

ART. VIII. — *Low Park Barn, Rydal: The Reconstruction of a Farm Building in Westmorland in the Seventeenth Century*.* By BLAKE TYSON, B.Sc., F.C.S.I.

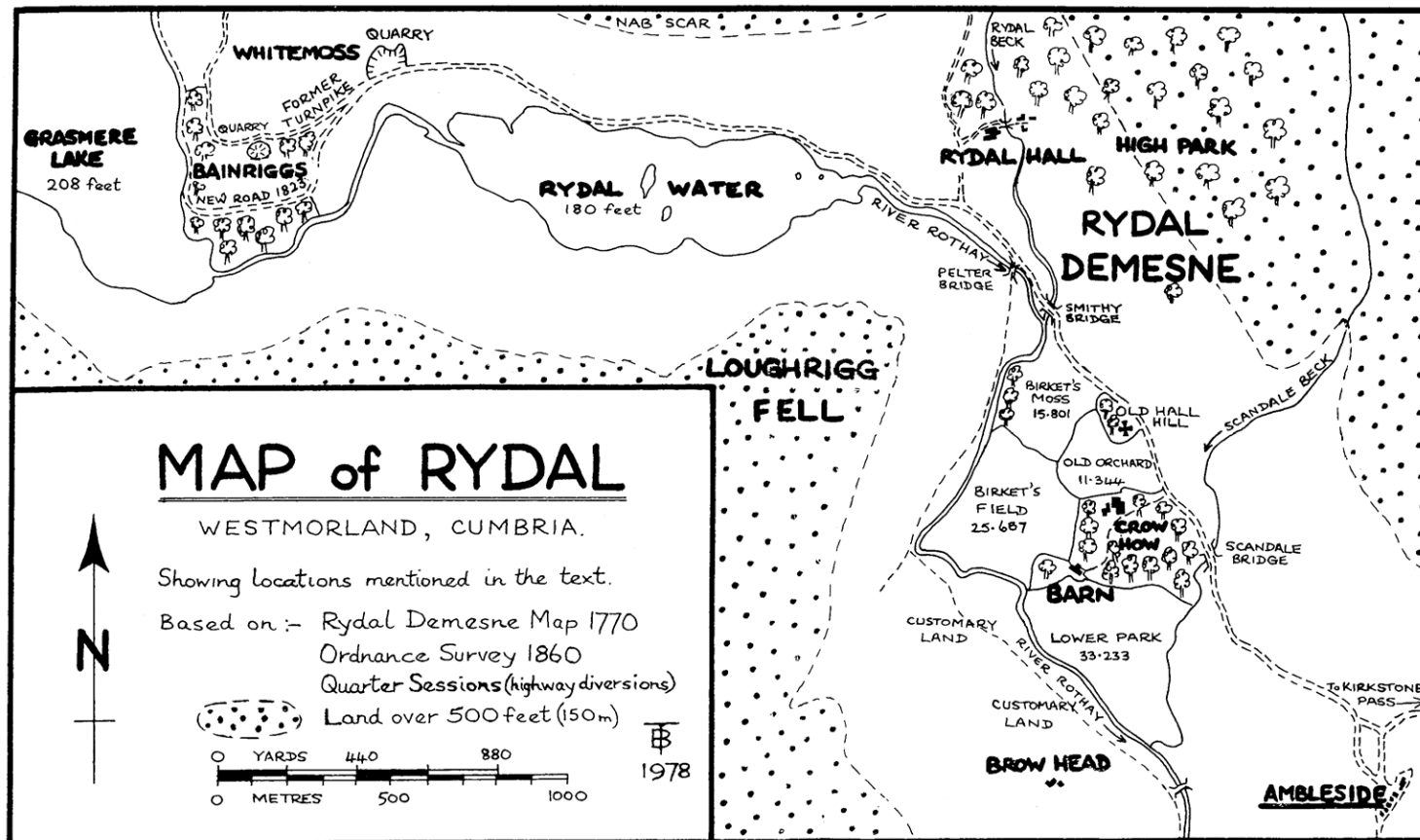
IN spite of their former economic importance, relatively little study has been made of vernacular farm buildings compared with farm houses¹, and we have too little idea of the actual processes by which the buildings were financed and erected. One of the main reasons for this is the difficulty of obtaining sufficiently coherent documentary evidence from which detailed case-studies can be derived. This article therefore examines evidence in the manuscripts left by Sir Daniel Fleming² of Rydal Hall, Westmorland, to create a detailed account of the construction activities associated with one identifiable surviving barn which was rebuilt in 1659 on older foundations, and brief comparison is made with another barn of 1688.

Fleming, knighted in 1681, gained possession of the Rydal estate in 1653 after it had been confiscated during the Commonwealth.³ He first repaired the Hall and then turned his attention to his farm buildings. To record his estate and personal finances Fleming kept two meticulous account books from 1656 to 1701⁴ which contain, amongst a host of closely written entries, many scattered references to building work on the estate. Although account books do present problems in the interpretation of information, Fleming left such a wealth of detail, including memoranda, that his own words can be used to describe much of what happened when his Low Park barn was rebuilt.

In the first account book the first specific reference to this building was made on Friday 13 May 1659 when a shilling was “given unto two wrights who began to fell ye wood for ye Low-parke barne” no doubt as earnest money to seal their agreement to carry out the necessary carpentry work. On 14 June, after his return from a fortnight’s visit to Cockermouth, Fleming brought his accounts up-to-date and recorded that on Monday 23 May a shilling had been “Given unto Jo Holme of Munck Coniston in earnest for ye walling of ye Low-parke barne at 18s. p. Rood”.⁵

Just over five weeks after the walling agreement with Holme the accounts record that on 28 June 6s. od. was “Paid for Ale att ye raysing of ye Low-parke barne” when the main roof timbers were erected on completed walls. The following day five shillings was “Given unto ye wallers in lew of their gloves which they challenged for helping to rayse ye timbers and to drinks”. On the same day Daniel Fleming “Paid unto John Holme for walling of ye Low-parke barne being 4 roods & a half (besides 16 yards of old wall which was not medled withall) after ye rate of 18s. per rood in all ye sum of £4. os. od”. This suggests that the building was established partly on the pre-existing walls of an earlier building, for which other evidence dated 1643 exists in the earlier accounts kept by Richard Harrison for his uncle John Fleming.⁶ If the wallers earned about 5d. a day each, the rate they were paid for later walling work on the estate, there were probably six of them working full-time, including Saturdays, for all of the thirty working days available in the contract period.

Note *Years are in modern form but dates are as recorded in the Julian System. The map shows places mentioned in the text.



The raising was obviously a joint effort by the wallers and the wrights since on 9 July the account book records that 2s. 6d. was "Given ye wrights in at their bargain and in lew of their gloves." Undoubtedly there were other helpers at the event but no details are given.

Whereas the raising marked the end of the wallers' work for which they were paid promptly the following day, the wrights had several more days' work to complete the roof structure, since on 9 July also was "Paid to Michael Holme of Ambleside, wright, in full for all ye wood-work about ye building of ye Low-parke barne, hee haveing onely boards ready sawn for ye doors, ye sum of £2. 12s. 6d". It is possible that an earlier payment made on 5 May refers to these boards since he "Paid unto Michael Holme for ye sawing of one Rood of Boards in Bainriggs ye sum of 14s. od." and only a week later felling started for the other timber used in the building.

Baneriggs is a woodland at the south-east corner of Grasmere Lake (NY 345063) two miles by road north-west of Low Park barn on the far side of Rydal Water and Loughrigg Fell. The mention of a rood of boards is interesting since the only definition so far discovered for this measurement is in Fleming's accounts when on 9 June 1682 he "paid Geo Birkett of Troutbeck for sawing 501 feet of boards (22 score Foot making a Rood) at 10s. ye Rood, the boards being in number 51, ye sum of £0. 11s. 6d".

An entry for 13 October records that £1. 8s. od. was "Rec'd off John Makereth for ye barke off 25 trees felled for ye new barne, due the 29th September". John Makereth was a local tanner,⁷ so the timber used in the barn was undoubtedly oak⁸ and peeling would be made easier by waiting until the sap was rising in mid-May.

Three earlier payments probably refer to the peeling of the twenty-five trees, since on Wednesday 18 May, five days after the agreement to begin felling, 8d. was "paid to Will Denny for peeling 7 trees" and 1s. od. was "paid to Holme for peeling, a day", whilst on 26 May Fleming had "Paid Holme for 3 dayes work, 1s. 6d", these payments being in addition to the contract price. The cost of peeling trees was about 1½d. each⁹ so these three items would account for all 25 trees. The size and quality of the trees is not mentioned but, for comparison, on 9 May 1679¹⁰ Fleming "Sold Christopher Dixon the Bark of Eleven trees which William Dennisson had at Yewdall for his new Barne for 4s. 6d.", an average price of only 5d. per tree compared with 1s. 1½d. for the Rydal trees. Although it has not been possible to identify the Yewdale barn, which may have been smaller, it seems more likely that the Rydal trees were probably smaller and younger and hence their bark attracted a higher price.¹¹ The barns could therefore have been of comparable size. There is one further entry referring to timber which should be mentioned. On 12 November 1660 Fleming was paid 6s. od. for wood "Sold unto Will Holme out of ye wood of ye Low-parke barne". Whether this refers to old wood from the earlier building or to new wood surplus to requirements, it can be set against the expenses of the new barn, as summarized in Appendix I.

The slater seems to have started as soon as the carpenters had finished the rafters for on Saturday 6 August, Fleming "Paid unto Greene (ye slater) for 25 dayes work in slating ye Low-parke barne at 6d. p.diem, in all 12s. 6d." Since he appears to have generally been a prompt payer it seems likely that the barn roof was completed the previous day. If Green had worked full-time on the slating he must have started at the latest between 4 July and 8 July depending on whether or not he worked all day on Saturdays. The latter date coincides with the completion of the wrights' work, and it seems unlikely that slating

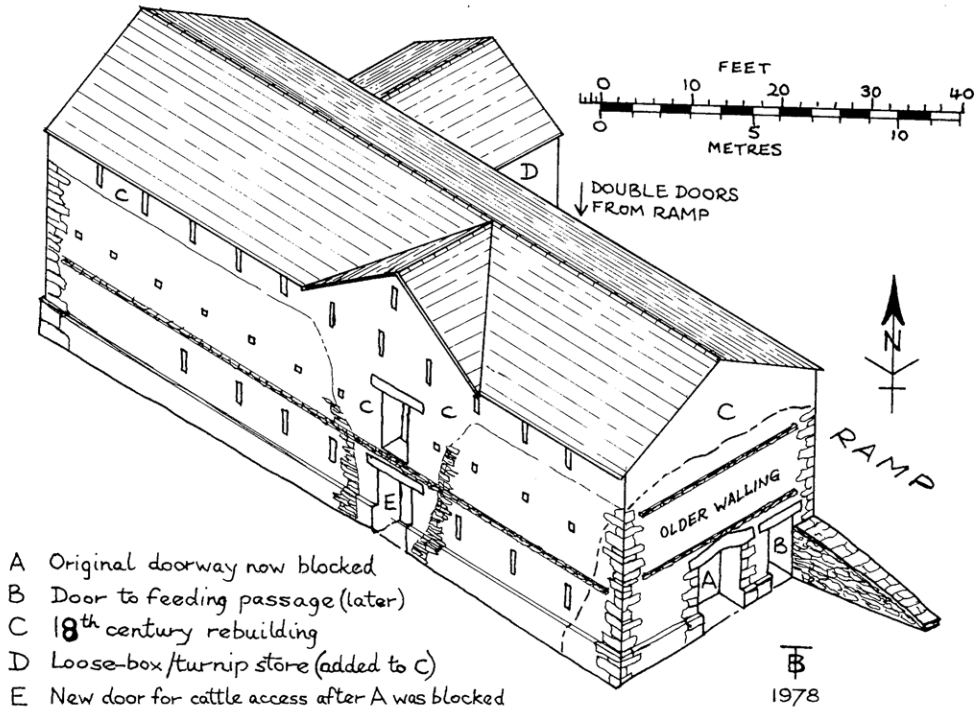
started earlier than the former date since the account book of Fleming's steward John Bancks¹² shows that on Saturday 2 July, only four days after the raising, "2500 latt nayles" were bought in Kendal for 6s. od. A further "halffe a thousand off latt nayles" were bought, also in Kendal, for 1s. 3d. on 16 July, whilst on 3 August the purchase of a further "200 latt nayles at Amblesyd" for 6d. undoubtedly allowed Green to complete the slating of the new barn by Friday 5 August in time for storing the year's harvest. Such close dating is rarely possible with vernacular buildings and indicates careful planning of the work schedule. The lath fixing must have been done by Green to suit the diminishing courses of Westmorland slate.

Unlike the prompt payments for labour it was not until 6 December that the account book shows that 6s. 8d. was paid "to John Greene for mossing of ye house 20 days¹³ and for slate had of him for ye new-barne at 3d. per load 5s. od., in all 11s. 8d". However, more than these twenty loads of slate had been used on the barn, for on 16 July, while Green was slating, Anthony Grigg, an estate worker mentioned in the accounts many times and shown to be perpetually in debt to Daniel Fleming, had 12s. 6d. "paid him for 50 load of slate getting for ye Low-parke barne". Since a load of slate was two hundredweights¹⁴, the load a packhorse could carry, about seven tons of slate must have been used in addition to any which was salvaged from the older building.

The location of Low Park barn can be proved from two sources. Thomas Machell's description of Rydal in July 1692¹⁵ said "There are two parks called high park and low park. The high park is very well wooded with timber trees, ash etc. The low park is almost a mile away to the South and the lower part of it is good arable meadow and pasture, and the higher part clad with great oaks and other wood but there are no deer in either of them". A manuscript map of 1770¹⁶ shows some of the field and woodland names and a barn is clearly marked at the southern end of the demesne between two of the largest fields, Lower Park and Birkett's Field. These were of 33.233 and 25.687 acres respectively¹⁷ and between 1669 and 1674 accounted for no less than 45 per cent of the corn sown on the demesne (or 58 per cent if the nearby Old Orchard field is included).¹⁸ Hence the importance of this barn in the economy of the estate was considerable.

Modern maps show a barn in the same position at NY368051 (Fig. 1) at the end of a lane through Crow How, a nineteenth-century farmstead. Inspection of the site reveals a bank barn of six bays constructed on a small rise of rocky, uncultivable land in the most strategic position between the two large, flat fields. There is clear evidence that, probably in the late eighteenth century, the walls were raised about four feet to increase the barn's storage capacity. In addition the centre part of the south-west wall has been rebuilt from ground level. The roof has been renewed and a turnip-store/loose-box was added on the north-east side, probably in the nineteenth century. There can be little doubt that the foundations, gable walls and much of the side walls date from the seventeenth century but the lower parts of the south-east gable and of the north-east wall against the ramp appear to be even older and probably represent the "16 yards of old wall which was not medled withall". Perhaps, therefore, the earlier building was also a bank barn of medieval age.

The barn measures 74 feet 3 inches long by 24 feet wide and the side walls were formerly 19 feet high. Since the external perimeter of the building is 65.5 yards and 16 yards was of old wall, the remaining 49.5 yards represent the 4½ roods of new wall erected in 1659. Thus each rood was exactly *eleven* yards long. So far, no similar definition of a rood of walling has been found, but the evidence in Fleming's accounts and the surviving building seems quite clear.



LOW PARK BARN 1659

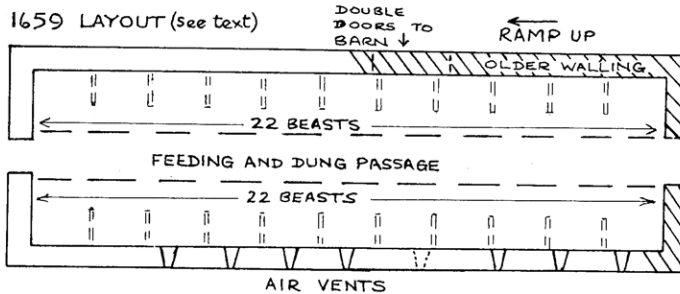
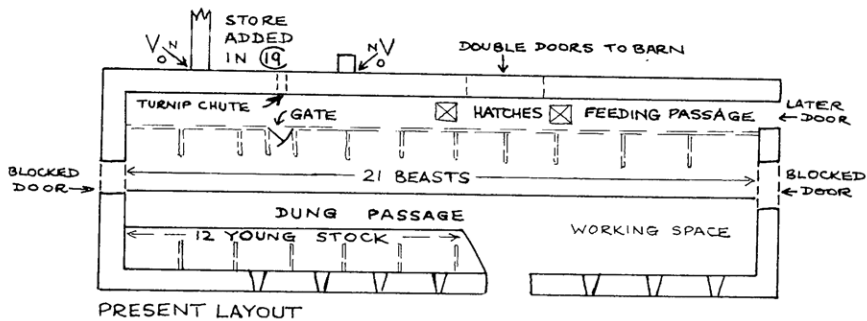


FIG. 1.

It would seem that this 1659 bank barn pre-dates Dr. Brunskill's earliest authenticated example at Nettleslack, Martindale by three-quarters of a century¹⁹, but it had a rather different form from the two types he has described. It undoubtedly had a central fodder and dung passage running the whole length of the building with cow stalls facing outwards on both sides of it. There were probably just the two doors in the gable ends and a row of ventilation slits in the south-west wall. The present internal arrangement post-dates 1659, because in moving the stalls towards the centre to create a feeding passage (with its own doorway) along the north-east side, both of the gable-end doors were blocked and converted into windows. A new door was made in the middle of the south-west wall for cattle access and cattle accommodation was consequently reduced from probably forty-four to twenty-one with twelve young stock along the south-west wall (Fig. 1).

The origin of the building materials for Low Park barn is not specifically mentioned in the accounts but Machell²⁰ wrote "There is a place called Old Hall, a quarter of a mile south of the present Hall, on the right hand of the highway to Ambleside whence Sir Daniel led stone to build a barn". There can be little doubt that this refers to Low Park barn. The Old Hall was apparently in a ruinous condition, having been unoccupied since at least 1600 when Jane Fleming died.²¹ The account book entries confirm this and show that on 2 May 1659 Daniel Fleming "Paid unto Adam Fisher . . . 5 days in Waleing stones at ye old Hall . . ." ²² and on 22 June, a week before the raising of the barn and the paying-off of the wallers, a final payment was made "unto old Adam for 10 dayes worke & an halfe at ye Old Hall in waleing of stones being all now due to him 3s. 6d". An intermediate payment on 25 May "unto Adam Fisher for 13 dayes work & a halfe . . . 4s. 6d." probably refers to the same job, as may an earlier payment for 12 days on 22 April giving him almost continuous employment for two months following Easter Day 1659. The stones were probably carried on a drag (sledge), rather than a cart, particularly since the Old Hall was located defensively on the summit of a crag.

Although Machell wrote "There are quarries of slate at White Moss near the town [Rydal], by reason of which convenience most of their houses are slated" it is more likely that Grigg got his 50 loads of slate from the nearby Old Hall rather than from the quarry which was two miles away on the far side of Rydal Water, for he would have had to get two loads (at 3d. each) a day to earn his wages. It is also possible to estimate how much slate was reclaimed from the old cowhouse. Reference to an old handbill advertisement²³ shows that a ton of Coniston Slate would cover 23 square yards of roof (i.e. 10.82 lb per square foot) which compares well with second quality Westmorland slate²⁴. Since the pitch of the barn roof is 30°, the slope area of 2058 square feet would have required 10 tons of slate or 100 loads. Only 20 loads were purchased from Green, and Grigg got 50 more (presumably from the Old Hall since he was "getting" slate rather than merely sorting it at the barn) and the difference of thirty loads came probably from the earlier cowhouse.

Undoubtedly economy was a prime consideration, for a minimum of new slate was bought. Any waste slate or small stones on site would have been used as filling for the random, slate-rubble, dry-stone walls and the two old buildings seem to have supplied all the necessary stone for the cost of sorting and haulage only. Any sound timber would have been re-used and perhaps re-worked; the lintel of the south-east gable doorway seems to be of pre-1659 oak. No cost was recorded for the new timber probably because it came from estate resources and so reduced the apparent costs summarized in Appendix I.

Unfortunately the account book neither gives the source of the 25 trees used in the barn nor states whether the timbers were made up near the building or at the site of felling. Since Low Park was "clad with great oaks . . .", probably open-grown and heavily branched, the closer-grown woodland trees of Baneriggs were probably more suitable and worth transporting.

It is interesting that no record of the demolition of the earlier cowhouse has been found. It must have been standing when a new lock was bought in November 1658 (footnote 6) and yet by Easter of the next year rebuilding work had begun. Perhaps John Evelyn's observations explain the sudden change in the building's fortunes. He described January 1658 as 'a severe frosty season' and on 9 March recorded 'This had ben the severest Winter that man alive had knowne in England . . .'. The bad weather must have continued, for on 2 June he said there was "An extraordinary storme of haile & raine, cold season as winter, wind northerly neere 6 moneths"²⁵. If the former building had been in a decayed condition following neglect during the Commonwealth²⁶ such prolonged bad weather would certainly have exposed any weaknesses and must have made replacement a matter of some urgency the next suitable spring. If it were cleared by full-time estate workers, paid half-yearly, the labour cost for demolition would not be recorded in the accounts, but it is surprising that Fleming did not record what happened in one of his many memoranda in the account books. This may well suggest that the need to replace the cowhouse was not unexpected.

In addition to the obvious advantages of having a sound barn on this relatively important but distant part of the estate, there may have been one other factor which encouraged Fleming to invest in a new building. Oliver Cromwell had died on 3 September 1658 and it must have been increasingly clear to our ardent but shrewd Royalist estate-owner²⁷ that Richard Cromwell's weakness would soon bring about the end of the Commonwealth, the return of the Monarchy and an improvement in his personal security. Cromwell finally abdicated on 24 May 1659, the day after Fleming made his agreement with the Monk Coniston wallers.

From the evidence discussed above, not only is it possible to identify clearly and date this farm building and to suggest motivation for its reconstruction, but the management of the project can also be examined in some detail. Fleming, a talented and astute young man of twenty-five, seems to have been a capable manager who delegated overall responsibility to his steward John Bancks²⁸ when away from home. Whilst he used estate labour for the relatively unskilled jobs of slate and stone getting and perhaps for clearing the old cowhouse, he selected proper tradesmen for the main building work. The slater came from Grasmere and the carpenters from Ambleside, but Fleming overlooked local wallers in favour of John Holme,²⁹ who may have already earned a reputation on Fleming's Coniston estate six miles away. Fleming negotiated suitable contract terms with the carpenters and wallers and ensured prompt payments probably as soon as he had personally inspected their finished work.

It seems that all the tradesmen worked full-time during the construction period; certainly Green the slater did, and it has been possible to plot their work on a bar-chart (Fig. 2) to show the timing and sequence of the various activities. There are no significant breaks in the work. Indeed there is ample evidence of the use of concurrent dependent activities, a feature of efficient building-management. For example, stone-getting started well before the walling and continued steadily until a week before the walls were finished.

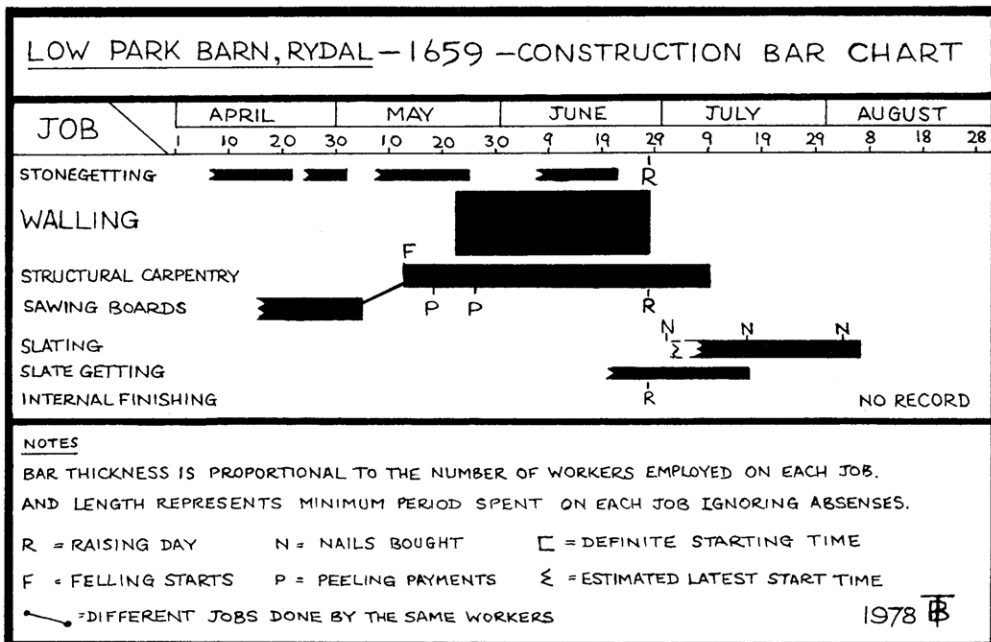


FIG. 2.

The slate-getting and slating had a later but similar relationship. The wallers and carpenters were occupied simultaneously, following independent activities until they combined to raise the roof timbers. The manner in which Green's slating has been shown to blend with Michael Holme's completion of the roof timbers also indicates sound management.

These strategies allowed the building to be weather-tight within three months from the commencement of felling. Indeed, the time scale was undoubtedly controlled by the two requirements of waiting until the oak bark was ready for peeling in May and of completing the construction before harvest. But in spite of using unseasoned timber the oak lasted perhaps 200 years in the roof and still survives in the barn floor-beams, which have a considerable amount of waney surfaces creating quite rounded beam sections. This supports the argument that Fleming chose relatively younger trees. Since the sale of bark covered no less than 13 per cent of the recorded expenses on the barn (Appendix I), it seems likely that such savings probably encouraged a more widespread use of unseasoned oak than has been recognized hitherto.

Corroboration that such building work was a spring and summer activity, scheduled to be completed in time for harvest, is found in brief details recorded in Fleming's second account book.³⁰ On 10 July 1688 he wrote that 10s. od. was "Sent by my son Michael to my Brothers to be bestowed in Ale at ye Raising of ye Great Barn at Coniston this day". As at Low Park barn, the raising was on a Tuesday and only two weeks later in the season. Walling for this barn started on 20 March when Fleming, apparently with some pride, wrote a memorandum "This day was laid the Foundation of the Great Barn etc. at Coniston Hall". He had been there only two weeks earlier on 6 March when he had "Given ye servants at Coniston when I & my son Will went thither to sett out ye new great

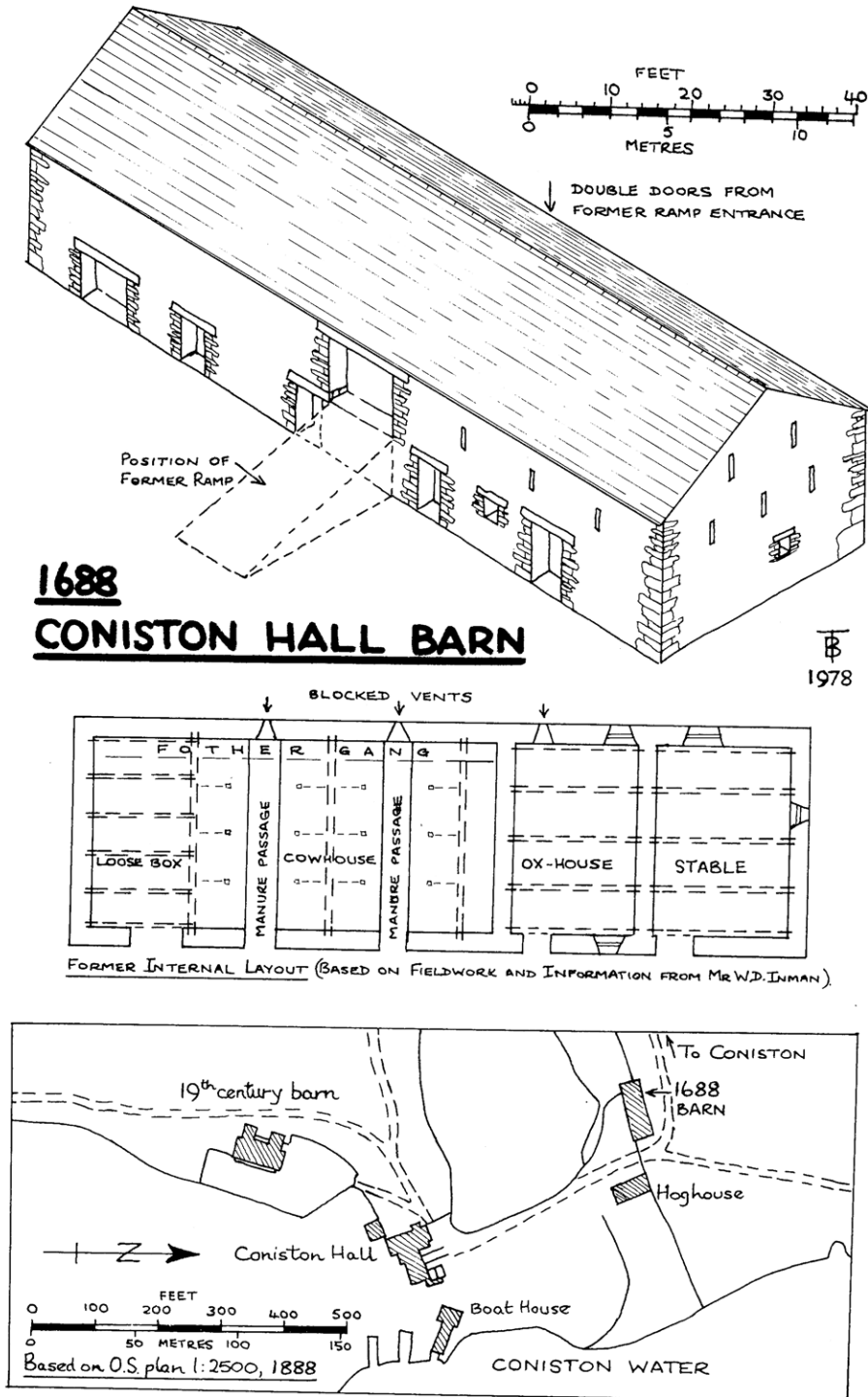


FIG. 3.

Barn, stable, Ox-house etc. 4s. od".³¹ No other details have been found,³² but the only building to which this could apply stands about 150 yards north-north-west of Coniston Hall. It measures 90 feet long by 28 feet wide and is aligned almost east-west across the contours on a gently sloping site.

When identified in the autumn of 1974 the building was in almost original condition except that the westernmost roof-truss had been replaced by one of modern sawn softwood when the roof had been extensively repaired perhaps early this century. The ramps up to the double doors on either side of the upper floor were no longer present but, inside, all the original oak-beams and floor joists were intact and sound. On the ground floor the headroom at the upper end was sufficient only for accommodating sheep or calves, but the stable at the eastern end had ample headroom. The cowhouses occupied the middle portion of the building. All the ground-floor doors were on the south side. Since the barn was entirely new and somewhat larger than the Low Park barn the walling had probably been started earlier to ensure completion at the appropriate time. Regrettably, during the winter of 1974-5 the National Trust, which had bought Coniston Hall in 1971, entirely gutted the inside of the building to provide accommodation for wintering forty suckling cows. Single stalls were set in a concrete floor, the walls were plastered and most of the upper floor was replaced by rolled steel joists supporting softwood joists and boards. New windows were made in the north wall and a new drive-in, double doorway was broken through the west gable. Although the superficial appearance of the building was preserved for landscape purposes, the original vernacular details and historical interest were destroyed after almost three centuries. Figure 3 shows a reconstruction of the former layout of the building and a measured drawing of its external features before alteration.

The changes suffered by the Low Park barn, though considerable, did not destroy the historical value of the internal detail and it is fortunate that both the building and a detailed record of its construction have survived to give such a clear indication of how the work was carried out over three centuries ago. Both barns are representative of the stage in Lakeland history when, following the Restoration, yeomen began to rebuild their houses and the more important people their farm buildings.³³ Low Park barn, especially, provides a remarkable illustration of the construction process which was probably used in countless traditional farm buildings erected during the ensuing 250 years in the Lake District.

Low Park Barn 1659		Appendix I		Summary of Information	
COSTS		PRICES		DIMENSIONS	
<i>Labour</i>		<i>Labour</i> (pence per day)		Length (ft.) 74.25	
Stonegetting	£ s. d.	Waller	contract	Breadth (ft.)	24.00
Stonesorting	0. 14. 0. (a)	Stonegetters &c	4	Area (sq. ft.)	1782
Walling	4. 1. 0. (b)	Wrights	contract	Average wall ht. (ft.)	c. 19
Wright's work		Slaters	6	Perimeter (ft.)	196.5
Construction	2. 13. 6 (b)	Peeling	12		
Sawing boards	0. 14. 0.				
Slating	0. 12. 6.	<i>Labour rates</i>		<i>SCHEDULE OF WOODWORK (f)</i> <div>Roof { Roof trusses 5 Ridge beams 6 Purlins 24 Rafters (originally (312) @ 6 ft. (cleft oak) at c. 16" centres) Barn Floor { Main floor beams 10 @ 22 ft. Lesser floor beams 2 @ 11 ft. (longitudinal) (g) Joists 148 Floor boards (sq. ft.) 1400 Finishings { Doors Double 1 pair Single 3 incl. winnowing door Windows 0 Stalls (20)</div>	
Raising costs	0. 13. 6.	Stonework (per rood)	18s. od.		
Labour cost	9. 8. 6.	Sawing boards (per rood)	14s. od.		
<i>Materials</i>		Slategetting (per load)	3d.		
Slate	0. 17. 6.	Slate laying (per load)	1½d. (e)		
Nails	0. 7. 9.	Slate laying (loads per day)	4 (e)		
Total Recorded Cost	10. 13. 9.	Peeling (per tree)	1½		
Equivalent cost of salvaged material		<i>Materials</i>			
Slate	0. 7. 6. (c)	Slate (per load)	3d.		
Existing Walls	1. 7. 0. (d)	Lath nails (per 100)	3d.		
Stonegetting	0. 8. 0. (a)	Locks (each)	6d. & 1s. od.		
	2. 2. 6.	Stone	NO		
Total Costs	12. 16. 3.	Timber	RECORD		
<i>Receipts</i>		<i>Gratuities</i>			
Bark	1. 8. 0.	Earnest money			
Timber	0. 6. 0.	Waller	1s. od.		
	1. 14. 0.	Wrights (for 2)	1s. od.		
		Glove money			
		Waller (for all)	5s. od.		
		Wrights (for 2)	2s. 6d.		

NOTES:
(a) artificially low due to re-use of materials from previous building.
(b) earnest money included.
(c) estimated 30 loads @ 3d.
(d) 16 yds. @ 18s. od. per 11 yd. rood.
(e) derived from quantities of slate and stated pay.
(f) figures in brackets estimated.
(g) supporting threshing floor.

Acknowledgements

My thanks are due to Mr M. Hodgson of Crow How and Mr W. D. Inman of Coniston Hall who allowed me access to their buildings. Miss Sheila MacPherson and her staff at Kendal Record Office have given invaluable assistance in many ways and the Rev. B. G. Fell placed his transcripts and his knowledge of the Rydal estate at my disposal. The co-operation of my wife, Margaret, is also gratefully acknowledged.

Notes and References

- ¹ R. W. Brunskill, *Illustrated Handbook of Vernacular Architecture* 1970, 132.
- ² For personal details see W. G. Collingwood (Ed.) *Memoirs of Sir Daniel Fleming*, CW Tract Series, xi, Kendal 1928, 73-79.
- ³ M. L. Armitt, *Rydal*, 1916 is the standard work on the estate but it suffers from some transcription mistakes and from not identifying sources of manuscript information.
- ⁴ Preserved in the Cumbria County Council Record Office at Kendal, WD/Ry Box 119.
- ⁵ This corrects an error by M. L. Armitt when she stated that the agreement with Jo Holme was made on 14 June. *op. cit.*, 240.
- ⁶ "Books of Receipts and Disbursements . . . &c", KRO WD/Ry Box 18 & 36 respectively.
3 July 1643 "pd to 2 wallers for walling Low parke barne £0. 13s. 6d.
pd to Slaters for slateing it £0. 3s. 6d."
The building is also mentioned in the 1654-1662 Account Book of John Bancks. KRO WD/Ry Box 119.
9 Jan. 1658 and 27 Nov. 1658 "for a new locke for lowe pke Cowhouse" 6d. & 1s. od. respectively.
- ⁷ An entry for 22 Dec. 1659 records
"John Makereth o' th' Browhead is to pay mee at Candlemas next for ye old Stone horse skin & for a filly skin ye sum of £0. 6s. 8d". This was paid on 15 March 1660. Other entries confirm Makereth's trade, and show that he also worked part-time on the estate.
- ⁸ L. A. Clarkson, "English Bark Trade 1660-1830" *Agricultural History Review* 22 (1974), 136.
"Until the 1790s it [oak] was the only bark used by tanners."
- ⁹ On 29 May 1658 Fleming had given his steward John Bancks 3s. 6d. "to pay for ye peeling of 27 trees in Bainriggs at 1d. ob a tree".
- ¹⁰ In "An account of what money I have Rec'd of my brother Fleming" KRO WD/Ry Box 119.
- ¹¹ L. A. Clarkson, *op. cit.*, 139.
- ¹² "Account book of John Bancks 1654-1662". KRO WD/Ry Box 119.
- ¹³ 6s. 8d. for weather-proofing the roof of Rydal Hall with moss was a regular yearly payment, falling due on 30 Nov. to John Green by an agreement mentioned on 30 Apr. 1669.
- ¹⁴ Agreement between William Dowthwaite of Over Staveley and Michael Mattinson of Longsleddale dated 31 Dec. 1753. KRO WD/TE.
- ¹⁵ Jane Ewbank, *Antiquary on Horseback*, CW Extra Series xix, 1963, 135.
- ¹⁶ "A Map of Rydal Demesne lying in the County of Westmorland" 1770, KRO WD/Ry. This map was probably the work of Thomas Goss who, on 24 Oct. 1771, signed a receipt for "Twenty one Pounds, being in part of an account for Surveying & Mapping Sir Michael le Fleming's Estate". WD/Ry Box 107.
- ¹⁷ Ordnance Survey 1:2,500 1st. ed. 1860, schedule of acreages.
- ¹⁸ "A particular of what corne, when & where sowne at Rydal since Mar. 25, 1669". Four pages written at the back of the 1656-1688 account book covering six successive years' sowing, threshing and use of cereals.
- ¹⁹ R. W. Brunskill, *Vernacular Architecture of the Lake Counties* 1974, 86.
- ²⁰ Jane Ewbank, *op. cit.*, 134.
- ²¹ M. L. Armitt, *op. cit.*, 220 & 233. See also J. Nicholson & R. Burn, *History of Westmorland and Cumberland* 1777, I, 174.
- ²² Armitt misread waleing and so referred to 'trailing' stones. *Op. cit.*, 234. Waleing means sorting.
- ²³ KRO WD/Ry Box 22 (slate). Apparently late 18th-century.
- ²⁴ Architectural Press *Specification* 1968 I, 194.
best Westmorland slate weighs 9lb per sq. ft.
2nd quality Westmorland slate weighs 11 ¼lb per sq. ft. [a 25% increase].
3rd quality Westmorland slate weighs 14lb per sq. ft. [a 25% increase].

- ²⁵ E. S. de Beer (Ed.) *The Diary of John Evelyn* 1959, 385, 388 & 390.
- ²⁶ Richard Harrison's account book shows considerable payments to the Royalist cause and, later, the financial penalties imposed by the Parliamentarians.
- ²⁷ *Memoirs of Sir Daniel Fleming*, 77, gives his personal attitude to the political situation.
- ²⁸ After working for the estate for fifty years, Bancks retired on 30 April 1685. He was given a gratuity of £100 and a pension of £2 per year plus his food. He died on 22 Nov. 1688. His only son William, a Fellow of Pembroke Hall, died in Cambridge in August 1699. (entry of 5 Sept. 1699).
- ²⁹ A year after the barn was built John Holme married Elizabeth Jackson at Hawkshead on 4 Aug. 1660. Two days later Fleming recorded that 2s. od. was "Delivered to my brother William to give att Jo Holmes (ye wallers) wedding". Holme worked for the estate for many years. In his old-age 1s. od. was "Given to Jo Holme ye Waller who came a Begging" on 12 Dec. 1689. Similar payments continued for several years but on 20 May 1701 at Hawkshead "John Holme de Munck-Coniston" was buried, just two months after Fleming.
- ³⁰ The first account book ended on 31 May 1688.
- ³¹ This indicates that he possessed technical skill as well as managerial ability.
- ³² The affairs of the more distant estates at Coniston, Skirwith, Beckermest and Monk Hall (Keswick) are much less informative than those of Rydal.
- ³³ R. W. Brunskill, *op. cit.* 1974, 75. This is the best guide to the region's traditional buildings.

