1977.

RURAL LANDSCAPE

Elizabeth comerford.

RURAL LANDSCAPE

Introduction:

Who owns the land?

If you, as I have, travelled over a mountain road, through a bleak and except for grazing sheep, unproductive landscape, to be told at the end that you are tresspassing on private ground, the question of ownership becomes a curious one. In this particular instance the landowner, who was definitely neither Irish nor a farmer, assured me that he did in fact own this mountain in the Dublin range. I still wonder to this day who sold him that mountain.

H. M. Fitzpatrick in his book Ireland's Countryside [1] says that of the 20 million acres of land in Ireland, farmland (land enclosed for tillage or pasture) amounts to 13½ of it. The farming community also hold grazing rights over much of the mountain area, approx. 5½ million acres. Another 700,000 acres is covered by state forests and the small remaining area is covered by towns, villages, roads, rivers and lakes. The bulk of the land therefore belongs to the farmers. Ownership of land implies working the land and this working or activity must influence the visual aspect of the landscape. It needs hardly be stated therefore, that there is little 'natural' landscape. With the exception of high mountainous areas or areas which

do not allow human settlement, there is no_where you can go here without seeing evidence of man's activities. Even these apparently wild lands show the mark of human activity in that they are made accessable to some degree by roads and paths. This activity of mans' and the mark he leaves on the landscape is the subject of Emyrs Jone's Human Geography.[2] In his introduction he states:-

> "We are faced - with an environment much of which has long since ceased to be 'natural', which bears the heavy imprint of man - no one can deny man's ability to change much of the landscape. How much 'natural' landscape do we see - we see fields and hedgerows and ditches, roads, fences, houses and gardens, the cumulative effect of centuries of use".

For an artist concerned with landscape it is an obvious fact that what he sees has been modified to suit social needs by people who have no direct link with the arts. An artist who deliberately seeks 'unspoilt' land can do so only by consciously ignoring miles of road, hedges, fences, and walls, by ignoring the pattern of fields, the animals and the buildings. To ignore this aspect of landscape is to miss much that is attractive, beautiful and often humerous.

landscape itself). In the past, as a matter of interest, communities did undertake to deliberately change the landscape in a consciously sculptural way - the Cerne Abbas Giant, Dorset, England provides the best example

> (it is) "over 180' long and is cut into a chalk hillside; his knotted club and erect phallus are attributes of the fertility God Hercules"(John Sharkey, Celtic Mysteries - the ancient religion.)[3]

There are two interesting points about this giant image (a) the concept of creating this image this way and the work and vision it entailed and (b) the fact as John Sharkey mentioned the association between the phallus image, a fertility symbol and agricultural communities. This association no longer exists although it is apt that nearly all our ancient monuments are on farmland and are in the care of its' owner under the National Monuments Act.

David Hockney states in his autobiography that art, the practical activity of painting and I presume collecting imagery, is an educational process. Like many such statements it is as true as we allow it to be. To draw visual imagery from rural landscape without curiosity as to why it presents such

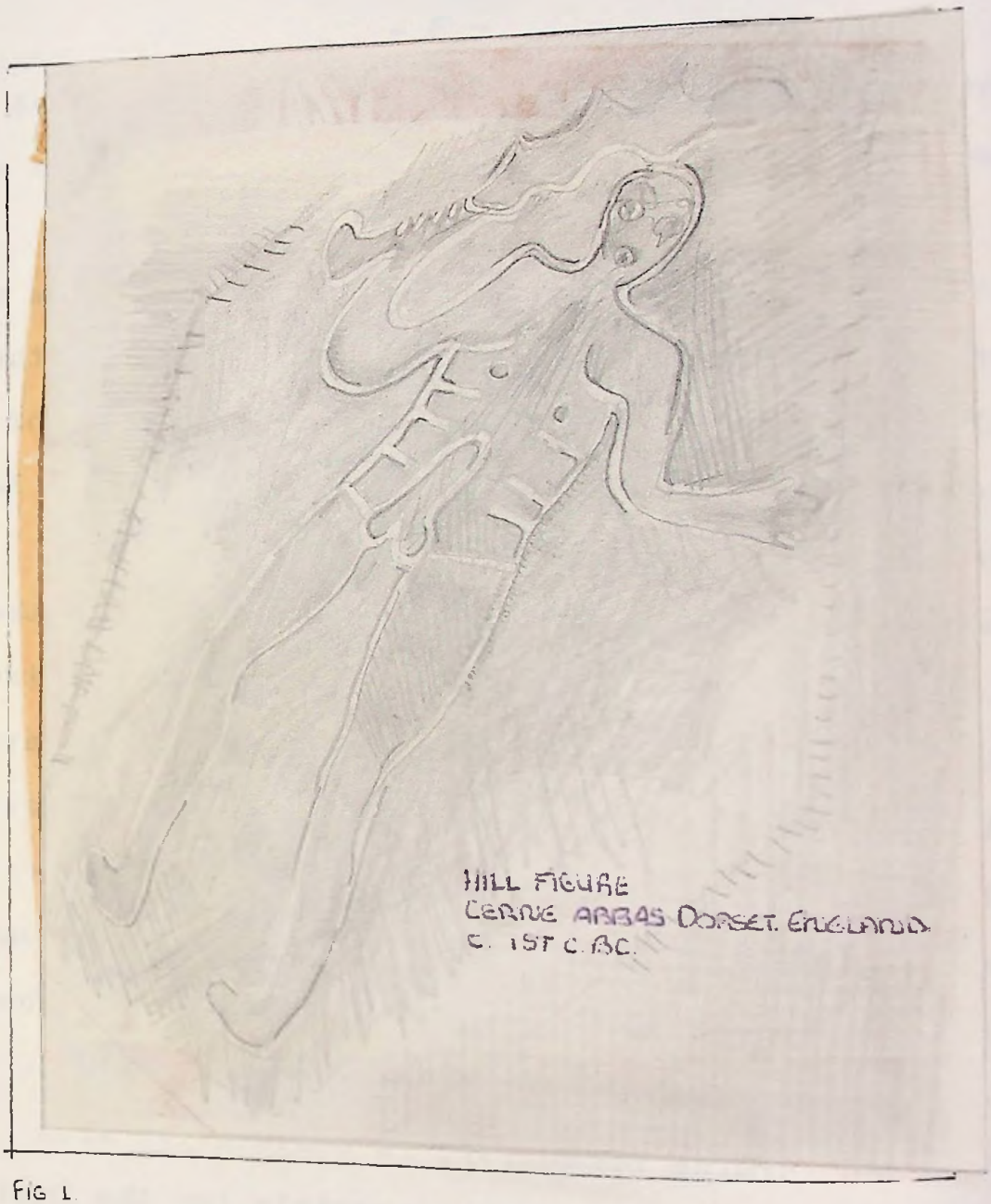


FIG 1.

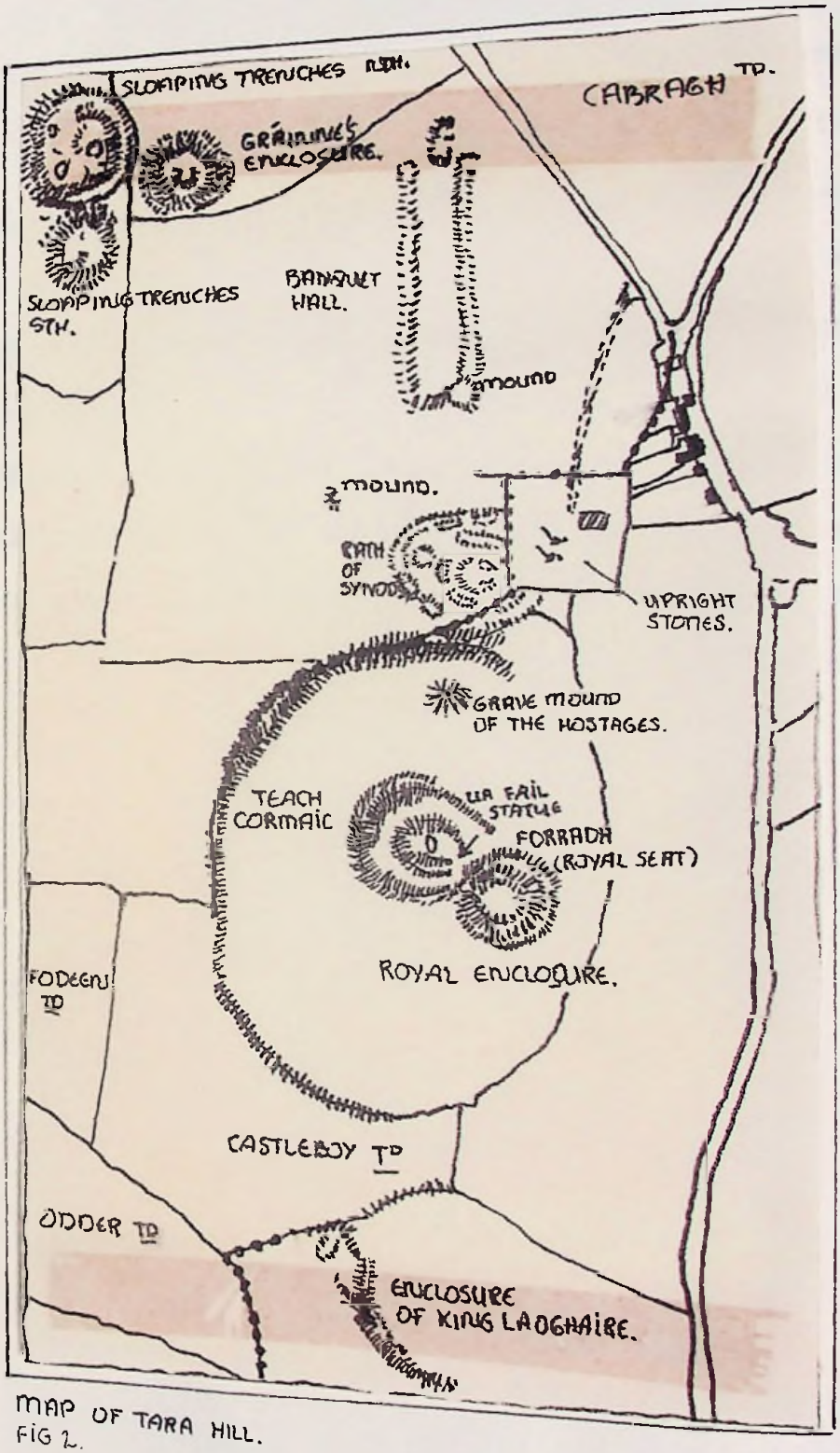
an appearance at a particular time and place, is to stunt this educational process.

The purpose of my thesis is to satisfy my own curiosity about this changing landscape, to inform and to a lesser extent comment on the work of those responsible for the land. In doing so I will study fixtures that are permanent or semi-permanent; man made or natural which the community living there use and leave in the landscape and the obvious seasonal changes apparent in the country.

SECTION 1

Objects man made or natural left in the landscape.

Human settlement of any kind involves changes in the appearance of the land. Our landscape has evolved contimously from the time of its' first settlement and is scattered with objects left there by successive generations of communities. While some of these objects are redundent - that is they no longer perform their original task, many are still functioning as first intended. So many are still in use that it is hard to realize that they may be several centuries old. When studying the appearance of rural landscape the evidence of ancient settlement becomes very obvious especially by the amount of monuments still standing that can be associated with death or religious rites. But there is also evidence of domestic structures of that period, though in the area of agricultural fixtures, such as boundary markers, field patterns and roads much has been overrun or amalgamated into later structures and are therefore more difficult to discern. The early agricultural societies in Ireland were concerned with cattle-breeding and some tillage in much the same way as small mixed farming communities are today. In addition to the routine chores this involved, a certain amount of pioneering work had to



MAP OF TARA HILL.
FIG 2.

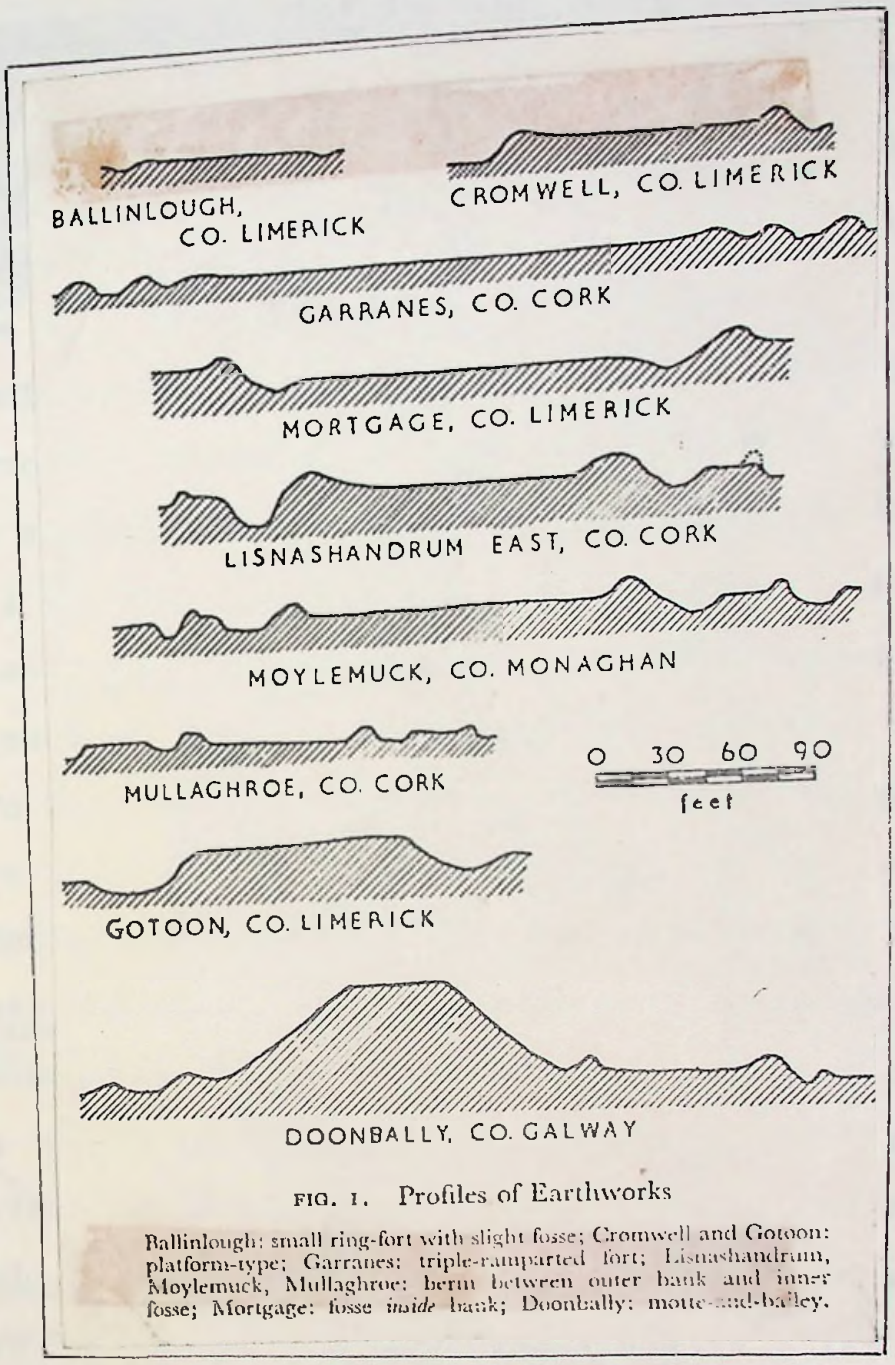
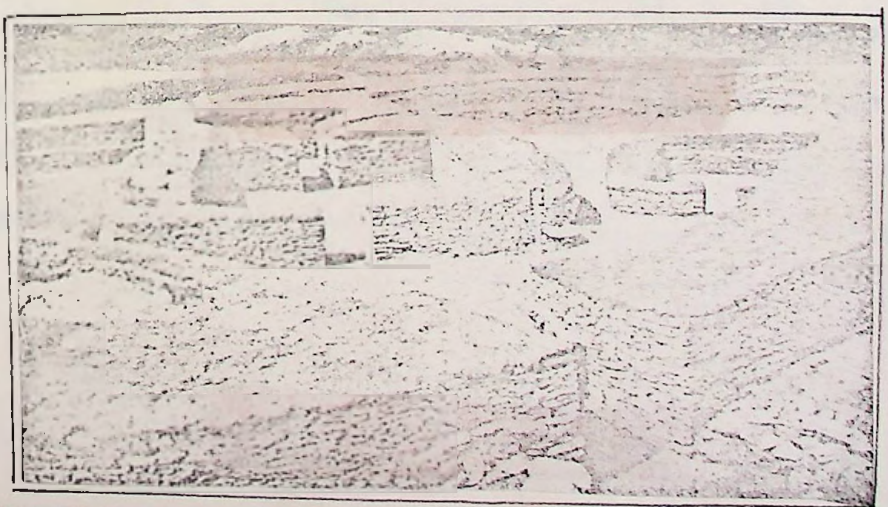


FIG. 1. Profiles of Earthworks

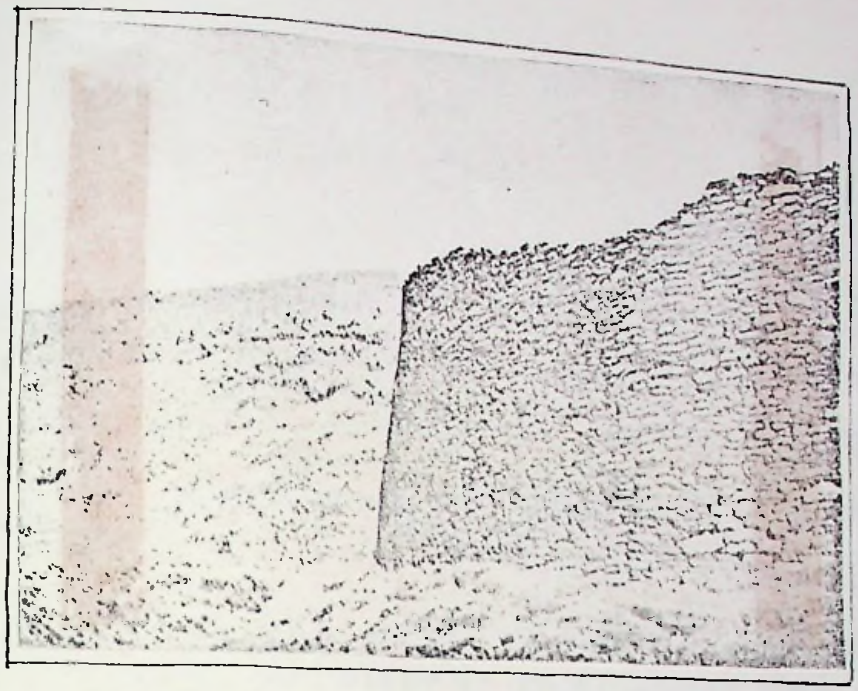
Ballinlough: small ring-fort with slight fosse; Cromwell and Gotoon: platform-type; Garranes: triple-ramparted fort; Lisnashandrum, Moylemuck, Mullaghroe: berm between outer bank and inner fosse; Mortgage: fosse *inside* bank; Doonbally: motte-and-bailey.

FIG. 3



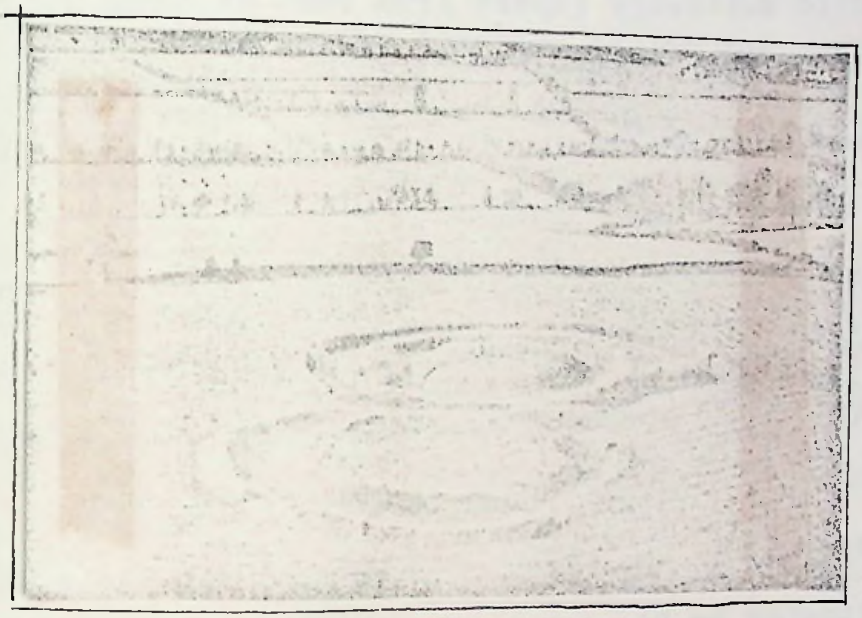
STONE FORT AT LEACANBU
CO. KERRY

FIG. 4.



wall joint and fosse
Staigue, Co. Kerry.

FIG. 5.



TARA:
TEACH CORMAIC
AND THE
FORRADH.

FIG. 6

KILFINANE
CO. LIMERICK.

FIG. 7

be undertaken - the initial clearing of woodlands, the establishment of home, the cleaning and enclosure of pasture and tillage areas and the maintenance of rudimentary paths, etc.

As today, the most obvious evidence of human settlement is domestic buildings (apart from road systems in our present society on which settlement depends). The homestead was normally circular and are known now as forts. Although not necessarily defensive in the military sense they did provide protection for both stock and inhabitants from other raiding clans, wolves and harsh weather. The forts were built by digging a deep ditch called a fosse and using the material provided to build up a bank. Variations are abundent as illustrated by Fig i Profiles of Earthworks - S. P. O'Riordain - Antiquities of the Irish Countryside. The interior was divided up for living quarters and pens for the herd. Except in areas where the whole structure is made of stone no great visual evidence remains of this housing arrangement, (example Leacanbuaile, Co. Kerry). In stoney areas no fosse is dug, but a stone wall is built to enclose a bank. The fort at Staigue, Co. Kerry provides an example of how beautiful both the building material and technique were.

Visually these forts are much more impressive seen from the air as S.P. O'Riordain's collection of photographs illustrate, in his book Antiquities of the Irish Countryside. They are so large that their whole image is not apparent at ground level. The fort at Ardooreen, Co. Sligo is an elongated circle with one fosse and bank - the fort set on the top of Tara Hill forms a figure eight shape and is again surrounded by a single fosse and bank, while the one at Kilfinnane shows a hillock surrounded by two semi-circular ditch and fosse arrangements. All illustrate the sculptural re-arrangement of the land and, as with the Cerne Abbas Giant in Dorset, size was no deterent to the building of these images.

In terms of modern agricultural practices it is interesting that many of these structures become much more obvious under crop when seen from the air, (i.e. stone boundary fences).
Apparently long rooted crops such as wheat, barley and oats show differences in height and density over areas previously disturbed i.e. a filled in ditch will be delineated by a tall dense crop whereas an underlying stone ditch now covered by soil stunts the crop growth and will likewise be evident from the air.[4] Most people

TRIPOD DOLMEN,
PROLEEK, CO. LOUTH.

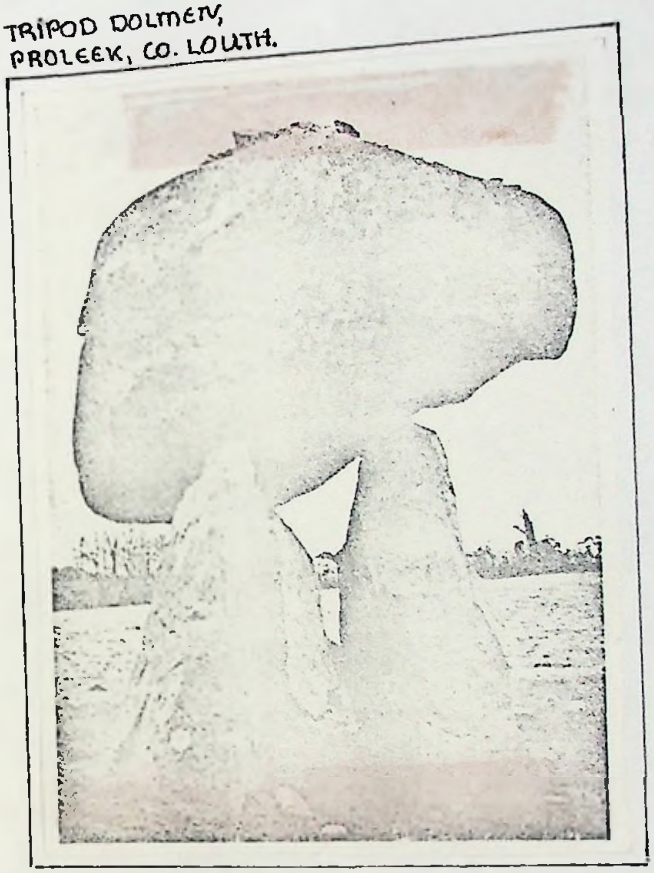


FIG. 8

PORTAL DOLMEN,
CHAPOLIZOD, CO DUBLIN

FIG 9

are aware of and appreciate the beautiful textile quality of these long-stemmed crops - a field further enhanced by a transient shallow relief, recording evidence of an older civilization is something akin to a long piled tapestry.

Apart from domestic buildings/forts which S.P. O'Riordain estimated to number between 30,000 and 40,000 the next most abundant of these structures are those associated with death, burial and religious rites.

The most imposing of these monuments for me are those called Dolmens. Dolmen is a definitive term meaning a simple structure characterized by a number of uprights supporting a capstone. The siting of these great stone monuments probably depended on the availability and location of huge erratics left by glacial movement. The tripod dolmen as illustrated by the one at Proleek, Co. Louth, and another at Legananrmy, Co. Down are by size and concept magnificent and commanding fixtures in the landscape. Normally three uprights support the capstone, two of which are matched to form portals, which signify the entrance to the tomb. Dolmens with a more obviously enclosed area are called Portal Dolmens and although intrinsically linked to the Tripod Dolmen they are visually quite different: The enclosed tomb being squat and bound to the land, instead of spanning it, enclosing both land and sky. The open corrougated hay barn without having any of the same mystical/religious significance, in the sense that they are domestic structures, provides the same visual contrast to adjacent enclosed buildings. These megalithic structures still retain their aura of sacredness as well as a great feeling of sculpture. Their sculptural quality is achieved by the

great mass and weight of the capstone, its apparent precarious positioning on the tall slender support stones and the open quality of the design which emphasizes these factors. They are monumental in the way some of the renaissance civil sculptures were (i.e. the equestrian monuments - Giovanni Bologna's Cosimo I on horseback -)

Cairns are another structure which, though not as striking in appearance, have by their design and building technique this same feeling. Most are now overgrown with grass and weeds and appear either as man made hills or just as natural, if unusual, bumps in the landscape Newgrange, a classic example of a passage grave is covered by a cairn and because it is now excavated and uncovered to show the original structures, serves as the best example. The cairn is built up with medium sized water-rolled pebbles collected from the nearby Boyne. The entrance area is decorated with, white quartz interspersed regularly with round boulders. It is a sophisticated architectural structure which very few later buildings here can match for integrity of design, material and building technique. The enclosed structure is made by a roofing technique called corbelling. This ancient technique was used until much later - e.g. Gallarus Oratory, Co. Kerry, Columcille's house at Kells, Co. Meath - especially in stoney areas. (S.P. O'Riordain provides an illustration of an outhouse made this way still in use on the Dingle penninsula) Claire O'Kelly describes the technique in her Guide to Newgrange -5

(the Chamber)- is constructed of horizontally laid courses of large slabs, each course partly resting on the one below it and partly oversailing it so that with each course, the diameter of the roof diminishes, until finally the vault is closed by a single capstone, 20' above the floor"

Standing stones are perhaps the most egmimatic of all these monuments. They are, as Professor O'Riordain states, merely a stone set upright in the ground. Some serve as grave markers, some as boundary markers and some are undoubtably linked with sacred rites. Because they are such/a minimal statement their function is subject to speculation. For example the stone on Tara Hill is both by shape (phallic) and location (Tara Hill - a royal seat) obviously linked to religious or cermonial rites. The cairn, even one as beautiful as Newgrange is less monumental then either the Dolmen or these stones. Newgrange because it is predominently architectural cannot be monumental in the same sculptural way. The standing stone either set upright or in aligument with others is visually disturbing. A solitary stone set upright in an otherwise conventional landscape is an inexplicable object, representing something no longer known, several of these set in a circle only increase this disquieting

FIG. 10 THE GREAT CIRCLE, NEWGRANGE.

visual/emotional reaction. (In rural communities stone circles became fairy rings and anything that was obviously solitary even trees, become objects of mystery and magic - the remnants of the old religion translated/diluted into folklore).

A phallic stone, with obvious sexual/fertility associations set in a rural landscape is even more incongrous in a country where sexuality is more often discussed in moral, medical or pornographic terms rather than in terms of symbolism or artistic expressionism. I mentioned in my introduction the visual humour so often provided by the working of man in the landscape and the phallic stone on Tara Hill is unintentionally humerous in that it is surrounded by an iron railing, at the opposite end of this small area is a plaster statue of St. Patrick. The juxtaposition of these two images and the implied cultural/moral differences is amusing:- Perhaps serving as a reminder of the subjugation of the pagan religion or in some way to dilute the potency of the virility of the image. Even more enlightening, though again perhaps unintentional, the two combine to illustrate to a small degree the protection once given the pagan culture of this country by Christian scribes who first wrote down its oral history/ myths. Unfortunately the illustration does no justice to

the art of these same scribes.

There are many more types of megalithic monuments in the landscape - southereins, passage graves, cist graves, tumulli, and gallery graves. All these with many variations are still present in Ireland. I have chosen to discuss those which I found most visually stimulating.

As stated in my introduction ownership of land implies visual evidence of this ownership. The first gesture of ownership seems to be the demarcation of the boundary limits and these boundary ditches, fences and walls are a very common marking in the landscape. As the whole question of land ownership in this country is one that is full of historical significance these fixtures provide a kind of testimonial to the evolution and political/social strife that occurred here.

As the Tain (translated) illustrates early Irish settlers were cattle breeders. The fort, as the homestead, acted as the focal point for each clan in the landscape. This developed into a nucliated settlement, the surrounding land communally farmed and added to by succeeding generations as need arose. In this developing society tillage had become important and some land became lightly fenced by banks or shallow walls. The landscape was not heavily marked but the clearing of the woodlands had even then

changed it irrevocably - when cleared the land was then intensely farmed until exhausted and finally abandoned to secondary scrub - in places now, blanket bogs cover areas that were previously rich land.

The native celts developed from this tribal or inter-related clan groupings to form tenant/landlord systems common to both England and Ireland. The tenant held the land of his lord (who indeed held it of someone else until we reach the king) in return for services rendered. (Barbara Lewis Solow - The Land Question and Irish Economy 1870-1903.)[6]. After the affluence that followed the coming of Christianity, successive invasions, culminating in that of the English, involved to varying degrees the plantation and settlement of conquering peoples. The resentment caused by the subsequent loss of land, political and religious differences between landlord and tenant and laws such as the Penal Laws which effectively reduced the native catholic landowners to a landless, political and socially powerless body, never allowed these plantation settlement schemes to work.

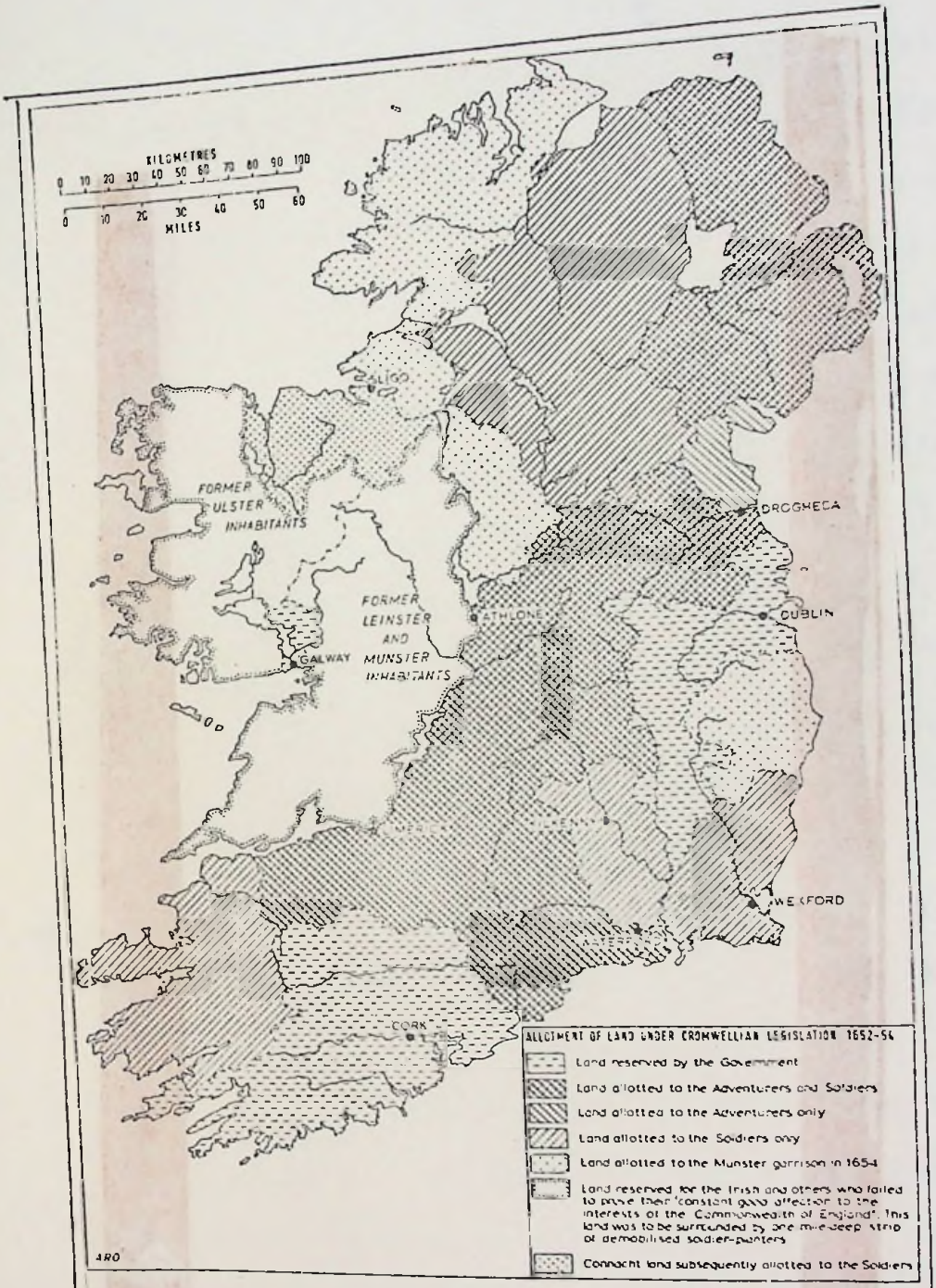
Of all the boundary markers in the landscape the most beautiful are those of Connaught. The irregular grey, white flecked stone (quart zite) were picked from the land and roughly piled to form very durable walls. In areas of the barren longer slabs were set to form patterns

of obliquely set stone filled with smaller roughly circular/ square ones. Their attraction lies not only in their building material and technique but in the number of them and the resulting maze-like appearance of the landscape. They were built however, because the political situation of the 18th Century demanded that walls be built and stone was the only available building material. Before ever referring to text books the phenomenon of so much wall arouses speculation:

Why are there so many?, and why are the fields so small in such a barren unproductive place?

To see holdings of that number and size in Meath or Kildare would not be so surprising where the land can support such intensive working.

After the Ulster revolt the last stronghold of the Irish Catholic landowner, Ulster was confiscated and became booty for the English Creditors. The native landowner was transplanted to Connaught (see map). This mass forced migration of people established the beginning of the enclosures seen in Connaught still. The Penal Laws which followed in 18th Century introduced still more repressive legislation with long term effects. As well as, severally curtailing the rights of the catholic landowner in terms of education employment opportunities it prohibited them from buying inheriting or accepting land as a gift. It also compelled



31. The Cromwellian land settlement 1652–4
(Based on the 'Act for the settling of Ireland' 1652, and subsequent legislation.)

15.

FIG. 11

them to subdivid the estate between surviving male heirs at death. This policy of subdivision more than anything else is responsible for the maze-like appearance of Connaught now. During the 19th Century because of land shortage, population growth and lack of alternative employment it became a regressive and deep rooted habit - on the face of it the only solution for the tenant - an obstacle to any attempt made by landlords to improve the lot of their tenants or for that matter their estate.

> "that is the great difficulty a landlord has to deal with, to prevent subdivision it is a thing almost almost impossible to prevent. The smaller the holding, the poorer the people the more they are inclined to subdivide"(Bessborough Commission 1881)[7]

In the richer lands of the midlands and south little remains of this phenomenon. The need for good agricultural land has not allowed such land abuse to remain. Even in the 18th Century economic needs demanded that in these areas land reform take place. It is unfortunate that this economic improvement threatened the security of the tenant farmer and was bitterly opposed by them (i.e. Whiteboy terrorist campaign in Munster See A. R. Orme Pg. 132 World's Landscape 4 Ireland)[8] Grazing became the dominant agricultural practise and required open/bigger field systems which were obviously at variance with the existing situation. However two famines and the resulting death toll plus

emigration drift sufficiently reduced the population numbers to allow some kind of enclosure to take place (it was never as successful here as in England where political stability and alternative employment allowed the landlord/owner much more freedom).

William Berre Jones [9] - (Who took over a neglected property) comments on this point:-

> "When I got in the estate was cut up in all sorts of ways. There was a field here and a field there and I found my farms subdivided in all sorts of ways. It was only by sacrificing any increase of rent for more than 20 years that I got them together. When one man went away I had to take seven or ten acres that were part of his farm, and give them to another man on condition that he give up five or six acres that adjoined another farm distant to him. In this way I readjusted the whole estate, and got the fields of all the farms conveniently together, so that every man had land near his house". (B.L.S. pg.83 Evictions, Rents and Improvements)

It is evident therefore that enclosure did not take place here at the "revolutionary pace" which W. G. Hoskins described in his English Landscape. It did however happen most of the reforms were carried out by both landlord and tenant, the landowner usually being responsible for the materials and outer boundary, the tenant building the inner boundaries. Often these obligations were laid out in the lease and the following extract illustrates the basis on which most of our

hedgerows were built:

> (The lessees)"shall and will yearly and every year - make or cause to be made on the premises aforesaid 30 perches of ditch 5' wide and 4' deep set with white Thorn or Crab Quickes at the usual and proper distance and also set or plant Ash or Oak trees in the said ditches at a distance of 10' at most until the farm hereby demised be divided into parks not exceeding 7 acres in any one park," Bellaghy Estate 1764 (Enclosures in Co. Derry E.A. Currie - Irish Geography Volume 9, p.g. 50, 1976.)[10]

So abundent and mature are these intercepting boundaries now that they limit the view of the countryside along some roads and paths to tunnels of vegetation speckled with light. They are largely hawthorn overgrown with dogrose and blackberry bramble, interspersed at intervals by trees. They bloom, bear fruit, wither with the seasons show-ing in some places more exotic vegetation i.e. the heavy scented deadly nightshade. The Irish Landscape without them would now appear very foreign.

With political independence in 1921 the role of landlord became the responsibility of the state under the direction of the Land Commission (1881). The Land Commission is now a land purchasing body and its main function is to help tenants buy their holdings and to ensure that these holdings are economically viable i.e. of at least 45/50 acres. To this end it has helped tenants buy 11.3 million acres in the Republic. It has also undertaken the broad duties of

the old landlord system - i.e. to encourage productive land use by adequate fencing/farm building, to help promote drainage and land reclaimation schemes and to work with the Department of Agriculture to recommend and offer grants for the cultivation of specific crops i.e. sugar beet. As with the Enclosure Schemes of an earlier age the Land Commission has concentrated on those areas where land is economically valuable. The landscape of the west of Ireland has not yet received the same attention and here there is still the remains of the landlord/tenanted holding. The Land Commission is now the chief arbitrator of land use in this country and is consequently responsible for the broad working of our present and future landscpae.

The shape, size, and pattern of the enclosed field developed alongside the various enclosure schemes. Sometimes the landlord was passive, allowing maze-like fencing without thought to the productivity of the fields, at others economic use of the land dominated the fencing arrangements. Perhaps the most informative way of illustrating this changing pattern is by studying the maps and diagrams of the different ages.

These used are from the Bellaghy Estate, Moyagall, Co. Derry (1764 - 1859) from Land Tenures, Enclosures and Field Patterns

(by E. A. Currie, pg. 50, Irish Geography Volume 9 1976)[20] in Co. Derry in the 18th and 19th Centuries and those provided by A. R. Orme, Landscape of Ireland re: Land Commission.

The first diagram shows the Moyagall Estate lease holdings in 1734. The north and middle divisions are leased in perpetuity to a middleman and were not controlled by the landlord - William Connolly. The remaining estate was divided into two lots - the North East Division of 94 acres formed by 4 families and the South Division of 181 acres also farmed by 4 families. This Division marks the first major enclosure of that land. Within it the old clan tradition of rundale farming still operated. This involved a cluster of 10 - 20 buildings surrounded by the communally held land. One large field nearby was divided equally into small plots for tillage. This was called the infield, an outfield usually on higher ground provided rough grazing for all stock and was used also for some strip tillage. Nearby mountain or bogland was used for grazing which was shared by a number of these settlement groups. Rundale, however, as a method of land use was at variance with the landlord/tenant system and by 1764 some attempt had been made on this estate to break up the land. The number of tenant holdings has now been increased to 4(12) approx. and the lease forbade rundale and made the building of fences obligitory. The lines 'ab', 'cd', and 'eaf' would indicate these boundaries.

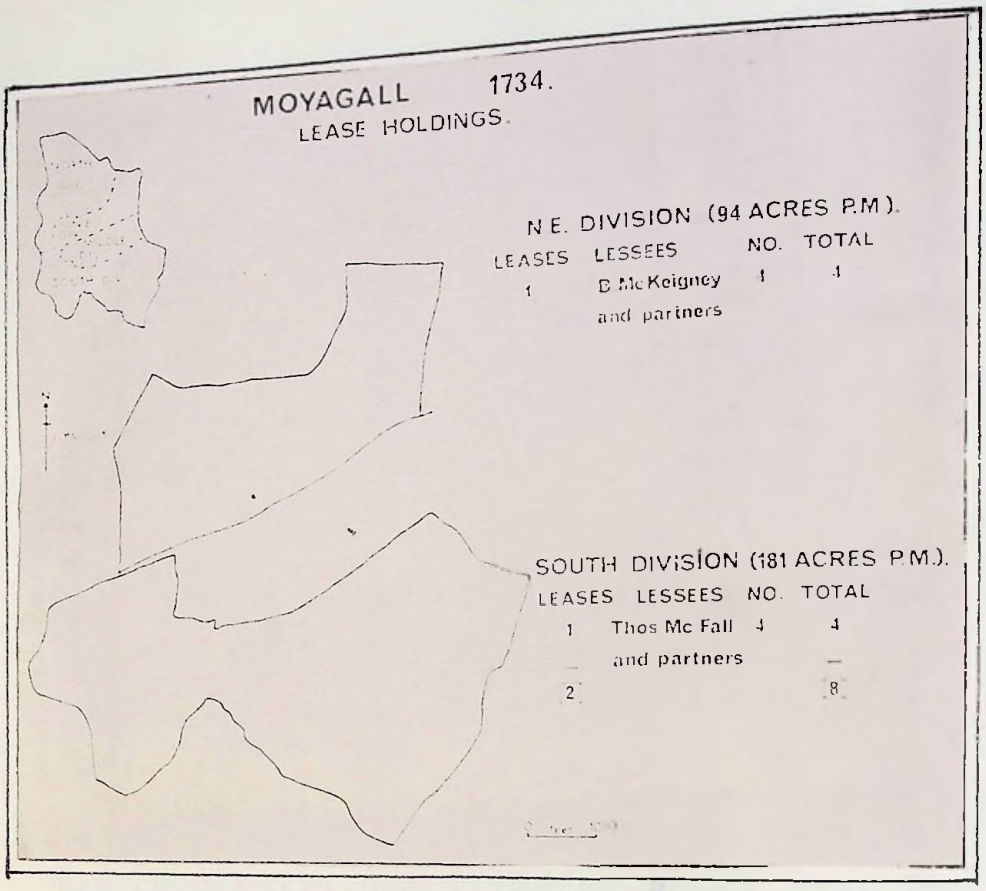

MOYAGALL 1734.
LEASE HOLDINGS.
N.E. DIVISION (94 ACRES P.M.).
LEASES LESSEES NO. TOTAL
1 B McKeigney and partners 4 4
SOUTH DIVISION (181 ACRES P.M.).
LEASES LESSEES NO. TOTAL
1 Thos Mc Fall and partners 4 4
2 8

FIG. 12.

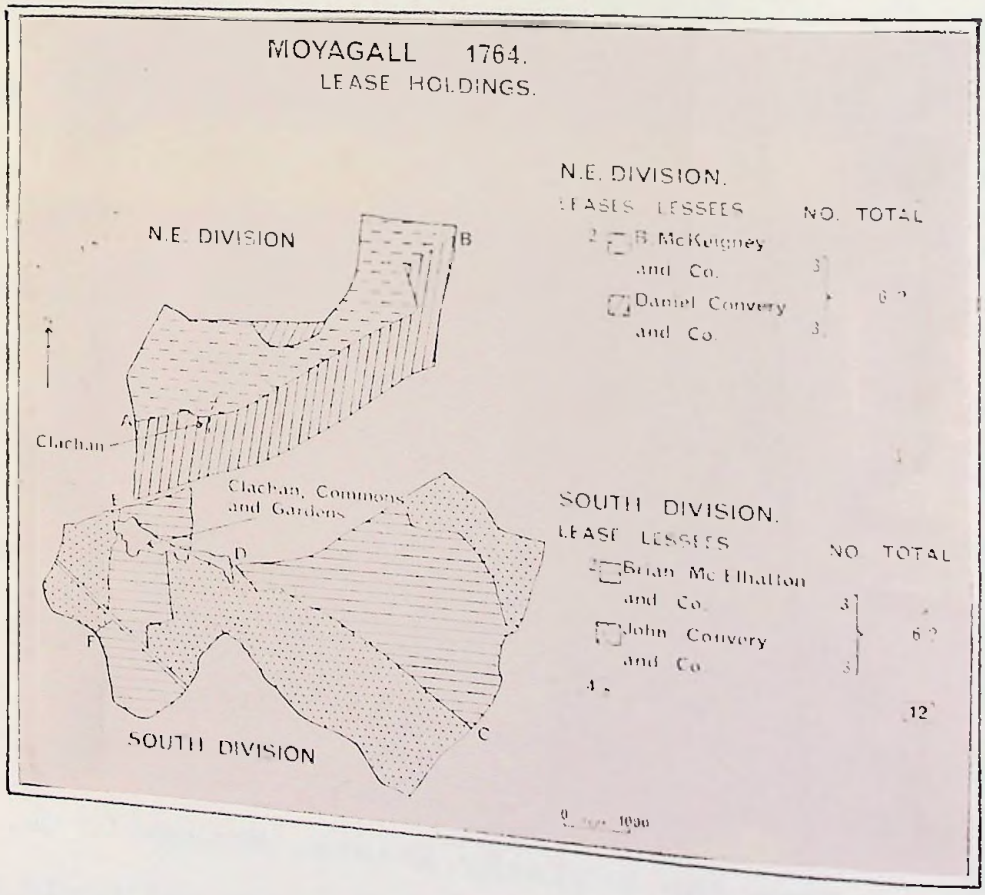

MOYAGALL 1764.
LEASE HOLDINGS.
N.E. DIVISION.
LEASES LESSEES NO. TOTAL
B McKeigney and Co. 3
Daniel Convery and Co. 3
N.E DIVISION
B
A
Clachan
Clachan, Commons and Gardens
E
D
F
C
SOUTH DIVISION
SOUTH DIVISION.
LEASE LESSEES NO TOTAL
Brian Mc Elhatton and Co. 3
John Convery and Co 3
12

FIG. 13

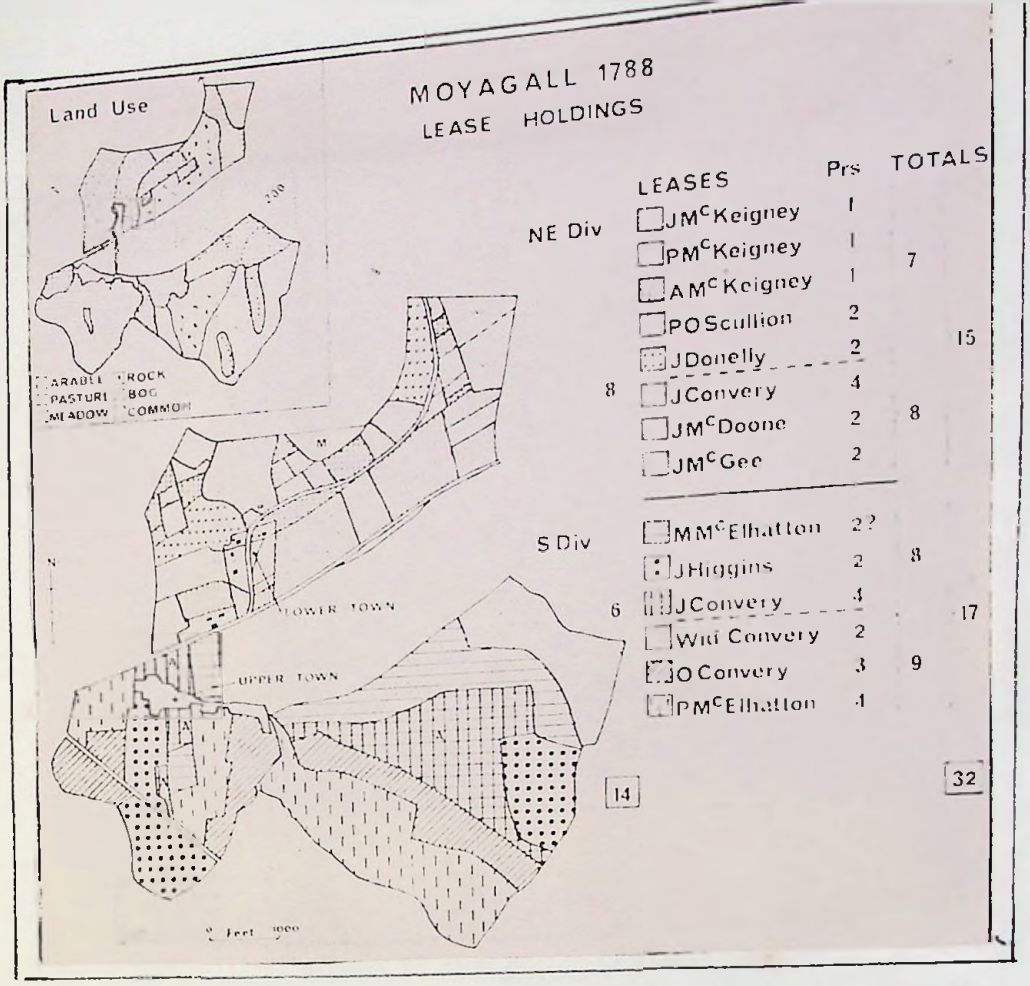

MOYAGALL 1788
LEASE HOLDINGS
Land Use
ARABLE
PASTURE
MEADOW
ROCK
BOG
COMMON
LEASES
Prs
TOTALS
NE Div
JM^cKeigney 1
PM^cKeigney 1
AM^cKeigney 1
7
PO Scullion 2
JDonelly 2
15
8
JConvery 4
JM^cDoone 2
8
JM^cGee 2
S Div
MM^cElhatton 2?
JHiggins 2
8
6
JConvery 4
17
Wid Convery 2
OConvery 3
9
PM^cElhatton 1
14
32
TOWER TOWN
UPPER TOWN
Feet 1000

FIG. 14

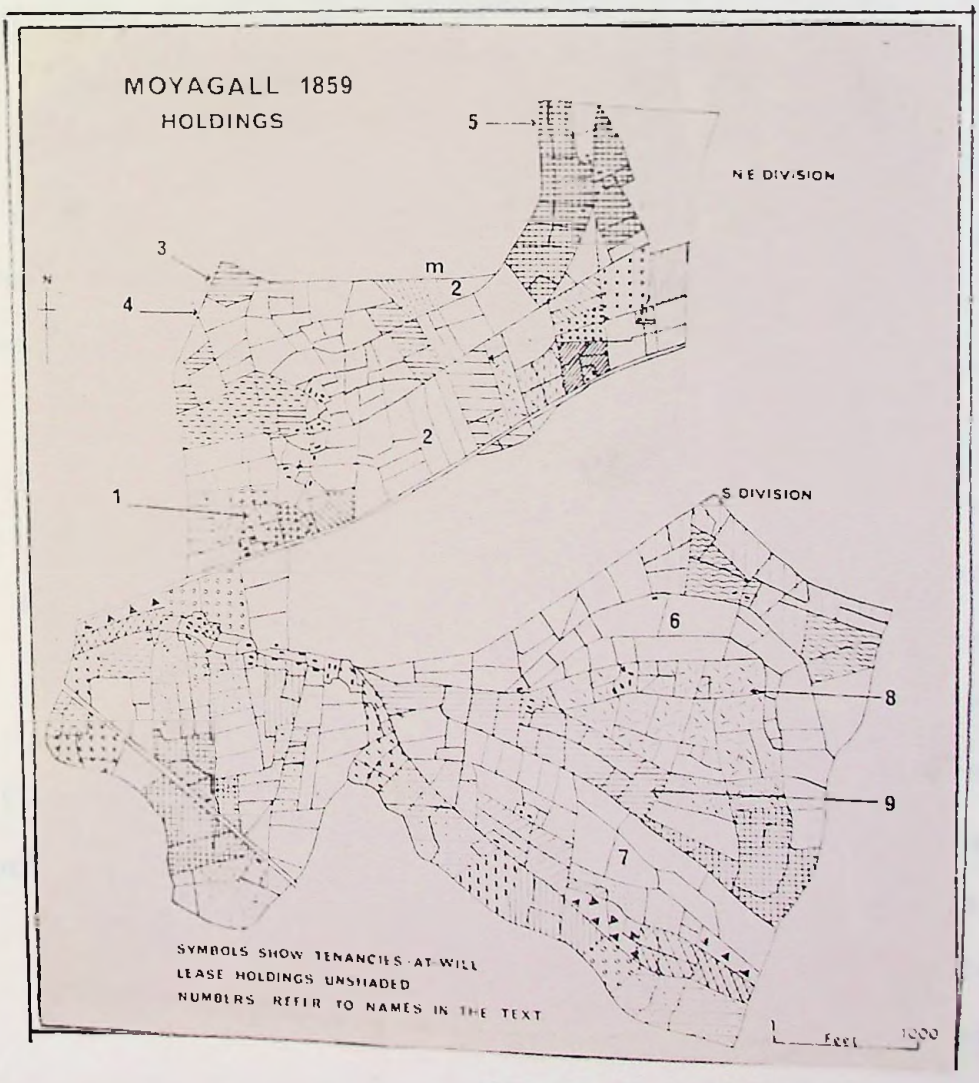

MOYAGALL 1859
HOLDINGS
NE DIVISION
S DIVISION
1
2
3
4
5
6
7
8
9
m
SYMBOLS SHOW TENANCIES-AT-WILL
LEASE HOLDINGS UNSHADED
NUMBERS REFER TO NAMES IN THE TEXT
Feet 1000

FIG. 15

By 1788, still using group tenants, the number of such tenants has risen to 14 (32) and each of them is allowed an equal share of good (arable, pasture meadow)land and bad (rock, bog and common)land, a characteristic of rundale farming. In the south division the six group holdings show the strength of rundale still in that although the land has been divided it is still among the clan i.e. the family names - McElhatton/Convery and also evidence of Penal Laws which compelled subdivision. Rundale was still in operation, modified by fences - i.e. what is established in 1788 here is 6 smaller open field systems preserving all of the old clan settlement customs i.e. the areas marked upper and lower town equals the old rundale cluster still surrounded by the common held infield. In the north division where the individual holdings are very scattered (see J. Donnelly's holdings) the average farm size is six acres as opposed to 24 acres in 1734. The last map of Moyagall is for 1859 and is less documentated possibly due to lack of interest on the part of the landlord. However, it shows that Michael McElhatton (No. 6) and Owen Convery still have their joint holdings under lease but the number of partners each has, is not recorded. Beside No. 7 on the land once held by J. Convery two new joint partnerships are established - James Dillon & Co.(No.8.) and the 10 acre holding of Dr. P. Convery (No. 9). The rest of the southern division is held by tenants-at-will whose individual holdings are shown. In the northern division the property held by

two joint tenants J. Convery and J. McDoone marked on the 1788 map are now subdivided into eight separate fragmented holdings between two and three acres in size. The holdings marked 1, 2, 5 have fields none of which were more than ½ acre. The holdings marked 3, and 4 belonging to John McKeigney have not changed very much since 1788.

The two diagrams from A. R. Orme's World's Landscape - Ireland (a) Land Holdings at Cloondeash (Peyton Estate) Co. Mayo and (b) Tooreen, Ballinrobe, Co. Mayo show lands similar to the Moyagall estate redistributed by the Land Commission. In many areas especially along the West Coast the old land arrangements were never changed since the famine and as E. A. Currie states regarding his research on the Moyagall Estate:

> "The pattern of small fields and fragmented farms became fossilized in the landscape."

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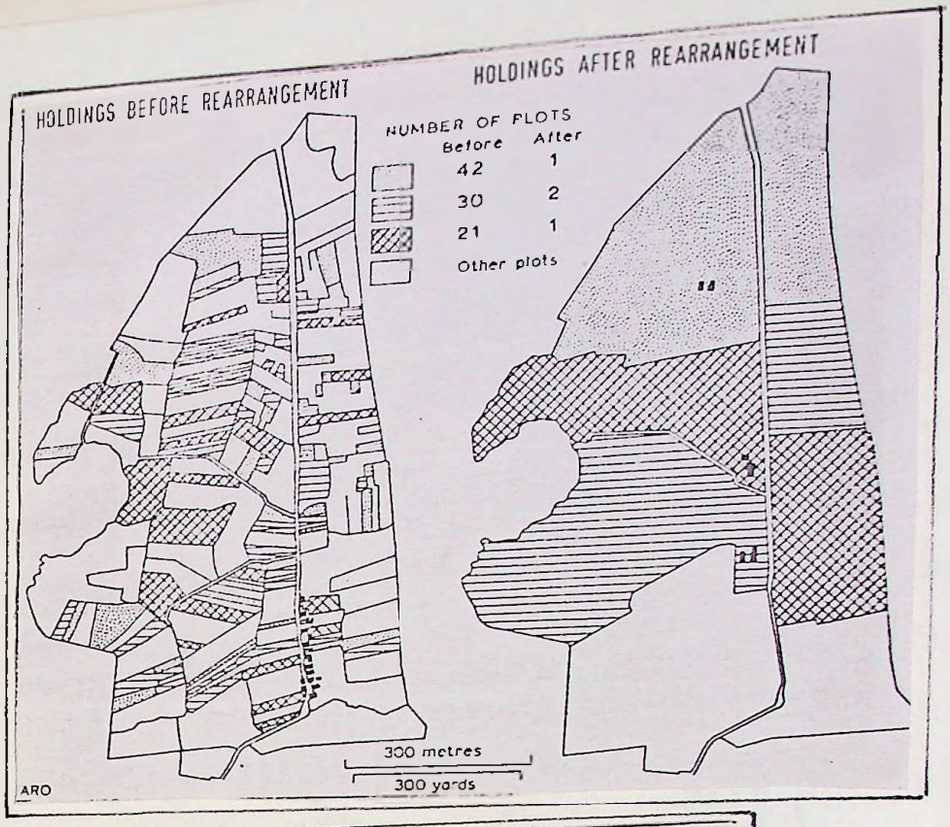
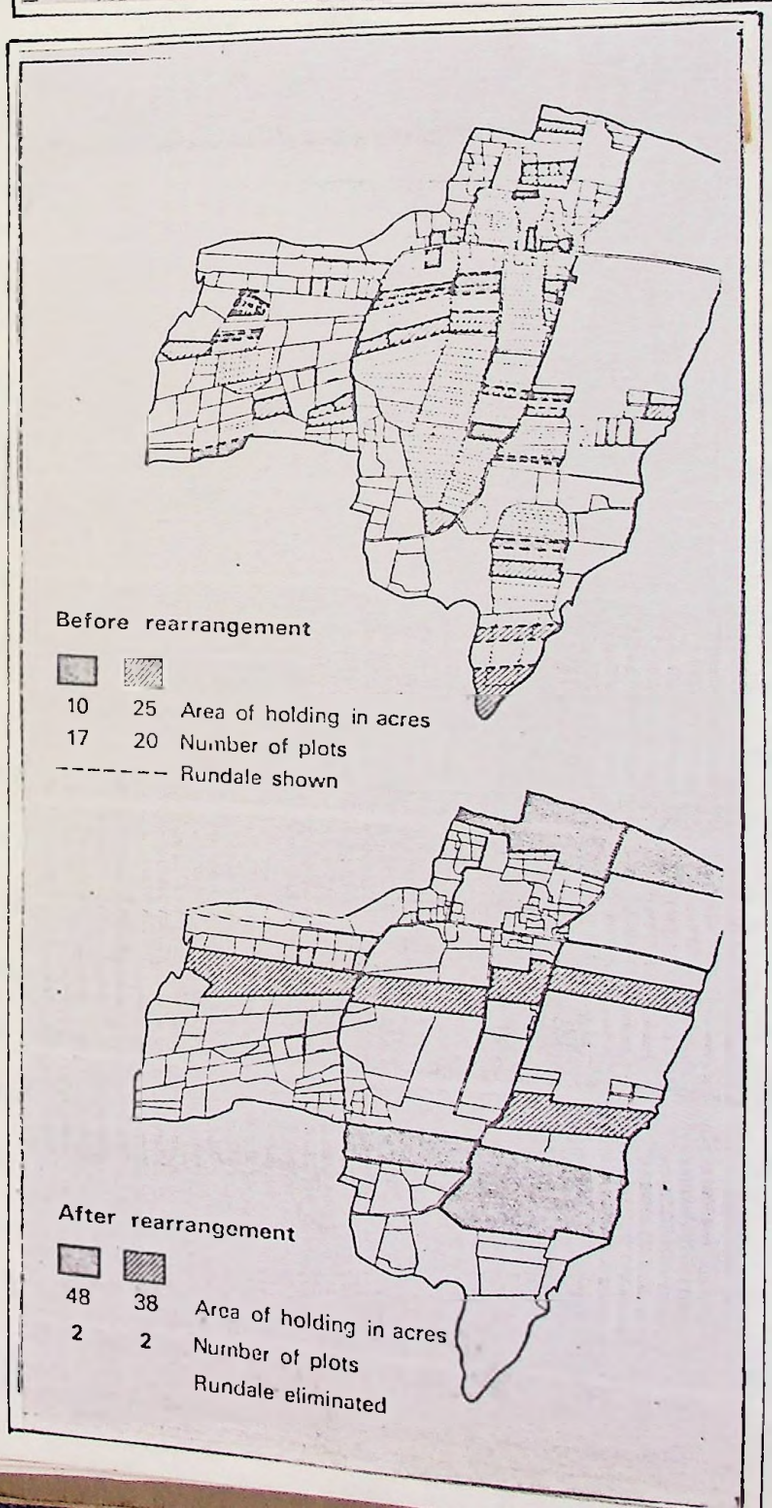


CLOONDGASH,
CO. MAYO
FORMER PEYTON ES

FIG 16



TOOREEN
NEAR BALLINROBE
CO. MAYO

FIG 17

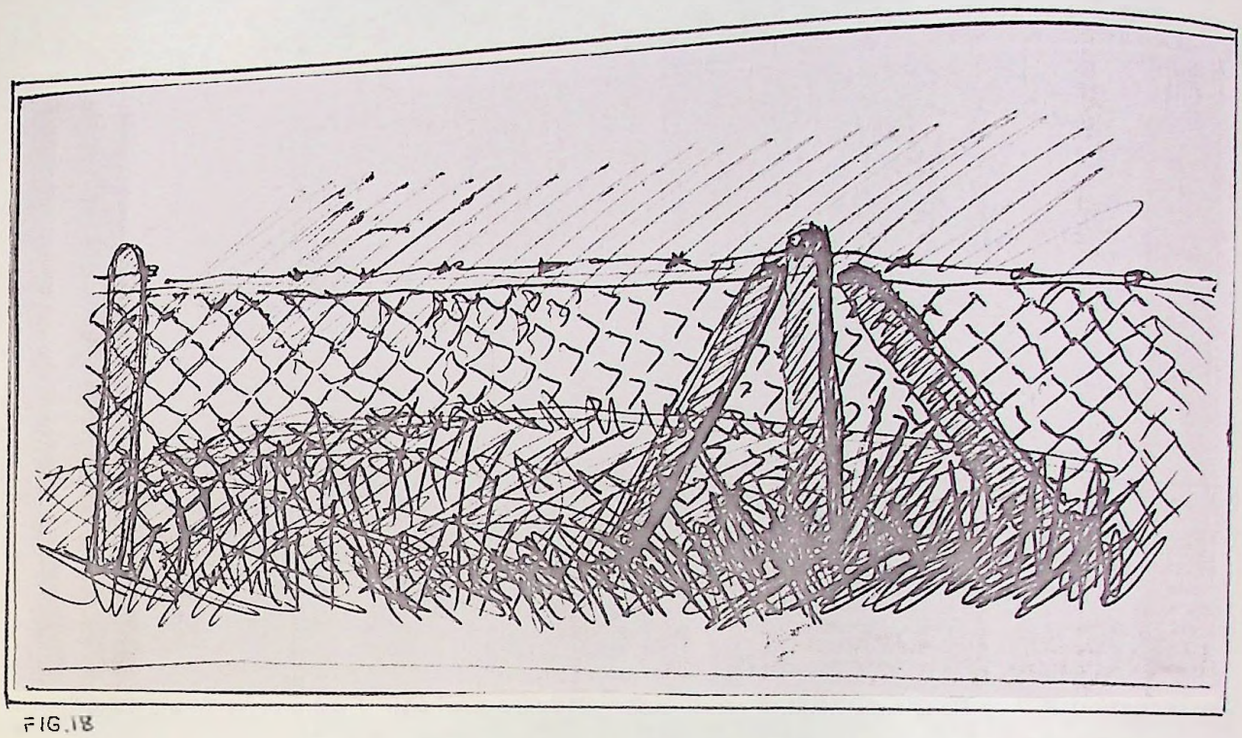


FIG. 18

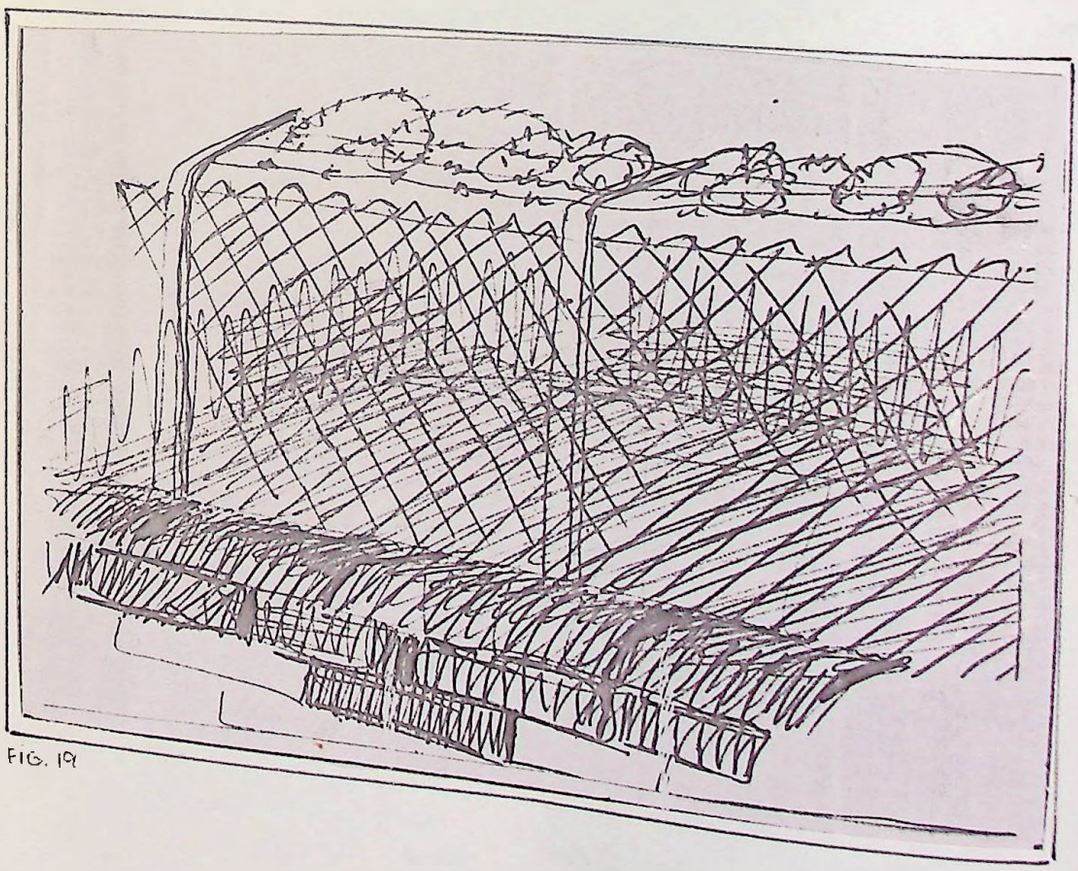


FIG. 19

SECTION 2

Traditional/Modern Building Materials.

Traditional building materials and techniques vary considerably all over the country. The stone walls of Connaught are one type and belong to that rocky quartzite landscape. In richer areas, Wicklow for example where suitable boulders are not abundent, sods of earth are used with the stone and together with the vegetation such as bramble and grass which soon overgrow it, make a very solid boundary wall. Lanes of earth and loose chippings link fields together in many areas and ditches of this wall and vegetative type grow to several feet to form deep tunnels in some places. Where agricultural machinery i.e. harvesters need access however these ditches are often cut in Spring to a uniform two feet and are left with an amputated appearance, the twigs uncovered by foliage, stick up all level showing each cut. In other areas this job is not done by machine saws, but overhanging or low boughs, ARE trimmed and removed.

Wire fencing is found mainly on the path of roads, especially where these have been recently widened. They are regularly supported by cement posts. The type of wire used varies in both pattern and size the most common patterns being diamond , honeycombe or chicken wire and woven box patterns. Barbed wire and electric fencing are frequently used in conjunction with light scrub. In a rural landscape none of these fences are specifically anti-

human - their function is to keep cattle secure in one place and to protect crops. The type of fencing common to city and urban scenes in the rural landscape is both incongrous and offensive. It is most often associated here with E. S. B. plants where it is acceptable as these fixtures are dangerous. (They do not in appearance invite human curiosity anyway) This type of fencing also protects the site of the Newgrange Passage Grave.

The most beautiful fencing arrangements are built by the Forestry Department, using long clean trunks of pine. These serve as light railings/posts and are also used to build foot bridges and stys. These fences are in accord with the forest and its function and for this reason escape appearing 'rustic' in the selfconscious way that similar fences in other areas do not.

Placement of some fences influence their appearance in the landscape - on the boggy hilltops near Kilbride, a fence with a diamond wire pattern and cement posts, runs across this virtually uninhabited and certainly unfarmed land. Its apparent purposelessness and incongruity with the landscape was reinforced by its diligence, where the land dipped, it also dropped to a double layer. Visually this fence, standing against a skyline, catching long strands of grass in its mesh was quite beautiful anyway.

Another type of fencing is needed where a road is sunk between two fields - a wall is built to bank off the earth while wire fencing is used on top to enclose the land which is flush to the wall. Further along this wall near

Blessington, where the road has again climbed scrubs grew out of the wall from 1 to 2 feet above ground level and both wall and scrub were covered in a green moss. Any regularity given by the spacing of these scrubs was relieved by the twisted growth of the trunks and the fanning out of the twigs and branches.

The range and variation of fencing arrangements both old and new is much too large to cover and those described here only touch on the more obvious types.

The farmyard is at the moment a place that is undergoing quite radical change. Rough hewed stone walls, roofed with corrougated iron or slate stand beside modern milking parlours of uniform cement blocks roofed with the same grey coloured absbestos sheeting. New domestic buildings are very much of a type and are the same no matter what the landscape is made of - whether it is of granite/quartzite/ or red sandstone the bungalows are of concrete blocks, plastic tiles and uniform patterned windows and doors. Where the design becomes more elaborate it is slightly surreal with spanish arching, dutch roofing, Elizabethian wood and plaster, roofed with Rolan plastic roof tiles. Their only virtue is that they are not in endless rows to emphasize their uniformity or incongruity in the landscape. On the other hand it is naive to expect materials to be of the landscape now, - it would be both awkward and expensive and these bungalows are comfortable and easy to live in. It is ridiculous to expect people to live in thatched cottages simply because they look attractive in the landscape.

One 20th Century farmbuilding which is both functional and attractive is the hay barn - this great big open building in essence only provides a roof although most have additional wings - when they are not full, they are neutral, they are neither obvious nor offensive in the landscape but in Autumn they are filled with straw and hay - the straw in bales providing a stubbley textured block effect while the hay hangs down layer after layer. The use of corrougated iron, which is one of the most visually satisfying of all man-made building materials, further enhances them. Iron by its nature rusts and changes this metal from flat grey when new to beautiful reds, sometimes almost pink - to orange brown and dark blues and purples.

Cement blocks are used most often now to build outhouses such as milking parlours and pigstys. Singly and when seen completely they are interesting in as much as they are functionally well designed being regular and fairly large for ease of handling, having two hollow sections which reduce weight while providing a damp course. When built up, however, they present a uniform greyness with an equally uniform building pattern which is visually monotonous and drab. In Dublin red bricks (i.e. another man-made building unit that is rectangular) are used with the same technique. The absorbency of this material, terracota, and the way it absorbs light in particular, give many such buildings a startling luminosity during the evenings of Autumn and Summer.

One aspect of all fixtures in the rural landscape, is that they are built by the farmer himself without much

help from either architects or professional builders. They are not consciously artful in any sense. Where individuals become conscious of an effect (i.e. in the area immediately surrounding their home) most lose their natural rapport with the material and landscape and are obviously influenced by advertising even to the extent of buying moulded rough hewn stone to simulate stone that is often available locally from derelict outhouses. Any building material made to simulate a natural irregular surface shows the essence of bad design and must degenerate into a type of repetitive pattern more acceptable in wall papering than as a real building material. So effective has advertising been in the area of promoting new needs and values among consumers that even professionals appear to have lost real visual and tactile awareness. The bridge illustrated is at Shaws' Bridge Belfast, built by Public Works Limited, and was described in the Building magazine Project 21 5th April, 1977 as showing "to good effect the pseudo-masonry finish on the bridge. This type of finish was chosen so that the bridge would blend in well with the landscape." In the same magazine and on the same page appeared an advertisement for Expandite products whose caption headed "Concrete doesn't grow on trees" shows that perhaps some manufacturers realize the potential of concrete as a building material in its own right. Corbusier's work of 50 years ago illustrated some of the possibilities available with cast concrete and it is sad to realize that in Ireland it is promoted only/mainly as a second rate material with no inherent design capabilities.

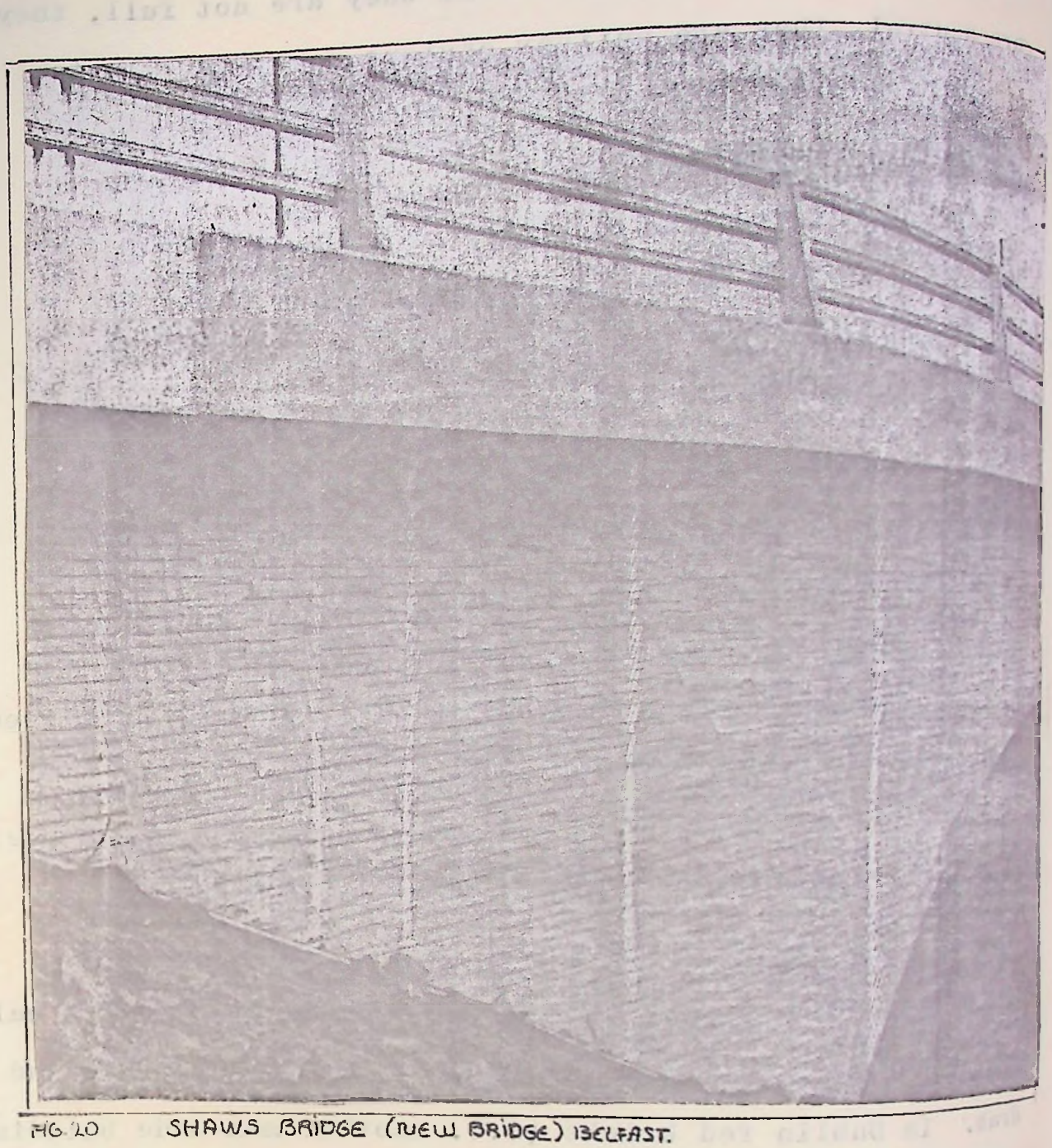


FIG 20 SHAWS BRIDGE (NEW BRIDGE) BELFAST.

One area of conscious decorative activity found in both rural and urban communities is gardening - in some cases it is almost a folk art - hedges usually the Golden Pivot, are clipped to form geometric shapes (circular, rectangular and conical) some are even clipped in to stylised figures i.e. horse heads. These dense wall-like hedges often enclose equally elaborate lawns, in their turn surrounded by many different and very colourful flowers. I have often thought that this kind of use of vegetation could be very exciting, incorporating as it does colour, texture, pattern and change in both two and three dimensions.

All this has been about a kind of accidental development of the rural landscape in visual as well as historical terms. While acknowledging that change always causes initial resentment, modern materials and building techniques are not always sucessful in the rural landscape and a lot of the craftmanship associated with these areas is now gone. These communities are vulnerable to further development of building material and the new demands made on their traditional skills, which may or may not be able to handle them successfully. A lot of the imagery of the countryside depends on the carelessness/artlessness of those living there and any conscious attempts to 'beautify' the landscape could not guarantee that these images would remain undisturbed or that others would be allowed happen. If I advocate anything it is that the traditional skills be remembered and used and that new building materials be manufactured with some thought to integrity of design and appearance.

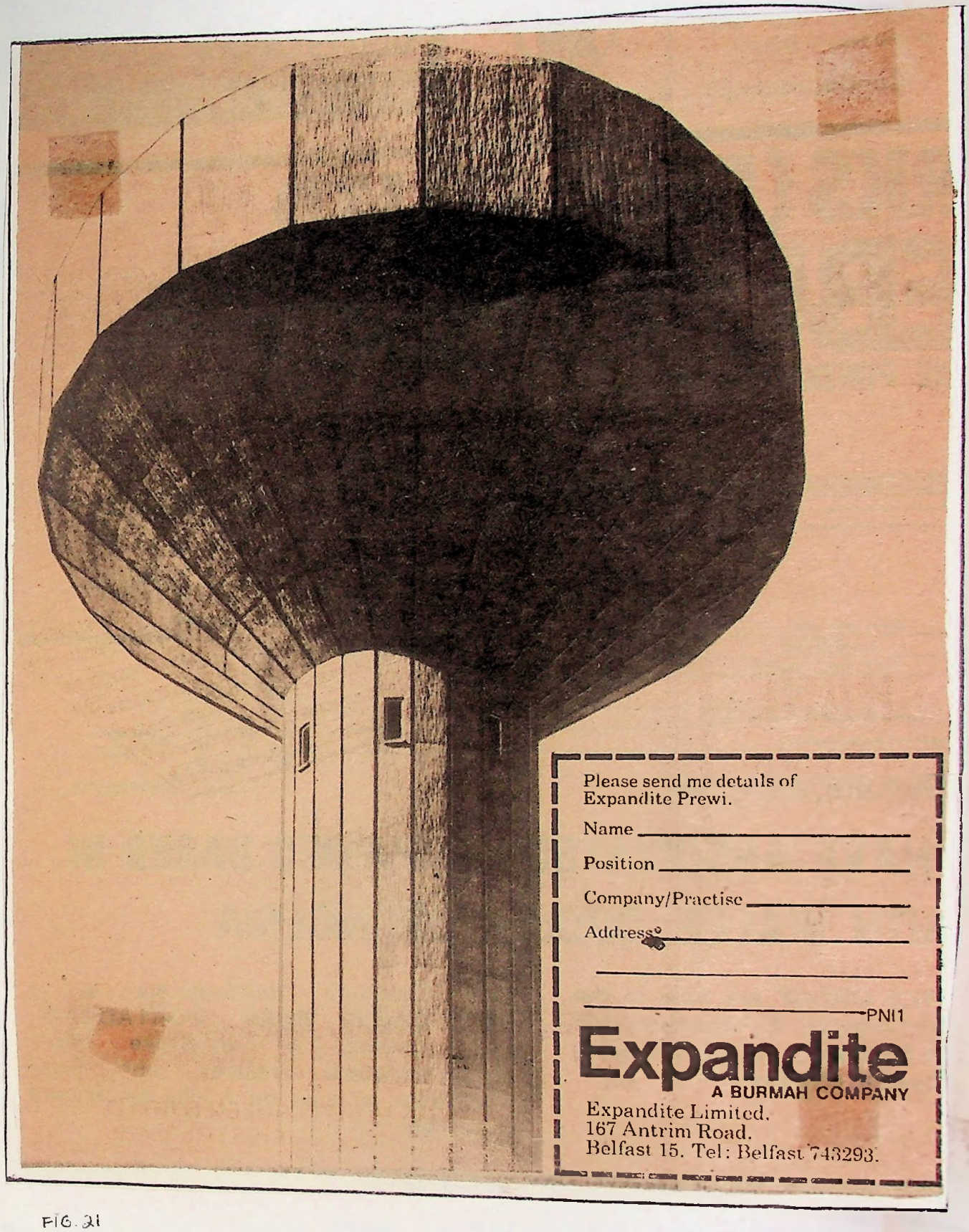


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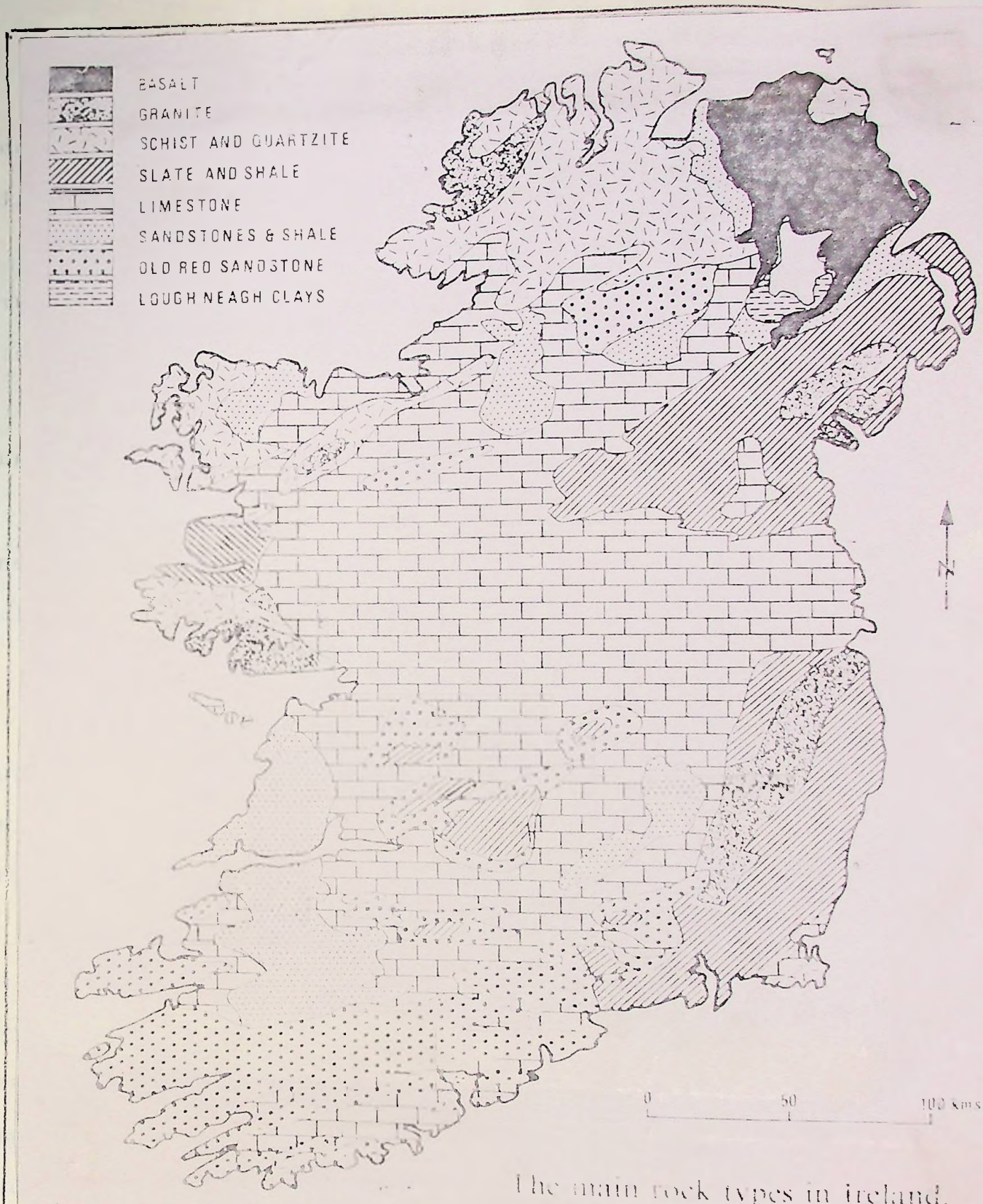
FIG. 21

SECTION 3

Seasonal Changes and Vegetation.

Vegetation unlike man-made fixtures depends on the physical character of the landscape. The mountain and lowland regions of Ireland differ not only physically but also in the type of plant growth they can support. Mountain and upland areas are not normally cultivated but left for pasture. They are covered by rough grass, bracken, heather and sometimes gorse - a brown/purple unfenced landscape whereas the lowlands are characterized by green belts of cultivated pasture and the abundence of hedge and fence markings. Even in the lowlands the physical landscape can influence the appearance of vegetation in that cultivated fields in the undulating lands of Meath appear quite different to those of the hilly drumlin belt further north.

There are two main contrasting mountain systems in Ireland the Caledonian Mountain Range of the North/West and the Caledonian Mountains to the East. The mountains of the North and West dominate the Ulster and Connaught landscape where the folds runs N.E. - S.W. as the river valleys of the Foyle and Gweebarra demonstrate. The Eastern range in a parallel fold running on an E. - W. axis. Both are separated by the limestone plateau of the Central Lowlands - the 100 sq. miles, limestone desert of the Burren is part of this plateau. There are two other relief areas at the EXTREME North-East and South-West the volanic basalt of



The main rock types in Ireland.

FIG. 22.

Derry and Antrim is responsible for the landscape of the Giants' Causeway while in Kerry the folding of layers of limestone and Old Red Sandstone gives us the ridge and valley landscape of the Magillicuddy Reeks and Boggeragh Mountains.

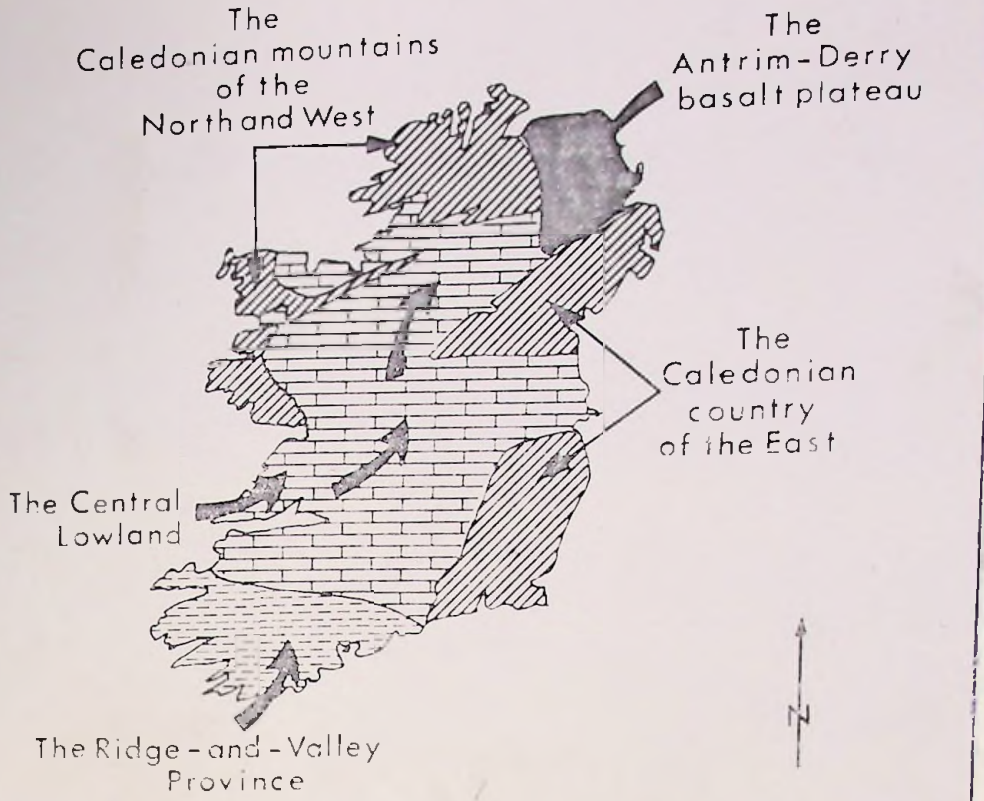
Much of the landscape of the North and West is of quartzite a very tough stone which resists erosion and the quartzite mountains of the Twelve Bens, and Maamturks form rugged conical peaks with scree covered slopes. The Derryveagh Mountains on the other hand are of an isolated outcrop of granite and show the soft round shape of weathered granite. There are only isolated areas in the south which have been unaffected by glaciation and these mountains show the characteristic glaciation markings - corries (deep rock bowls, surrounded by cliffs) and 'U' shaped valleys - especially in the shaded north and east slopes. Where the hard quartzite of these mountains reached the coast it formed magnificent cliffs such as those at Slieve League in South West Donegal.

The mountains of the East are separated by the limestone plateau into two separate areas north and south of Dublin - the land to the north is of shale and sandstone while the mountains of the Leinster Chain are of granite. The northern upland region is mountainous only where igneous rock such as granite uprose to form mountains i.e. Mourne Range.

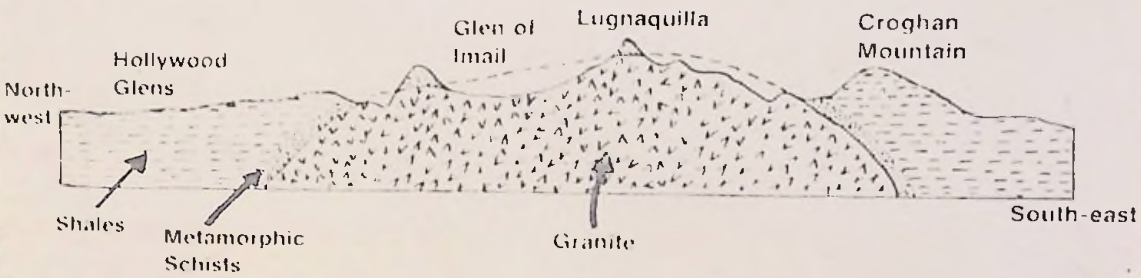
Glaciation in Ireland.

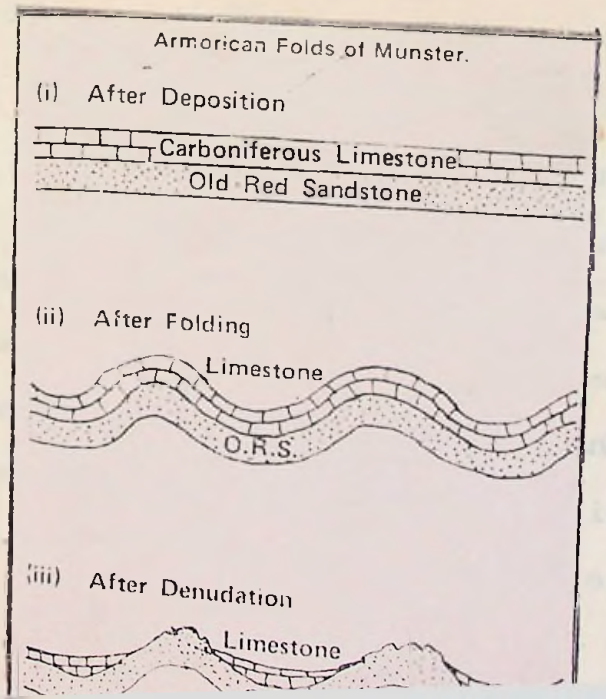
FIG 23

MAJOR RELIEF REGIONS OF IRELAND



A CROSS-SECTION OF THE LEINSTER CHAIN.





The bedrock of this area is covered by drumlins deposited there by glaciation and the small hillocks block drainage causing bogs and marshy lakes. It also severly affects roads, not only are they twisted but where they travel over these drumlins they take on a roller coaster aspect. (Another glacial deposit here is the huge erratics used by the megalithic builders at Newgrange.) The Leinster Mountain chain is of rounded granite which contrasts sharply with the rugged shist peaks of Lugnaquilla and the Djouce Mountains, while the very prominant quartzite peaks of the Great and Little Sugar Loaf are well known. Here too glaciation has marked the landscape creating such valleys as Glendalough, Glencree and Glenmalure and deep ravines at the Scalp and Glen of the Downs.

The South East is made of layers of old Red Sandstone covered by limestone and shale which folded.

Erosion removed the softer limestone and shale to bare the underlying sandstone peaks. The limestone and shale now cover the valley floors. Here again glaciation has caused the beautiful rugged scenery for which the area is famous - corries such as the Devils' Punchbowl in the Mangerton Mountains and the wide 'U' shaped valleys to the Gap of Dunloe and Cummenduff Glen.

The Basalt Region of the North East is the only basalt outcrop in Ireland and was caused by molten lava, the cooling properties of this lava flow resulted in the world famous exposure of Terticery Lava, called the Giants'

Causeway. This phenomenon of a mass of six sided columns forming cliffs and stepping stones to the sea must surely be the strangest and most aweinspiring piece of natural landscape in Ireland.

This landscape is covered in most areas by extensive vegetation or bog.[11]

ooo 00 ooo

Vegetation is the earths natural cover, it protects the soil and underlying rock bed from further erision and begins the cycle of food distribution on which other forms of life depend. It is intrinsically linked to the natural landscape through the soil which is produced by the weathering and erosion of the rock bed. (Glaciation is responsible for depositing soil and boulder clay from one area to another and in this case the soil may be foreign to the rock bed.)

The simplest food cycle is from soil - to plant, to animal to micro-organism and back to soil. Thus the plant takes from the soil water and air, carbon, hydrogen and oxygen to produce starches, sugars and fats. The soil water contains chemicals in solution: nitrogen, which is used to produce protein being the most important, and salt, phosphate, lime, sulphate, potash and calcium. The makeup of most agricultural soils includes Sand at 50 - 70%, Clay at 20 - 30%, Pulverised Limestone at 5 - 10% and Humus at 5 - 10%. Very sandy soil will not hold enough soil water containing the minerals while heavy clay soils can be waterlogged preventing the complete oxidation of decaying humus. This clay soil will also be a greyish colour because oxidation of ferric (iron) oxides will also be impeded making the land peaty. The oxidation of ferric oxides gives well drained soil its characteristic reddish colour. Humus and the root mat is also needed to support a multitude of micro-organisms responsible for plant decay and to keep the soil loose and

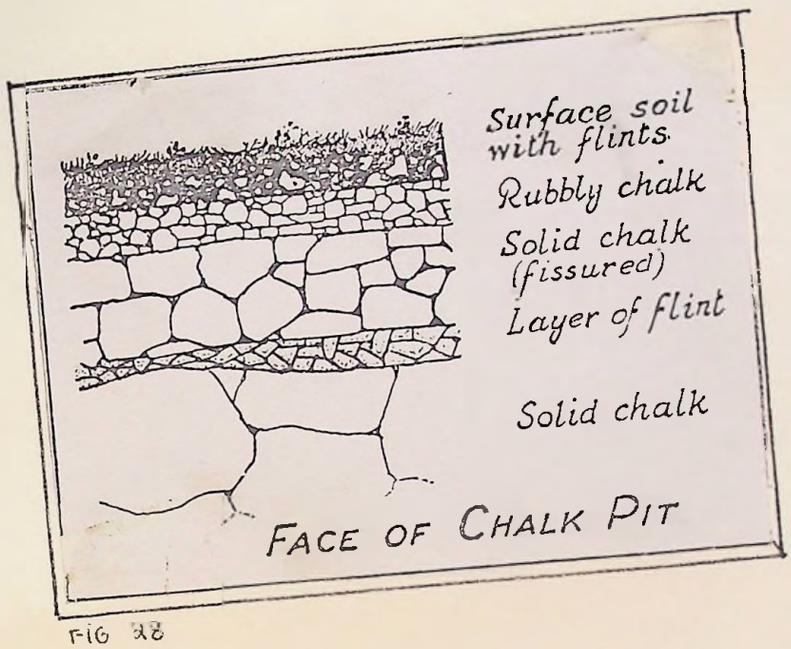


FIG 28

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open , a function the earthworm also serve.
Much of the vegetation from grass to woodland, is controlled for agricultural and commercial purposes, but wild vegetation is surviving within these controls and in areas where land is left uncultivated. Apart from weather conditions, which obviously change with the seasons, vegetation is the only other visual manifestation of the Summer, Autumn, Winter and Spring cycle. Winter is a dormant season while in Spring, Autumn and Summer most plants concentrate their energies to bloom, flower, bear fruit and effect seed dispersal.

Vegetative life is something completely different to animal life and it is not generally seen as a comparable living organism. A study of the intricate details of the plant growth will show that each growth cycle is dependent on a reason, which is universal to all living organisms. The pollination mechanism of the primrose illustrates to some degree the kind of logic that plants use. This plant has two types of flower head called a pin and a thrum, which would correspond loosly to male and female in the animal kingdom. The pin flower has a sticky stigma on the pin head which is borne on a long style in the centre of the flower. This leads to the ovary. Half way down the style are situated 5 pollen sacks. The Thrum has a short style on the other hand which holds the stigma about half way up the tubular portion of the flower.

The pollen sacs are located above this at the top of the tube. Using both colour and scent it attracts insects which on the pin flower must pass the pollen sacks to reach the nectar. Should the insect then pass to a thrum flower it must pass the sticky pin head where the pollen is removed. The whole process can be reversed when the insect travels from a thrum to a pin flower and it is called heterostyle pollination.

Hedgerows provide growing space for a variety of scrub and climbing plants which have been cleared from the enclosed land. As already stated they are made up of such scrubs as hawthorn, rowan trees, holly bushes, gorse, rose briars and blackberry brambles. Hawthorn and rowan are the most common and formed the origional planted hedge. The hawthorn is a small deciduous scrub which is abudently branched. The flowers which bloom from May to June are dingy white, sometimes tinged with pink. From a distance they smell slightly of aniseed but because they need to attract midgets and flies to effect pollination they smell unattractive until after this has occurred. The flowers contain a substance called trimethylamine which is one of the by-products of putrefaction and these are what causes the smell. To further attract these insects the anthers are purple and the pollen brown to simulate decaying meat. They bear a bright red berry when the fruit is ripe. The Rowan or mountain ash which grows to about 20 ft. and bears flowers in clusters also attracts similar insects by its

HAWTHORN.

ROWAN OR MOUNTAIN ASH.

FIG. 29

FIG 30

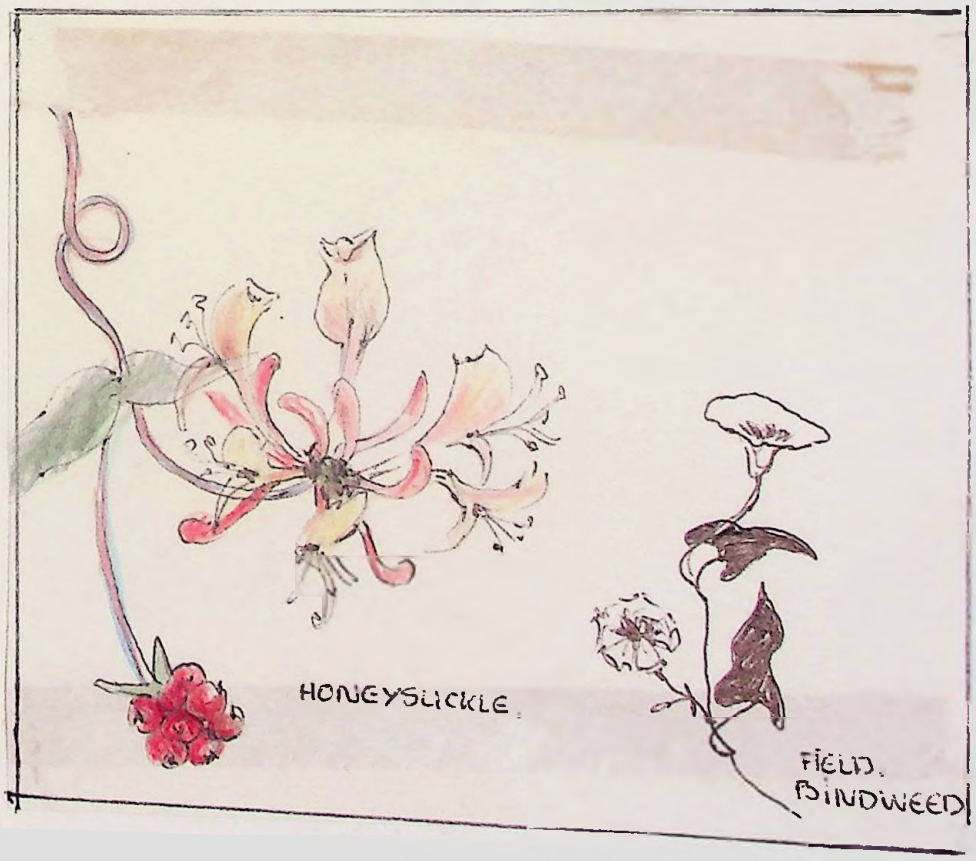


FIG. 31

amonia like smell.[13] Intervined around these scrubs is a variety of climbing plants among them sweet briar and the blackberry bramble together with the dense hawthorn/ rowan, these thorny briars build up an almost impenetratable mass of hedge. While holly bushes and gorse scrubs are in themselves too thorny to push past. Other parasitic plants such as the beautiful honeysuckle with its heavy mid summer smell and bindweed also grow among or on these scrubs. The most successful parasite must be ivy which has massed itself around the trunks of all the hedgerow trees giving them a very deformed and choked appearance in winter.

Along the grass verges grow all the smaller plants, the primroses, foxgloves, and the tall wild grasses. In upland regions bracken which turns a beautiful copper colour in late summer dominates this area. Not all wild vegetation is classed by the farmer as weed though some like the thistle is outlawed - clover is cultivated in meadows for its nitrogen content while grasses such as Perrenial Rye Grass, Cocksfoot and Timothy are grown for hay and silage. Daisys and buttercups have no food value but are irremovable and grow on regardless.

The whole area of plant growth reveals a facinating world of simplicity, of ingenuity and intricate detail:- The dandelion has seeds attached to feathery white tails which when ripe are scattered for miles by even light winds.

The winged helicopter seeds of the sycamore are well known and also effects seed dispersal through wind. Sticky burrs are carried by many animals and are difficult to remove from clothing while the poppy has a beautiful catapult action when its seed pod bursts open, flinging the seeds away.

The most fundamental use of land is undertaken by the farming communities. In Ireland most of the land is under pasture - i.e. the land is used to grow grass to feed cattle. This involves the use of several fields from Spring to November, when the cattle are removed from the grazed fields and feed on hay or silage for the winter. Care must be taken that the pastures produce high quality feedstuffs, suitable for both direct grazing and for storage as winter feed. So fundamental does grass growth appear to be in Ireland that it is hard to realize that it is not a natural vegetation and that without husbandry would revert to scrub. Close grazing prevents the re-establishment of such scrub as bramble and hawthorn. Under the protection of these thorny scrubs wind borne tree seeds such as ash would soon establish growth and the whole area would become lightly forested. The most primitive type of grass management therefore involves only the use of grazing animals. The grass and herbage itself being uncultivated. This type of pasture is found in shady areas which provide growth for sea grasses, in marshy coastline areas and mountainous

regions. In other areas of permanent grassland, the swarth has been improved by burning and surface cultivation but again the grass and herbage have not been cultivated. Artifical grasslands or LEYS consist of cultivated grasses which are usually mowed for either hay or silage and are not normally permanent being rotated as any other cultivated crop. Most of the old uncultivated pastures contain large numbers of more or less useful grass and herbs together with an amount of weeds. Good grasses would include ryegrass, cocksfoot, timothy, meadow fescue and meadow foxtail, while tussock and torgrasses are no use for grazing and inconsequence are weeds. White clover, red clover are good valuable feed while again rest harrow is definitely a weed.

Frequently mown meadows produce tall grasses - tall oat, meadow foxtail, tall fescue, timothy, wild red clover and tall umbellyferous herbs - while ryegrass and white clover grow close to the ground..

Of the grasses sown for hay/silage, ryegrass is the most valuable and is often grown as a catch 'crop' i.e. sown after harvesting of early potatoes or under sown corn to produce late grazing and it can also serve as a nursing crop for clover. Cocksfoot reaches full productivity about the same time as ryegrass and is often used as a silage crop. The two combine to produce good grasing over a long and continuous period, Timothy is also sown as a hay crop on peaty soil. The establishment

FIG. 32

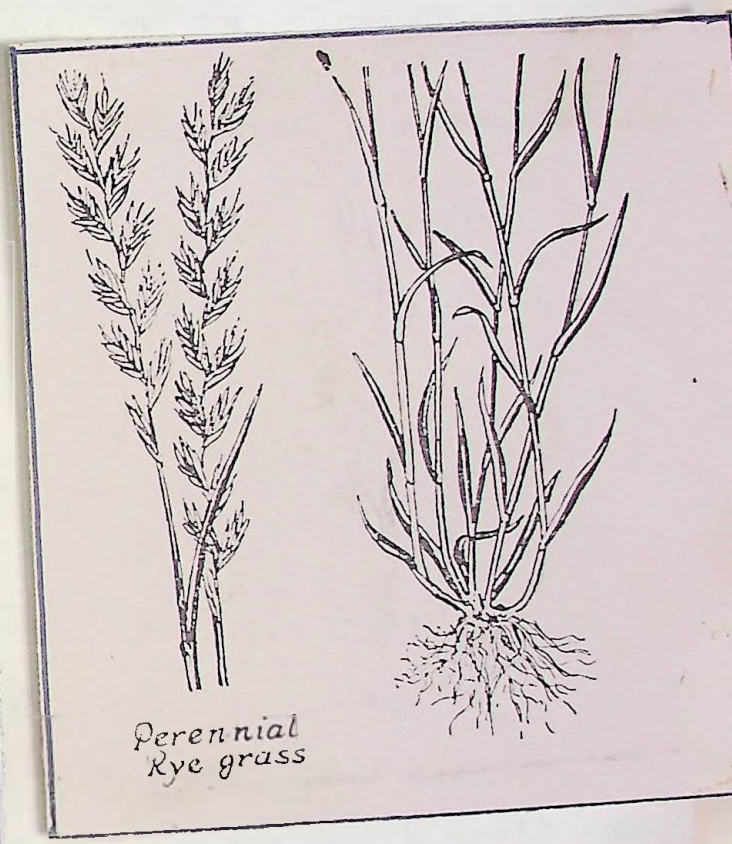
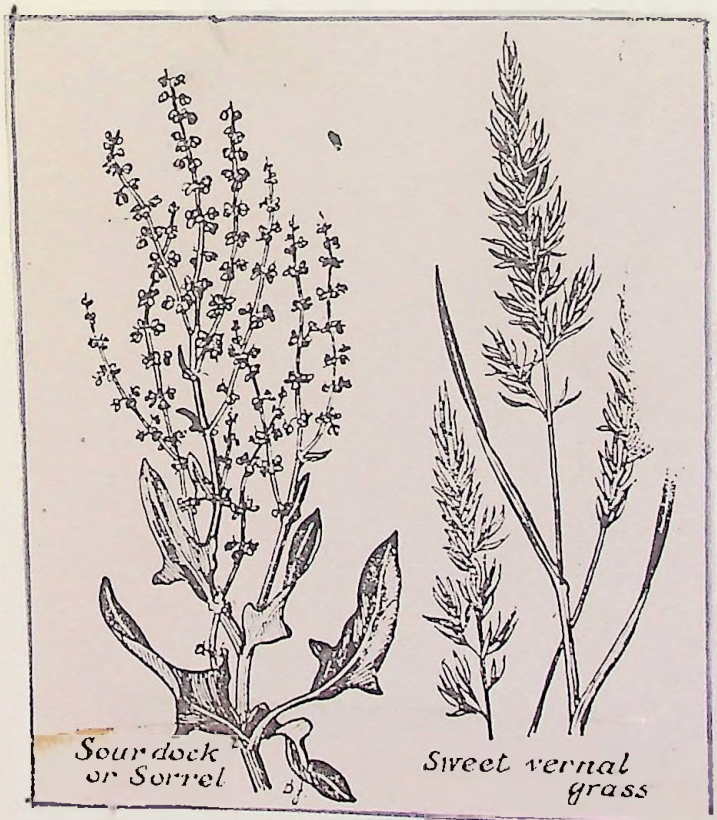


FIG 33

FIG 34



of a sward means that the soil must be ready for sowing in the Spring or late Summer.

The purpose of ploughing which begins in October and continues throughout the winter when the soil is dry, is to bury the turf or stubble of the previous year's growth and to leave a clean surface of soil which winter frost and rain break down into a loose seed bed for sowing. Where the soil is ploughed to bury old pasture turf for new grass the object in ploughing is to kill the root mat which may be quite thick. Futtows must not be set up in a crest as is in the case where the turf is of stubble - they must be laid on top of each other as flat as possible. The whole field is then raked with disc harrows, cultivators or spiked harrows until the old herbage is dead. Thus ploughed fields intended for grass or grain growth are flat and not furrowed as for root crops.[15]

Mowing machines cut and harvest the meadow and grain crops. When the lush grass crop is ripe it is cut and saved either for hay or silage. Grass is determined ripe when the grass and clover have formed undeveloped seed heads. The mowing machine travels around the field in ever narrowing circles, laying out an even swathe to one side. It lies there to dry in the sun for one or two days during which time it is turned occassionally until it is dry, sweetsmelling and ready for cocking. Cocking or bailing takes place when the hay is dry (if it is too dry it will lose much of its food value while if it is too wet, it

it can heat and turn mouldy. Cocking is not a mechanical process, the hay is gathered from the swathes and carried to the site of the cocks, where it is built up by hand with forks into conical shapes. It is then raked down to take out loose hay and it is finally secured by rope and stones. If the hay is baled this is done direct from the windrows by a square or round baler. (I have never seen the round bales here.) The hay is gathered and compressed by a ram, trimmed with knives and tied by twine. They are then stacked in lots of 6 or 7 and like hay cocks they are left in the field of stubble to dry for several weeks. As it stands and afterwards is stacked in the fields this grass crop becomes part of the summer/autumn landscape until they are removed and stored in hay ricks for the winter. Silage is the other method of harvesting grass and is very suitable for this climate where heavy rainfall may ruin the crop before it can be harvested as hay. Although this is feasible it can only be salvaged as good feedstuff, before the crop has seeded. A separate plot should be prepared for both. Where a field is specifically prepared for silage the herbage could include high quality plants such as lucerne, sainfoin, and red clover.

The process of ensilage involves cutting the green grass and preserving it by close packing in pits and clamps allowing it to ferment. It has generally replaced mangels

and root crops as a winter feed substitute with hay When storing this crop the drainage must be effective because there is considerable seepage of plant sap which will polute nearby streams, and when not stored in the farmyard it is left in the fields. Here it is built up into a stack, compressed and sheltered by black plastic secured by a row of used tyres on either side. Silage is not a traditional storage method and these thatch like structures are still quite unfamiliar in the countryside but they are attractive, and the plastic and tyres combine two strange materials very effectively.[16] Grain crops are grown in Ireland to supplement the animal storage/dairy farming income. In addition the straw provides a very important bye-product for animal bedding. For grain growing the soil is harrowed to a depth of several inches in Spring to give a seed bed. This harrowing process is continued by disc harrows which reduce it to a fine tilth. The surface is raked and levelled by zig-zag harrows. The seeds are then planted by combine drills which deposit a consentrated fertilzer directly beneath the seed. The whole field is again raked lightly by the zig-zag harrow and may also be rolled to consolidate the soil. In some places the field is marked out with sticks to show passages or change of grain crop and scare crows are stacked up. The old dressed figure is now almost gone though it is sometimes to be seen guarding garden plots. Dead crows hung on sticks or carbide or electric bangers which imitate rifle shots at regular intervals are now more frequently used.

Harvesting grain crops takes place in late summer when the crops stand high and are loaded with grain. Sometimes before cutting with the binder an open road is made around the crop. The combine harvester cuts and threshes, the crop. The knife travels in front, against the lean of the crop cutting it to a short stubble. The grain is separated and cleaned and then transported to a tank or bagging apparatus. The straw can be left in a swathe behind the machine to be gathered later by a baler, or stacked and trussed. The bales are very familar but the trussed stacks heaped three together in a pyramid shape with each truss tied at the centre aree now rarely seen. Some survive in areas where only a small crop is grown which is more conveniently harvested by hand. They are fairly common in northern Scotland and on the islands.

With the exception of sugar beet no other root crop is grown as a cash crop by the farming communities . The needs of the urban communities are supplied by market gardens near these centres while the farming communities normally grow only enough for domestic use.

Ploughing for root crops much be furrowed and this type of ploughing is done in sets. The ordinary plough turns the sod in one direction only and the sets are laid down by a plough travelling to and fro on each side of a middle furrow. In a small field there may be only one middle furrow with its two sods, turned inwards. In a

larger field there may be several "middle" furrows and each group is separated by a furrow where the sods are turned away from each other. Although beet can be grown either in furrows or flat, furrows allow much better weed control. Sugar beet is a type of mangel with high sugar content, moreover the leaf tops may be fed to cattle after they have wilted. Before planting, the soil must be dressed with both manure and lime, the sowing being in March. Roots crops require more labour in that they need hoeing and thinning out a month after sowing and this is usually done by hand. The beet is ripe when the foliage assumes a shrunken appearance and as the beet is required by the factories by the end of September lifting takes place at this time, and is a fully mechanised process Unlike grain and grass crops, sugar beet leaves no transient markings on the landscape as it is loaded and brought directly to the factories.[17.]

Arable farming is not widespread in this country, rather it serves as a supplement to stock and dairy farming or as feedstuff for these animals. Although not wide spread the resulting imagery, the futtowed earthy, yellow grained crops and the neat piles of straw are part of the seasonal changes.

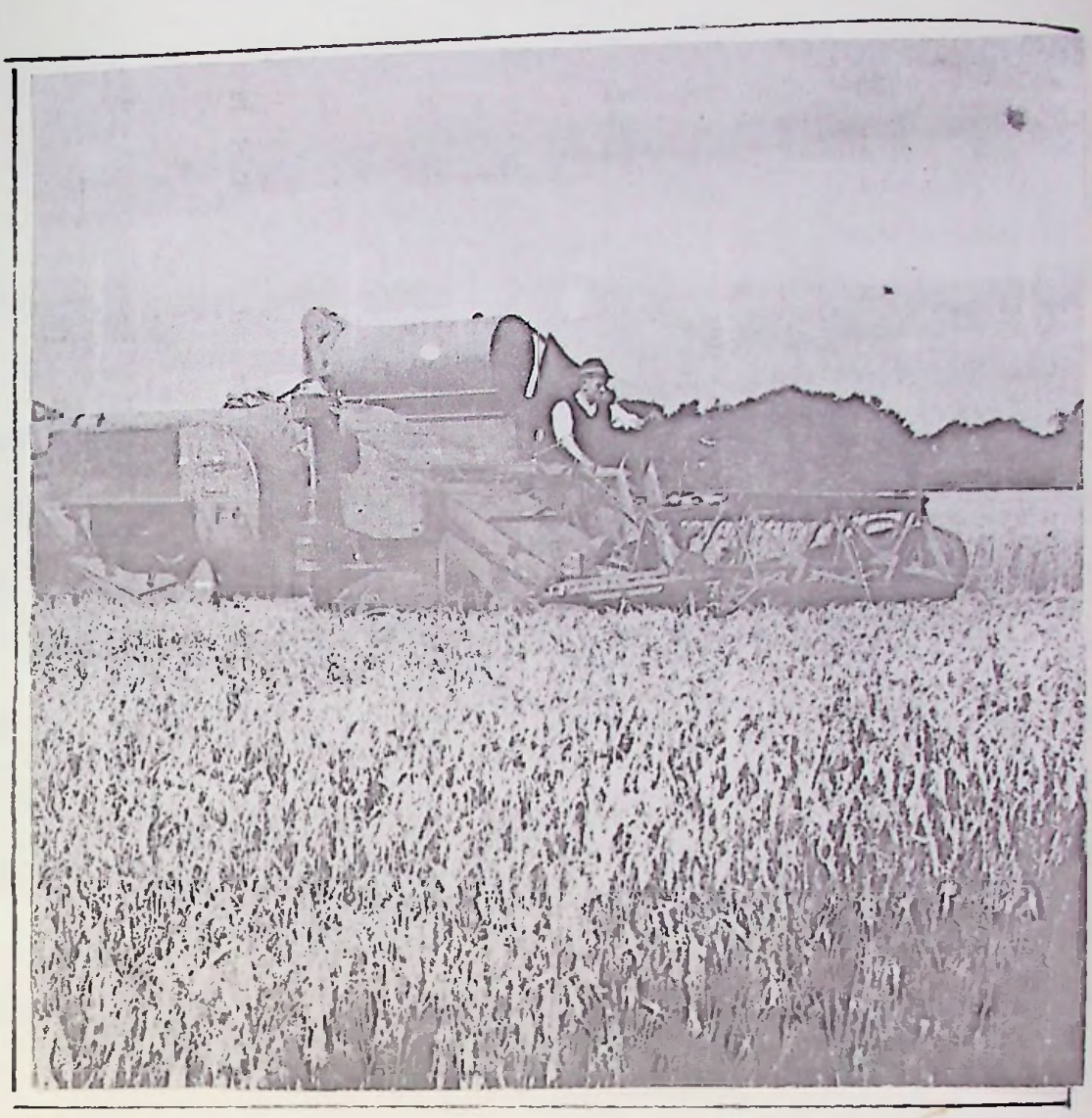
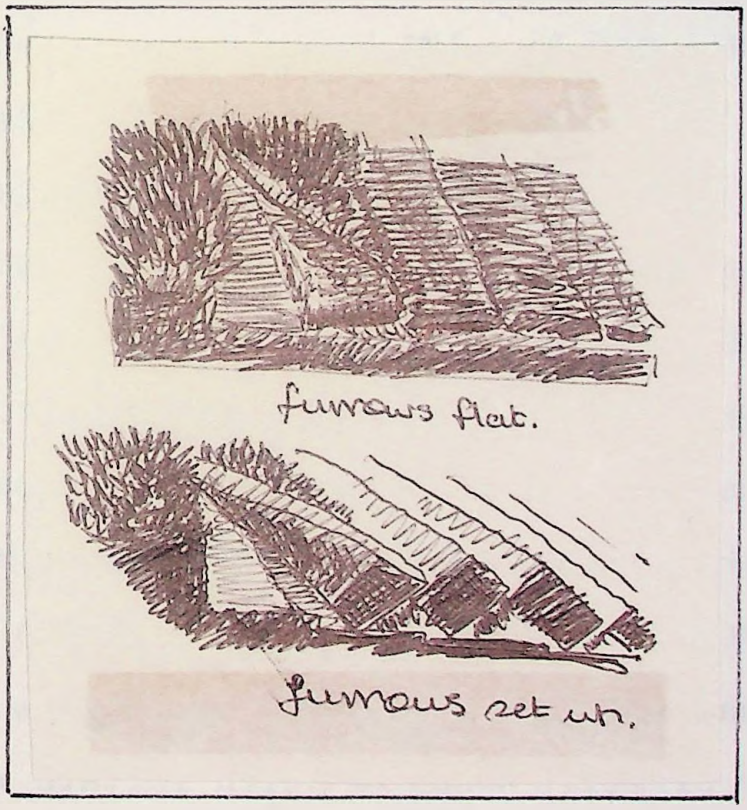


FIG 35

FIG 36.



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19. FENCE.

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