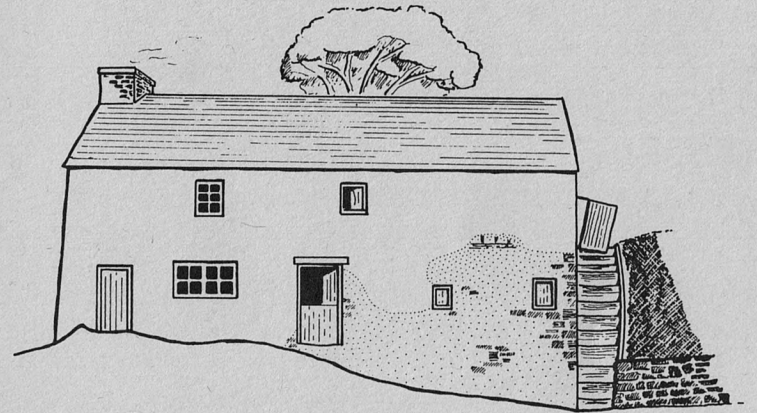


The Watermills of Radnorshire



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Cylchgrawn Cymdeithas Melinau Cymru
Journal of the Welsh Mills Group

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Watermills of Radnorshire

by

Gordon Tucker

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WATERMILLS OF RADNORSHIRE

by Gordon Tucker

INTRODUCTION

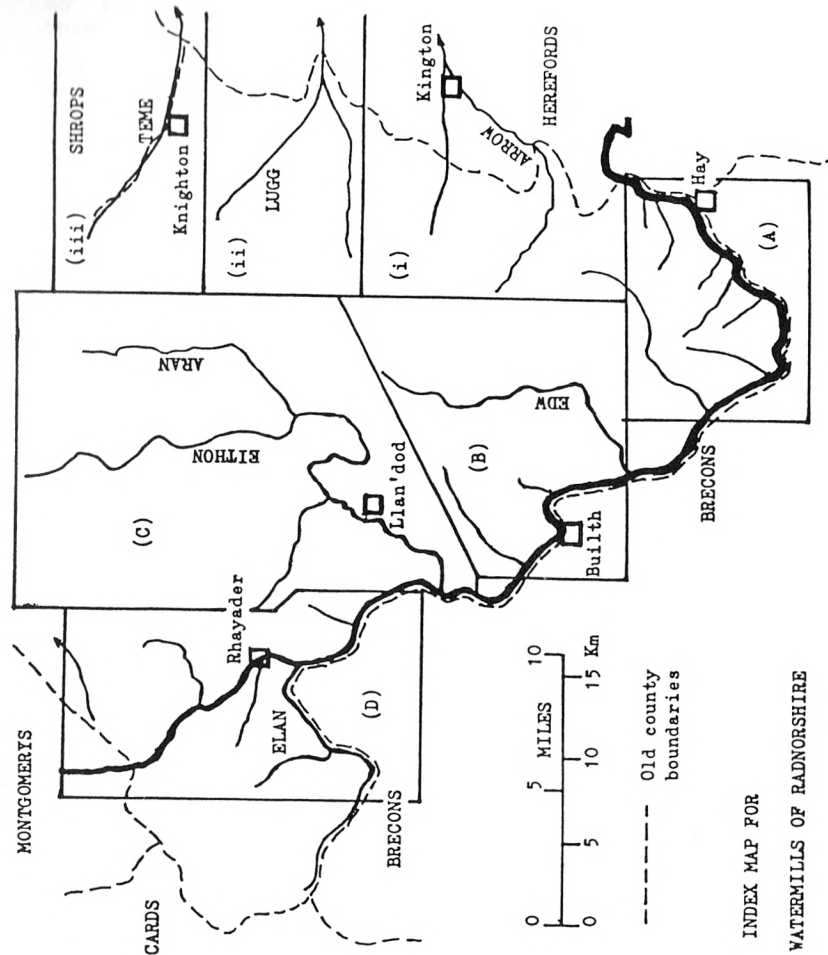
Radnorshire was a county of Wales until the reorganisation of 1974 incorporated it into the new county of Powys along with Breconshire and Montgomeryshire. However, it still retains its geographical identity as the Radnor District of Powys. It was a small county, although far from being the smallest; but its population was, and is, quite tiny, at about 20,000, with a maximum ever of just over 25,000 in the 1840s. On the south-east, south and south-west its border lies along the middle of the River Wye, and, as its higher land is mainly in the north, this has the consequence that the great majority of its watermills are on streams which drain into the Wye within Radnorshire. Only for the mills in the basins of the Teme, Lugg and Arrow in the east of the county, and on a small stream (the Dulas) in the north-west, is this not the case. Our Index Map (p.2) makes this clear, and shows the areas into which the county has been divided for the purpose of publishing a survey of the mills. The Table (p.4) uses these divisions for the presentation of the data in summary form.

The old county boundaries are roughly indicated on the Index Map, and it can be seen that the River Arrow and its main tributary, while rising in Radnorshire, very quickly run into Herefordshire, so that, as the table shows, there are only three certain and two possible mill-sites in Radnorshire. A survey of the mills of this area has already been published¹.

The River Lugg and its main tributary have rather more length in Radnorshire, and also serve more productive land in the so-called Radnor Valley; before finally leaving Radnorshire, the basin has sixteen certain and five possible mill-sites. However, the county boundaries oscillate about the streams in a way not indicated on the Index Map, and (as the Table shows) only thirteen certain and four possible sites are strictly in Radnorshire. A survey of the mills of this area has been published in this journal².

In the case of the Teme valley, the Radnorshire/Shropshire boundary oscillates in a very peculiar manner, but if we count as a Radnorshire mill one which has either its building or its leat mainly in that county, then there are five certain and two possible mill-sites. The survey of the Upper Teme Valley will be published by the present author in Wind and Water Mills in due course.

The remaining eighty-four certain or possible mill-sites in Radnorshire are contained in the four areas A, B, C and D marked on the Index Map. A survey of these sites is the basis of the present article, and each area is covered in a separate Part,



TABLE

Area	Total no. mill sites within Radnorshire. 1st no. certain 2nd no. possible	No. of sites with substantial building remains	No. of buildings with substantial machinery remains	No. of woollen mills	No. of leather mills	No. of corn-mills originally with kiln	No. of mills thought to be working c1830-40	Note
A	10 + 4	8	3	0	0	1	10	
B	13 + 6	7	3	1	0	0	12	a
C	19 + 11	12	2	2	0	8	15	
D	17 + 4	8	3	3	3	4	13	b
i	3 + 2	2	1	0	0	0	3	
ii	13 + 4	8	4	1	1	0	9	c
iii	5 + 2	3	0	1	0	1	4	
Totals	80 + 33 = 113	48	16	8	4	14	66	d

- Notes: (a) One mill used first as corn mill, then sawmill, then hydro-electric generating station.
- (b) Includes two hydro-electric stations specially built, one a double station.
- (c) Includes a woollen mill later a corn mill, and two corn mills later water-pumping stations.
- (d) Mills counted as within Radnorshire if any part of mill or leat in the county.

with its own numbering series for its sites. The principle of numbering is to proceed up the main stream as far as a tributary, then to proceed up that tributary as far as its first side stream, then up that, and so on, finally returning to proceed once more up the main stream. Plain numbers indicate certain sites; possible sites are prefixed by P. By certain we mean that either the physical evidence or the map evidence is so good as to leave little room for doubt that it was a mill-site; obviously a standing mill with complete machinery is the best evidence. By possible we mean that the indications are too vague or ambiguous.

Little has been published on the mills of Radnorshire. The work of Stedman Davies³ has been useful in giving a good start to the investigation; Howse's subsequent note⁴ of thirty-four mills that were reported to be working in 1901, of eight still working around 1939-40, and of two around 1950, has been most valuable; and some help has been gained from an article in the Western Mail⁵. But these articles have not given the location of the mills, and have mentioned well under one-half of the mills now located. Our main source has been the series of Tithe Award maps, with the Apportionments or Schedules which accompany them to give the details of every parcel of land, which was produced for tithe redemption purposes around 1840, with a large-scale map for every parish. Another important source has been the First Edition of the one inch to the mile Ordnance Survey map, produced in the 1830s. Often the original published map can be inspected (the National Library of Wales has the 1833 printing for Radnorshire), but the modern reprints⁶, although based on later printings, generally have the mill information unaltered from the very first printing. The large-scale OS maps of 1880-1905 have also been extensively used.

With these as our documentary sources, it is inevitable that we shall have no record of eighteenth-century or earlier mills that have left no trace in the nineteenth century. Our fieldwork has been based on locations determined approximately from these sources, with the addition of a number of sites which we may have chanced upon or been led to by the information of helpful people we have consulted. Practically every site has been visited and examined.

For parishes close to the Herefordshire border, the maps of Price (1817)⁷ and Bryant (1835)⁸ are sometimes of help.

The Table (p.4) shows the number of mills in each area thought to have been working around 1830-40, based on their being shown as 'mill' on the 1st.ed. 1" OS map and/or the Tithe Map. The total for the county is sixty-six, which is roughly one mill for each 400 of the population of the county. We found this same proportion in the basin of the Rivers Monnow and Trothy in Monmouthshire (now Gwent)⁹.

It is worth quoting at this point an interesting passage from a book by Howse dated 1949¹⁰:

'In the 14th century almost every community in Radnorshire had its fulling mill and its corn mill. In the 18th century both kinds of mill were still common. After about the middle of the 19th century not a fulling mill was left, and the corn mills (all driven by water) were rapidly disappearing. Today the mill at Hundred House, Llanantffraid yn Elvel, is the only one in the county still working its old water wheel. [N.B. It is likely that the mill at Rhos-goch was also working at the time of the book.]

'At the beginning of the 19th century there were several small cloth or flannel factories; they were situated at Presteigne, Rhayader, Llanfihangel Rhydithon, Maestraylow (near Cascob) and Cregrina. The Rhayader business was not closed before the 1840s and some work was done at Llanfihangel up to the 1880s; the others were closed before 1820. A later woollen factory, started at Knighton in 1854, was working up to 1927.'

Two comments on this last paragraph are: the woollen mill near Cascob became a corn mill, and there was a water-powered weaving mill in Rhayader well into the twentieth century.

As Radnorshire is well supplied with streams, it is not surprising that its main source of power was water. No information on any windmill in the county has been found, but that there must once have been one is suggested by the name 'Felin Wynt' for a hill at around National Grid Reference SO 12 80, in the parish of Llanbadarn Fynydd. The name is shown on the 1st.ed. 1" OS map and on modern maps.

Most of the mills of which there are remains are (or were) of rubble-stone construction, and there is no reason to think that those which have disappeared were any different in this respect. There were exceptions, however. One is Cantell Mill (gazetteer no.C/14), which is built of brick. Timber construction was used at Coedgwan Mill (C/6) and at Gwynllyn Mill (D/13) as is evidenced by the illustrations accompanying the gazetteer (Pls. 10b, 7 & 14). In the former case, at least, the bases of the walls were of rubble-stone. There are examples of wood-cladding and slate-hanging to give walls further protection. The mills were generally very small, typically of about 500 sq.ft. in plan, with two storeys and an attic. The stone floor (i.e. the floor carrying the millstones) was in most cases not a complete floor covering the whole plan area, but rather a sort of gallery.

From the relatively small number of mills with all or most of their machinery left, it is possible to make a few generalisations. Nearly all had overshot (or possibly pitchback) water wheels, for most were on tributary brooks rather than on the main rivers, and thus had steep gradients rather than large flows to exploit. Nearly all had the nineteenth-century typical gearing layout of the pit wheel driving an upright shaft by means of the wallower, the great spur wheel on the upright shaft driving the stone nuts and stone spindles below the stones (i.e. underdrift), and the crown wheel at the top of the shaft driving bevels on horizontal shafts with pulleys to drive a bolter and/or

sack-hoist. The crown wheel was generally of wood, the water-wheel axle and the upright shaft were of wood, and the pit-wheel teeth (or cogs) and those of the spur wheel were of wood; everything else was of iron. Water-wheel construction varied, but bosses and shrouds were always of iron.

There were some unusual arrangements, but there is no surviving machinery to suggest that the simple Vitruvian mill was used, i.e. a direct drive from pit wheel to stone spindle; nor are there survivors of earlier all-wood gears. The only mill we found with all-wood gearing was Coed Trewernau (no. C/7), but the gearing there is modelled on the nineteenth-century iron gearing. There was a seemingly-unique crown-wheel arrangement at Hundred House Mill (B/6) in which a plain wooden horizontal wheel had bolted to its upper surface an iron gear ring to engage the bevel on the horizontal shaft. The use of an upright shaft above the stone floor was dispensed with altogether at Coed Trewernau (referred to above) and at Norton and Holbach Mills in the Lugg basin (Area [ii]); in the last two cases horizontal shafts below the stone floor were driven by bevel gears carried 'pick-a-back' on the great spur wheel. These shafts carried pulleys to drive bolters and the sack hoist.

The relatively small number of kilns recorded (fourteen altogether) may merely reflect the less durable nature of the kiln building and its lesser importance for mention on maps and in schedules. One might have expected the proportion to be higher in a fairly wet county such as Radnorshire.

The machinery remaining in the mills pertains to corn mills only; none of the machinery of woollen mills remains. For an account of the woollen industry in Wales reference can be made to the book by Jenkins¹¹, and for more technical detail the paper by Parkinson¹² should be referred to.

The difficulties with place-names and river names in Radnorshire deserve mention. For the period concerned primarily in this paper - the last two centuries approximately - English has been the dominant, if not the only, language of the county. However, the language was originally Welsh, and, except in the east, place and river names are basically Welsh. There has been a degree of anglicisation in both spellings and pronunciation. Ordnance Survey maps give different spellings at different dates, and now we have a reliable gazetteer of correct Welsh spellings by Davies¹³. The latter, however, would not be recognised by the inhabitants of the county. For example, the River Eithon (as it is spelled in the present paper) is spelled as both Eithon and Ithon on the same river on the 1952 1" OS map while Davies gives Ieithon. The brook called Bachawy by Davies and by the 1986 1:50,000 OS map, is called Bach howey on the 1st.ed. 1" OS map, Bach Howe on the 1961 1:25,000 OS map and Bach Howey on the 1967 1" OS map. In this paper, where it occurs in Area A, it seems best to call it Bachawy. The River Aran (in Area C) would perhaps not be recognised if called Afon Cymaron as given by Davies. Although Davies gives Welsh names for places with obvious English

names, such as Glasbury and Painscastle, these must clearly retain their English names. The present author has used his judgement where there is room for doubt.

An interesting light on Radnorshire pronunciation is given by Caerfagu Mill (Area C). It seems consistently referred to as 'Car-vague-ee', thus conceding Welsh pronunciation to the 'f' and 'u', but not to the 'a'.

So that the title 'Watermills of Radnorshire' may be justified for this paper, seeing that only the gazetteers for Areas A-D are given in full, it seems desirable to list those mills described elsewhere for Areas [i] - [iii] which count as in Radnorshire.

[i] The Upper Arrow:

Certain: **Milton Mill** (SO 240 509): still standing, converted to a residence, but retaining a large proportion of its machinery. There were two wheels in tandem, driving two separate sets of machinery.
Gladestry Mill (SO 240 548): gone, but leat still detectable.
Weythel Mill (SO 242 575): derelict and empty.

Possible: **Newchurch** (SO 21 50)
Lower Mill, Gladestry (SO 24 54)

[ii] The Lugg basin:

Certain: **Llangunllo Mill** (SO 212 714): gone, but tail race traceable.
Mynachty Mill (SO 234 694): building remains as residence; watercourses remain, but dry.
Bleddfa Mill (SO 207 683): building used as store: no machinery.
Bridge End Mill (SO 268 670): no definite remains.
Cascob Mill (SO 239 663): gone.
Walk Mill, Discoed (SO 266 654): former textile mill converted to corn mill; building still stands with fragmentary machinery.
Norton Mill (SO 306 668): still stands with almost complete machinery. Sack hoist and bolter were driven from bevel attached to spur wheel and not by an upright shaft.
New Mill, Presteigne (SO 311 649): still stands, with almost complete machinery.
Tanyard, Presteigne (SO 316 646): gone.
Llanfihangel Mill (SO 186 582): gone.
Haines Mill, New Radnor (SO 203 604): derelict.
Old Mill, New Radnor (SO 213 610): gone.
Holbach Mill (SO 252 627): still stands, with machinery as at Norton Mill.

Possible: **Pilleth** (SO 25 67)
Lower Mill, Discoed (SO 270 654)
St Mary's Mill (SO 299 653)
Mill, Presteigne (SO 313 648)

[iii] The Upper Teme:

Certain: **Gwrd Dwr Mill** (SO 160 821): gone.
Vron Mill (SO 167 818): fragmentary remains only.
Lloiney Mill (SO 245 759): converted to residence.
Silurian Mills, Knighton (SO 287 725): building still stands, in use as a factory.
Cwm Mill, Knighton (SO 281 720): fragmentary remains only: leat and pond detectable.

Possible: **Mill** (SO 162 840)
Crugyn Farm (SO 168 813)

In the further interests of completeness, it should be added that water wheels were also used in the metal mines of Radnorshire; these were in the western parts of Area D, e.g. at the Cwm Elan Mine, but were never as numerous as they were in other Welsh counties.

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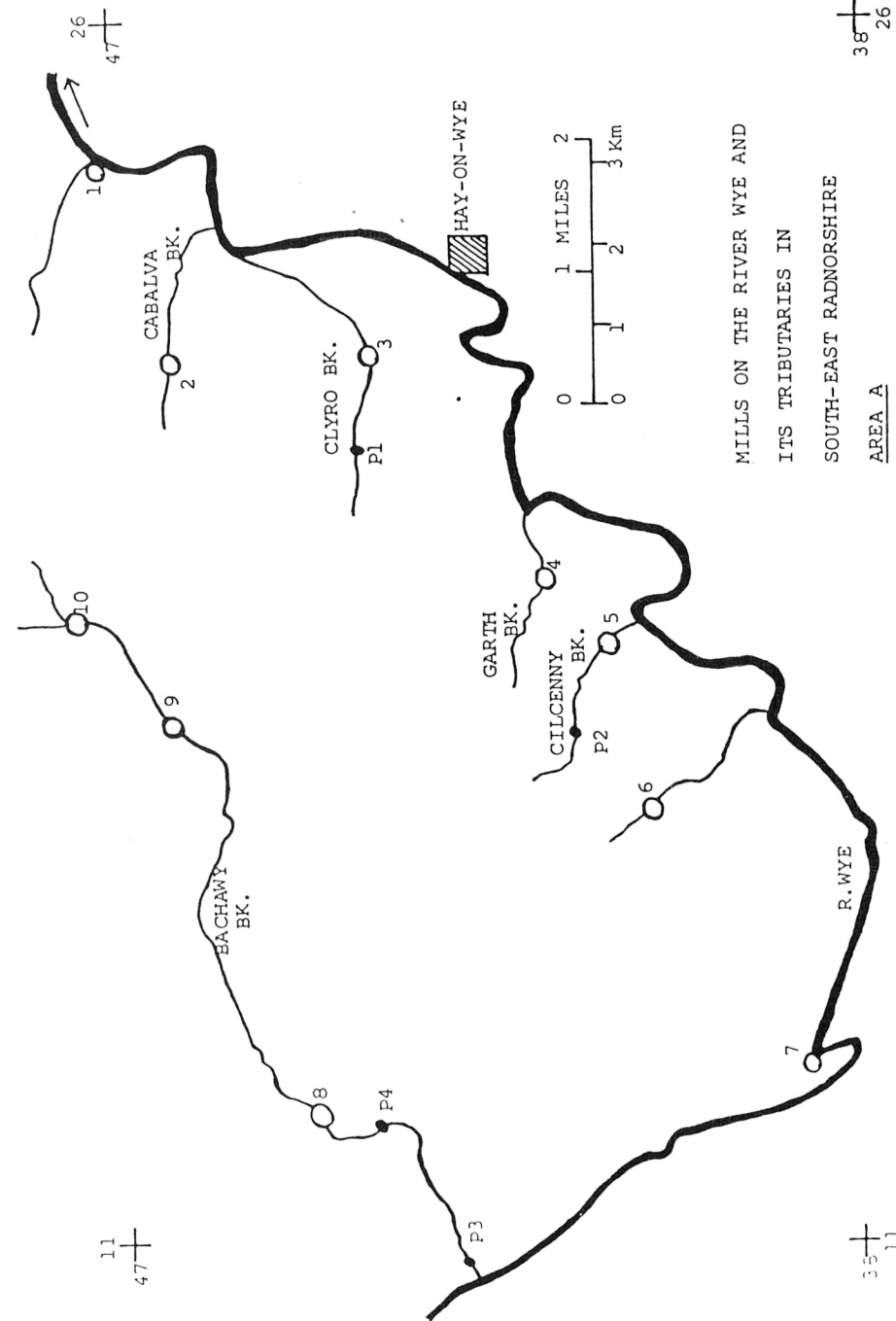
A lot of people have given help in this work. My thanks are due to all the owners and occupiers of mills and mill-sites who have courteously given access and information; although we have not always obtained full access for physical reasons, we have only once been actually refused. Mr.Brian Lawrence, the County Librarian, has been very helpful and has provided the old illustrations of Gwenllyn and Sero Mills near Rhayader (Area D); Mr.Tom Evans of Llandrindod provided a copy of the drawing of Coedgwgan Mill (Area C) by the former Miss Joanne Munro, and obtained (through her father the County Surveyor) her permission to publish it; Mr.Worts of Disserth first put me on to Cnitho Mill and Castle Crab Farm Mill (Area B); Mr. Jim Groucott of Llandrindod first drew my attention to the unique nature of Coed Trewernau Mill (Area C), and Mr Bob Humphrey of Bromsgrove gave me invaluable information about the Elan Valley (Area D). To all these people I am very grateful. Thanks also to the staff of the National Library of Wales and the Powys County Library, and to Mr. James Peart of the University of Birmingham Map Room, for much willing assistance. My grateful thanks are due to Miss Melanie Brown (a former student at the Ironbridge Institute) for the drawings of Boughrood, Coed Trewernau and Cenarth Mills. and to the Secretary of the Royal Commission on Ancient Monuments in Wales for permission to reproduce the drawings of Caerfagu Mill. My wife Mary gave her usual invaluable help and encouragement in the field and in the libraries.

GAZETTEER

Part 1: AREA 'A'

This area is entirely bounded on the south and south-east by the Radnorshire boundary along the middle of the River Wye. There is only one sizeable brook, the Bachawy Brook, which is over eight miles long, and has its uppermost mill - Rhos-goch - at over 800ft. altitude, i.e. about 600 ft. above the River Wye. The other brooks barely reach two miles in length and fall only about 200ft., but they have made very steep-sided dingles which are now very overgrown with vegetation and very hard to explore for old mill-sites. Builth and Hay are the only small towns serving the area.

A/1. **Cabalva Mill**, parish of Clyro (SO 243 470): on a small brook, tributary to R.Wye.



There is a suitable fall of water available, but no physical evidence of a mill. 'Cabalva Mill & Ferry' are marked on Bryant's map (1835). The Tithe Map of 1840 shows a small stream and pond with a building just below the pond; the Schedules show for parcel 1213 'Mill House Garden'. There can be little doubt that a mill existed here in the early nineteenth century.

A/2. **Whitney's Mill**, parish of Clyro (SO 218 462): on Cabalva Brook, tributary to R.Wye.

Ruins of the mill remain on the steep valley slope, mainly just the lower parts of the stone walls. The main part of the building was about 40 ft. by 18 ft., which would have included the miller's cottage as indicated by a fireplace on the wall against the bank. The wheelpit is quite distinct, indicating an overshot wheel about 15 ft. by 4 ft. The long, well-constructed leat terminates about 30 ft. above the brook, so much of the head was lost in the tail-race. No machinery remains except for three millstones: one French-burr runner, one conglomerate runner and a broken French-burr bedstone, each of 46 in. diameter.

The Tithe Map of 1840, taken with the Schedules or Apportionments, shows the mill and a kiln adjacent. The name 'Whitney's Mill' is given on the 1st. ed. 1" OS map, and this seems to be the local name even now, but Bryant (1835) gives 'Whitlys Mill'. According to Stedman Davies, the mill had already been demolished by 1940.

A/3. **Clyro Mill**, parish of Clyro (SO 218 438): on Clyro Brook, tributary to R.Wye.

The three-storey building remains, roofed with corrugated iron. The plan is about 36 ft. by 20 ft., and appears to have included the miller's cottage. The wheel was external, on the south wall, and must have been breast-shot from a 12-inch pipe through the dam of a small terminal pond fed by a 50-yard leat. No machinery remains, but hurstings indicate that there were two pairs of millstones.

The mill was shown on Price's map of 1817, and on the Tithe Map of 1840; it was shown as 'Clyro Mill (Disused)' on the OS maps of 1932. The machinery had all gone by 1940, according to Stedman Davies.

A/4. **Llowes Mill**, parish of Llowes (SO 192 417): on Garth Brook, tributary to R.Wye.

The mill building remains, right in the village, but is not accessible for close examination. It is very overgrown with ivy and clearly derelict; it has two storeys and an attic, but is very small, probably only about 16 ft. by 14 ft., with a single-storey annexe on the north side. all built of stone.

Surprisingly, the overshot water wheel remains on the south side, and looks to be about 10-12 ft. diameter by 2 ft. wide, with iron shrouds. There is a possibility that machinery remains inside, but Stedman Davies indicates that the mill ceased work about 1920.

The Tithe Map of 1844 does not show the mill, but the Schedules give 'Mill & Pond' in the correct place. It was part of the Court of Llowes Estate. It is shown as 'Mill' on the 1:25,000 OS map of 1951.

A/5. **Little Mill**, parish of Glasbury (SO 183 410): on Cilcenny Brook, tributary to R.Wye.

The mill building and its attached cottage still stand, but joined into a very attractive residence. The mill was of four storeys, with an external overshot wheel on the high wall adjacent to the brook; a scrape on the wall indicates this wheel to have been of about 16 ft. diameter. The owner reckons the mill dates from the mid-eighteenth century, and ceased work about 1860. The leat, about a hundred yards long, can still be followed; it fed a terminal pond which is now a lawn. No machinery is left, but there is a conglomerate millstone of 48 in. diameter with notches for a four-pronged rynd, another conglomerate stone which could not be closely examined, and segments of French burr.

The Tithe Map of 1847 shows 'Little Mill', and the 1st. ed. 1" OS map shows 'Lill Mill'. Stedman Davies suggests there was a mill on this site in the fourteenth century.

A/6. **Cwm Mill**, parish of Glasbury (SO 162 406): on a small brook, tributary to R.Wye.

It was found difficult to identify the site of this mill by field search, although the dingle concerned was searched for half a mile. Nevertheless, it is given very definitely on the Tithe Map and Schedules of 1847, the map showing a short leat, narrow pond and building just below it, in parcel 1350 which is given in the schedules as 'Cwm's Mill'.

The only field indications found were a track leading slantingly downwards from the road to the bottom of the dingle at the point indicated by the Tithe Map, and a small flat piece in the bottom of the dingle at this point, which might possibly have been the pond.

However, the Tithe Map is so definite that we feel justified in classifying this mill as certain.

A/7. **Boughrood Mill**, parish of Boughrood (SO 131 385): on R.Wye.

This mill stands, derelict and with collapsed timbers, but with more or less complete machinery in its remarkable position on the banks of the Wye, which is very wide here (Pl.1: figs 1-5). It used water taken by a 50-yard leat from above the rapids to drive an undershot wheel about 14 ft. diameter and 3 ft. wide, returning the water by a tail race about 100 yards long, to a point near the bottom of the rapids, thus giving an overall head of about 4 ft. The wheel, all wood except for iron bosses and straps, has lost most of its paddles, and, like its wooden axle, is rather rotten. The remnants of the sluice frame are in place next to the wheel.

The building has three full storeys, and is built of stone with a plan about 21 ft. by 27 ft. The wheel is on the east wall, and the machinery is concentrated at the east end, the stone floor being only a gallery. The pit wheel (about 6 ft. diameter), the wallower, and the great spur wheel (about 7 ft. 6 in. diameter) are all of iron, the two large wheels having mortices for wooden teeth. The upright shaft is of wood, with a clasp-arm wooden crown wheel driving an iron gear on the horizontal shaft carrying wooden pulleys. There is a sack-hoist near the ridge, with wooden pulleys. Iron stone nuts drove two pairs of stones, one conglomerate, the other probably French burr. A small adjoining building had a power take-off from the crown wheel. The machinery is partially collapsed and all very dangerous. But it is remarkable that it has survived so long in such an accessible position.

The mill is not marked on the 1st. ed. 1" OS map, but is shown on the Tithe Map of 1844, the Schedules of 1838 naming it 'Boughrood Mill'. It must have gone out of use well before 1940, because Stedman Davies says it was dismantled by then.

A/8. **Cefnige Mill**, parish of Llandeilo-Graban (SO 126 447): on the Bachawy Brook, tributary to R.Wye.

The stone building is ruinous, with only the end and back walls standing. There are no pieces of machinery or millstones to be seen. The leat is evident at a high level at the back, so the wheel, which must have been at the eastern end, would have been overshot. The western end would have been the miller's cottage, but it looks as though the whole building were latterly a residence. There is a very old name-board by the wired-up gate reading 'CEFNEIG'.

The 1st. ed. 1" OS map marks 'Mill' here. The Tithe Map of 1842 does not show the mill, however, although the Schedules give the name 'Caven Cague' for the property. The 6" OS map of 1905 uses the name 'Cefnige' and shows a 200-yard 'Mill Race' entirely on the Llandeilo-Graban side of the brook.

Stedman Davies states that the mill was out of use by 1940

(although Howse shows it as working in 1901), and also refers to Melyn-Kevenyge in the 34th year of Elizabeth under the parish of Llanbedr; the present boundary of the parish of Llanbedr-Painscastle is the brook, just a few yards from the mill.

A/9. **Mill near Painscastle**, parish of Clyro (SO 174 465): on the Bachawy Brook, tributary to R.Wye.

The brook is the boundary with the parish of Llanbedr-Painscastle (as noted above), and the site is so near Painscastle that it could with some justification be called Painscastle Mill. It lies some 250 yards upstream from the bridge on the Painscastle-Clyro Hill road. Only minor remnants of the walls remain, showing a plan about 20 ft. by 16 ft., with the wheelpit on the south (lower) side. There are the remains of a French burr millstone with iron bands around it.

The 1st. ed. 1" OS map marks 'Mill' here, and the Tithe Map of Clyro ('Clirow', 1840) marks the mill and shows a 56-chain leat terminating in a very small pond, now undetectable.

A/10. **Rhos-Goch Mill**, parish of Bryngwyn (SO 185 475): on the Bachawy Brook, tributary to R.Wye.

This was one of the last - perhaps the last - of the Radnorshire mills to remain in water-powered work, ceasing only in the mid-1950s. The mill is at the back of the mill-house, probably about 20 ft. square (Pl.2). It has an iron overshot wheel about 10 ft. by 3 ft., with an iron header box, still in situ. The latter is fed by an iron pipe through the pond dam, and the pond (now dry) was fed by a leat which still runs as far as the overflow sluice. The present owner, Mr. Powell, is a direct descendant of the owner-occupier shown in the Tithe Schedules of 1844, but unfortunately he refused access to the mill. He did say, however, that the machinery was all still in the mill except for a silk machine. The pit wheel, wallower, spur and crown wheel are all iron; the axle and upright shaft are both wooden. There are two pairs of French burr millstones.

The 1st. ed. 1" OS map shows 'Rhos-goch Mill'. The Tithe Map of 1849 marks 'Mill' on the map, with a 16-chain leat. The Schedules give the name 'Rhosgoch Mill' with owner-occupier Thomas Powell. Stedman Davies says that the mill was once called 'Hodenant Mill'.

Possible Mills

A/P1. **Mill**, parish of Clyro (SO 206 440): on the Clyro Brook, tributary to R.Wye.

No physical evidence was found, but the Tithe Map of 1840 and its Schedules show parcel 312 here as 'Mill Piece', and other,

adjacent, parcels also refer to 'Mill'. This may be connected with the remark by Stedman Davies (1940) that 'Paradise building in the village, formerly a mill is now dismantled'.

A/P2. **Cilcenny Mill**, parish of Llowes (SO 174 415): on the Cilcenny Brook, tributary to R.Wye.

The clue here is the Tithe Map of 1844, which showed in parcel 558, quite near Cilcenny House, a 150-yard leat from the brook, terminating in a narrow pond in the dingle, and a building just below it. No mill is mentioned on the Map or in the Schedules, but it could hardly have been anything else.

Cilcenny House is now largely derelict and used as a farm store. The dingle is very overgrown and difficult to explore. A flat area covered with small stone blocks such as would be used in a rubble stone building was found with a bank separating it from a long, narrow hollow in the side of the dingle. This could have been a mill site with the mill pond; however, it seemed rather too high above the brook to have been fed by a leat of only 150 yards.

As we have no use of the word 'mill' in the documents, and no positive field evidence of a mill (such as a piece of millstone), we must classify this as only 'possible'.

A/P3. **Mill**, parish of Llandeilo Graban (approx. SO 107 428): on the Bachawy Brook, tributary to R.Wye.

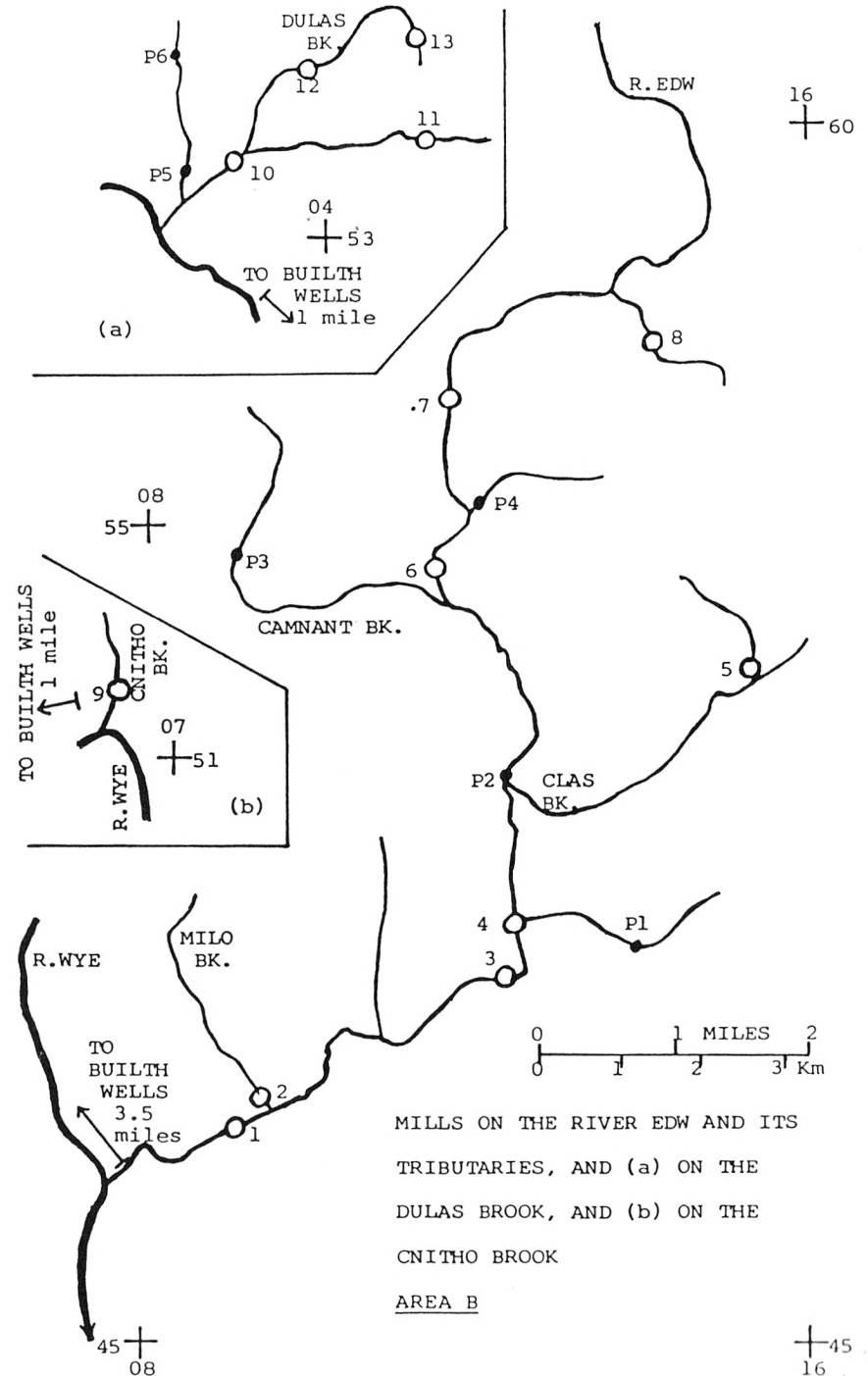
The Tithe Map of 1842 and Schedules of 1838 have parcel 244 here entered as 'Garden Mill Screens'. This is not understood, but there seems a possibility that there was a mill here at one time.

A/P4. **Lower Mill**, probably in parish of Llanstephan (SO 124 439): on the Bachawy Brook, tributary to R.Wye.

'Lowr.mill' is marked here on the 1st.ed. 1" OS map, including the printing of 1833. There is no sign of it on the 2nd.ed. 6" OS map, nor on modern maps. Unfortunately the Tithe Map for Llanstephan was not available at the National Library of Wales, nor at the Powys County Library, nor in the parish. The site is suitable for a mill, as waterfalls enable a good head to be easily obtained.

Part 2: Area 'B'

The main portion of this area is the basin of the River Edw and its tributaries, which fall from about 1,000 ft. altitude to the River Wye just below 400 ft. It is a mountainous area of



MILLS ON THE RIVER EDW AND ITS TRIBUTARIES, AND (a) ON THE DULAS BROOK, AND (b) ON THE CNITHO BROOK
AREA B

exceptional beauty, many of the hills rising to 1,500-1,700 ft. The population is small and there are no large villages.

The subsidiary area 'a' is the basin of the Dulas Brook, which in its length of about five miles falls about 500 ft., and with its tributaries provides four certain and two possible mill-sites. Note that there are two other streams in Radnorshire called Dulas, one (dignified with the title River) in Area C and one in the north of Area D, draining to the River Severn.

The subsidiary area 'b' contains merely a short brook, the Cnitho, which drives one mill.

B/1. **Lower Mill, Aberedw**, parish of Aberedw (SO 092 476): on R.Edw, tributary to R.Wye.

The building still stands between the river and the road, but has been converted to a cottage with a disfiguring extension on the river front (Pl.3, top). The stone building is about 27 ft. by 22 ft. externally. Probably only the northern half was the mill, the southern part being the miller's cottage. There are two storeys, and no windows to the attic. The leat is buried under the modern widened road. A local resident can remember the leat being visible before the road was rebuilt.

The Tithe Map (c.1840) shows 'Lower Mill' here, with the leat starting about a quarter of a mile upstream, more-or-less opposite the confluence of the brook on which the next mill (Court Mill) stands. The mill and leat are not clearly marked on the 1st.ed. 1" OS map.

B/2. **Court Mill**, parish of Aberedw (SO 095 479): on Milo Brook, tributary to R.Edw, itself tributary to R.Wye.

The mill still stands, derelict and roofless, with the timbers all collapsed and some removed and laid outside. The owner of the property remembers it working in the 1930s. The mill was relatively large, about 30 ft. by 20 ft., in line with a cottage and small bakery. The range of buildings, of stone, lie approximately SW-NE. The wheel was internal at the south-west end, and is still there; it was overshot, about 14 ft. diameter by 2 ft. wide, with wooden axle, arms and sole plates, but iron bosses and shrouds. It can be seen through an arch on the end wall; but no other machinery can be seen, except the wooden upright shaft, still in place. The mill would have had two storeys and an attic.

The very short leat takes off just above a waterfall, but has partly collapsed. There is a large terminal pond of roughly rectangular shape, with two walls stone lined, and the dam facing the mill. An iron pipe led the water through the dam to the wheel. The tail race is in a culvert under the mill yard for about thirty yards, then runs down to the R.Edw.

The 1st.ed. 1" OS map marks 'Court Mill'. The Tithe Map shows 'Mill' with a short leat and pond, just as now traceable. 'Mill (Dis.)' is shown on the 1:25,000 OS map of 1951.

B/3. **Hergest or Glanedw Mill**, parish of Llanbadarn-y-garreg (SO 124 493): on R.Edw, tributary to R.Wye.

Some fragments of this mill remain in the north-east angle between the farm road over the bridge and the road from Aberedw to Cregrina with which it makes a T-junction. There is nothing more substantial than some bits of wall and some scatterings of stone and slates. The 200-yard leat from the Edw is mostly still detectable.

The Tithe Map of 1839 shows the mill clearly, with its leat, and the Schedules also give it (parcel 3) as 'Glanedw Mill'.

B/4. **Walk Mill**, parish of Cregrina (SO 124 501): on R.Edw, tributary to R.Wye.

Stones and stone-slates lie on the ground as the only mark of the former mill, but there is no possible doubt of the site. The local people know it as the site of a former woollen mill, although it has probably been out of use for over 160 years. Its location beside a waterfall of about 10 ft. makes it most unlikely that it did not use water power, and, of course, it would not have needed a leat long enough to be marked on maps.

The source of greatest certainty about the site is the Tithe Map of 1839, which marks it clearly as 'Walk Mill' with a building, but no leat, as explained above.

B/5. **Glascwm or Yatt Mill**, parish of Glascwm (SO 153 531): on a brook tributary to Clas Brook, itself tributary to R.Edw, in turn tributary to R.Wye.

Recognisable fragments of the mill remain; in particular, the wheel pit is detectable. The wheel must have been overshot, probably about 14 ft. by 4 ft. The plan of the mill would have been about 40 ft. by 20 ft., with the long axis W-E and the wheel on the west end. There is one complete conglomerate monolithic millstone and pieces of others, one with the furrows very clear.

The arrangement of the leat is now impossible to follow owing to rebuilding of the farm roads, but it is clear that the power came entirely from the side brook.

The Tithe Map of 1840 shows 'Mill' here, with a very short leat of about 30 yards; the Schedules (parcel 1093) name the site as 'Yatt Mill'. It was a ruin by 1940 according to Stedman Davies.

B/6. **Hundred House Mill**, parish of Llansantffraed-in-Elvel (SO 114 546): on R.Edw, tributary to R.Wye.

The mill is part of a linear range of farm buildings, and still stands, complete with its machinery. It is said by its owners to have been last used for grinding in 1947. The wheel is in a covered wheel-house, is overshot, 10 ft. diameter by 4 ft. 4 in. wide, with wooden axle, arms, soleplates and buckets, but iron hub and shrouds. The interior of the mill is difficult of access, but the main gears appear to be of iron with wooden teeth on the pit wheel and great spur. The upright shaft and the crown wheel are of wood, but the crown wheel has an iron gear-ring bolted to its upper surface, with an iron bevel wheel engaging with it to drive a square-section iron horizontal shaft carrying wooden pulleys. There were probably originally two pairs of stones as two sets of wooden furniture are thrown aside, but there is now only one pair, French burrs by Kay & Hilton of Fleet Street, Liverpool, dated 1871, with circular holes for four balance units. The mill section of the farm buildings is about 20 ft. by 20 ft., but all the machinery is confined to the eastern 10 ft. adjacent to the water wheel. There are two storeys but no loft of useful size. There is a cottage section about 30 ft. by 20 ft.

There is a leat, now dry, almost half-a-mile long from the Edw, with a small terminal pond just above the wheel-house.

The 1st.ed. 1" OS map and the Tithe Map (c.1840) show the weir on the river and the leat; the Schedules to the Tithe Map name the mill 'Cadwgan Mill'.

Howse (Radnorshire, Hereford, 1949, p.97) claims this to be the last mill to be working in Radnorshire, and in his article of 1954 he states that it was still working then.

B/7. **Bettws Mill**, parish of Glascwm (SO 116 566): on R.Edw, tributary to R.Wye.

The river forms the boundary with the parish of Bettws Disserth, which no doubt accounts for the name of the mill. The mill and its cottage still stand on the east side of the river, but are integrated into an attractive residence which shows little sign of the former mill (Pl.3, bottom). However, the lower end of the quarter-mile leat was carried on an embankment which still remains in the garden, and the end of the tail race can be seen as it joins the river. The buildings had the long axis N-S, with the mill at the north end, about 20 ft. by 20 ft., with two storeys and an attic, and standing taller than the cottage.

The 1st.ed. 1" OS map shows 'Mill' here, and the Schedules to the Tithe Map of 1840 give the name 'Bettws Mill'. According to Stedman Davies, it was out of use by 1940.

B/8. **Fedw Mill**, parish of Glascwm (SO 141 574): on a brook tributary to R.Edw, itself tributary to R.Wye.

There is now little left at the site to indicate the former presence of a mill; just a pile of broken roofing slates, and a pile of old timber which includes what looks like an old upright shaft, with iron straps on some pieces of beam, also nails and bolt-holes. There is now no sign of the leat. Yet the site must be right, for it was shown as 'Old Mill' on the 1:25,000 OS map of 1951. It was shown as 'Felin-fedw' on the 1st.ed. 1" OS map, but is not shown satisfactorily on the Tithe Map or its Schedules, which merely have several parcels around this position with 'Mill' in the name. The article in the Western Mail of 1st November 1939 claims that this was one of the mills working in 1840.

B/9. **Cnitho Mill**, parish of Llanfaredd (SO 063 518): on Cnithio Brook, tributary to R.Wye.

The building still stands, the mill and attached cottage having been combined into one attractive residence (Pl.4). The mill was the southern part; it is devoid of machinery inside, but some of the old beams from the mill have been used in reconstruction, including one vertical beam with screw tentering gear and part of the bridge beam in the slot. The mill had two storeys and full-height attic. The pond was at the back, and the entrance to the stone floor was at the back, below the dam of the pond.

The wheel compartment, while internal, was open at the outside wall, and the wheel still remains in position although a little decayed. It was overshot, 14 ft. diameter by 3 ft. wide, with iron shrouds 9 in. deep, sheet iron sole plates mostly rusted away, wooden buckets, iron arms and bosses, and a wooden axle of 15 in. diameter. After the mill ceased operation as a corn mill, the wheel was used to drive a sawmill which worked until about 1935, employing seven men making such things as coffins. Thence until 1956, the wheel was used to drive an electricity generator. There is a 5 ft. 6 in. iron gear now fitted on the axle of the wheel, driving a 15 in. gear on a short shaft; this would have been the drive to the generator, and possibly earlier to the sawmill. The tail race is in a culvert, and the leat is still traceable.

The Tithe Map of 1843 or later shows 'Clitho Mill' with a 16-chain leat on the west side of the brook, with a terminal pond about 6 chains long. The spelling 'Cnitho' is used by the present owners, but 'Cnithio' is used by the Ordnance Survey on the 1:25,000 map of 1951 in relation to the brook.

B/10. **Cwmbach Mill**, parish of Llanelwedd (SO 029 539): on Dulas Brook, tributary to R.Wye.

There is now no sign of this mill at the site, which is

occupied by a car repair workshop. The pond must have been destroyed when the railway (the Central Wales line of the LNWR) was built in the mid-1860s, for the embankment must have gone at least partially across the pond. However, the Tithe Map of 1842 clearly shows the pond just above the road bridge over the brook, and the mill below on parcel 84, which the Schedules give as 'House Mill &c.'. The 6" OS map of 1905 shows the railway where the pond should have been, and a 'Smithy' on the site of the mill.

The site was a good one for a mill, having a head of water from falls on the brook without the necessity of building and maintaining a long leat.

B/11. **New Mead Mill**, parish of Disserth and Trecoed (SO 051 542): on brook tributary on east to Dulas Brook, itself tributary to R.Wye.

Only fragments of the building remain on a flat platform above the brook and just below the end of a 250-yard level embankment which evidently carried the leat along the north bank of the brook from just below the present road bridge over the brook, not far from New Mead Farm. The end of the leat is high enough above the mill site to have enabled an overshot wheel to have been used.

This site is not quite the same as that shown in the Tithe Map, for the latter appeared to be at SO 053 541, where the leat described above started. On the Tithe Map there was a pond on the brook itself, and no leat. It is therefore quite possible that a new mill was constructed at some time after 1840.

B/12. **Little Mill**, parish of Disserth and Trecoed (SO 038 550): on Dulas Brook, tributary to R.Wye.

The mill has been converted into a residence and retains almost no sign of its former use. The leat has gone in the vicinity of the mill, but still runs further up the valley and is a feature of the garden of the house where the former mill-owners live. They have a French-burr millstone from the mill. Apparently the water wheel broke in 1947, and the mill, which had two pairs of stones, then fell into disuse. It was sold and converted in 1980-81.

It was shown as 'Little Mill' on the 1st.ed. 1" OS map and on the 6" OS map of 1905, which showed the quarter-mile leat. The Tithe Map missed the mill as such, but it was included in the Schedules.

B/13. **Castle Crab Farm Wheel**, parish of Disserth and Trecoed (SO 050 553): on small brook tributary to upper reaches of Dulas Brook, itself tributary to R.Wye.

The farmer who had owned Castle Crab Farm from 1951 to 1987 said that the wheel was in place in 1951, but was destroyed soon after. It was all iron except for wooden buckets, about 20 ft. by 2 ft., overshot, and drove farm machinery but no mill stones. The pond was what is now the front farmyard, and was fed by a culverted leat under the road, which came from the upper waters of the small dingle nearby. There was, he thought, only enough water to drive the wheel in winter or after heavy rain. We could find no other information about the history of this wheel. The site is now completely filled in.

Possible Mills

B/P1. **Rhulen Mill**, parish of Rhulen (possibly around SO 14 50): presumably on tributary of R.Edw.

This was one of the mills quoted as working in 1840 in the article in The Western Mail of 1st Nov. 1939, but there is no other evidence at present. Neither the 1st. ed. 1" OS map nor the Tithe Map show any mill in the parish.

B/P2. **Old Mill** in Cregrina village, parish of Cregrina (SO 124 523): on R.Edw.

The article in The Western Mail of 1st Nov. 1939 mentioned a mill in Cregrina as working in 1840, but the only map evidence found was parcel 192 in the Schedules to the Tithe Map, which was 'Mill Meadow' at about SO 123 520, just below the church.

Enquiries in the village proved more helpful. Mr. Charles Evans, aged 81, born and bred in Cregrina and now living there in retirement, pointed out a leat just behind the village (which is really only a hamlet), and a piece of flat land between it and the river where he said his father (who died in 1940 aged 80) had told him there was a wood turnery and sawmill when he was younger, probably about 1880-1900. The father was a blacksmith and knew the wheelwrights who made wheels there. He was certain it was driven by a water wheel.

It seems quite possible that this was the site of the reputed corn mill, and it is possible that the corn-mill building was used for wood-turning and sawing. However, the head would have been insufficient for anything but an undershot or low-breast wheel; but there is enough water in the river even now for this to have been effective at most seasons.

B/P3. **Mill**, parish of Llansantffraid-in-Elvel (SO 191 547): on Camnant Brook, tributary to R.Edw.

The Schedules to the Tithe Map have 'Mill Field', 'Upper Mill Field', etc., around this point, but there seems no other map

evidence.

The position is possible. There are stone-lined banks to the stream which might have been dammed here, and there is an apparent take-off channel lined with old trees. There are no remains of any buildings, and there seems no other promising site in the vicinity.

B/P4. **Old Mill**, parish of Glascwm (SO 119 552): on a brook, tributary to R.Edw from east.

Although no sign could be found on the ground, nor did the farmer who had worked this land for twenty years know anything of a mill here, the site is quite suitable. The only evidence is that the Schedules to the Tithe Map show parcel 10 at this point as 'Old Mill'.

B/P5. **Old Mill**, parish of Disserth and Trecoed (SO 024 538): on Nant-y-Prophwyd, tributary to Dulas Brook, itself tributary to R.Wye.

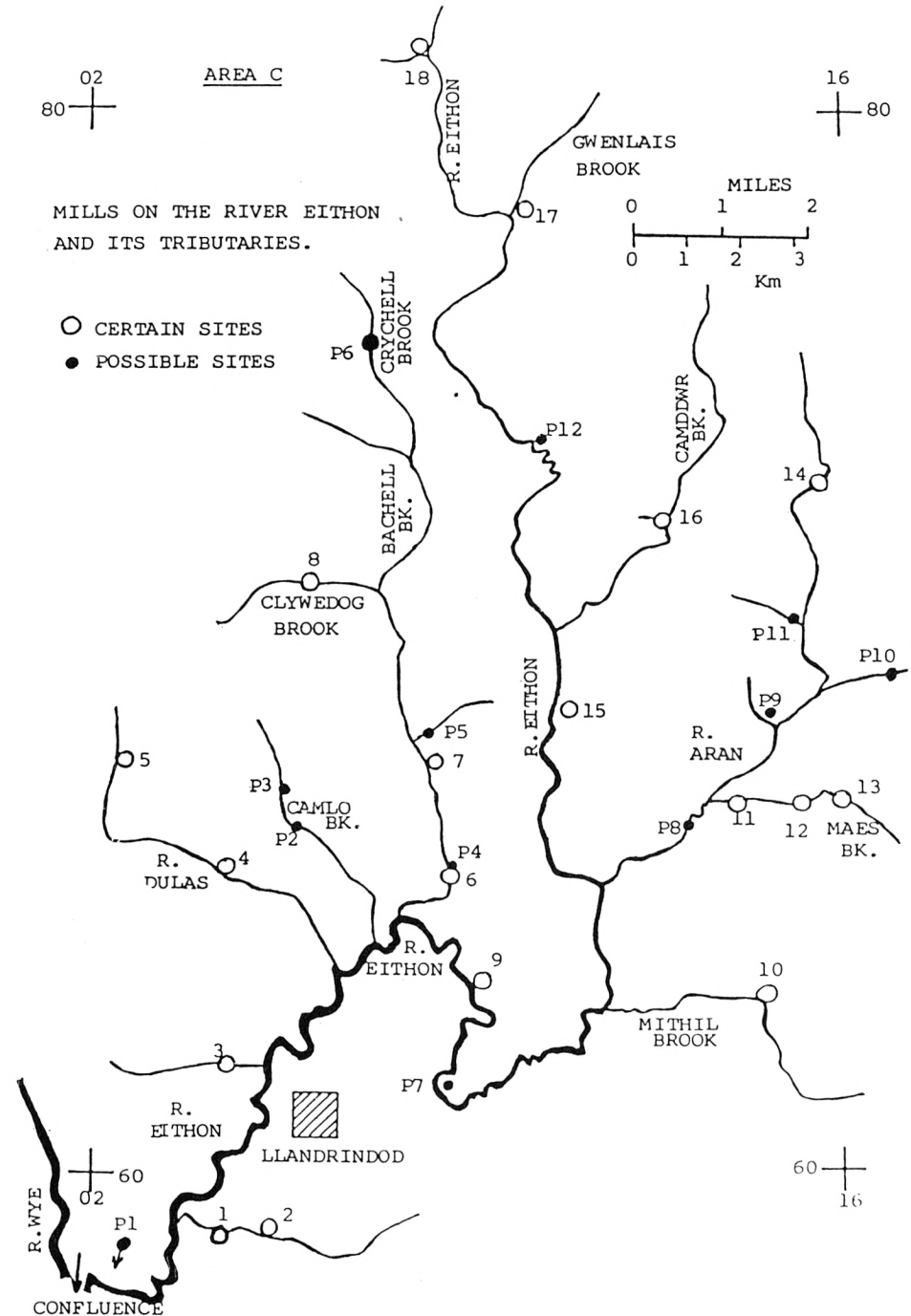
This site is not shown on any maps, but the Schedules to the Tithe Map show parcel 1165 here as 'Waste about the Old Mill'. The physical site is not very suitable for a mill, but a hundred yards upstream from the early twentieth-century house which now occupies the site is a patch surrounded by hedge-topped banks which might have been a pond, and the present path to the house is level and might have been a leat. But this may be letting imagination play too freely, for the brook is a very small one, and the head could have been only a few feet.

B/P6. **Rhydfelin**, parish of Disserth and Trecoed (SO 023 551): on Nant-y-Prophwyd, tributary to Dulas Brook, itself tributary to R.Wye.

The name is the clue here: 'Mill Ford' in English. But it is unlikely, so high up the little brook.

Part 3: Area 'C'

This area takes in the whole of the basin of the River Eithon, with its numerous tributaries. It is by far the largest of our areas and has the longest length of river. The northern part of the basin is an upland area, and the mills nos.14, 16, 17 and 18 are around 900-1000 ft. in altitude. The lower, or southern part of the basin is, however, of a rather different nature. Our map shows clearly how the river meanders over fairly flat land, falling only from about 700 ft. at the confluence of the Mithil Brook to a little under 500 ft. at its confluence with the Wye. Two of the Eithon's tributaries are given the dignity of 'River': the Dulas and the Aran; although the Clywedog Brook is a larger



stream than either. The gradients of the streams are not generally very great, and, although overshot water wheels are widely used, leats are generally quite long.

C/1. **Old Mill**, parish of Disserth and Trecoed (SO 042 588): on Howey Brook, tributary to R.Eithon.

The Tithe Map shows 'Mill' here, and the Schedules name parcel 530 as 'Old Mill'. No mill is shown on the 1st. ed. 1" OS map, but the Tithe Map evidence makes the site certain.

Physical examination of the site shows a depression on the south side of the brook, now covered in rushes; this must have been the mill pond as it has what is clearly a former leat entering at the eastern end. There are stones, probably once part of the mill walls, lying below the bank of the pond, between it and the brook.

C/2. **Howey Mill**, parish of Llandrindod (SO 053 587): on Howey Brook, tributary to R.Eithon.

The building still stands, the part that was the mill itself having two storeys and an attic, but devoid of machinery since before 1940 according to Stedman Davies (Pl.5). The external overshot wheel on the eastern wall was apparently in place in 1940 but quite derelict. There was a cottage attached at the western end, and a smaller building beyond that which might possibly have been a kiln, although doubt is cast on this idea by the fact that the plot across the road is now called 'The Kiln'. The wheel pit remains, with above it a small terminal pond, partly stone lined, formerly fed by a half-mile leat, now dry.

The buildings have been converted into an attractive residence, incorporating the old beams, though not necessarily in their original positions. The construction is of stone, and the cladding of weatherboarding is recent.

The mill was shown, with leat and terminal pond, on the Tithe Map of 1840. This map also shows a building, which may have been the kiln, on a plot on the opposite side of the road, belonging to the mill. Howse states that the mill was working in 1901. Note that most of the village is on the opposite side of the brook and is thus in Disserth parish.

C/3. **Llanyre Mill**, parish of Llanyre (SO 043 620): on Cwm-nant Brook, a tributary of R.Eithon from the west.

The mill site lies entirely under the new road embankment, through which the brook is culverted. The only detectable signs of the former existence of the mill are therefore the depressions in the field to the west of the road which correspond closely to the leat and head-pond shown on the Tithe Map of 1842. This map

marks 'Mill' here, and the 1st.ed. 1" OS map marks 'Felin Llanyre'. According to the Radnorshire Field Names Survey of 1970, there was a separate corn-drying kiln here.

C/4. **Caerfagu Mill**, parish of Nantmel (SO 043 656): on R.Dulas, tributary of R.Eithon from the west.

The mill building and the attached cottage still remain in excellent condition, and the mill retains all its internal machinery in good condition apart from missing wooden teeth on the great spur wheel (Pl.6, Figs. 6-8). It has, however, been converted to a residence, and the machinery forms merely a feature of interest. The pit wheel is of iron with wooden teeth and is 7 ft. 6 in. diameter on an 18-inch wooden axle. The wallower is a single iron casting (including teeth), 3 ft. 5 in. diameter overall. The iron spur wheel of 6 ft. diameter lacks its wooden teeth. The wooden upright shaft is 13 in. diameter. There are two iron stone-nuts on iron spindles, with ordinary screw centering. The wooden crown wheel has wooden teeth, 4 ft. 10 1/2 in. diameter overall. The cog and pulley for the sack-hoist are in place, but the hoist itself is missing. There are two pairs of stones; one pair appears to be French burrs of 47 in. diameter with an 8-inch circumferential band; the other pair, of 50 1/2 in. diameter, has a conglomerate runner on what looks like a grit bedstone.

The cottage has two storeys, the mill three. The range of buildings lies parallel to the river on its north bank. The half-mile leat with its small head-pond runs on the north side of the mill, and the external wheel, probably overshot but now missing, was on the east wall. The internal machinery is consequently concentrated in the eastern part of the mill. Ruins across the lane were probably a drying kiln. The top storey of the mill was extended upwards in 1859 according to a datestone. The construction is of stone.

The mill is shown on the Tithe Award map of 1840 and as 'Felin' on the 1st. ed. 1" OS map. It was out of use before 1940 according to Stedman Davies.

C/5. **Vaynor Mill**, parish of Nantmel (SO 024 677): on R.Dulas, tributary of R.Eithon from the west.

No trace of any mill could be found in this area, nor could elderly life-long residents remember any. Nevertheless the site is reasonably definite, for the Tithe Award map of 1840 shows 'Mill &c' in parcel 971 here, and 'Vaynor Mill' is shown on the 1st. ed. 1" OS map at approximately this position.

C/6. **Coedgwan Mill**, parish of Llanbadarn Fawr (SO 085 655): on Clywedog Brook, tributary of R.Eithon from the north.

The mill has been almost entirely dismantled and a new house built on its foundations, incorporating some of its beams. The mill was timber-framed and weather-boarded, on a stone base. No machinery remains, but the mill had an external overshot wheel on its south wall, fed by a leat about two-thirds of a mile long which can still be largely traced. There were two pairs of stones, all French burr, of which one pair, 48 in. diameter and very little worn, lies in the adjoining paddock and is believed to have once had a Kay & Hilton maker's plate.

The sketch by Joanne Munro reproduced here (Pl. 7) gives a good impression of the former appearance of the ruined mill before demolition; it is well supported by photographs which, however, are not good enough to reproduce.

The mill is shown on the Tithe Award map of 1839 in parcel 478. The adjacent parcel 477 was named 'Kiln Meadow', so there was evidently a drying kiln. The mill was called 'Hall Mill' on the 1st. ed. 1" OS map, from the nearby Coedgwgan Hall. Stedman Davies says the mill was still complete in 1940.

C/7. **Coed Trewernau Mill**, parish of Llanddewi-Ystradenni (SO 081 676): on Clywedog Brook, tributary of R.Eithon.

This small two-storey mill (about 24 ft. by 18 ft. internally) still stands, with its attached small cottage, and has almost complete internal machinery, which is remarkable for being almost entirely of wood, the only exceptions being the bearings and one or two straps on the pit wheel, and, of course, the stones (Pl.8; Figs. 9-13). There were originally two pairs of stones; only two individual stones remain, both monolithic grit stones; one is in situ as a bedstone. The pit wheel is about 7 ft. diameter, of clasp-arm construction, with its morticed teeth all missing; it has dropped about 6 in. so that it cannot now engage with the solid wood wallower, which is about 2 ft. 6 in. diameter and has its teeth still in place. The clasp-arm great spur, of about 4 ft. 6 in. diameter, still has most of its teeth. The upright shaft is very short and does not extend into the stone floor, and there was never a water-powered sack hoist. The owner, Mr. Ralph Morris, who very kindly showed us round, remembers that when he was a boy and the mill was working, the sacks were wound up by hand. Unfortunately the stone nuts and spindles are missing, and one must suppose that they were of iron, and probably accompanied the iron water-wheel when it was taken for scrap in 1940.

The mill faces south, with the cottage in line on the east, and the wheel pit on the west. The Tithe Map of 1839 shows the mill as Coed-Werney (Coed-y-Werney on the Apportionments), and with a leat three-eighths of a mile long coming from the north and terminating in a sizeable pond at the back (north) of the mill. The embankment for the head-race still remains.

C/8. **Abbey Cwmhir Mill**, parish of Abbey Cwmhir (SO 059 711): on Clywedog Brook, tributary to R.Eithon.

The mill is derelict and partly ruinous (Pl.9, top). It had two storeys and an attic, with its roof-ridge lying north to south, and an internal wheel on the south wall, overshot and about 16 ft. diameter and 5 ft. wide. Most of the machinery has gone, but parts of the floors remain and the stone floor has two sets of French burr stones. Both runners have balancing weights, the eastern one has circular boxes and the western one has rectangular boxes.

The stonework of the mill is evidently old, but the roof seems much less so. A wooden pulley and the hoist remain in the roof. There are several sheds adjacent to the mill, but although none looks like a kiln, there are numerous pieces of perforated iron sheet lying about, each 5 ft. by 2 ft. with holes at 1-in. spacing.

The leat came from the west, the last section being in a culvert. About a hundred yards before the mill, the leat has a stone-lined section with a sluice in the northern wall to allow water to flow into the meadow below the embankment (or perhaps into a culvert under the meadow and so into the brook about a hundred yards away); unfortunately the leat is filled with old cars and other rubbish. The tail-race was culverted under the garden of the mill house, which was separate.

The mill and a kiln were shown on the Tithe Awards, c.1840, and 'Mill' was shown on the 1st. ed. 1" OS map. Stedman Davies reported the mill to be partly dismantled in 1940.

Information on the mill in the early nineteenth century is given in Layton Cooke's 'Report on the Abbey Cwmhir Estate 1822', annotated by Thomas Wilson in 1833, as printed by the Radnorshire Society in its *Transactions*, Vols. 35 & 36, and particularly as far as the mill is concerned, Vol.51 (for 1980). The mill was leased to Edward Meredith from 1808 to 1829, when it 'came into hand', i.e. reverted to the owner Thomas Wilson. Meredith had let the mill fall into disrepair to an extent estimated as £91.10s. 0d. in 1822, but for which the owner accepted £60 in compensation in 1829, and then repaired it himself. Walls were rebuilt and the machinery put into perfect order. A Dressing Machine was added, as was 'an iron Drying kiln'. Evidently the perforated iron plates which still lie about the site are likely to have been first fitted around 1830.

C/9. **Trelowgoed Mill**, parish of Cefnlllys (SO 090 634): on R.Eithon.

Although still called Trelowgoed Mill, this stone building has been completely converted to a house (Pl.9, bottom). The machinery is believed to have been taken out about 1950, and all that now remains is the wooden axle and a part of the iron wheel,

which was made by a millwright in Newtown. There was a weir on the R.Eithon and a very short leat from the north-west, and the wheel was undershot. According to Stedman Davies the mill was still complete in 1940. It was marked as 'Mill' on the 1st. ed. 1" OS map of a hundred years earlier, but was probably quite old then.

C/10. **Llandegley Mill**, parish of Llandegley (SO 143 633): on Mithil Brook, tributary to R.Eithon from the east.

The shell of the stone-built mill still stands, in use as a cowshed, absolutely devoid of machinery and evidently disused for a long time. It is very small, about 15 ft. by 20 ft., with two storeys and a small attic. The leat is still detectable and wet, and gave a head of 10-15 ft. for a small overshot or high-breast wheel on the south wall. A derelict cottage nearby was presumably the miller's cottage.

The mill was marked as 'Mill' on the 1:25,000 OS map as recently as 1951, yet was missed by Stedman Davies in 1940 and not included in Howse's list of mills working in 1901. The 1st. ed. 1" OS map does not show it, but the Tithe Map of 1843 marks it as 'Old Mill', while the Tithe Apportionments show parcel 518 as 'Old Mill', parcel 520 as 'Mill Close', and parcel 521 as 'Doles by Kiln'. It is possible, therefore, that the mill has been continuously out of use since early in the nineteenth century, and it is certain that when it was in use it had a drying kiln.

C/11. **Lower Mill, Dolau**, parish of Llanfihangel Rhydithon (SO 138 668): on Maes Brook, tributary to R.Aran, itself tributary to R.Eithon.

The site is easily found on Great Dolau Farm; the line of the leat is detectable, and is crossed on the lane leading to the farm, with the depression of the former mill-pond on one's right. Beyond the still-remaining pond-dam, just below it, is a pile of stone believed to have been some of the wall material of the mill. The only other sign of the former mill is a fragment of a sandstone or grit millstone grooved for a four-pronged rynd, lying in the nearby garden at the time of our visit.

The mill must have gone well over a century ago, for it was not shown on the 6" OS map surveyed in 1887. It seems to be indicated, though not in words, on the 1st. ed 1" OS map. The Tithe Map of 1839 does not show the mill, but the Schedules give the parcel containing the site (parcel 40 at Lower Dolau Farm) as 'Maes y fellin'; it thus seems likely that the mill was derelict even 150 years ago, although the name confirms it as a mill site.

C/12. **Woollen Mill, Dolau**, parish of Llanfihangel Rhydithon (SO 152 668): on Maes Brook, tributary to R.Aran, itself tributary to

R.Eithon.

The mill building still stands, in line with and joined to the former mill house. They have been renamed, the former as Cwm Arran Mill, the latter as Walk Mill. There is no doubt as to the identification, for the leat still remains coming from the right (i.e. from the east) to the back of the mill, where the wheel pit is still distinct. Both the mill and the house are now occupied as separate residences of good class. The front (south) wall of the building is now slate-hung. The walls are substantial, there is a buttress on the front, and the mill was quite probably at some time a fulling mill; there was a good head and flow of water and ample power was probably available. However, it was in 1887 a 'Cloth Factory' according to the 6" OS map surveyed then. It had become a dwelling house by 1940, according to Stedman Davies.

The mill is not marked on the 1st. ed 1" OS map; the Tithe Map of 1839 does not show the mill either, but the Schedules give 'Walk Mill' as the heading for the property, of which one parcel is 'Homestead' and another 'Rack Piece'. It seems therefore that it had ceased work as a fulling mill well before 1839.

It is believed that this mill was used as a weaving mill later in the nineteenth century, perhaps up to the 1880s (see W.H.Howse, Radnorshire, Hereford, 1949, p.97).

C/13. **Upper Mill, Dolau**, parish of Llanfihangel Rhydithon (SO 158 670): on Maes Brook, tributary to R.Aran, itself tributary to R.Eithon.

This stone-built mill still survives, but is devoid of machinery except for wooden pulleys and bedstones on the first floor (Pl.10, top). It was last used in 1937. The front of the mill faces west; the wheel was on the north side and was about 16 ft. diameter by 3 ft. 6 in. wide. There were two pairs of French burr millstones. A drying kiln was associated with the mill. The machinery was removed in 1949.

The quarter-mile leat was used by the Council in 1950 to drive a hydraulic ram to supply water to the parish.

'Upper Mill' was shown on the 1st. ed. 1" OS map, and on the Tithe Map and Schedules of 1839.

C/14. **Cantell Mill**, parish of Llanbister (SO 156 730): on R.Aran, tributary to R.Eithon.

Still standing, this brick-built mill is devoid of machinery except for two wooden pulleys, one wooden gear-wheel, and one French burr bedstone in situ on the gallery-type stone floor (Pl.10, bottom). There had once been two pairs of stones. The building is about 32 ft. by 22 ft. in plan, with the long side facing the river on the north-west. The wheel had been on the

north-east side, external, and the still-detectable leat and terminal pond provided a head of about 12 ft. The machinery had all been at the north-east end of the building, and an oven and fireplace at the other end (which looked newer) suggest that the south-west part provided a small cottage for the miller. The mill part had two storeys and a small attic. The exterior of the upper part of the north-east wall is weatherboarded.

According to Stedman Davies, the mill was disused before 1940. It must then have been over a hundred years old, for 'Cantell Mill' is marked on the 1st. ed. 1" OS map.

A new farmhouse has been built up the hill to the north-west, but the old one still stands, unoccupied, facing the mill across the river.

C/15. **Llanddewi Ystradenni Mill**, parish of Llanddewi Ystradenni (SO 107 686): on R.Eithon.

The building still stands, but converted into a house and almost unrecognisable as a former mill (Pl.11, top). Yet Stedman Davies said that it was working as a corn mill in 1939, with three storeys, iron wheels and two sets of stones. The long leat (about three quarters of a mile) is still detectable, and the terminal pond is now dry and the site of a bungalow named 'Millfield'. The Eithon valley has here a very low gradient, and in spite of its length, the leat provided such a low head that the wheel must have been undershot.

The Tithe Map of 1839 shows the mill, pond and leat in their present configurations.

C/16. **Ddol or Dol Mill**, parish of Llanbister (SO 127 724): on Camddwr Brook, tributary to R.Eithon.

There are no remains of the mill building (nor does an elderly farmer who lives nearby remember any), but there is ample evidence of the former existence of the mill. The old terminal pond, about 75 yards long by 10 yards wide, remains, though dry, on the north-west bank of the brook; it is harder to detect the leat which fed it. There are many signs of old earth banks at the presumed mill-site. The head would have been about 6 ft.

The Tithe Map marked 'Mill' here, and the slope opposite is called 'Mill Bank'. Parcels 1601-2 on the Tithe Map are 'Upper' and 'Lower Kiln Pieces', so evidently there was a drying kiln.

C/17. **Abergwenlais Mill**, parish of Llanbadarn Fynydd (SO 097 783): on the Gwenlais Brook, near confluence with R.Eithon.

The mill is a stone-built structure separate from the house (unfortunately Stedman Davies was wrong in this particular) and

used to have a datestone showing 1862. One informant stated that this was the date of construction and that the mill was driven by a turbine from the beginning; another informant said that the mill was much older, and that 1862 was the date of a major reconstruction, when a turbine replaced a water wheel. It was a flour mill, and there is still a flour dresser in the mill. The turbine is understood to be still in situ, and there is one French burr stone and also a Peak millstone in situ; otherwise there is no mill machinery left. For a time, during World War II, the building was used as an undertaker's workshop. There was no drying kiln.

Outside the mill is a most unusual millstone: made of sandstone/quartz conglomerate of a pink colour (from Penallt, Gwent?) in four segments clamped by iron bands (Pl.11, bottom).

The early history of the mill is obscure because it is not marked on the 1st. ed. 1" OS map, nor is any leat. The Tithe Map of 1844 shows a leat almost half a mile long extending to this site, but neither the Map nor the Schedules name any mill. Probably there was an earlier mill here, the leat of which the later mill utilised.

C/18. **Crochran Mill**, parish of Llanbadarn Fynydd (SO 082 811): on R.Eithon.

The mill itself has practically disappeared, only some footings of coarse conglomerate and a discarded grit millstone remaining. The mill site was on the south side of a large embankment which carried the leat from the R.Eithon and the terminal pond. An old stone shed still stands by the mill pond, and, being visible from the road some two hundred yards away, gives an initial impression that the mill still stands.

The tailwater from the mill ran into the Berllwyd Brook just below it. As the mill appears from the remains to have been quite a small one, and the brook seems quite a powerful one, it is rather puzzling that an expensive massive embankment should have been constructed to bring water from the Eithon when the brook would probably have sufficed. The leat, two-thirds of a mile long, and the embankment were shown on the Tithe Map of 1844, and on the 25" OS map of 1903 with the mill labelled 'Crochran Mill' and the pond labelled 'Old Mill Pond'. On the 1st. ed. 1" OS map, 'Felin Crochran' is marked. The mill may have gone out of use before the end of the century, as suggested by 'Old Mill Pond' on the 25" map, and confirmed by an entry in the Radnor Field Names Survey of 1970: 'Old water mill for grinding corn. Last used about 80 years ago'. Further support comes from the fact that the grandfather of the present owner of Abergwenlais Mill is known to have been the miller at Crochran before moving to Abergwenlais, presumably when the former ceased work.

Possible Mills

C/P1. **Pont a'r Ithon Mill**, parish of Disserth and Trecoed (SO 019 572): on R.Eithon, tributary to R.Wye.

Howse refers to this mill in his booklet (W.H.Howse, Disserth, Radnorshire, Disserth, 1987, p.20). The Tithe Map and various OS maps show no sign of a mill near here. The area on the right-hand bank of the river provides possible sites for a mill, with the pond perhaps above the road bridge and the mill itself below. But there seems no positive indication that there was ever a mill here.

C/P2. **Old Mill** near Carmel Bridge, parish of Nantmel (SO 057 665): on Camlo Brook, tributary to R.Eithon.

The Tithe Map of 1840 shows 'Old Mill Meadows' for parcel 180, as part of Upper Talcoed Farm. The mill must therefore have been abandoned before 1840. The site is quite suitable for a mill, but no sign of one could be found. The Elan Pipeline runs on an aqueduct over the Camlo valley just here, and the construction of this massive stone structure could well have destroyed any remains of the mill.

C/P3. **Cryndir Farm Mill**, parish of Nantmel (SO 054 672): on Camlo Brook, tributary to R.Eithon.

The Tithe Map of 1840 shows 'Mill Bank' for parcels 322 and 325, as part of Cryndir Farm. Although not an impossible site, it is very unlikely.

C/P4. **Coedgwgan Carding Mill**, parish of Llanbadarn Fawr (SO 085 655): on Clywedog Brook, tributary to R.Eithon.

According to Stedman Davies, Coedgwgan Mill had, in the middle of the nineteenth century, another building containing a carding machine, where wool was prepared for spinning. It is not known whether or not this was water-powered, but in this situation it could very easily have been driven by a water wheel. There is no building now that could obviously have been a woollen mill, although 'Mill Cottage' (across the former pond from the corn mill) is well situated for this use.

C/P5. **Pandy**, parish of Llanddewi Ystradenni (SO 080 682): on Pandy Brook, tributary to Clywedog Brook, itself tributary to R.Eithon.

The name of the brook gives the suggestion of a former woollen mill here; the name 'Pandy' appears on the 1:25,000 OS map of 1952. It is quite a powerful brook, and the site is suitable, but there are no signs of any remains of a mill. The Tithe Map and Schedules give no help.

C/P6. **Flock Mill**, parish of Llananno (approx. SO 070 756): on Crychall Brook, tributary to Bachell Brook, which is tributary to Clywedog Brook, tributary to R.Eithon.

It is thought that this mill has entirely disappeared. It was shown as 'Flock Mill' on the Tithe Map of 1843, and as 'Walk Mill' on the 2nd. ed. 6" OS map of 1904.

C/P7. **Mill** at Cefnlllys, parish of Cefnlllys (approx. SO 083 615): on R.Eithon.

The only documentary evidence for this mill appears to be the Map of South Wales and the Border in the Fourteenth Century by William Rees, cited by Stedman Davies. The site is supposed to be near the church, and it is certain that there was a water channel still traceable, looking like a long leat, across the meadow below the church, which might have given a few feet of head for an undershot wheel.

C/P8. **Mill**, near Ty-du Farm, parish of Llanddewi Ystradenni (approx. SO 130 664): on R.Aran, tributary to R.Eithon.

The Tithe Apportionments of 1839 show 'Mill Piece' (parcel 881) and 'Lower Mill Piece' (parcel 880) here, although the Tithe Map itself does not indicate a mill. So the mill must have been eighteenth century or earlier.

C/P9. **Mill**, near Far Hall, parish of Llanddewi Ystradenni (SO 146 684): on a small brook tributary to R.Aran, itself tributary to R.Eithon.

The Tithe Apportionments of 1839 show 'Mill Meadow' (parcel 1275) and 'Kiln Close' (parcel 1279) here, although the Tithe Map itself does not indicate a mill. Presumably the mill and its kiln were of the eighteenth century or earlier.

C/P10. **Mill**, parish of Llanfihangel Rhydithon (SO 167 690): on a brook tributary to R.Aran, itself tributary to R.Eithon.

Although the Tithe Map of 1839 shows no mill here, nor does the 1st. ed. 1" OS map, the Schedules accompanying the Tithe Map have parcel 745 as 'Mill Piece' and parcel 746 as 'Mill Meadow' around this position. There must have been a mill here at some earlier time.

C/P11. **Mill**, parish of Llanddewi Ystradenni (SO 151 703): on Nant-y-Gelli, tributary to R.Aran, itself tributary to R.Eithon.

'Dol-y-felin' is marked on the Tithe Map and Apportionments of 1839 (parcel 1381), near the confluence of Nant-y-Gelli with R.Aran, beside Castell-Cwm-Aran.

C/P12. **Felin-llwyn-bedw**, parish of Llanbister (SO 103 738): on R.Eithon or on a small brook tributary to it.

The name is marked on the 1st. ed. 1" OS map, but is not shown on the Tithe Maps for Llanbister or Llananno, nor on the 6" OS map of 1904. There are no signs of a mill on the ground, but the position indicated would seem to be the only possible site in the vicinity. This is a very doubtful mill site, however.

Part 4: Area 'D'

This area is basically the town of Rhayader, the Elan Valley, and the uppermost stretch of the R.Wye in Radnorshire. More than half the mill-sites (eleven out of twenty-one) are within a mile of the centre of Rhayader. Five of these use the water of the Wye itself, this being convenient not only because the river is not here particularly large, but more particularly because there are convenient rapids and waterfalls which can be harnessed cheaply. Because of the commercial interests of the town, the water power drove woollen and leather mills or works as well as corn mills. Rhayader's electricity also came from local water power for a time.

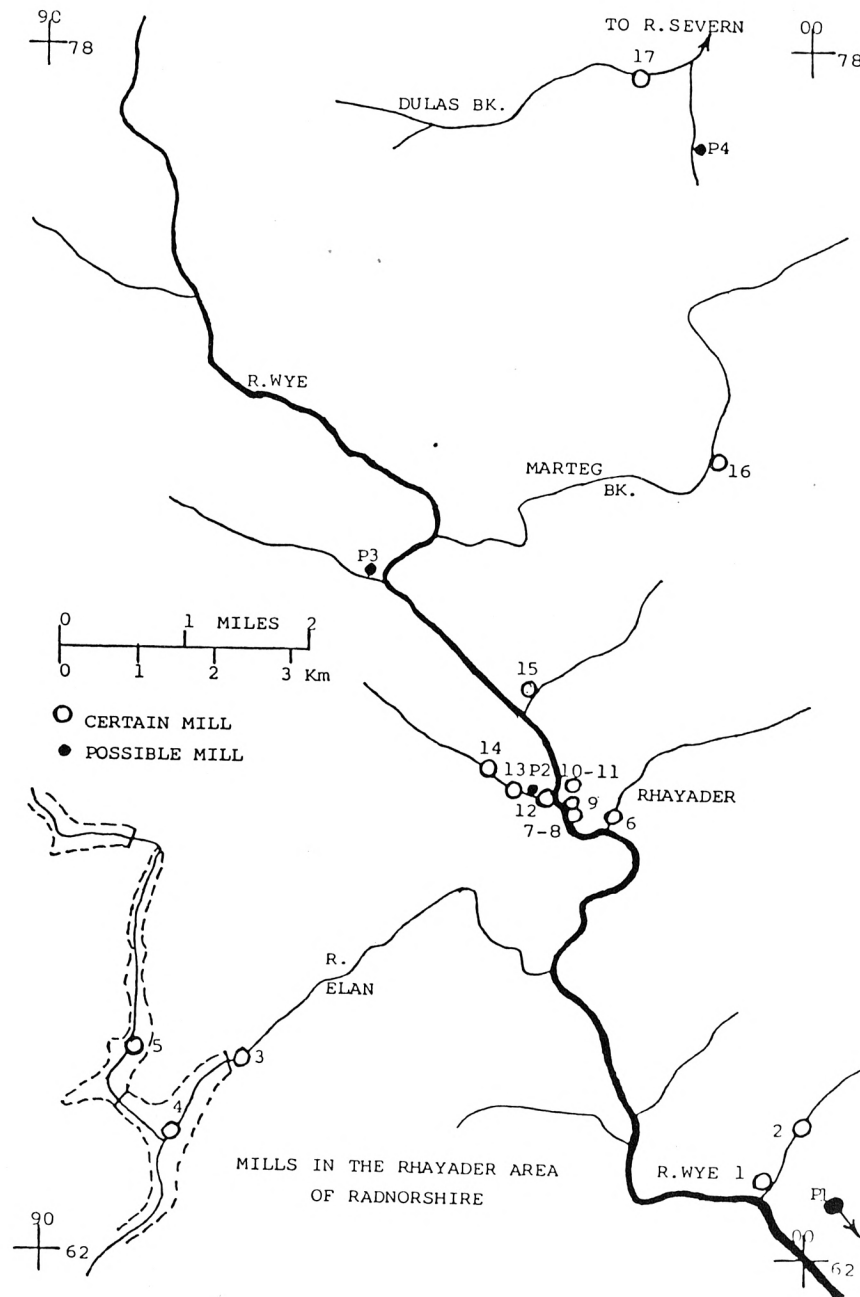
The Radnorshire boundary, which follows the middle of the Wye most of the way through our four study areas, leaves it just below Rhayader and follows the Elan river. The Wye enters Radnorshire from Montgomeryshire at the north as quite a modest mountain stream at about 900 ft. altitude.

For convenience, we include in this area a small brook - another Dulas - which drains to the R.Severn to the north, but has one important mill on it, and a possible site on a tributary brook, both in Radnorshire.

We should mention again that water wheels were also used at the metal mines in the west of this area.

D/1. **Argoed Mill**, parish of Nantmel (SN 995 628): on Nant Treflyn, tributary to R.Wye.

The building still stands, in good condition but devoid of machinery and used as a furniture store for Doldowlod Hall, of whose estate it is a part (Pl.12). The former miller's house is linked to the mill by a barn, and is now the Post Office for the neighbourhood. The mill is of three storeys, of stone construction, about 45 ft. by 34 ft. in plan, with an eight-foot wide wheelhouse on the wall remote from the Post Office. The



water from the leat was carried on its last stage in a 15-in. pipe on a well-built stone aqueduct (still standing and sound) about 4 ft. wide by 12 ft. high, with a large archway giving access to the garden. There was a drying kiln, now in use as a shed.

According to Stedman Davies, the mill was also known as 'Melin Rhos', had three sets of stones, and was in use for grinding corn until the early 1930s. Mr. G. Phillips, manager of the Doldowlod Estate, said that the mill machinery was taken out in 1934, and a turbine put in to generate electricity for the village and the Hall from then until 1965, when a mains supply became available and the turbine was scrapped.

The Tithe Award Map of 1840 names the mill as 'Argoed Fawr Mill'.

D/2. **Cornel Mill**, parish of Nantmel (SO 001 637): on Nant Treflyn, tributary to R.Wye.

Ruins of the mill and mill house, which were in line as one stone building, still remain. The house has been gutted by fire, and the mill is just a pile of stones. The wheel, which was probably overshot and of about 12 ft. diameter, is buried under the stones and a small part of it can be seen. The land above the mill has been much changed by farming; no part of the leat remains, and only traces of the old head pond dam. A line of ancient oak trees, with about 3 ft. of roots above the present level of the land, may indicate the lower bank of the leat.

There is some choice for the name of this mill. 'Cornel Mill' is the name on the 1st. ed. 1" OS map and on the Tithe Map of 1840. The Apportionments accompanying the Tithe Map, however, call it 'Llwyn Piod Mill' (parcel 1811). On the 1:25,000 OS map of 1951 the name is 'Coed Tew Mill'.

D/3. **Electricity Generating Stations** in the Elan Valley, parish of Llansantffraed-Cwmdeuddwr (SN 925 645): on R.Elan, tributary to R.Wye from the west.

There are two hydroelectric generating stations here, still in use, one at each end of the bridge over the R.Elan just below the massive Caban Coch dam of the Elan Valley waterworks system (Pl.13). They are relatively small, each with a capacity originally of about 100 hp but now several times larger; the electricity was used in the works and village, and now some is exported to the national system. They were built at the beginning of the present century, when the dam was constructed, and their original specification is given in the book by C. Judge, The Elan Valley Railway (Oakwood Press, Oxford, 1987, p.194). It is understood that new larger turbines with AC generators replaced the original DC plant in the 1950s.

There was an earlier generating station here to serve the construction works. Judge says (p.77): 'The village [i.e. the construction workers' village] by this time [1896] had electricity in all the main buildings and street lighting being powered from a generator situated near the base of the Caban Coch dam, run by "water power"'.

The present stations are shown as 'Power Houses' on the modern 1:10,000 OS map. They operate on the compensation water flow of 27M gallons a day drawn off by pipes 102 ft. below the top of the dam, and as the minimum head required to give full output from the original turbines was only 26 ft., there was normally a large surplus of potential power being wasted; the new machines make better use of this. The turbine, generator and exciter at each station are on the same horizontal shaft, and may be seen through the windows.

The earlier station might have been on a somewhat different site, for it was fed from 'a small coffer dam built on Nant y Gro (SN 922 635)', according to E.Anne McBride in Elan, published by the Welsh Water Authority (1987), p.35.

D/4. **Groe Mill**, parish of Llansantffraed-Cwmdeuddwr (SN 918 637): on R.Elan, tributary to R.Wye.

The site of this mill is now under the Caban-coch reservoir. The Tithe Map of 1838 shows 'Groe Mill' here. The 1st. ed. 1" OS map does not name the mill, but shows it nevertheless with a half-mile leat from the Elan, taking off above the confluence with the Claerwen, and with the tail race joining below the confluence. The 6" OS map of c.1890 shows 'Gro Mill' about a hundred yards below the church. Its leat started just about where the Foel Tower now stands, drawing off water from the Carreg-ddu reservoir for the pipeline to Birmingham.

D/5. **Cwm Elan Mill**, parish of Llansantffraed-Cwmdeuddwr (approx. SN 913 648): on Nant Methan, tributary to R.Elan, itself tributary to R.Wye.

The site is now under the Carreg-ddu reservoir.

The only positive evidence for the former existence of this mill is the 1st. ed. 1" OS map, which marks 'Mill', with a clearly indicated leat of about two-thirds of a mile in length from the Nant Methan, and with a tail race to the R.Elan. The fact that the whole system is shown makes it almost impossible for the marking to be a mistake.

D/6. **Tannery**, parish of Rhayader (SN 975 678): on Rhyd-hir Brook, tributary to R.Wye from the east.

The site is still recognisable in the north-west angle of the

brook and the A470 road. The whole range of buildings, including a bark mill powered by a short leat from the steeply-falling brook, has been removed and re-erected at the Welsh Folk Museum at St Fagans. It is described in the booklet by J.G.Jenkins, The Rhaeadr Tannery, published by the museum in 1973.

The site is clearly shown on the 1st. ed. 25" OS map of 1889.

D/7. **Woollen Mill**, and

D/8. **Corn Mill**, parish of Rhayader (SN 9685 6780): on R.Wye, below the Town Bridge.

These two mills are treated together because they were joined together in several ways: they shared the same leat, they were accommodated in the eastern and western ends respectively of the same long building of stone construction, their water wheels were said to have shared the same heavy wooden axle, and they had the same tail race. It is, in fact, extremely unlikely that the two wheels would have had a common axle; there were probably two separate axles on the same axis. In the Tithe Map of 1841, the leat and tail race are shown connected to the middle of the long narrow building, as they are in the 25" OS map of 1889, although the two mills are not separately identified. There were apparently two separate wheels, without a wall between them, undershot, and about 12-15 ft. diameter. How they operated is not known, and there must have been problems in reconciling the needs of two such different kinds of mill. The machinery remained until after 1945, and the corn mill had three pairs of stones. Weaving was done, at least between the Wars, at the woollen mill. The corn mill had a drying kiln behind it.

The building remains, much altered inside, and joined to new construction to make a large and attractive house called 'Water Grist Mill'. Its garden includes, according to the deeds, an area called 'The Racks', presumably where the cloth workers at the mill had their tentering racks. The leat can still be seen to the north of the buildings; it was quite short because it took off just above a natural waterfall in the Wye. The tail race is still distinct below the buildings and provides an approach lane to a ford across the Wye. This is no doubt why one of the names of the lane is Water or Watery Lane, the other being Mill Street.

In the garden is a pair of monolithic millstones of quartz/sandstone conglomerate; there is also a single stone in six segments which appears to be of French burr. All the stones have iron bands and are of 3 ft. 6 in. diameter. They were removed from the mill only in 1984.

No name or history is known for the woollen mill at present, but the corn mill has a long record. It was probably the 'grist mill' and 'Rayder mill' referred to in documents of 1570 and 1571 which Mr. Brian Lawrence has told me about. It was probably the 'Rhayader Mill' of 1784, with Evan Stephens as tenant, which Stedman Davies mentions. It was 'Town Mill' in nineteenth-century

directories, occupied by Edward James in 1850 and Mrs. Mary James in 1875. It was 'Watery Lane Mill', according to Howse, in 1901.

D/9. **Tannery**, parish of Rhayader (SN 9687 6785): on R.Wye, below the Town Bridge and just north of Watery Lane (otherwise known as Mill Street).

Some of the buildings remain and one can still see the tanning pits. The construction was in stone. One or two of the buildings could have made use of the leat alongside, and it is believed there was a water wheel, probably to drive a bark mill. The leat was the one that drove the woollen mill and corn mill discussed above. The water would certainly have been used for the tanning process.

The Tithe Map of 1841 shows what seem to be these buildings, but does not label them. On the 25" OS map of 1889, they are marked 'Tannery'.

D/10. **Castle Leather Works**, parish of Rhayader (SN 9685 6795): on R.Wye, above the Town Bridge.

There are now practically no detectable remains of this large water-powered works. The Tithe Map of 1841 shows a building here about 100 ft. by 30 ft., with a hundred-yard leat from the river forking into two branches as it enters the building at the western end. Presumably, therefore, there were two water wheels. Two tail races run back to the river. The 25" OS map of 1889 still shows the building (with the gas works now beside it), but with only one leat entering and one tail race leaving, and without a name. It would probably still have been working as a leather works then. It is understood that it was a three-storey building, and was destroyed by fire about 1910, being then rebuilt as a Drill Hall. The new building is still in use as a Mace store.

D/11. **Electricity Generating Station**, parish of Rhayader (SN 9685 6796): on R.Wye.

This was a water-powered plant, standing next to the site of the Castle Leather Works and using its former leat. It supplied the town as a non-statutory undertaking, registered on 19th March 1923 as the Rhayader Electric Light & Power Co. Ltd. Dynamos driven by a Gordon water turbine (capacity 26 KW) with a Keighly oil engine (capacity 10 KW) in reserve, supplied a DC overhead distribution system at 230 V. There was a Tudor battery of 240 A-hr. capacity. The authorised capital was £2,000, of which £1,700 had been raised by 1927. The directors were Brig. Gen. H.J. Evans, Richard Hughes and John Roberts; the Secretary was Chas. Cadwallader, and the Resident Engineer was Geo. Williams. There were only thirteen shareholders.

Supply commenced in 1923. When the undertaking was acquired by the Shropshire, Worcestershire & Staffordshire Electric Power Co. in 1929 the turbine was still listed, but the 10 KW engine-driven set had been replaced by a 50 KW Blackstone oil-engine set, suggesting that the demand had greatly outgrown the capacity of the water-driven plant. The station would have been closed down when the company's main supply reached the area, probably in the mid-1930s.

(Information from Garcke's Manual of Electricity Undertakings, 1926-7 & 1929-30; Electrician, 90 [30 March 1923] p.354, and 91 [30 Nov. 1923] p.619.)

D/12. **Lower or New Mill**, Rhayader, parish of Llansantffraed-Cwmdeuddwr (SN 967 680): on Nant Gwynllyn, tributary to R.Wye.

This mill still stands, ruinous and roofless, on the west bank of the Wye, but with practically all its machinery present, although collapsed. It is now almost overgrown with trees, and its former roadway is barely a path. Its power came from a leat fed, not by the river, but by the brook and terminated by a mill pond. A photographic postcard in the Rhayader Museum of the mill as it was in the early 1900s shows that there were buildings on each side of the mill itself; these have now largely gone.

There were two water wheels, one at each end, completely roofed over. The southern wheel was the later and is still in place, with iron shrouds, six pairs of iron arms and wooden axle; it is about 12 ft. diameter by 4 ft. wide. It has the maker's name J.MILLS LLANIDLOES 1901 cast on the shrouds. The northern wheel has six pairs of wooden arms in iron bosses on a wooden axle, but the outer parts have been removed and most are lying about on the river bank. One segment of the shrouds is on display at Rhayader Museum and has the maker's name LLANIDLOES FOUNDRY 1868 on it. The diameter of the wheel was about 11 ft. and the width about 4 ft. The southern set of machinery was all in iron except for the wooden upright shaft. The northern pit-wheel is of wooden clasp-arm construction with iron rim and wooden teeth; the wallower and spur are missing. At the southern end there is a pair of French burr millstones lying on the ground; at the northern end there is a conglomerate bedstone with spindle and iron stone nut.

The mill is roughly 40 ft. by 20 ft. externally. Its site is partially hewn out of rock so that the rear wall up to above the stone floor is natural rock; the rest is built in stone. The associated buildings were of brick.

The Tithe Map of 1838 showed 'Mill' here. Directories of 1850 and 1875 called it 'New Mill' with occupiers Matthew Phillips and John Lewis respectively. It was used up to about 1940.

Evidently the machinery was extensively replaced and refurbished during the second half of the nineteenth century.

D/13. **Gwynllyn Mill**, parish of Llansantffraed-Cwmdeuddwr (SN 962 681): on Nant Gwynllyn, tributary to R.Wye from west.

This corn mill, less than a mile from the centre of Rhayader, must have been regarded almost as one of the town's mills. Although 'Gwynllyn Mill (disused)' is marked on the 1:10,000 OS map of 1982, the attractive large house on the site does not appear to incorporate anything of the mill except possibly its drying kiln. In the photograph of 1889 reproduced here (Pl.14), the stone building in the left foreground is probably the kiln said to be incorporated in the modern house. The rest of the buildings, including the three-storey mill itself, are evidently of timber.

Mr. Brian Lawrence informs me that the Nantgwillt deeds include a lease of 1795 of Gwynllyn Mill from John Lewis of Nantgwillt to Morgan Evans of Nantmel. The 1st. ed. 1" OS map marks 'Felin Gwynllyn' here, and the Tithe Map of 1838 shows it as 'Upper Mill'. The 25" OS map of 1889 shows the mill plan in some detail, agreeing with the photograph, and also showing a very short leat (the brook is steep here) and a millpond of about a quarter of an acre. Directories of 1850 and 1875 name the mill 'Upper Mill', with occupiers or millers Mary Evans and Thomas Edwards respectively.

D/14. **Fron Factory**, parish of Llansantffraed-Cwmdeuddwr (SN 958 684): on Nant Gwynllyn, tributary to R.Wye from west.

The ruins of this water-powered undertaking, whatever it was, can be recognised by the protrusion of a piece of iron gear wheel from the heap of stones; it had mortices for wooden teeth, and looks to be of about 8 ft. diameter (Pl.15). Moreover, the leat is clearly detectable, leading to this building. A pair of semi-detached cottages, not quite derelict, still stand in line with the ruins.

It was marked on the Tithe Map of 1838 (and listed in the Apportionments) as 'Factory', suggesting a carding or fulling mill.

D/15. **Sero Mill**, parish of St. Harmon (SN 964 692): on Sero Brook, tributary to R.Wye on east.

This mill evidently utilised a waterfall in the brook to give it a head of water. It stood on the northern (St.Harmon) side of the brook; the other bank is in Nantmel parish. Only a few remnants of what must have been auxiliary buildings now remain; they are of stone.

The Tithe Map of 1839 shows 'Zero Mill'. The 1st.ed. 1" OS map shows 'Felin Serw'. An attractive sketch of 1840 by William Wallace, reproduced here (Pl.16), calls it 'Syrw Mill'. 'Sero

Mill' is in the 1850 Directory with Jonathan Hamer as occupier, but Mr. Lawrence says that he is not a miller in the 1851 Census. The mill does not appear in the 1875 Directory; it is likely that it went out of use in the mid-nineteenth century.

D/16. **St. Harmon Mill**, parish of St. Harmon (SN 987 725): on R. Marteg, tributary to R. Wye on east.

The embanked leat still runs across a field (although dry) to the stone walls of the derelict mill building. There is no machinery left, nor has been for over forty years.

The Tithe Map of 1839 marks 'Mill', and the Apportionments call it 'St Harmon Mill' (parcel 1485). The 1st.ed. 1" OS map marks 'Melin'. It is likely that the mill fell into disuse before the turn of the century.

D/17. **Cenarth Mill**, parish of St. Harmon (SN 978 777): on R. Dulas, tributary to the R. Severn (confluence at Llanidloes).

The mill still stands with complete machinery (Pl.17; Figs.14-18). The stone structure has been in very bad condition, and the owner has attempted to put it into a secure structural condition by the use of concrete blocks; e.g. the collapsed west wall has been rebuilt in this way. The overshot wheel, about 10 ft. in diameter by 3 ft. 3 in. wide, is at the east end. It has a wooden axle, wooden arms, soleplates and buckets, but iron bosses and shrouds. The pit wheel is all iron, about 6 ft. in diameter, with a power take-off bevel with wooden teeth driving a horizontal shaft with internal and external pulleys. The wallower is of iron, about 3 ft. diameter, with wooden teeth. The spur is about 6 ft. diameter and all iron. The upright shaft is also of iron, 3 in. in diameter. The crown wheel is iron; the cog for the sack hoist has wooden teeth and drives a shaft with a pulley with slack belt operated by a long wooden arm in a rather compact arrangement. The stone floor does not cover the whole area of the ground floor, but only the eastern part. There are two pairs of stones, covered by wooden furniture; one is almost in the middle of the eastern end of the floor, the other in the northern corner.

The mill is about 20 ft. by 18 ft. externally. Stedman Davies says that there used to be a kiln. There is a good pond, fed by a short leat.

The Tithe Map of 1839 shows the mill, and the Apportionments show 'Kiln Close' (parcel 888). The 1st.ed. 1" OS map marks 'Felin Cenarth'. It was marked as 'Mill (Disused)' on the 1:10,000 OS map of 1952.

Possible Mills

D/P1. **Old Mill**, Newbridge-on-Wye, parish of Llanyre (SO 017 584): on Dyfnant Brook, tributary to the R. Wye.

The evidence for the former existence of a mill here is the Tithe Map (1842), which marks 'Old Mill' at this point. There are now no remains to be seen, and the stream is a small one, although with a steep gradient. The 1st.ed. 1" OS map does not show the mill, but an elderly local resident said that he remembered some mill ruins here.

D/P2. **Walk Mill**, parish of Llansantffraid-Cwmdeuddwr (SN 964 681): on Nant Gwynllyn, tributary to R. Wye from west.

This building, of stone construction, and currently serving a residential purpose, does not really look like a former walk (or fulling) mill except in respect of its sturdy construction and the fact that the land at its rear is level with its upper storey, thus giving the right configuration for a water wheel. There is, however, no sign of a leat or tail race. The fact that it is called 'Walk Mill', and so marked on the 1:10,000 OS map of 1982, does suggest that it had a former industrial use, even if not water-powered.

The Tithe Map of 1838 shows two buildings here, but gives no indication of a leat. The accompanying Apportionments show 'Factory and Garden' (parcel 589). The 25" OS map of 1889 shows only the present building here. It has the date 1830 on one door arch.

There is a large embanked pond about 50 yards to the west, which could have provided water for power, but no connection is shown on any map.

D/P3. **Possible Mill**, near the former Marteg Station, parish of Llansantffraid-Cwmdeuddwr (SN 944 709): on Nant-y-Sarn at confluence with R. Wye on west.

There is no sign now of a mill here, but the Tithe Apportionments (1838) show parcel 661 as 'Cae Mellin'. It is a likely place for a mill, but the former existence of one remains doubtful in the absence of other evidence.

D/P4. **Possible Mill**, parish of St. Harmon (SN 985 767): on brook flowing north into R. Dulas, tributary to R. Severn.

The only evidence of a mill here is the name 'Rhosfelin' on the 1st.ed. 1" OS map, and 'Rhos-y-felin' on the 1:10,000 OS map of 1952.

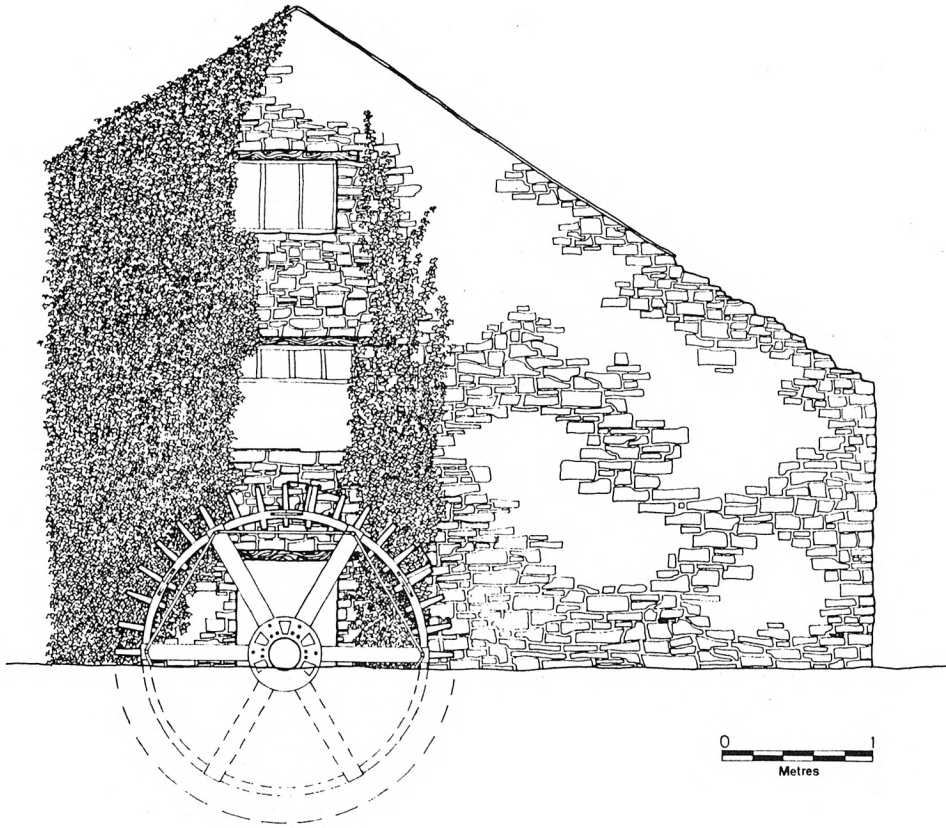


Fig. 1: Boughrood Mill (A/7). South-east elevation showing undershot wheel.

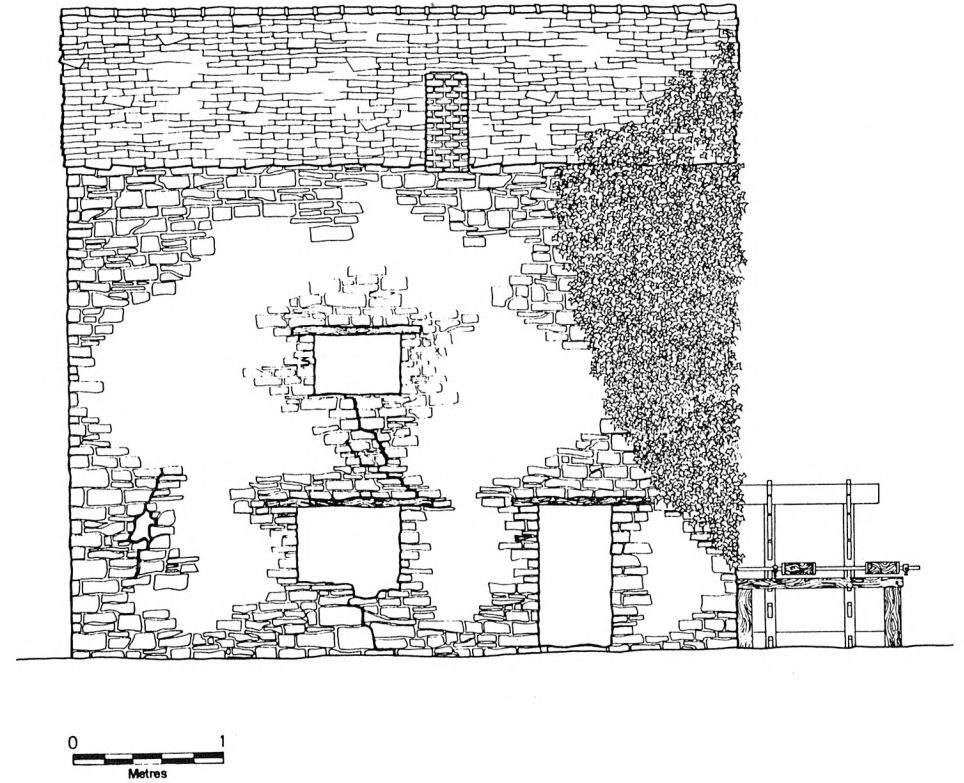


Fig. 2: Boughrood Mill. South-west elevation showing sluice and wheel.

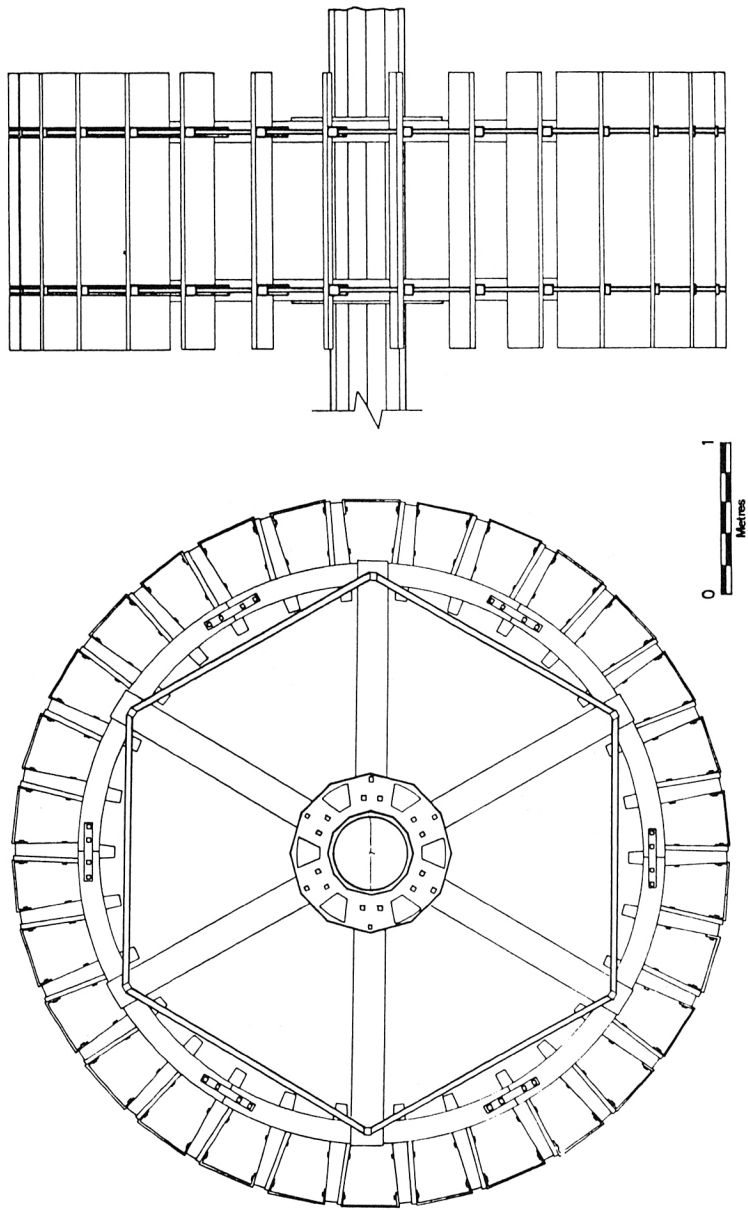


Fig. 3: Boughrood Mill. Detailed drawing of wheel.

Fig. 4: Boughrood Mill. Sectional elevation showing machinery.

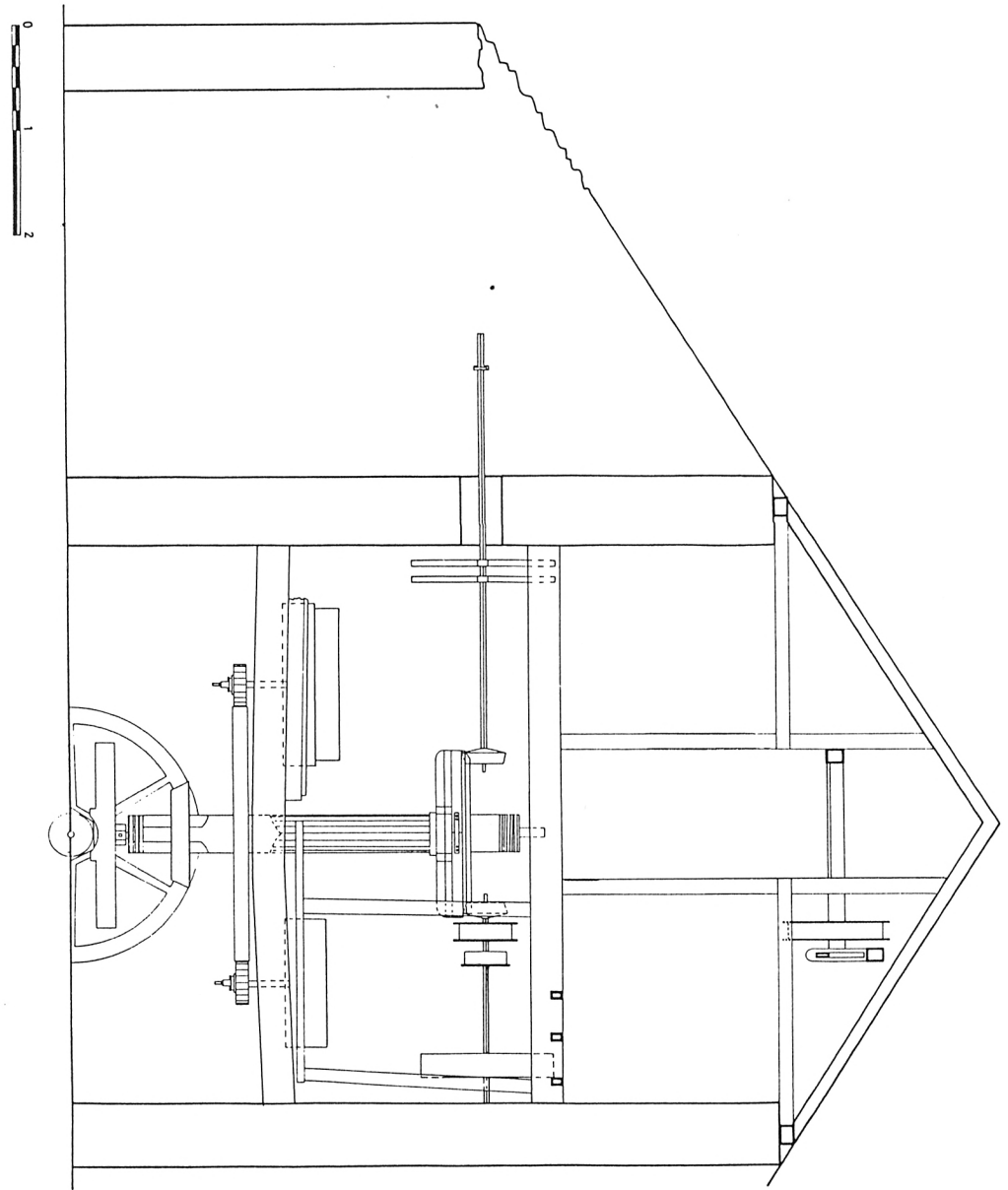


Fig. 5: Boughrood Mill. Ground floor sectional plan showing collapsed position of spur and wallower.

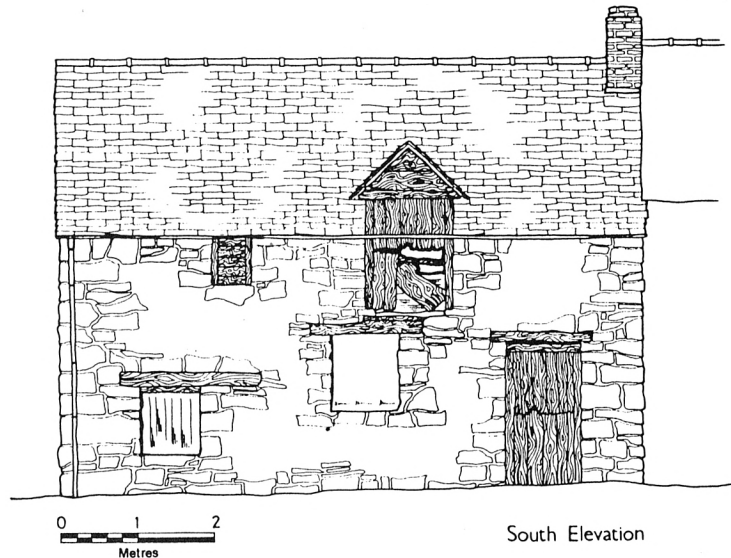
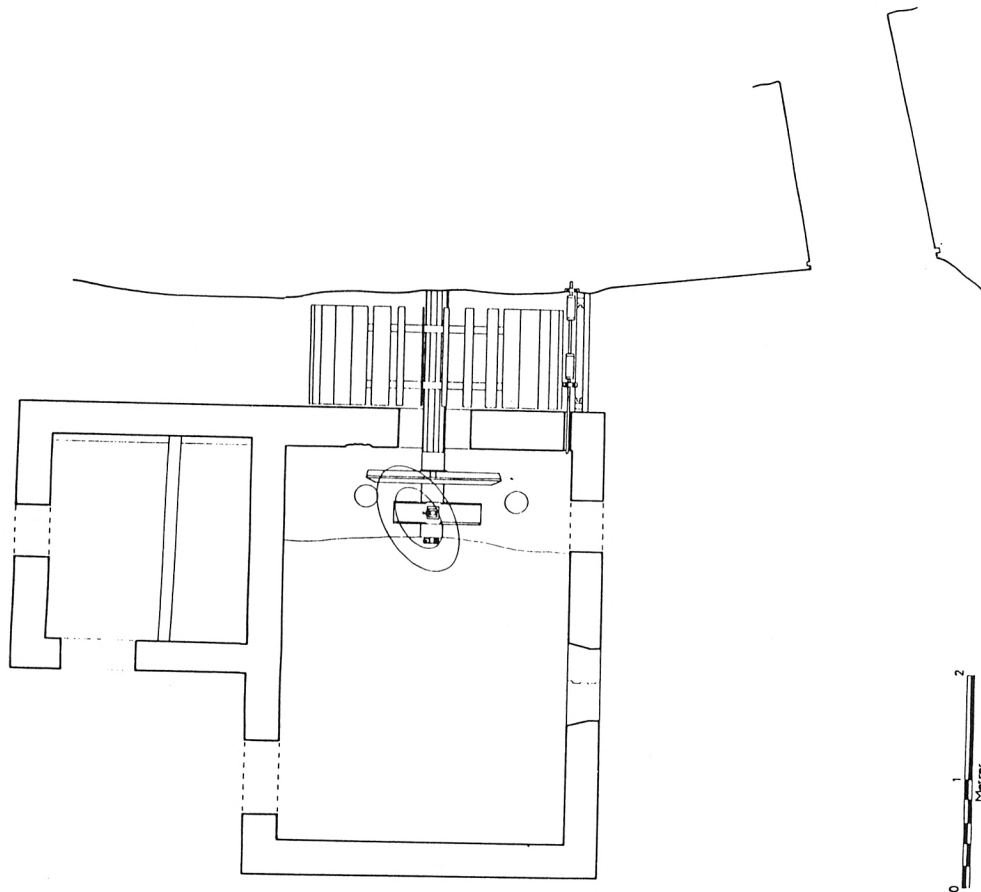


Fig. 6: Coed Trewernau Mill (C/7). South elevation.

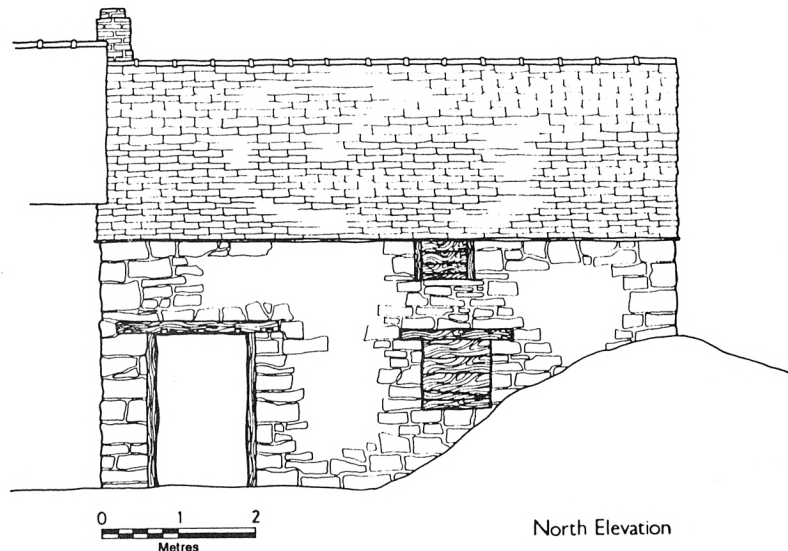


Fig. 7: Coed Trewernau Mill. North elevation.

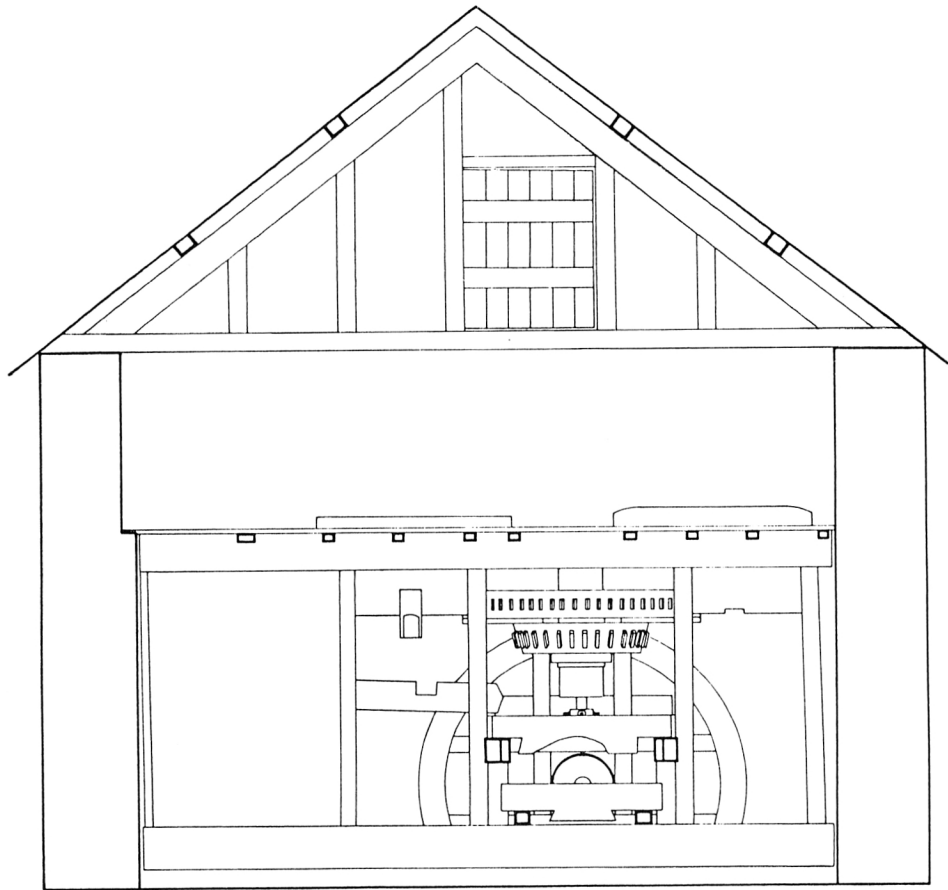
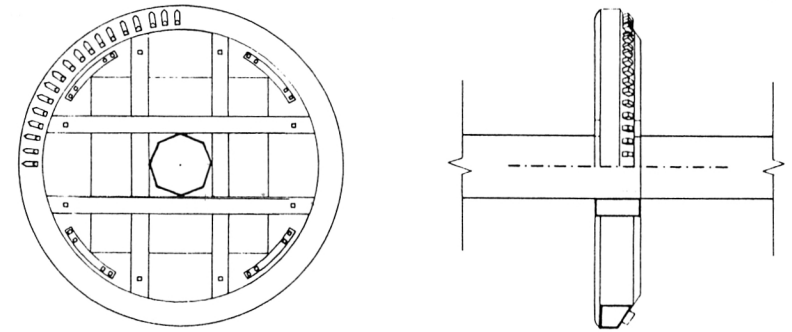
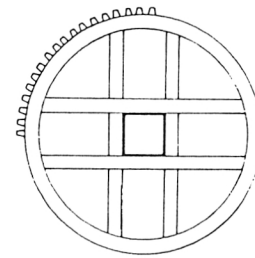


Fig. 8: Coed Trewernau Mill. Internal elevation of machinery, looking West.

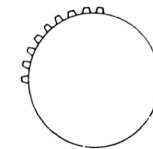


Pit Wheel
0 1
Metres

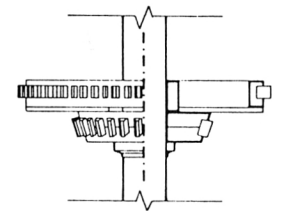
Fig. 9: Coed Trewernau Mill. Pit wheel (all wood except straps).



Spur Wheel

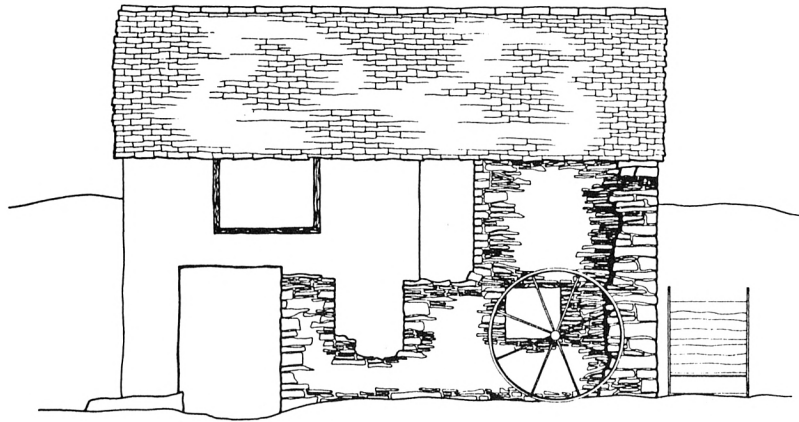


Wallower



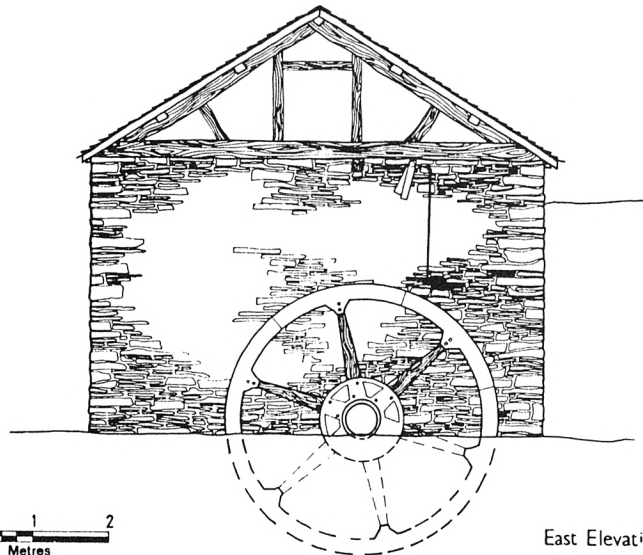
0 1
Metres

Fig. 10: Coed Trewernau Mill. Spur wheel and wallower (all wood).



South Elevation
0 1 2
Metres

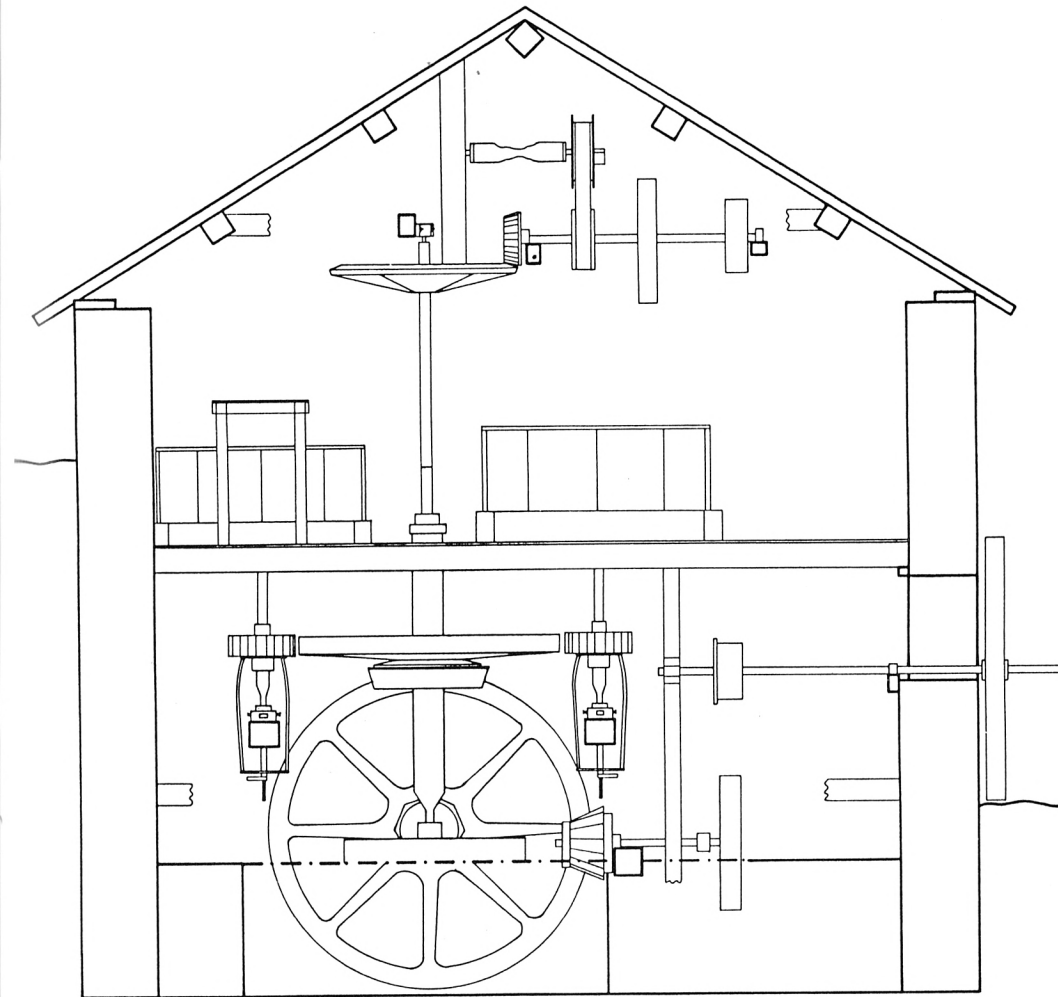
Fig. 11: Cenarth Mill (D/17). South elevation.



0 1 2
Metres

East Elevation

Fig. 12: Cenarth Mill. East elevation.



0 1
Metres

Fig. 13: Cenarth Mill. Internal elevation of machinery, looking East.

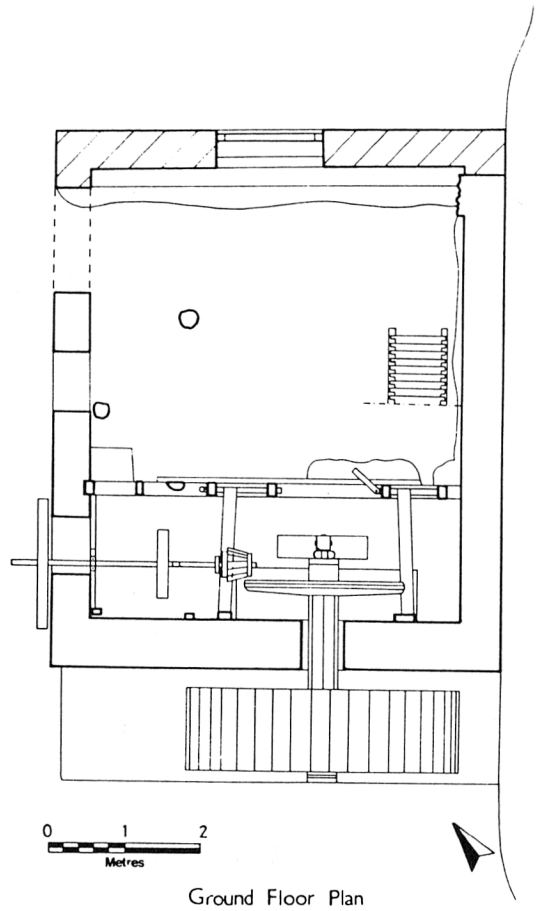


Fig. 14: Cenarth Mill. Ground floor plan.

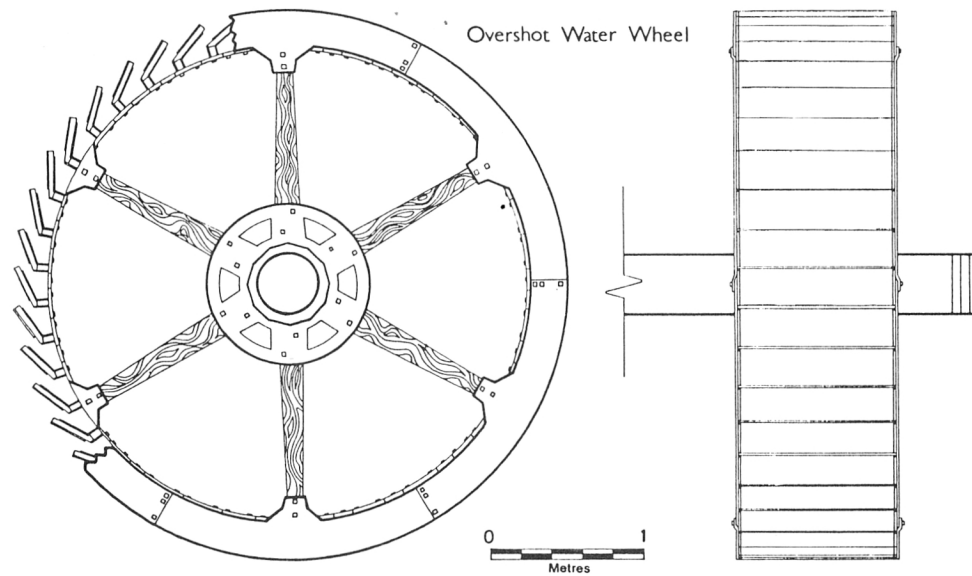


Fig. 15: Cenarth Mill. Elevation of overshoot wheel.

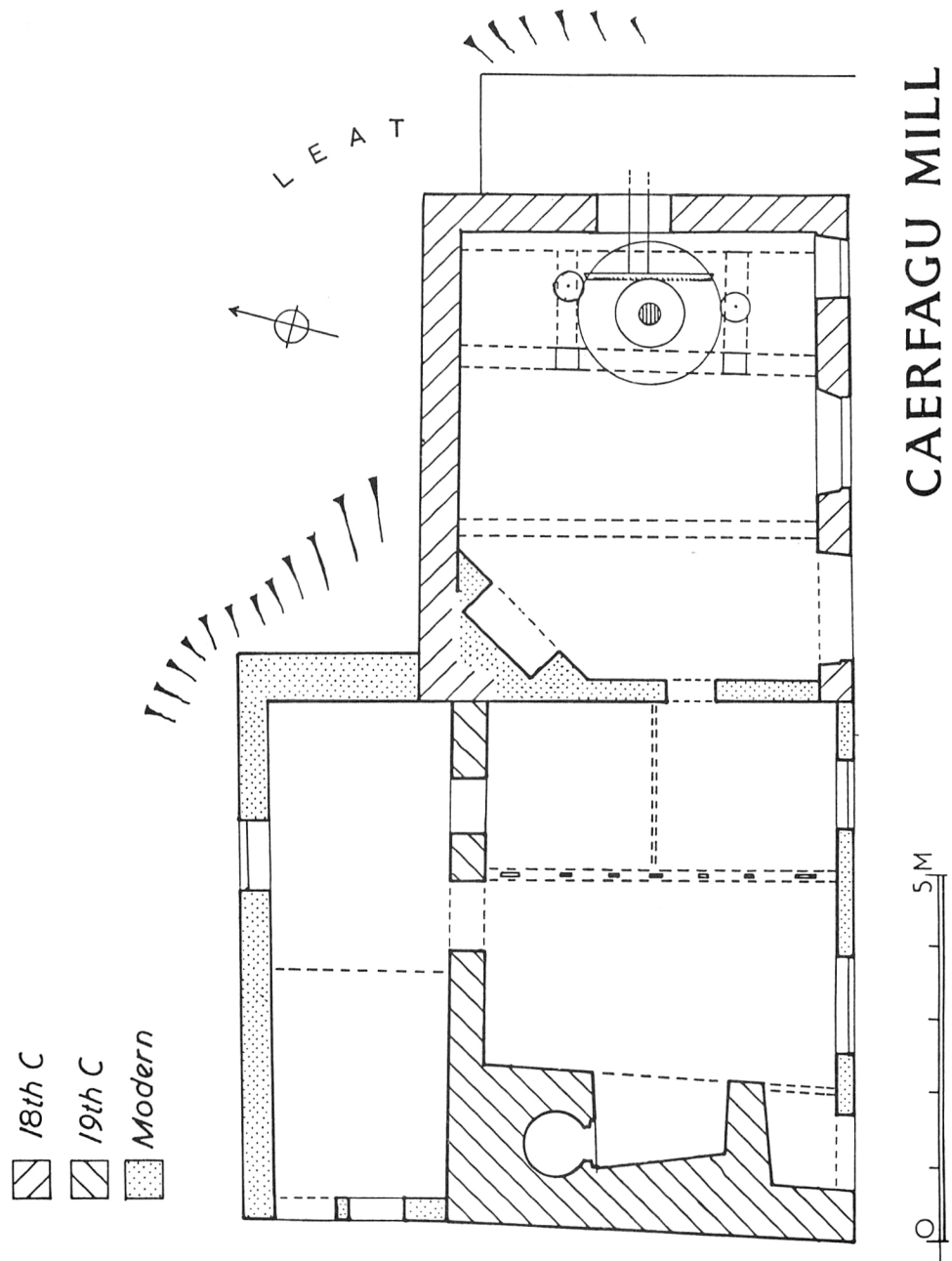


Fig. 16: Caerfagu Mill (C/4). Ground floor plan.

CAERFAGU MILL

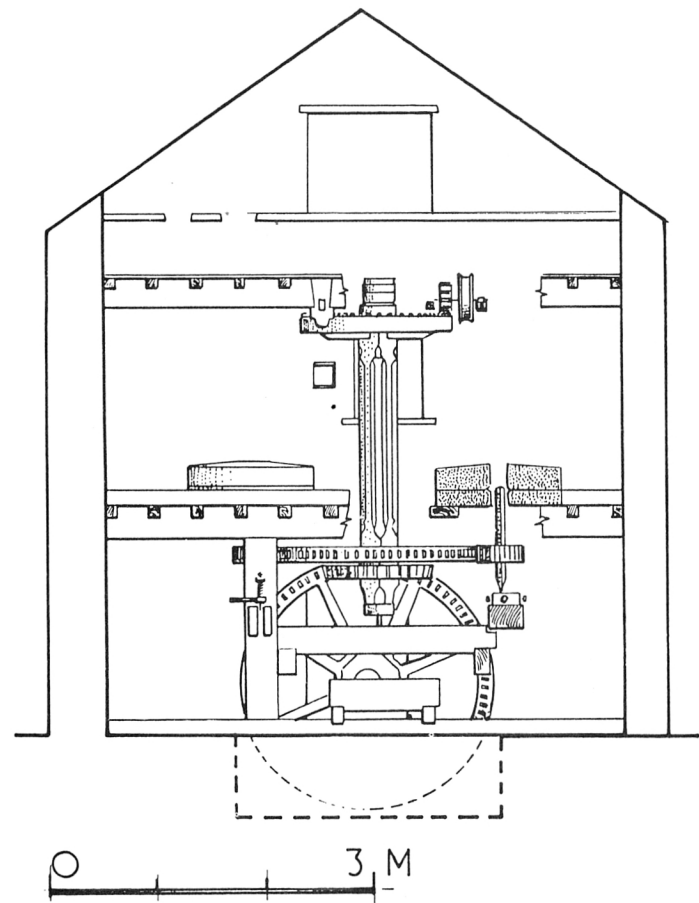
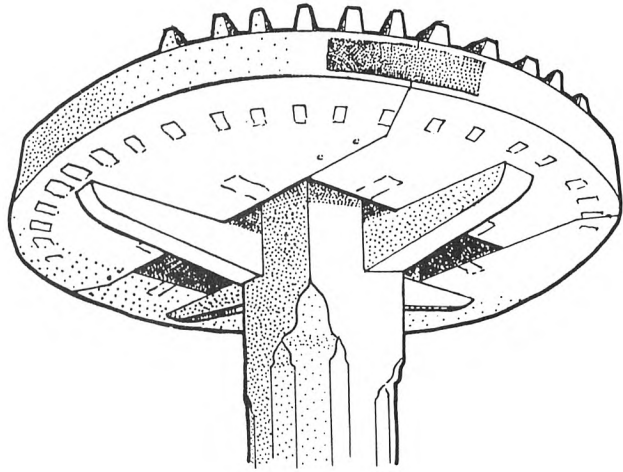
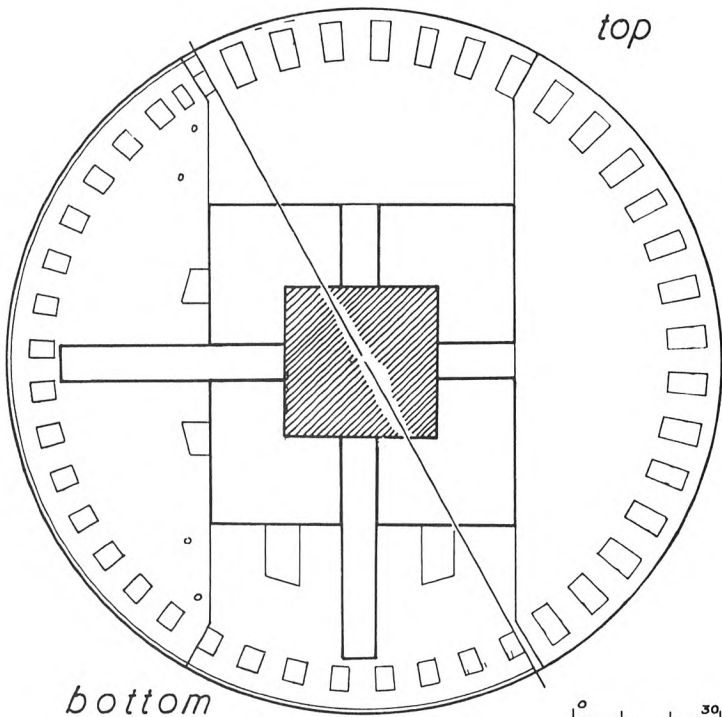


Fig. 17: Caerfagu Mill. Sectional elevation of machinery, looking East.

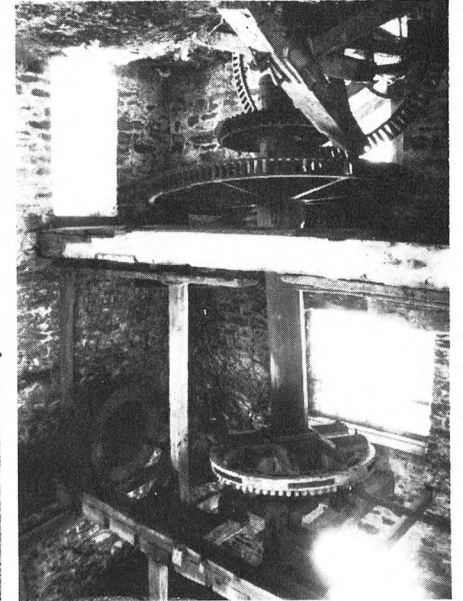
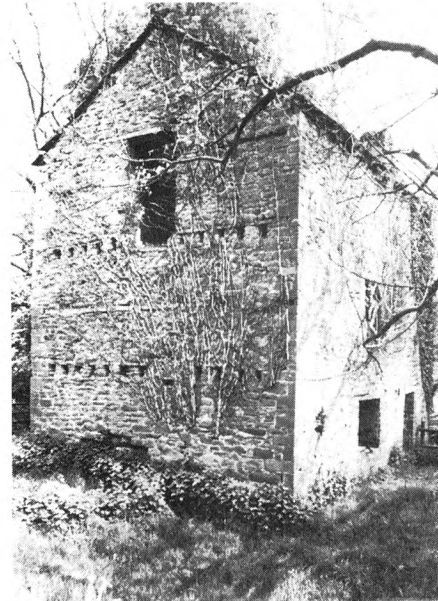


top

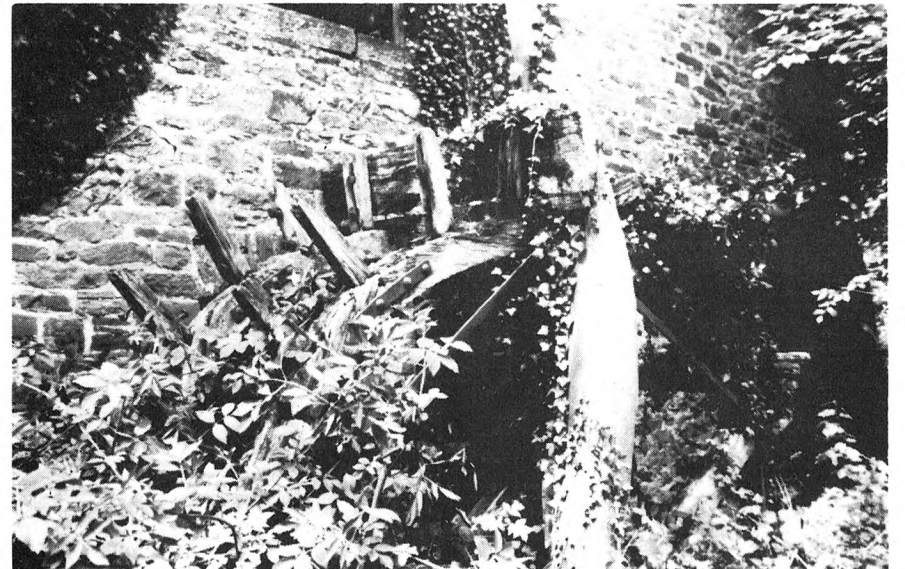


bottom

Fig. 18: Caerfagu Mill. Detail of wooden crown-wheel.



Boughrood Mill (A/7). Left: mill building from south-west. Right: interior showing gearing and stone-gallery. Below: remains of undershot water wheel.





Rhos-goch Mill (A/10).

Above: mill dam and rear of mill.

Left: overshot water wheel.



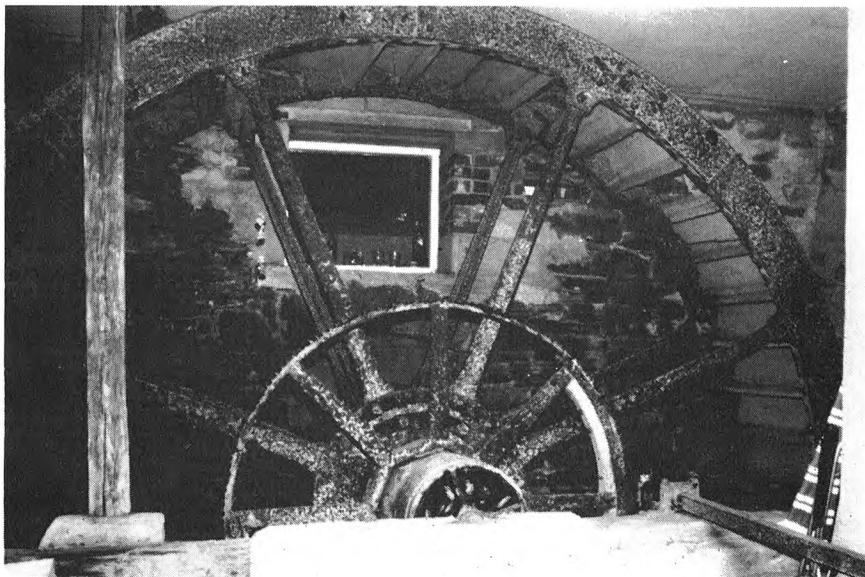
Lower Mill, Aberedw (B/1), now a residence.



Bettws Mill (B/7), now a residence. River Edw in foreground.



Critho Mill (B/9). Above: the former corn-mill was the left-hand part of the main building.
Below: overshot water wheel with gearing for generator.

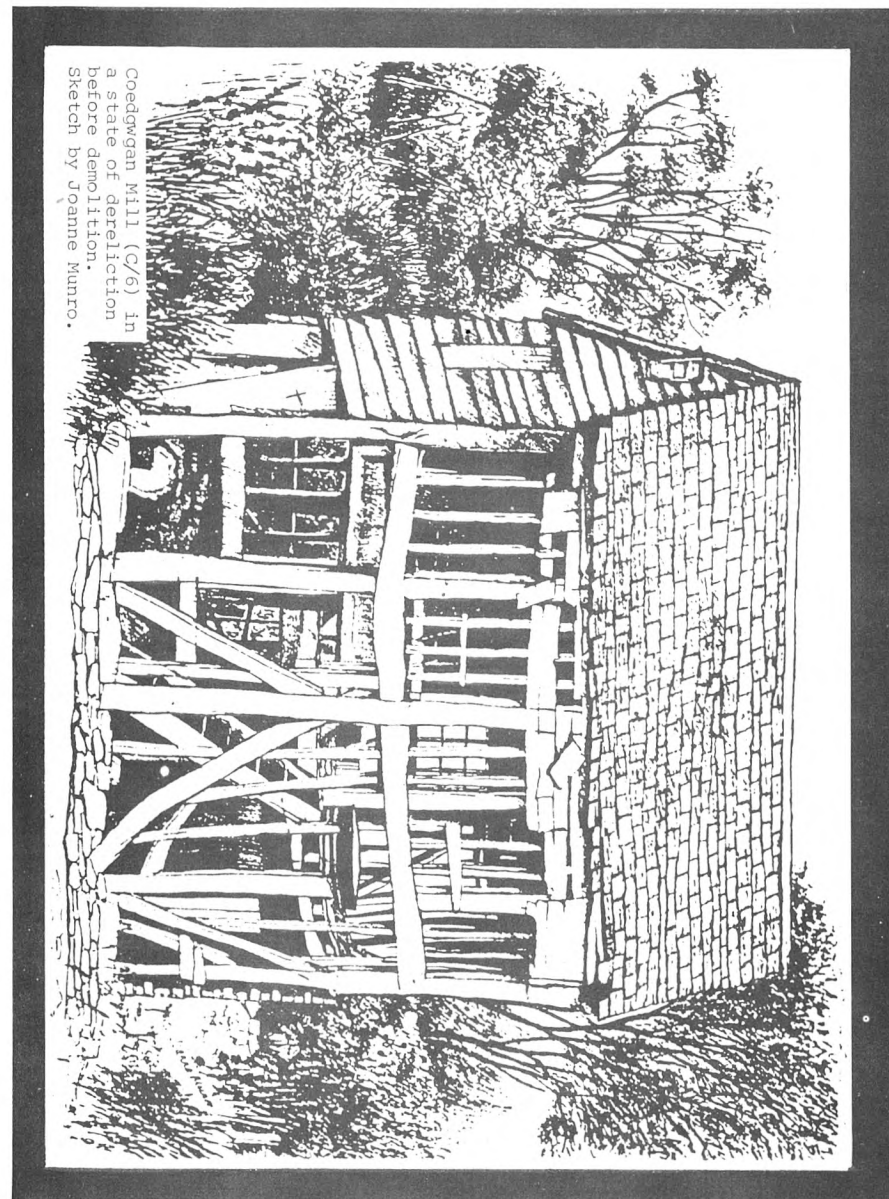
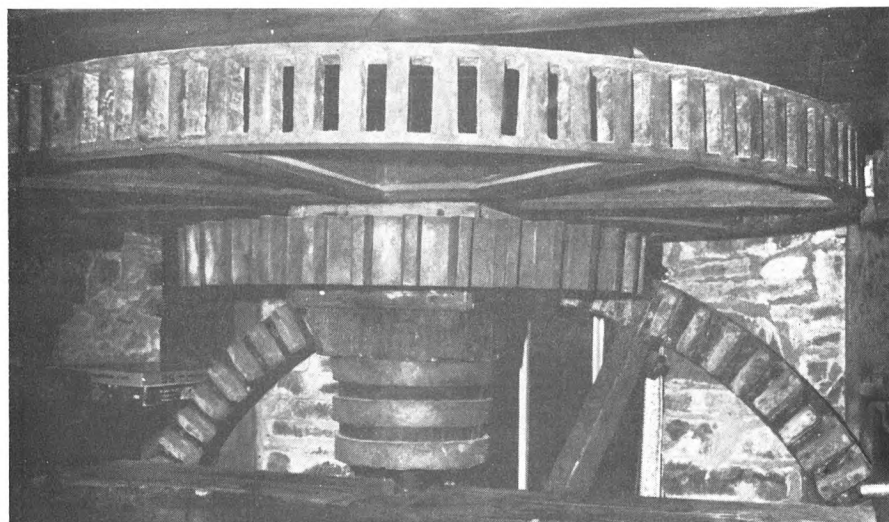


Howey Mill (C/2). Above: from an old postcard.
Below: in 1987.





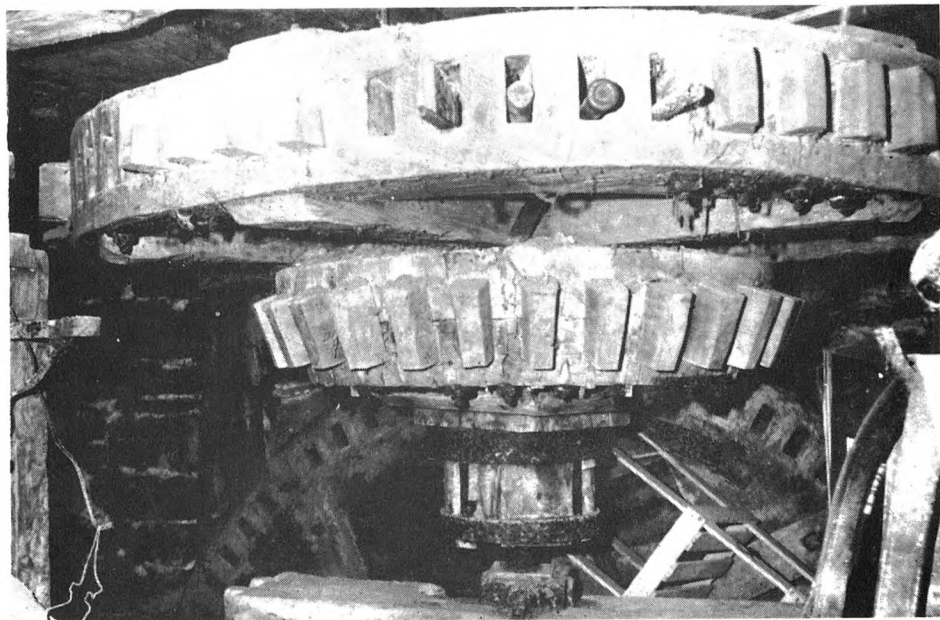
Caerfagu Mill (C/4). Above: the former mill (on right) from south.
 Below: the main gearing, still in the building.
 Note the small angle of bevel of the pit-wheel and wallower.



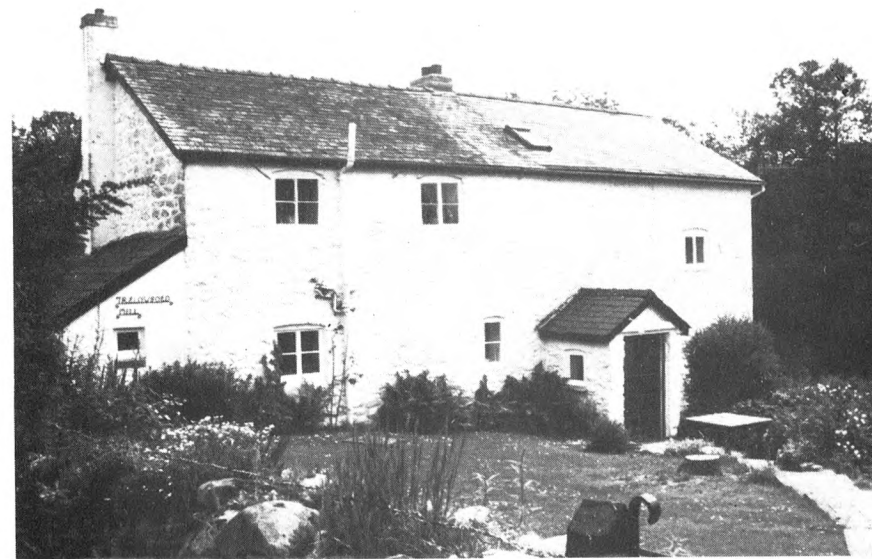
Coedwgan Mill (C/6) in
 a state of dereliction
 before demolition.
 Sketch by Joanne Munro.



Coed Trewernau Mill (C/7). Above: the building from south; the mill was the left-hand part.
Below: the wooden gearing.



Abbey Cwmhir Mill (C/8), from east.



Trelowgoed Mill (C/9), from west. The wheel was at the far end.



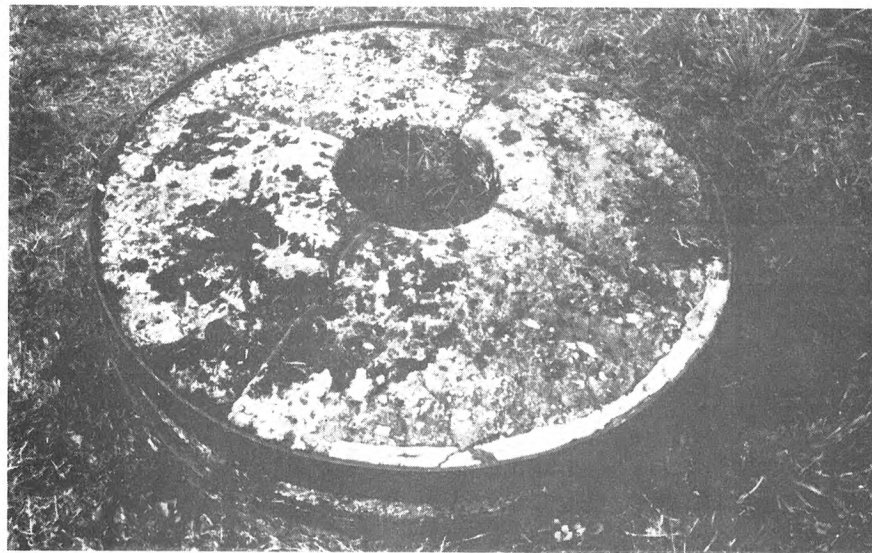
Above: Upper Mill, Dolau (C/13), from west; wheel was on left.

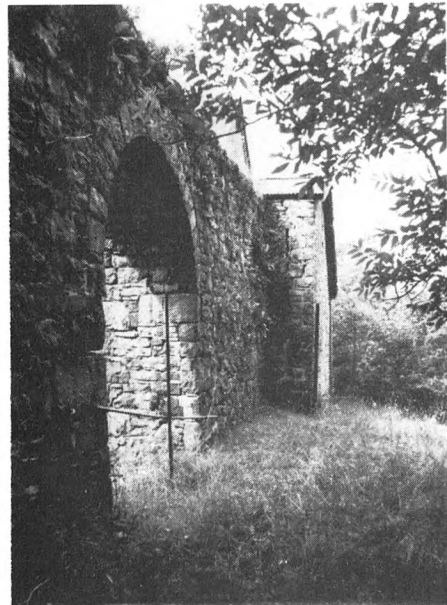
Below: Cantell Mill (C/14), across R.Aran; wheel was on left.



Above: Llanddewi Ystradenni Mill (C/15); mill itself at right.

Below: Four-piece millstone in sandstone/quartz conglomerate at Abergwenlais Mill (C/17).





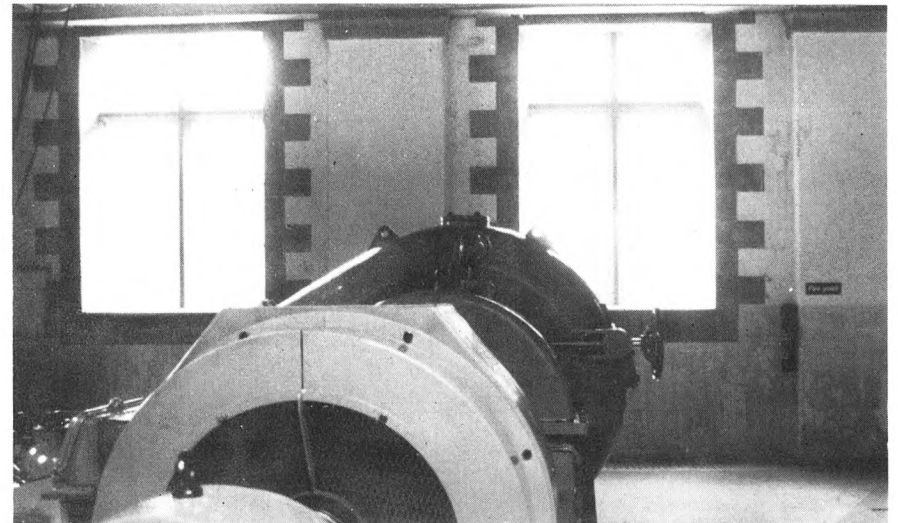
Argoed Mill (D/1).

Above: from south-west.
The wheel was internal
at the far left.

Below: arch in the
stone aqueduct carrying
15-inch pipe to mill.



Hydro-electric generating station in Elan Valley (D/3).
Above: one of the twin stations.
Below: interior view.

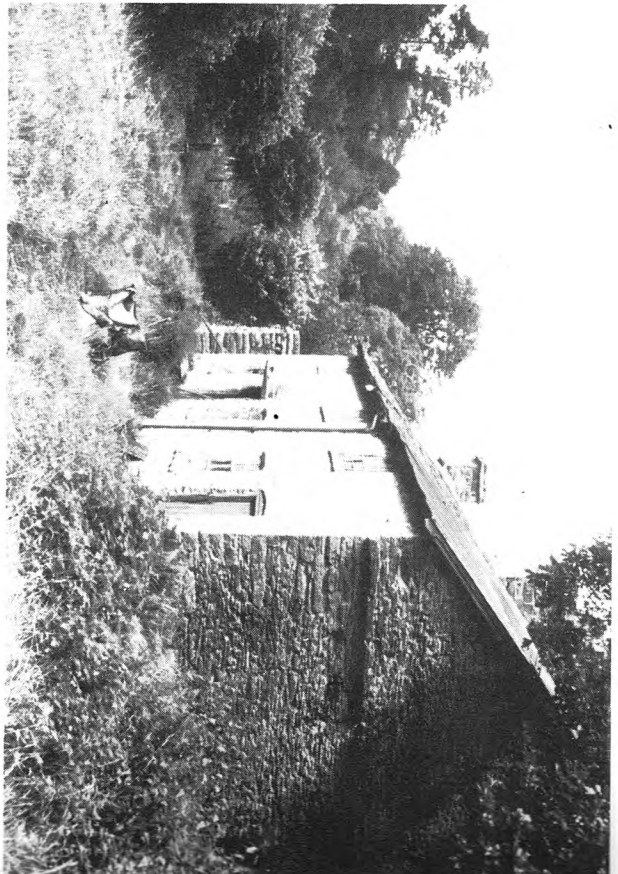




Gwynllyn Mill (D/13). Photograph by J.Owen, 1889.



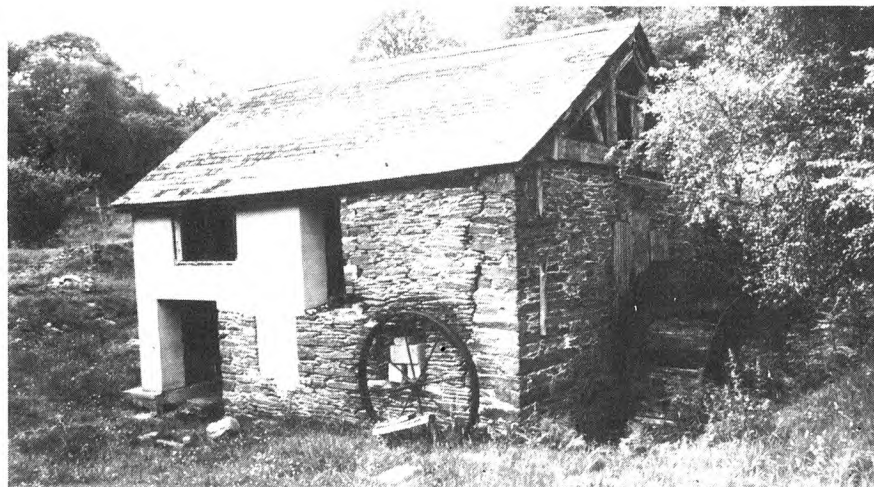
Iron Factory (D/14). Above: the cottages; mill ruins at end.
Below: piece of gear wheel with mortices for wooden teeth.





Syrff (Sero) Mill.
Red map in blue

Syrff (Sero) Mill (D/15). Sketch by William Wallace, 1840.



Cenarth Mill (D/17). Above: from south-east. Wheel and gearing at right; collapsing left-hand end repaired with concrete blocks, cement-rendered.

Below: pitwheel, wallower, spur and upright shaft, all of iron apart from teeth of wallower.

