls used largely undressed, or roughly dressed stones, and courses were maintained in so far as the material allowed.

Doors and : are all a neater fit, and so more draught-proof. Originally  
Windows the windows would be shuttered, though these would be replaced, in time, with small glass panes.



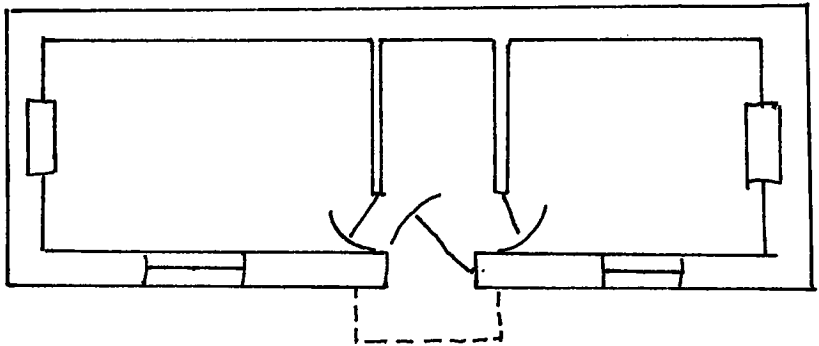
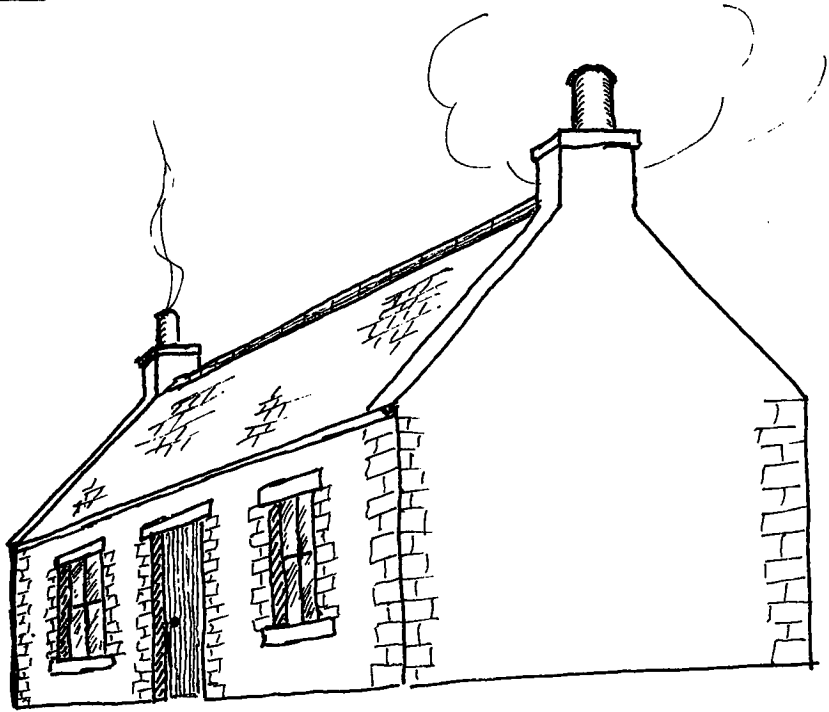
## PHASE IV - Stone and lime-built Cottage.



Here we have the early two-roomed Cottage, constructed of dressed stone and lime-mortar, gabled and with gable chimneys. The roof remains of thatch on standard timbering, and heating was by two recessed fireplaces with stone-lined flues within the gable-ends, and open chimney-tops.

The first "But-and-Ben" Scots Cottage, of eighteenth century vintage, and referred to by Grant as the "Toy-side" Cottage. There was a living-room with a bedroom off it, with internal wall partitioning. Many were as narrow as their dry-stone predecessors, but from this point onwards, broader and higher building took place.

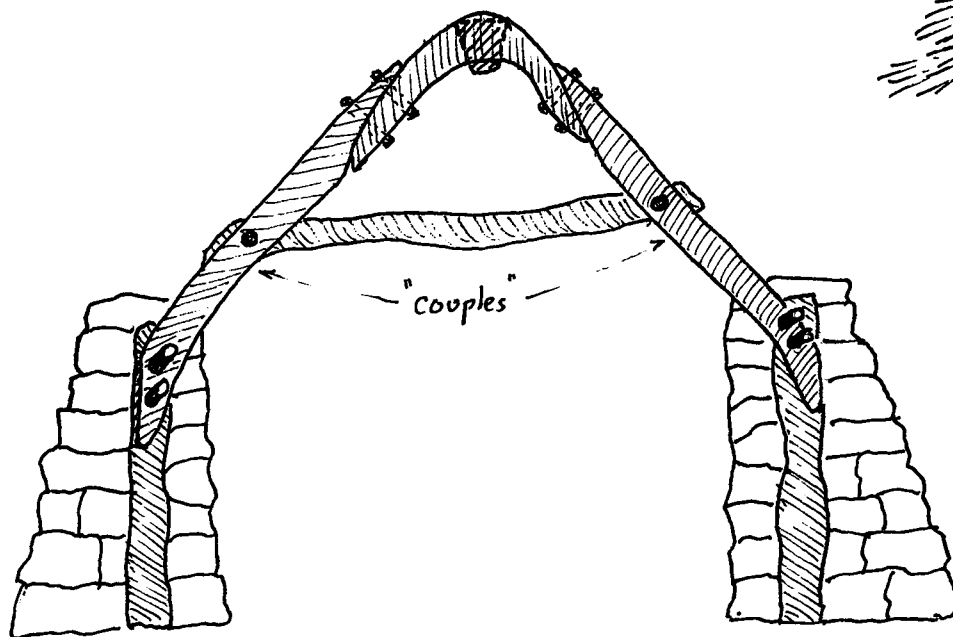
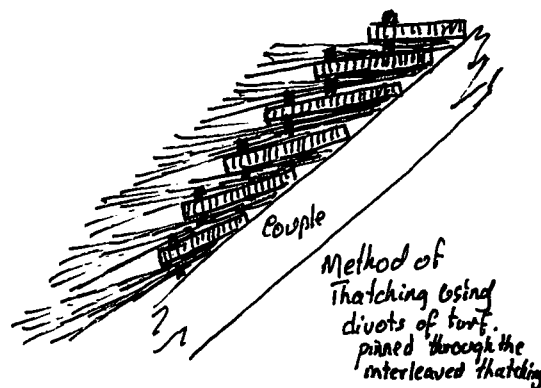
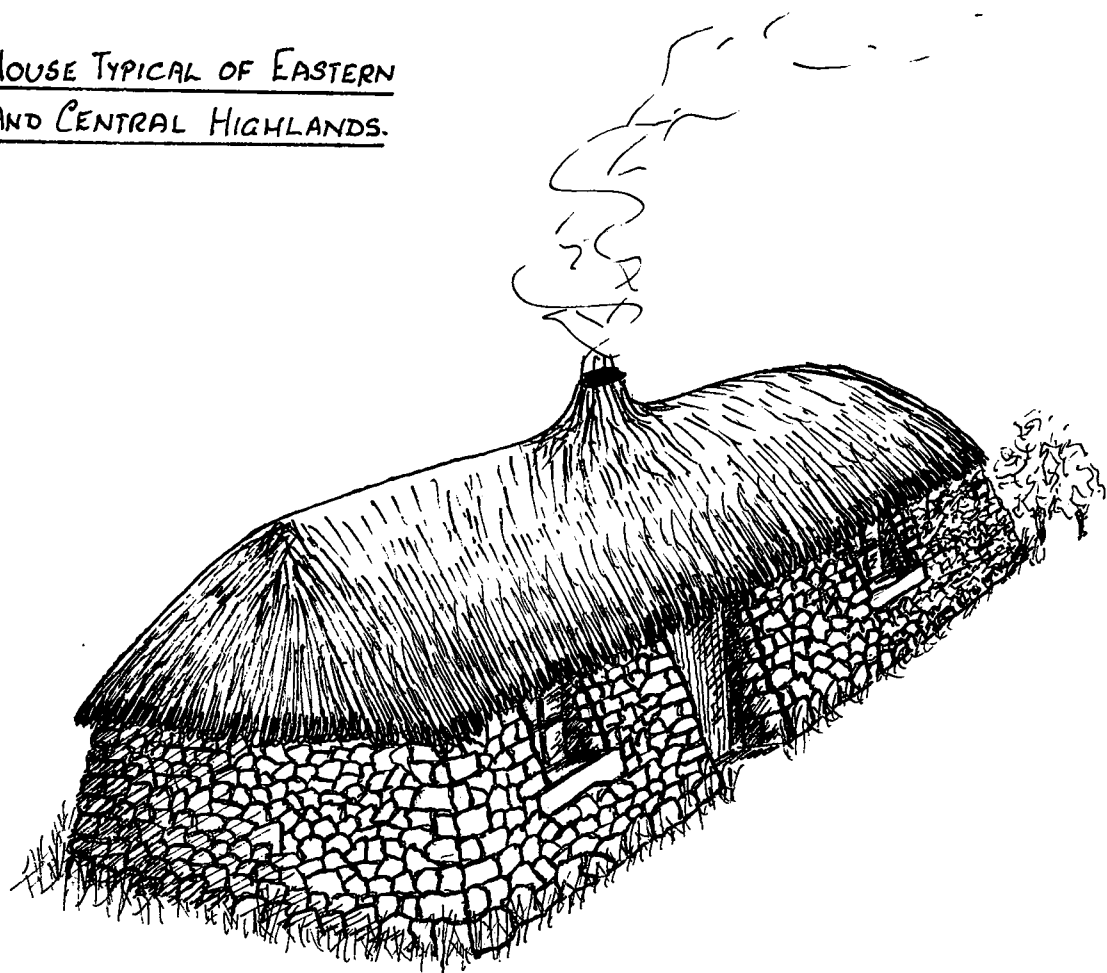
## PHASE V - The Modern Slate-roofed Cottage.



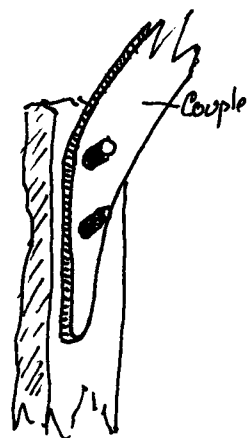
A stone-and-mortar built cottage with slate roof (occasionally corrugated iron). In addition to two rooms, the front-door now opened into a narrow 'tween-room' space used for hanging outdoor clothes, personal belongings, sacks of grain, seed or cattle food. In many cases an outside porch was added which enhanced appearances and gave for a warmer, less draughty house. Chimney pots now capped the chimney heads.



HOUSE TYPICAL OF EASTERN  
AND CENTRAL HIGHLANDS.



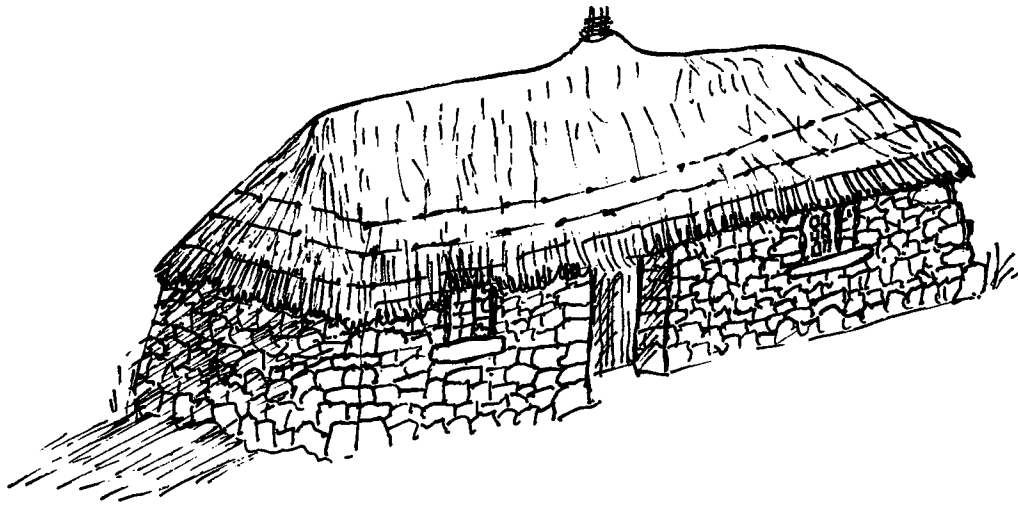
Schematic cross-section of house to show  
wall and roof rafter (couples) construction.



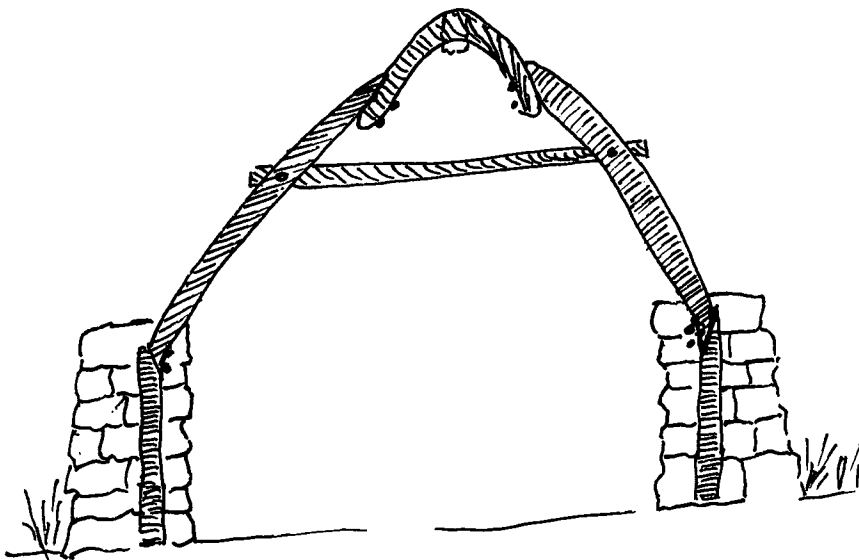
Pegged addition to  
Couples.  
(optional.).

[Taken from : GRANT, J. F : Highland Folk Ways : 1961 : Ch. VII pp 141-166 -  
"The Homes of People".]

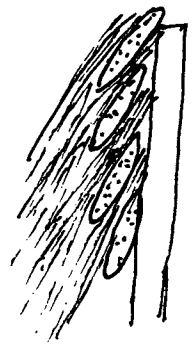
House typical of Eastern and Central Highlands:



Roof covering of divots.

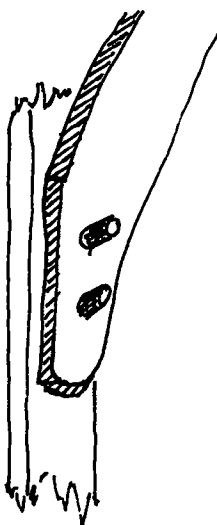


Detail of construction.



Method of Thatching  
(Note this should be sloping  
not vertical !!)

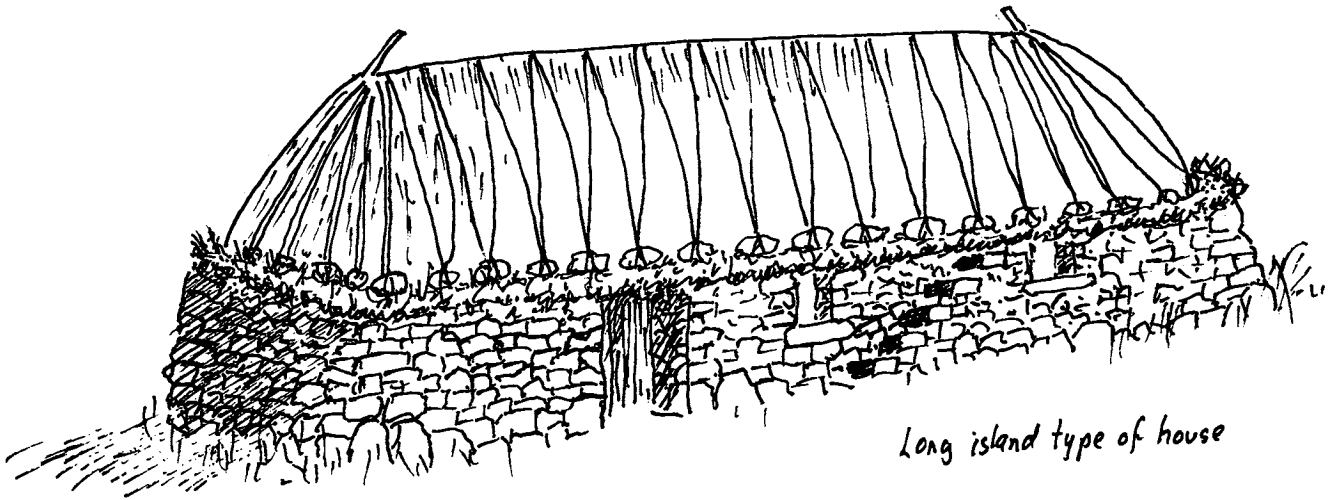
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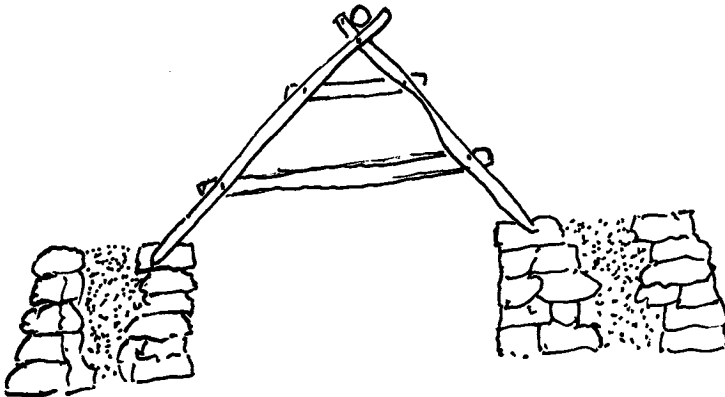
Pegged addition to couples.

# HIGHLAND COTTAGES.

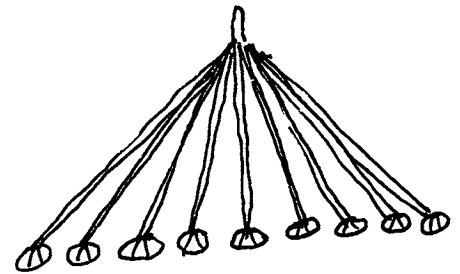
[from GRANT, L.F.: Highland Folk Ways: 1961. Ch VII pp 141-166 "The Homes of People"]



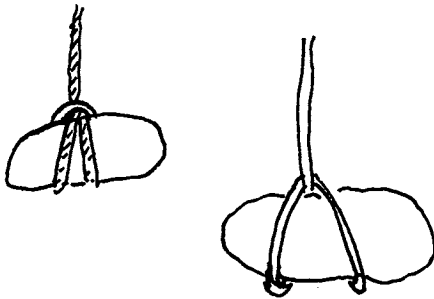
Long island type of house



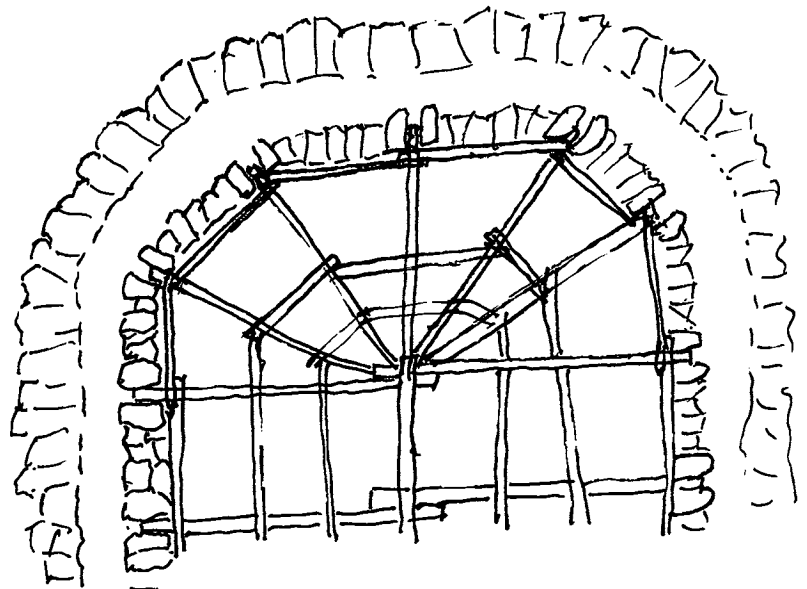
Details of construction.



Method of roping thatch at the end.



Stones that weight roof ropes.

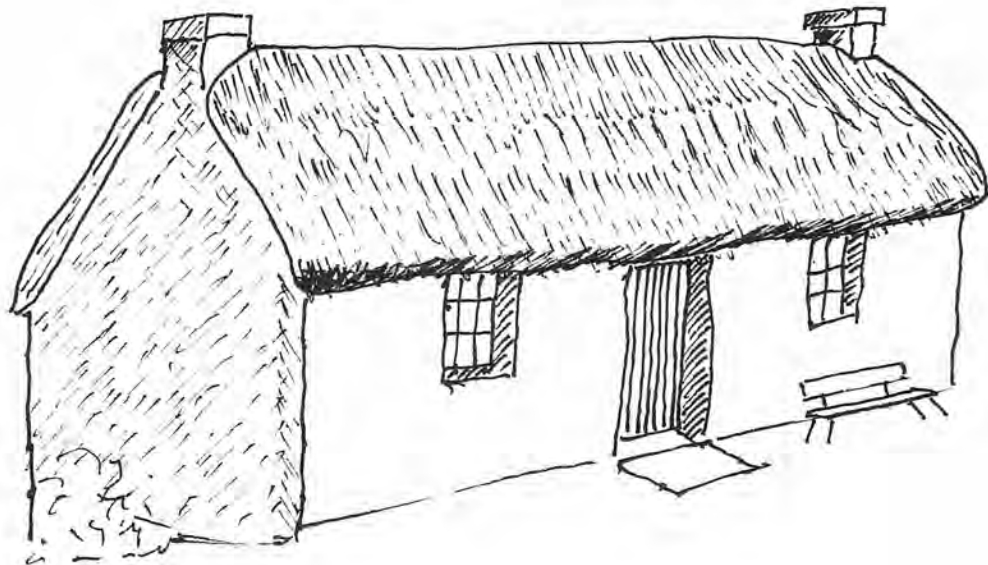


Detail of timbers at end.



Eighteenth Century "Tayside" Cottage.

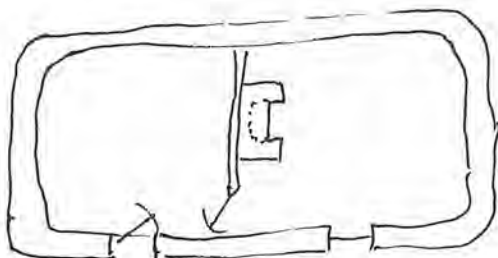
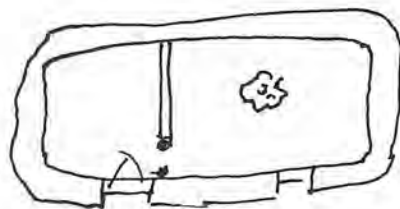
Superficially resembled the late Dalriadic cottage, with square ends and triangular gables. Built more or less with mortar. Many thatched - but often slated.



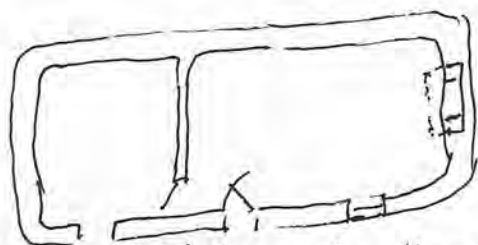
Hearths and fireplaces



Hearth in middle of floor - flint stones.

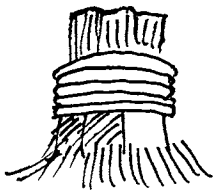
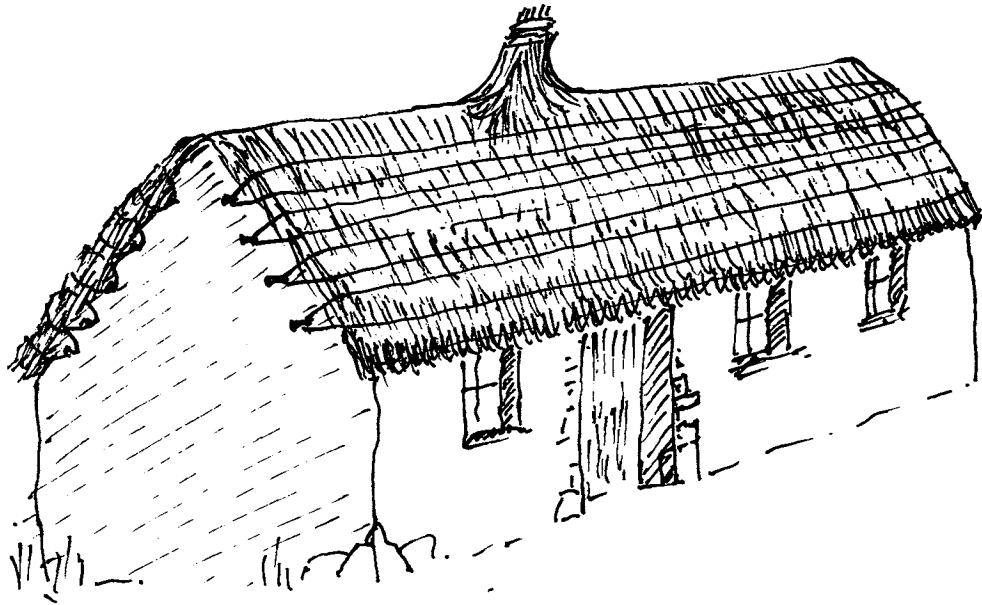


Hearth built against middle partition.

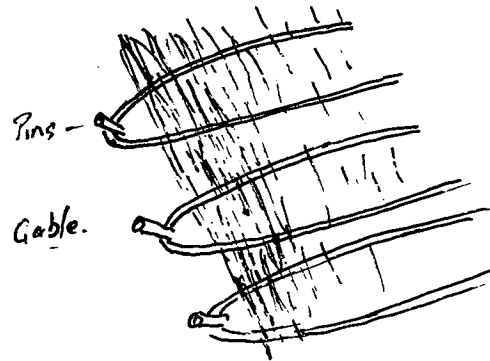


Fireplace under chimney flue

South-Western type of house:

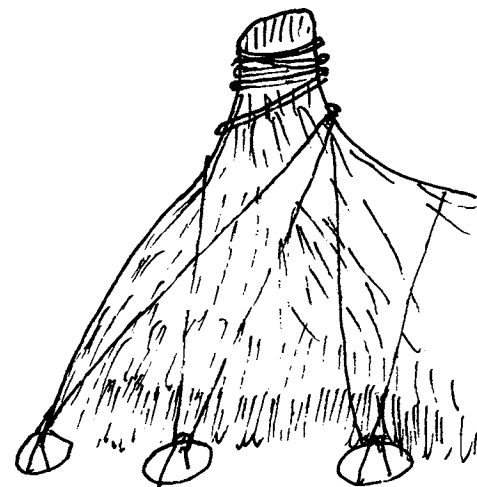
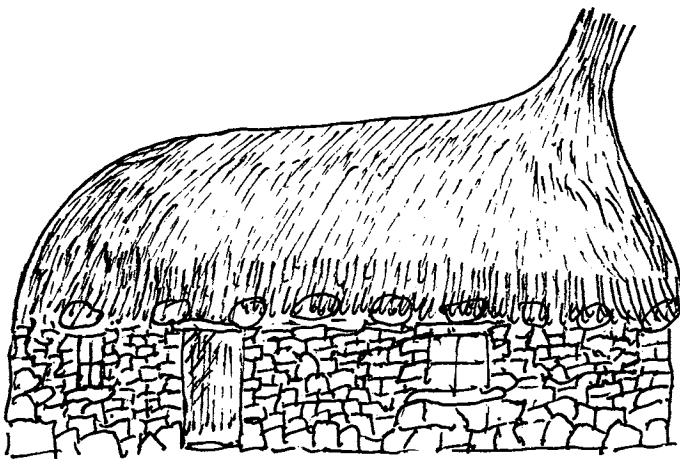


Detail of chimney.



Fastening of thatch to square gable-end

Mull type of house:—



Detail of chimney at end of house