

ART. XIV. – *The Troutbeck Park Slate Quarries, Their Management and Markets, 1753-1760.*

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RECENT articles in these *Transactions*¹ have described how some traditional Cumbrian buildings were erected, where the materials were obtained and how economies were made, particularly by re-using suitable materials from old buildings. Although building stone was available almost everywhere,² its poor value/weight ratio caused old walls to be stripped right down to the foundation and quarries for new stone to be located a fraction of a mile from new buildings to minimise transport costs.³ Suitable timber was also widespread, but became scarce as demands for ship-building and charcoal increased, so that builders had to scour the countryside before starting work and often transported timber more than 15 miles over poor and difficult routes. In contrast, the more restricted locations of workable slate deposits arose principally from geological chance, but the product, though heavy and labour-intensive, was sufficiently specialized and durable to justify the cost of transport over considerable distances and compete with perishable alternatives like thatch.⁴ Despite its former importance to Cumbria's rural economy, the slate industry has not been examined in detail.

Fortunately the Browne Manuscripts, preserved at the Cumbria Record Office at Kendal,⁵ contain a collection of nearly 50 letters, as well as accounts and other documents, relating to the Troutbeck Park slate quarries in the mid-18th century. The accounts were submitted by the quarry manager, William Birket (1711-1794)⁶ of Lowwood (now Wood Farm), Troutbeck, between 1754 and 1758 to the owner Ralph Day (1707-1772) of London and Maidenhead. Day had gained Troutbeck Park through his marriage, on 21 August 1736 at Gray's Inn Chapel, to Mary Pigeon of St Bride's parish, London,⁷ daughter and heir of Major David Pigeon who had worked the quarries until his death in 1733.⁸ Details of Pigeon's career, of how he came into possession of the quarries and what happened to them after Day's death are contained in the Appendix, which corrects errors already published by Nicolson & Burn, Mannex and others and reveals many fresh facts about this important Lakeland property. Ralph Day was a member of Clifford's Inn and most of his letters were written from Dyer's Buildings on the south side of Holborn, where he occupied one of sixteen tenements from at least Spring 1743 to Autumn 1758.⁹ The content of his letters is very repetitious and is concerned often with obtaining minimum transport rates for generous weights of larger slate. William Birket's draft replies are usually more informative, but as they and his accounts are also repetitive, some facts contained in this article will be a conflation of scraps from various parts of the archive.

The earliest relevant document is a contract, dated 31 December 1753,¹⁰ between Michael Mattinson of Longsleddale and Robert Philipson of Staveley, near Kendal (for Ralph Day of the City of London), and William Dowthwaite of Over Staveley, slategetter, "Concerning the opening and Driving [of] one new Levell at the High Slate Quarry at Troutbeck Park and Getting Slate there". Dowthwaite had the option of a 3 or 6 year lease, was to "Constantly Employ when the Weather is Seasonable seven . . . Persons

Skilled in Working at the Slate Quarrys”, and was “to have such firing for the use of the quarry as is Specified in John Harrison’s Lease”. At the end of his term he was to leave the quarries “Free and Clear from Rubbish” and “Deliver the like Number of Work Tools . . . As he shall . . . receive from the said Ralph Day or his Agents”. Douthwaite was to receive £10 “at the Beginning of the said Work”, £27 “when . . . Michael Mattinson shall Judge Requisite” and £3 more if he “work the Quarry six years”. Also, on delivery of every 200 loads of “Good and Merchantable [slate] . . . Delivered at the Weigh Post”, he was to receive 1s. 6d. a load for London slate, 1s. 2d. for Country slate and 6d. for Neam Tom slate, “having 21 Load to the Score” and each load to “Contain 16 Stone Weight and 16 pounds to Each Stone”. Also “none of the London slate shall be under 10 Inches in Length under the Pin-hole nor . . . Less than 6 Inches in Breadth”. The contract, after several insertions in William Birket’s handwriting, was signed by the three men and witnessed by John Douthwaite and William Birket.

The document sets out the working conditions clearly and identifies the three usual categories of Westmorland slate. Although the measurements of Country and third-grade Neam Tom are not defined, the surprisingly small size quoted for the best grade helps to explain why Day’s customers in the South of England complained that their slates were not large enough. He himself constantly grumbled about receiving light weight even when he measured consignments in short tons of 20 hundredweight (cwt.), each of 112 pounds (lbs.). He was therefore trying to counteract this problem at source by using long measure in which cwts. of 8 stones, each of 16 lbs. (rather than 14), weighed 128 lbs. As ten loads normally made one ton, the use of “21 load to the score” produced an extra half load in each long ton, which therefore comprised 2688 lbs., an advantage to Day of 448 lbs. (or 4 normal cwts.) per short ton. This 20% extra weight also compensated for substandard goods and breakages during transit.

Unfortunately John Harrison’s lease has not been found, so one cannot be sure whether the “firing for the use of the quarry” was for helping to split rock or to provide heat in quarrymen’s huts. John Harrison was Day’s tenant farmer at Troutbeck Park and “Herds” (Hird House) and earned extra income carrying slate by packhorse to local customers and to the shore of Windermere. The few surviving letters from Robert Philipson to Birket are vague, but show that he lived at Ashes (SD 469 969) and acted as Day’s steward, collecting rents, transmitting and receiving money as necessary and generally overseeing legal matters and the manager’s work. Mattinson was the quarry manager, but Day soon found his accounts “so imperfect” and “made up . . . by hearsay”, he suspected “damned Villany and neglect”.¹¹ Hence William Birket, whom Philipson addressed as “Cousin”, took control perhaps at the latter’s recommendation and, on 29 October 1754, submitted an account of slate sold locally “since I took the charge of the Management of the Slate Quarries at Troutbeck Park as Agent for Ralph Day from Aug’ the 12th 1754”. His salary was £20 a year. In September he had been with Mattinson weighing slate already in stock at the change-over (see Fig. 1). “At the High quarry” were 193 loads of Country slate and 127 of Neam Tom, whilst “At Low quarry at Goat Cragg”¹² there were 113 and 23 loads respectively. Also, “London slate at Lowwood [near Haverthwaite] . . . Weighed by Michael Mattinson” amounted to 50 tons 4 cwt., in addition to two loads of gutter slate and 95 loads of London slate sold to John Walker of Haverthwaite at 2s. a load (*sic*) or only £1 a ton, and 27 loads sold to John Rawlinson of Haverthwaite at the same price.

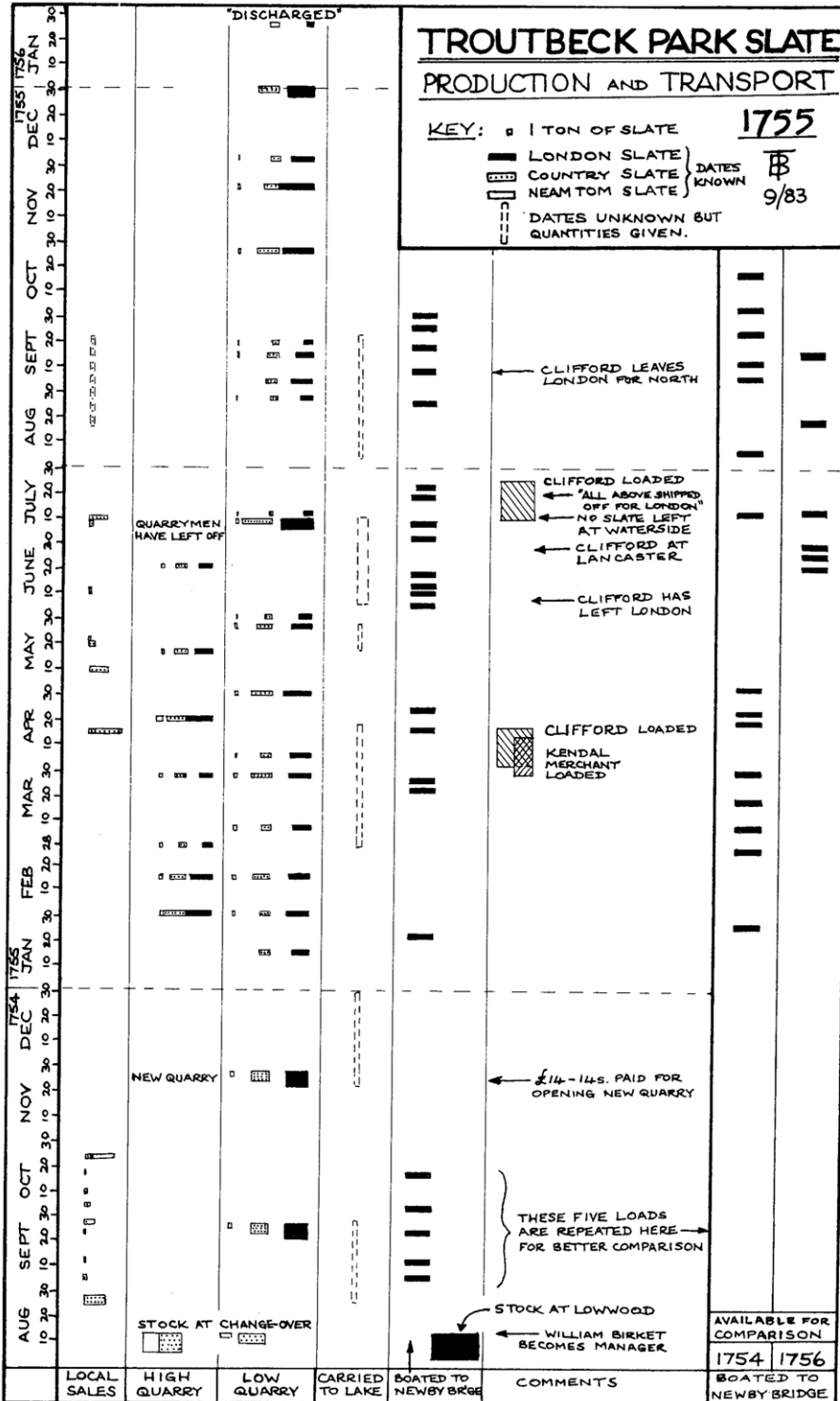


FIG. 1.

Clearly, two main aspects of the slate trade can be identified; sales of Country and Neam Tom slate to local customers, and a trade in London slate through Lowwood with peripheral sales to customers along the route. These will be considered in reverse order but, first, by reference to vouchers and a small notebook of Birket's, the slate production figures can be examined for a short period. Quantities of each type of slate won at the Low Quarry between August 1754 and January 1756 and at the High Quarry for the first half of 1755 are recorded on the first and last pages of the notebook. At variable intervals of about two to four weeks, the slate was weighed and dips in production reflect poor weather in winter and harvesting in summer. On 19 September 1755, for example, Birket noted that "4 of the hands were off almost 3 weeks in Hay Time". Whenever 200 loads were accumulated, the quarrymen were paid as in Table 1.

QUANTITIES OF SLATE GOT AT TROUTBECK PARK QUARRIES IN 1754-5														
<i>Low Quarry</i>				<i>High Quarry</i>										
} William Dowthwaite				} Henry Turner										
} George Wallas				} Nicholas Cowperthwaite										
<i>Loads</i>				<i>%s of Total</i>				<i>%s of Total</i>						
<i>Lond. Co. Tom</i>								<i>Lond. Co. Tom</i>						
<i>Pay Date</i>										<i>Pay Date</i>				
*28 Sep '54	140	68	11	63.9	31.1	5.0	New quarry opened						24 Nov	
*27 Nov	126	74	10	60.0	35.2	4.8								
15 Feb '55	126	74	9	60.3	35.4	4.3	50.0	43.7	6.3	111	97	14	28 Feb	
5 Apr	126	80	10	58.4	37.0	4.6	50.0	41.1	8.9	113	93	20	17 May	
31 May	129	87	11	56.8	38.3	4.9	42.6	45.9	11.5	26	28	7	21 June	
12 July	140	70	6	64.8	32.4	2.8	Abandoned							
20 Sep	132	74	4	62.9	35.2	1.9								
22 Nov	129	71	6	62.6	34.5	2.9								
31 Dec	148	55	4	71.5	26.6	1.9								
27 Jan '56	13	19	0	40.6	59.4	0.0								
"Discharged"														
Totals	1209	672	71	61.9	34.4	3.6	49.1	42.8	8.1	250	218	41	Totals	
				1952			in c. 76 weeks			509				
				c. 26			Average weekly production			c. 20				

Note. * quantities on vouchers only.

TABLE 1.

On 24 November 1754, Birket had paid £14. 14s. "to Henry Turner and Nicholas Cowperthwaite for opening a new quarry". The quantities on their payment vouchers match those entered for the high quarry, so William Dowthwaite and his partner, George Wallas of Kentmere,¹³ must have worked at the low quarry and their few vouchers confirm the notebook entries. In the older, low quarry, London slate formed about 62% of total production and output of the less desirable Neam Tom was gradually reduced from 5% in response to Day's demands for better slate. In contrast, the new quarry was a disappointment, producing barely 50% of London slate and showing a marked increase in output of third quality slate. It was therefore abandoned before July 1755, partly because of poor sales in London, as will be demonstrated later.

The way in which slate was taken from Troutbeck Park to the ships must now be

considered. On the reverse of an advertisement, printed by Thomas Ashburner of Kendal, directing enquiries for slate to William Birket, handwritten notes state the costs of transport per ton on each stage of the journey. Confirmation and extra detail appears elsewhere. In Birket's notebook, for example, a page lists "London Slate led by Jno Harrison [Day's tenant] to the Water [Windermere] since I took Charge . . . to 1st of January [1755], 191 loads". By 10 July 1755, Harrison had carried 650 loads more and there was "None left at the Water[side]" because several ships had been loaded. He transported 250 loads more by 23 September to total 109 tons in 13 months. If he had a string of ten packhorses, he would have moved one ton on each return trip of nine miles and was paid 5s. a ton (6d. a load) equal to 13.3d. per ton-mile of the slate's progress seawards (see Fig. 2).

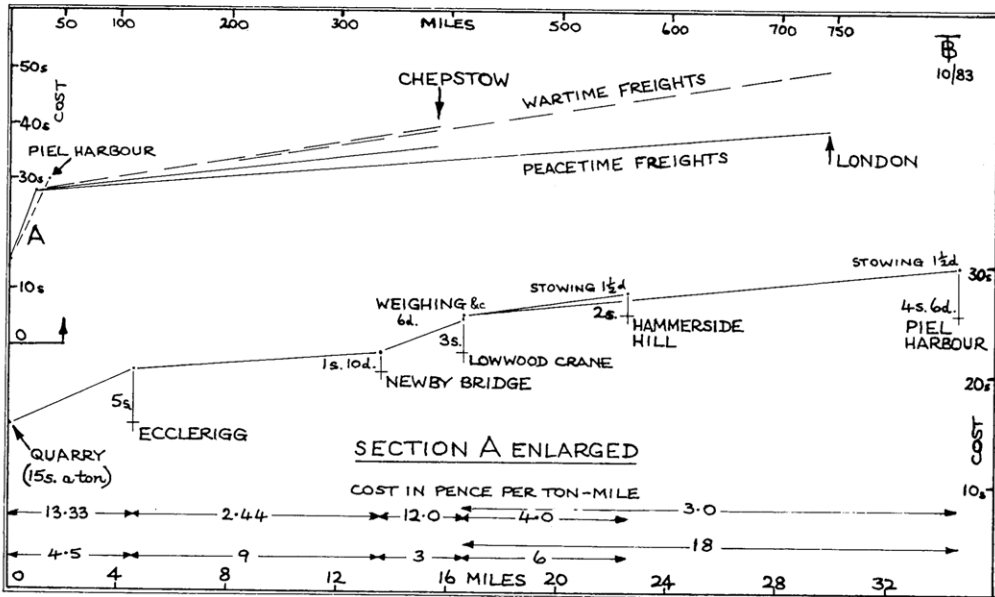


FIG. 2. - Cost-Distance graphs for the coastwise shipment of slate from Troutbeck Park, 1755-60.

Another page lists "Henry W[illia]mson's acc[oun]ts of Boating London Slate down the Water 1754" starting on 26 January. On 22 January 1755, he was paid for 16 trips carrying 5 tons each time, ten journeys having been in Mattinson's time. By 30 September 1755, seventeen more boatsful had been taken to Newby Bridge for 1s. 10d. a ton (see Fig. 1). A voucher, dated 9 January 1756, shows he was paid for a further six loads of "Slate from Ecklrigg to Water foot". This is a vital clue for, in Ecclerigg Crag quarry (NY 389 005), a small dock, now partly occupied by a modern boathouse, could have accommodated perhaps two loading barges and sheltered them from storms. Most of this quarry was abandoned before 1835 when the first of several huge inscriptions was carved into the quarry floor.¹⁴ In 1773 Henry Williamson was one of three men who boated 828 tons of building-stone from this quarry to Thomas English's circular house on Windermere Island.¹⁵ In 1754 he charged 10d. a ton for trips to Bowness Nab or Belman Landing (SD 393 938), at rather more than the 2.4d. per ton-mile charged for the nine mile trip to Newby Bridge.

The next stage is referred to, on 11 March 1755, in a receipt for £7. 10s. paid "to Daniel Fleming . . . for cartage of 50 tons from Windermere Waterfoot to the Crane at 3s. per ton", no doubt crossing the river Leven at Backbarrow. Details on the back of the slate advertisement say the route terminated at "Lowwood Fournace" and that "Fleming is to find landing". The Crane's exact location is not stated, but inspection of the area suggests that it would have been below Lowwood bridge, possibly on the Haverthwaite side and perhaps as far down-stream as the Fish House (SD 339 831) where Ordnance Survey maps show the "Normal Tide Limit". Certainly, progress beyond the crane depended on Spring tides so that delays were common. The rate for Fleming's three-mile haul was 12d. a ton-mile so, if horses and carts were used, they produced only a marginal cost advantage over Harrison's packhorses on the route's first stage.

Only four Bills of Lading have survived, three of them from 1755. Dated 12 April, the first states that the *Kendal Merchant*, captain John Turner,¹⁶ was anchored in the river Leven bound for Chepstow with 34 tons of blue slates to be delivered to Mr Taylor, agent to Lord Coventry. The second, dated 15 April, shows that Allen Backhouse of the *Clifford*, also anchored in the river, was to take 45 tons of slate to the Port of London to Ralph Day. Three months later, on 26 July, the *Clifford*, anchored at "Pile of Fowdrey" (*i.e.* Piel Harbour SD 23 64), was again bound for London with 56 tons 17 cwt. of slate "but there is Two Tons aboard a lighter [and] if it doth not get aboard the Vessel, there will be only 54 tons 17 cwt.". Presumably the ship was close to sailing or capacity. Ralph Day preferred to use the *Clifford* because he held a one-eighth share in it. By 22 August 1756, Simon Woodborne (or Woodburn) of Lancaster was its master, but the fate of Allen Backhouse has not been traced.

Vouchers and accounts refer to the lighterage of slate down the Leven estuary for these voyages. On 15 April, John Birket of Haverthwaite was paid 1s. 6d. "for Ale at putting 90 Tons of slate on board the lighters" and George Wilson "a Slate Dresser [had 1s. 4d.] for Dressing broken Slate". After some delay, on 11 May, £1. 9s. 9d. was paid "to Wm Holm [of Haverthwaite] for weighing 29½ Tuns at 3d. p. Tun and putting 90 Tuns of slate on board the Lighters at 3d. a ton". For John Turner's cargo, John Colton was paid on 1 May for lighterage of 12 tons at 2s. plus 1½d. a ton for stowing on board, Elkanah Taylor was paid similarly for 10 tons on 7 June and David Slater, referred to elsewhere as "master of the Flatt belonging Lowwood Company", was paid for 8 tons on 13 July. John Colton, John Ashburner, John Postlethwaite, John Satterthwaite and James Dickenson each carried 12 tons to the *Clifford* on the same terms and, on 9 July William Thwaites¹⁷ of Ulverston had £1. 8s. 8d. "for Stowing Slate and Dressing on Board the *Clifford* and Expences . . .". On 2 May, Taylor and Postlethwaite had assigned their wages for slate taken "to Hamberside Hill", east of Ulverston, to William Dockrey, the agent at Backbarrow Furnace.¹⁸ For the *Clifford's* second voyage Holm and Thwaites were paid promptly on 26 and 27 July for weighing and stowing, but the lightermen were not paid until 29 December when Holm was given £5. 6s. 3d. "for the use of Thomas Postlethwaite, John Satterthwaite, James Dickenson, Elkanah Taylor, David Slater and Henry Lamb for carriage of 50 Tuns of slate [longweight] Down the River . . . at 2s. p. Tun & 1½d. Stowing ditto". This equalled 60 tons shortweight exactly.

To develop this study, each cargo will be followed in turn to its destination. Day's earliest dated letter, of 16 March 1755, sets the scene for Turner's voyage:

. . . I wo^d have thirty Tons of Slate . . . sent the first opportunity to Bristol They are to go from Bristol up the River Severn to my Lord Coventrys Wharf at Upton near Parshaw in Worcestershire The vessel may go up with them if worth her while or put them on Board a Trow . . . and set Edgways . . . as in the Ship and be careful of Breaking them . . . Mr Taylor, Lord Coventry's Steward at the Wharf will pay the freight from Bristol Let there be weight and good for 'tis a new Customer . . . Mr Sunderland of London¹⁹ Informs me the freight is but 9s. [a ton] at most

A week later he wrote again saying "The Captain must Inquire for Mr Edward Jacks, a Trow Owner of Worcester . . . who Carrys goods for my Lord . . . [and] is to be heard of on the Key or at the post office at Bristol . . .". Birket's undated, draft reply reads:

Agreeable to your order, have sent 30 Tuns slate . . . by Captain Turner I could not hear of any vessel bound for Bristol but am informed . . . that Chepstow is the more convenient port for goods bound up the River Severn as . . . it is much nearer [and] . . . their will be a considerable saving in the lighterage The Freight to Chepstow . . . is 9s. p. Ton Longweight and 10s. if he proceed to Bristol, 128 to the 100 and 20 c. to the Tun There is 30 Ton longweight and 33 Ton 16 hund 80 pounds neat.²⁰ I made it up to 34 tun neat. The Slate is extraordinary Good and cannot miss of giving contentment The Captain is for going up the Baltick and therefore intends to Draw upon you in London for the freight . . . [to] Chepstow it will amount to £13. 10s. [and] at Bristol £15"

The lower sum was paid on 21 June (see footnote 16).

However, the *Kendal Merchant* discharged at neither place, for Birket's accounts record £3 "pd John Turner for Extra Freight of 30 Tuns of Slate from Chepstow to Newnham", about 20 miles upstream and 11 miles SW of Gloucester. This diversion caused Day to complain, on 1 July, "Ld Coventrys Steward Insists a Trow might have been got at Chepstow or Bristol, so the extra [cost] will fall on me . . ." and, on 16 December wrote to Robert Philipson that he was not to pay "a farthing Extra for the Captain going up the Severn but the reverse . . . 'twas 2s. 6d. p. Ton more than if it had been delivered at Bristol". In fact, Birket had already settled the matter on 13th "at Kendal, Mr Philipson being present, at 2s. p. Tun and tho[ugh]t had come well off . . . [Turner] insisted strenuously on 3s. . . ., that it was £7 out of the proprietor's way going up to Newnham and it . . . Cost him 9s. going by Land from Chepstow to Bristol . . . to enquire for Troughs" but he found "no men by reason of the Press [gang] and he lost one hand himself". They parted on poor terms. Birket's expenses were 12s. being "Three Days from home" during negotiations.

With regard to this impending expense, Day, on 7 June, had hoped originally "to get some or all out of my Lord", but consoled himself that "They are safe [financially] and will want 100 tons more so must pay it myself if they insist". Significantly, he wrote again to Birket, on 12 and 26 April 1757, that he had sold 14 tons more slate for Lord Coventry's new house at Croome Court, 7 miles SSE of Worcester: "Mr Holland desires they may be large and good . . . he to pay extra freight occasioned by the War²¹ He complains of the former being small and a ton did not cover two square [*i.e.* 200 sq. ft.].²² Let it be good and large but don't pick it & make weight allowing a little for breaking. You may send it by first August . . .". Birket's accounts for 1757 show that it was boated down Windermere by Henry Williamson and a Richard Hudson carted it to the crane, from where Henry Lamb and William Benson boated and stowed 6 and 8

tons respectively by August. William Holm had 6d. a ton for “weighing & Boarding” it on the lighters and William Thwaites had 2s. 6d. “for Dressing & Stowing . . . on Board the Ship” which is not named. The bill of lading was sent to Day and has not survived. On 15 November 1757, he asked what had happened to the bill for £9. 16s. charged for freight at 12s. 3d. a ton (neat), or 14s. (longweight) which “at 20th Sept. Capt. Muckelt advised me [he] had drawn”. The delay caused Birket to postpone payment to “Thomas Muckelt for Shipping of 16 Tuns of slate to Bristol” until 8 February 1758. As $16 \times 112 \times 20 = 14 \times 128 \times 20$, a pattern of prices can be established. The quarrymen were paid by long tons of $21 \times 128 = 2688$ lbs., whereas the lightermen were paid by smaller long tons of $20 \times 128 = 2560$ lbs. to allow for breakage and get generous weight at the lowest charge. Day noted enviously that, on *some* voyages, ships carried at $20 \times 120 = 2400$ lbs. rather than neat weight, but then the customer was charged in short tons of $20 \times 112 = 2240$ lbs. to maximize income at a market price probably not known to the Cumbrian workmen. It is not surprising that confusion and errors occurred.

Fortunately, amongst the records surviving in the Croome Estate Office at Severn Stoke, there are five slate accounts signed by Henry Holland the elder (1714-1785) the well-known builder from Fulham. On 19 December 1757, he was paid £100 on account by Lord Coventry and then submitted his bill “For Slateing his [Lordship’s] House at Crombe” for the years “1755 to 1758”. The main item was £330. 16s. 9d. for “101 Square 80 [square] Feet of Best Westmoreland Slateing at £3. 5s. per Square” including labour. However, there is a comment below: “Deduct for over Charge, and er[rors] Forty four Pounds” signed by Lancelot [‘Capability’] Brown. This was his first architectural commission²³ so he was guarding his client’s interests carefully. He reduced the area of slate by 3 squares [*i.e.* 300 sq. ft.] and noted “The slats left are Mr Holland’s”. These were probably the small-sized slates mentioned earlier; Holland received the balance of £186. 16s. 9d. on 18 May 1758. If a ton covered about 2 squares, the roof would have required about 50 tons of slate, the same amount as had been shipped from the Leven estuary on the two voyages described and, as there was a surplus at Croome, we may dismiss Holland’s complaint of short weight.

Another bill, of 1760, “For Slating a Church at Comb”, presumably the estate church of St Mary Magdalene, charged £95. 6s. “for 28 Square 37 Feet of Best Westmorland Slating” and “for 1 Square 31 Feet . . . between the Towers” at £3. 5s. a square. In addition £41. 5s. was charged “for 11 Tons of Slat left at £3. 15s.” a ton and “Freight from Chepstow” cost £11. Again ‘Capability’ Brown was not satisfied: “There is over charged for the slating five or six shillings per square. Who Measured the work and who weighed the slates that are left”? If, as might be expected, Holland was making a profit over his costs, we cannot truly assess Day’s profit from the price per ton. These 26 tons of slate are not mentioned in the Troutbeck papers for the accounts end in October 1758 and the final letter is dated 27 April 1760 when the last 32 tons at Lowwood was being shipped to London. Perhaps Holland had found a different supplier and, certainly, started using cheaper Welsh slate for the service wings, for two more bills, presented in 1765 without comment by Brown, recorded a total of 232 square 78 feet “of Walch Slating don on the Offises at Cromb” at £1. 12s. 6d. a ton.²⁴ This price compared with 5 tons of Westmorland slate at £4 a ton and shows why the latter was reserved for prestigious buildings. The distinction is still evident at Croome.

We must return to 1755 and the first cargo on board the *Clifford*. Ralph Day’s letters

of 16, 23 and 30 March refer to an order for 20 tons of slate to “be laid out at Feversham in Kent to Cover the Church . . . but [I] beleive more will be wanted Inquire for Mr Maulsbury a Bricklayer whose men are Building there . . . and [for London add] as much more as you think proper not Exceeding 40 tons [longweight] . . . in two parcels . . . for I shall get rid of two twenty Tons or two fifteen Tons better than all together . . .”. He expected Captain Backhouse to take it “at 13s. per Ton longweight” to London, but the latter was “Insisting on 70 or 80 Tons” at a higher rate for neat tonnage so that, in early April, Birket reported to Day that Backhouse “came post hast to Kendal . . . to have the slate put on board the spring [tide] following” to avoid delay. “I told him, before Mr Philipson, I expected another Letter . . . before I could proceed, at which . . . Backhouse fell into a great passion and said . . . before he was either detained or wanted it [at 13s. per ton] he would give you his share of the freight for nothing . . . In short . . . I’ll have no more to do with him . . . pray settle the freight between yourselves when you see him for he is more than a match for me . . . There is 60 tons longweight on board the *Clifford* [including] . . . 20 Tun for Feversham.” Birket had rounded up the London slate to 45 tons and the Faversham slate to 22½ tons neat weight.²⁵

To arrange another meeting, Backhouse wrote from Ulverston to “Mr Barkert, Near Troughbeck Bridgh” on Saturday 12 April:

Mr Barkat, as I Canot Com to penney Brigh on waiday nor anney Day Els bot on Tusday, I Daise [desire] you will Com to Vluerstone and I will be shuer To Met you thier at 10 Cloke in the Moring for alle the Slatz will be on board by That Taime . . . I am so throng aboard the Ship I Canot Com

This is an interesting example of a mariner’s literacy²⁶ and it is significant that the bill of lading for the 45 tons was signed on Tuesday 15 April. The bill for the Faversham cargo has not survived, but there are brief comments in Day’s letters of 15 April and 1 July saying respectively: “he says he can’t deliver the 20 Tons at Feversham” and “tell him Maulsbury says ’tis £7 Damage not laying out his Slate at Feversham”. The exact events are not stated but, perhaps with such a deeply laden ship, Backhouse could not get up Faversham creek and, in his impatience and haste to reach London, unloaded into a lighter at the entrance to The Swale, thus generating an expense Maulsbury did not expect. On 7 June, Day reported: “Backhouse . . . has behaved Ill to all the Owners and [had] set sail homeward deeply Loaden”.

Documents in the Kent Record Office at Maidstone provide useful detail of the building work at St. Mary’s church, Faversham.²⁷ As the condition of the medieval church was causing concern in 1752, the vicar and ten parishioners formed a committee to make necessary arrangements. They engaged George Dance, the elder (1695-1768),²⁸ who submitted a structural report and proposals for rebuilding the central portion of the church.²⁹ On 15 April 1754 the committee noted that “the south-east Pier of the Great [central] Tower is in a ruinous state and in danger of falling if not taken down”. On 5 July, the architect wrote introducing “The Bearers . . . who built the Corn Exchange of London and are very well qualified to undertake the Alteration of your Church . . .”. Before they signed the contract on 9 May 1755, these workmen must have demolished the tower for, on 18 April, Dance wrote to placate the committee who claimed that the masons had taken away demolished materials as if their own.

Henry Wheeler of St. Michael, Cornhill, mason; Jonas Maulsbury of St. James, Westminster, bricklayer and slater; Thomas Poultney of St. John, Southwark, carpenter; and Humphrey Wilmott of St. Brides, London, plasterer, agreed to undertake the work for £1,148. Of this £608 was for Wheeler and Maulsbury who, before 29 September 1755, were to pull down the old tower “in the middle of the cross of the church” as well as the piers and arches supporting the nave. They were to re-use “the best of the old materials” and were to erect four new piers “of solid Portland block” at the crossing, rebuild the nave and “cover the Roof . . . throughout with the best Westmorland Slates on good sound Oak Laths and . . . Plaister the underside thereof . . .”. Poultney was to have £405 and use good, sound, yellow Riga timber with iron bolts as directed by Dance; the king posts were to be of sound oak, the strap iron of Swedish bars and the cornice of Riga deal, covered in milled lead 1½ ft. wide and weighing 7 lbs. per foot.

It is interesting that, on 10 May 1755, Dance wrote “I verily believe the People at Portland can get no Vessels yet to load for Faversham” and “even London People are very much distressed for Stone . . . not on Account of Winds . . . but because they can get no vessels to Load . . .”. Hence, Birket was not alone in his difficulty of finding ships to run the English Channel. A letter from Jonas Maulsbury, addressed from Argyll Building, near Hanover Square and dated 18 October 1757, claimed that the contract was very hard and he sought extra payment for slating “that part of the Roof over the Organ loft and building the walls thereto . . . as Mr Poultney had pulled down that part [in error and] I was not willing to let it remain naked . . .”. This suggests a policy of minimum interference with the sound parts of the church. Dance used slate to save weight and estimated that £400 would be earned from selling the old lead. The overall result of his work is a pleasing Georgian nave with Doric columns supporting a triglyph frieze and a clerestory with semi-circular openings. A steeple of flint and stone was added at the west end in 1799. There are no details of the cost, handling or possible problems associated with the Troutbeck slate or of a further order. It is significant, however, that one of the rebuilding committee members was Thomas Buck who had chambers at Clifford’s Inn, London and so probably knew Ralph Day quite well. It would be interesting to know how much more of Day’s business was conducted through such personal contact and how well he knew Henry Holland or ‘Capability’ Brown, for example.

The 45 tons of slate for London, shipped with the Faversham consignment, leads naturally to consideration of how the capital’s slate trade influenced activities in Westmorland. On 23 March 1755, Day wrote of that batch “I am not Anxious of a Quantity for have none bespoke in London . . . you can’t Imagine the Difficulty we have to weigh it out of the vessell at London and [the] Expence”. Correct weighing at Lowwood was therefore vital. On 30 March, Day grumbled “Backhouse in a former freight knows he had 2 Tons short, sold [to] Mr Leadbetter³⁰. . . if the slate turns out no better must desist there [at Troutbeck] . . . The last by Capt Pennington was so badly stowed and broke [it] was dressed in the ship at London and was at least £12 loss to me as well as the Captain’s loss in freight”. On 7 June he noted customers “are very dull in pay[ing] and Hazardous. Suppose shall have a Hurrying Demand the latter end of the Spring” and by 1 July 1755 was asking for a further 40 or 50 tons, again in two weighed batches: “I am not in want of the Slate but as winter will draw on and know not the Event of

the War, 'twill be adviseable to move some They, in contracts for Slating . . . don't care to take 'em Unless a foot long – and are beating down the prices sadly".³¹ A fortnight later he complained "the peril of Credit in London Slate and other incident Hazards and Expences [is] so great I plainly see I am working [only] for the men [at Troutbeck]. Therefore am now come to a resolution of not laying out one shilling more in Opening new Quarries . . . and think it Adviseable to desist at the first Expençe provided they have full filled their agreement . . ." at the quarry.

Despite his financial incentive, Ralph Day seems to have been an ineffective salesman and management of the complex supply arrangements was weakly controlled. There were, however, other factors. In an undated and damaged letter of early 1755 Day wrote: "The Marketts are Glutted with Slates from other Countries and altho' worse they sell Cheaper and are Readier sale . . . They'l mix 20 or 30 Tons with 10 of ours and cover it all as Westmorland". The situation was no brighter in Cumbria. Writing on 5 July 1755, William Birket regretted not winning a large local sale of London slate to a Mr Braithwaite³² and revealed:

here is a large quantity [of unsold slate] . . . and it is a very great Drug [on the market], the whole country being almost new built and a great number of quarries worked . . . and still increasing. We sell our country slate at 1s. 4d. p. Load, but Rigg, who is our main antagonist on this side of the Country, undersells us by 1d. p. Load so . . . as London slate cannot be got without it we must endeavour to quit it after the best method Turner &c is almost come to a stand at the New Quarry, 4 Hands haveing now worked at it 7 weeks for 26 Load of [London] Slate and that very ordinary Several good Judges thought . . . it would have been a better quarry than the old one The contract for opening it was £28 . . . and if they work on untill Martinmas [11 Nov.] next they will be intituled to the other half which I think will be money quite sunk. They have now left it off untill I hear from you

Entries in Birket's notebook (Table 1) confirm the last statement and the new quarry's poor production record.

Having arrived safely with the 57 tons of London slate shipped at the end of July, Backhouse was ready to return north by 2 September. Day took 5 tons for his own use and complained "I have so much money due for Slate and the people not worth a Groat makes me sick of Trade. Therefore will desist as soon as Conveniency will permitt . . ." ³³ Birket replied on 19 September: "I communicated your thoughts to the workmen about Dropping the works They inform me that their workmen are all loose at Christmas excepting one Hand, therefore are willing to desist as soon as you please". As the quarries were in good order, William Dowthwaite thought they might be let advantageously if trade recovered but suggested a rent of only £6 a year. On 29 October, Birket reported "when it came to the push, they refused to leave off until Christmas But the quarries in Kentmere . . . now wrought by Robt Wilson are to be let at Martinmass . . . and he must not have them any Longer at any price". Dowthwaite and Wallas were almost certain to take them and Birket warned "'twill be impossable to get 'em again should you manage the works any more they are now seven, who work better yn most men constantly, and we have agreed . . . That if you . . . employ 'em any longer than Christmas they'll after[wards] employ as few hands as you please untill the times have a brighter aspect . . ." Day was not interested.

He had already made his intentions quite clear on 5 October, saying he had not then sold the previous cargo of slate. He wanted the quarries left free from rubbish, the tools

secured and any further slate to “remain at the weigh post Let all at the Several Landings be got down to Lowwood” ready for shipping and to save landing-site rents. “Get rid also of all the Country and Neam Tom as fast as you can and the accounts adjusted. Should the war go on [I] am Assured ’tis prudence to leave off tho’ hope to have a good Chap for 100 Tons next Year”. This did not materialize. On 13 November he remarked: “my Design of beginning again is almost Frustrated for have arrested one man [for debt] and can get no money of the others so ’tis high time to leave off which I am resolved to do at Xmas The difficulty I Labour under is [finding] Customers that can & will pay”. He wanted details of the Kentmere quarries.

William Birket’s response is an undated draft. “Pursuant to your Directions [I] have discharged all the workmen upon 31st of 10^{ber} [December] last . . . and paid ’em off last Tuesday [27 January]”. He had withheld payment until rubbish was cleared from the quarry, but Dowthwaite had kept the tool-store key hoping to have first refusal if Day decided to re-open the quarry. “As to Kentmere Quarries, Mr Mattinson who is agent to Mrs Fisher . . . undertakes to manage ’em together with Wallas your late workman as partner, Robt Wilson’s Term being Expired”.

Now that Park quarry was closed, the accumulated stock had to be sold in a weak market. Birket’s final account of October 1758 records the amount of country and Tom slate still “not sold at Goat Cragg” as 40 and 23 loads respectively, and “at Ash Busk” (the high quarry) as only 4 and 1 load. In addition 9 loads had gone “To Herds” and 51 “To Troutbeck Park” for repairs to Day’s tenanted farm buildings³⁴ mentioned in his now infrequent letters. As ordered, all Londonslate was removed to Lowwood, where 66 tons accumulated. Referring to these and to a request from Simon Woodborne, “now Captain of the *Clifford*” for a cargo of slate, Day commented, on 22 August 1756, that he could take all or part of it for 13s. a ton shortweight or 14s. longweight. In wartime such rates were obviously unrealistic and Woodborne ignored the offer.³⁵

In fact, the first of this stock to be removed was the 16 tons (neat) for Croome Court taken to Bristol by Thomas Muckelt in 1757. Writing on 26 April 1757, Day asked Birket to find a ship to take the remainder to London and stated “. . . I’ll not begin work again till the war Ceases – In short every Slater in London is poor. Rigg and Strickland . . . sometimes sell for Loss”. On 8 June he commented “I have got no Certain Chap for the Remainder of the London slate” and asked Birket to try to sell it locally for “as much Money clear as . . . at London I offered it [to] Mr Sunderland at 2 G[ui]nea[s] p. Ton at Lowwood your weight and am offered [only] £3. 5s. p. Ton London weight by a Slater [here] If you can make near £3. 5s. p. Ton in the Country shall not be displeas’d ’Twas not worthwhile to go after Capt Woodborne”. Again he was asking an unreasonable price and none was sold. In an undated draft of 1757, Birket reported the “Captains are all quite shy since the war broke out while their behaviour was quite the reverse before The [lowest] Freightage of slate . . . for London . . . is Twenty Two shillings per Ton . . . [and] the insurance of it to London . . . will be six pounds or six guineas for . . . every £100”.

Eventually, 2½ years after the quarries closed, Day wrote from Dyer’s Buildings on 12 June 1758:

I yesterday saw Mr Sunderland who says there’s a Ship called the *Henry & Sussannah*, George Emlington Master, who has contracted to take 140 or 160 Tons of Cast Stores [cannon shot] for his Majesties use. The Ship’s [of] 200 Tons Burthen and [would] . . . bring my Slates to make

up his Loading – Mr Sunderland’s Bro[ther] at Lowwood will acquaint you further . . . [he] says I shall pay no more freight than he does . . . I know not what to do with ’em . . . but Land ’em & Hope to get a place at the warren where the Iron is to be delivered . . . Pray go directly to Lowwood . . . or ’twill be too late . . .”

This letter was received on 15 June and, on 23rd, William Birket signed a contract with George Emlington “to take in 40 or 50 tuns of Slate or as much as he shall have a Vakence for when the shot &c belonging to Mr Sunderland is in . . . Willm Berkit agrees to pay fright the same as Mr Sunderland for Short Neat tunage & be at the Expence of Sending the Slate Down to the Peel of foudrer the Next Spring tyde . . . The Slate to be Delivered at Wolage near London . . . where the Shot is Delivered”.³⁶

This seemed a straight-forward solution to the persistent problem of unsold slate, but Birket’s “Copy of a Letter to Mr Day Dated 31st July 1758” reveals personal caution and further interesting information:

pursuant to your Directions have put Aboard 21 Tun [neat] of Slate, as you’ll see by the Bill of Lading inclosed, on Board the *Henry & Sussanah* . . . [which] being obliged to weigh [anchor] at Hammerside Hill and go down to Pile foudrey with half loading (the vessel being of so large a Burden) I thought it prudent to let no more go down but only one Flat, which I had contracted for, by reason of the additional Expence p. Tun, it being 4s. 6d. to the Peel, and the other place but 2s. I Desired Mr Sunderland of Lowwood to tell me what Tunage they paid but he . . . would not . . . being very huffish . . . Mr Holms another proprietor . . . [was] no better.³⁷ . . . I had never so much trouble about sending off slate, having rid[den] . . . above 180 computed miles and . . . was 4 nights [from home] . . . and my Expences amount to above 1s. p. Tun. . . . I went down . . . upon 23rd Instant . . . but the Capt . . . [had] not taken the slate on Board tho’ the Flatt was alongside . . . and had waited Two Days and could not get discharged . . . If he comes any more into this Channel . . . he may fetch the goods aboard himself . . . Capt Woodburn is now at London . . . [and] the likeliest person I know of to bring [the remaining slate] next Trip. . . . Rigg contracted for a parcel [of slate] about a month since at 27 shillings p. Tun Neat weight.

As usual, William Holm weighed and loaded the 18½ tons of slate (longweight)³⁸ on t. the lighter at 6d. a ton with 9d. for ale, and John Dobson of Ulverston took it to Piel Harbour for 4s. 6d. a ton. They were paid on 27 August. William Thwaites of Ulverston had 11s. on 18 October “for 2 Journeys to the Peel of Fowdrey and Stowing 18½ Tuns on Board the Ship”. On the same day Holm was paid 10d. “for weighing 3 Tun 3 cwt. of Slate sold in the Country @ 3d. per Tun”, of which John Rawlinson bought 5 cwt., Robert Rowlandson 17 cwt. and James Maichel 26 cwt. of London slate at 2s. per cwt. or £2 a ton. This price allowed a gross profit of 15s. a ton (see Fig. 2). Maichel also had 15 cwt. “of small slate lying at Crane being outcasts in Bateman’s/Thompson’s³⁹ time at 1s. 3d. per cwt.”, clearly sub-standard slate unsold for several years. Birket charged £7. 10s. expenses for selling slate, collecting cash and for horse-hire.

On 27 August 1758 Day wrote from Maidenhead apologizing for the “trouble & Difficulty about the Slate Getting on Board” and reported “the Captain was at Milford [Haven] waiting for Convoy” through the English Channel, but the slate’s fate at Woolwich remains unknown. He wrote again, on 11 January 1759, that “Mr Harrison of Troutbeck Park is very desirous I should let the Quarries for his Advantage⁴⁰ . . . [Previously] they were let at £100 a year for 7 years [in better times] to get 200 Tons London Slate at 10s. p. Ton . . . and acc’ for the other sorts . . . nor would I take £100

a year without stint . . .". He dismissed Philipson's suggestion of £10 or £20 a year rent and remarked that, if the latter had not died he would have remained steward only on other terms. These and earlier comments show Ralph Day as a selfish, ruthless, absentee landlord.

On 26 February 1760, Day commented that he had paid 20s. a ton for shipping the previous cargo of slate and that "There should be 32 Tons of London slate at Lowwood . . . [but] Mr Thos Holme of Kendal⁴¹ yesterday wrote me word there was only 27 Tons" there, apparently confirming reports from Mr Sunderland that the stock was being pilfered. Replying on 11 March, Birket rejected thoughts of theft

. . . for I frequently viewed it myself and got William Holm who is upon the spot and . . . a very honest man to take care of it . . . At last [I] have got a vessel for the slate which [I] was not able to do this twelve months and had not now without a friend. I contracted with Mr Simon Woodburn at 23s. p. Tun but he, having got Loading with Ball [shot], turned it to James Bolton who also has a Quantity of Ball.⁴² [I] Got part of it aboard last Spring [tide] and the remainder is lying Neeped in the river which I hope will get aboard the next week. Mr Woodburn is ready and they will sail together . . . expecting a convoy . . . from Liverpool.

The bill of lading, dated 20 March, shows that the *Hope*, James Bolton master, was to take 32 tons of slate from "the Harbour of Pile of Fowdrey" to London for 23s. a ton, and an attached account includes 7s. paid, on 29 February, "to William Jackson for slate lying upon the Warf at Haverthwaite Dock 32 Tons", presumably compensation for the inconvenience caused by its awaiting shipment for nearly four years. On 8 March, William Holm was paid for weighing and boarding 28 [long] tons at 6d. a ton and on 19 March William Thwaites had 8s. 6d. "for Stowing 32 Tuns . . . on Board the Ship".⁴³ George Holms and William Wilkinson were paid 2s. a ton for lighterage, probably to Hammerside Hill. William Birket's last letter in the collection, dated 27 April 1760, said "The vessel intended to sail the first fair wind . . . she being gone Down to the Pile of Fowdrey for that purpose".

Having cleared the last of the London slate from Lowwood, we must examine, finally the local trade in Country and Neam Tom slate. Birket's letter of 5 July 1755, quoted above, suggests that the London market was the quarry's prime target and that local sales resulted from disposing of poorer quality produce at relatively lower prices to reduce waste and maximize gross income. Profit margins on London slate were eroded, or even eliminated, by rising freight rates resulting from higher risks during the war with France. This did not apply to the local trade in which prices of Country and Neam Tom slate remained stable at 1s. 4d. and 9d. a load (or 13s. 4d. and 7s. 6d. a ton) respectively. This left a margin of 2d. (14%) and 3d. (33%) over the contract costs of slate-getting, but overheads had to be deducted. To simplify matters, Ralph Day wrote on 16 March 1755 ". . . for the future let the Buyers pay Carriage" and he wanted accounts submitted half-yearly and all arrears collected.

Of 80 local transactions during Birket's management, 31 record the dates of sale and receipt and 34 give only the receipt date.⁴⁴ Of the former, the average delay in payment was just over a year and only one customer paid in less than six months; a William Roper of Cartmel who settled his account a month after buying 10 loads in 1755. In contrast, James Burrow and John Cartmel, both of Crosthwaite⁴⁵ bought 8 and 3 loads of Country

slate in September 1754 and took two years to pay but, despite this tardiness, were sold a further 60 and 44 loads respectively, paid for in 1758. This may indicate some desperation to clear stocks after the quarry closed.

Exact locations are given for only 35 customers, but others can be inferred from Manor Court books and parish registers. These are plotted on Figure 3. The only clients north of Troutbeck Park were Thomas Robinson and Mr Cookson, both of Lowther, who had 30 and 6 loads of slate, probably carried on pack-horses over High Street along the Roman road route. Most customers lived within ten miles in a triangular area bounded on the west by Windermere (beyond which was Rigg's territory) and on the east by the watershed with Kentmere and the line of the Staveley to Kendal road, where competition from the Kentmere quarries was at least challenged by Robert Philipson's influence around Ashes farm. The southern boundary is less clearly defined, but included Underbarrow, Crosthwaite and even Burplethwaite Hall, where William Robinson bought 45 loads of slate in 1755.⁴⁶ This area covered about 50 square miles. Perhaps all of Cartmel parish and the area west of the lower river Kent relied on Troutbeck Park for much of its slate, but caution is essential when trying to establish such boundaries. For example, when New Hall, Staveley, was altered in 1764, 30 loads of slate were bought from William Rigg at 1s. 3d. a load and 17s. 6d. more was paid for "Leading 30 Loads of Slate from Bouness at 7d."⁴⁷ Hence, with Robert Philipson dead and Troutbeck Park closed, Rigg was competing in an area where one might expect Kentmere quarries to have been dominant.

Local transport rates are rarely given, but a note on the reverse of the printed slate advertisement states that carriage to "Misslet Yeat", about 2 miles west of Staveley, was 6d. a load "and so in proportion for any greater distance". "An Account of slate and carriage by John Harrison of Troutbeck Park . . ." provides extra detail. Out of 18 customers, 12 were charged 6d. a load for carriage. Harrison had received £5. 17s. 4d. from Thomas Tebah of Underbarrow (Bonefire Hall)⁴⁸ for 64 loads of Country slate, 60 in 1755 and 4 more in 1757, presumably to finish the job. John Longmire of Underbarrow (Red Scar Tenement)⁴⁸ paid him £6. 6s. 8d. in 1755 for 30 loads at 1s. 8d. left "at Bowness Landing in Mattinson's time" and a further 40 loads (at 1s. 4d.) carried by Harrison to Underbarrow for 7d. each.⁴⁹ Also in 1755 he carried William Roper's ten loads 18 miles to Cartmel for only 6d. a load and perhaps returned with the early payment. At the same rate he carried 55 loads to John Dixon of "Stors" in 1755, 50 to Mr George Cumpstone of Ambleside in 1758 and 52 to Mr John Braithwaite of Hollin Hall, near Staveley. He charged only 5d. each for 20 loads to John Chamley of Lickbarrow and 28 loads to William Sharp of Undermillbeck,⁵⁰ but 8d. a load to Thomas Williamson of Applethwaite and Rowland Elleray of Common for 4 and 5 loads respectively. Distance was clearly not the only consideration in arriving at these prices. As they span the whole period of Birket's management, it is probable that the other customers made their own transport arrangements, but only one piece of evidence survives. In 1755, Thomas Ashburner of Kendal, probably the printer, had 70 loads carried eleven miles by James Dixon of Reston for only 4d. a load.

Significantly, Harrison charged only 4d. each for 51 loads carried for a Mr Birkhead. On 23 February 1758, the quarry accounts show 21 loads of Country and 30 of Tom sold for £1. 8s. and £1. 2s. 6d. respectively to Jonathan Birkhead of Lancaster. He owned

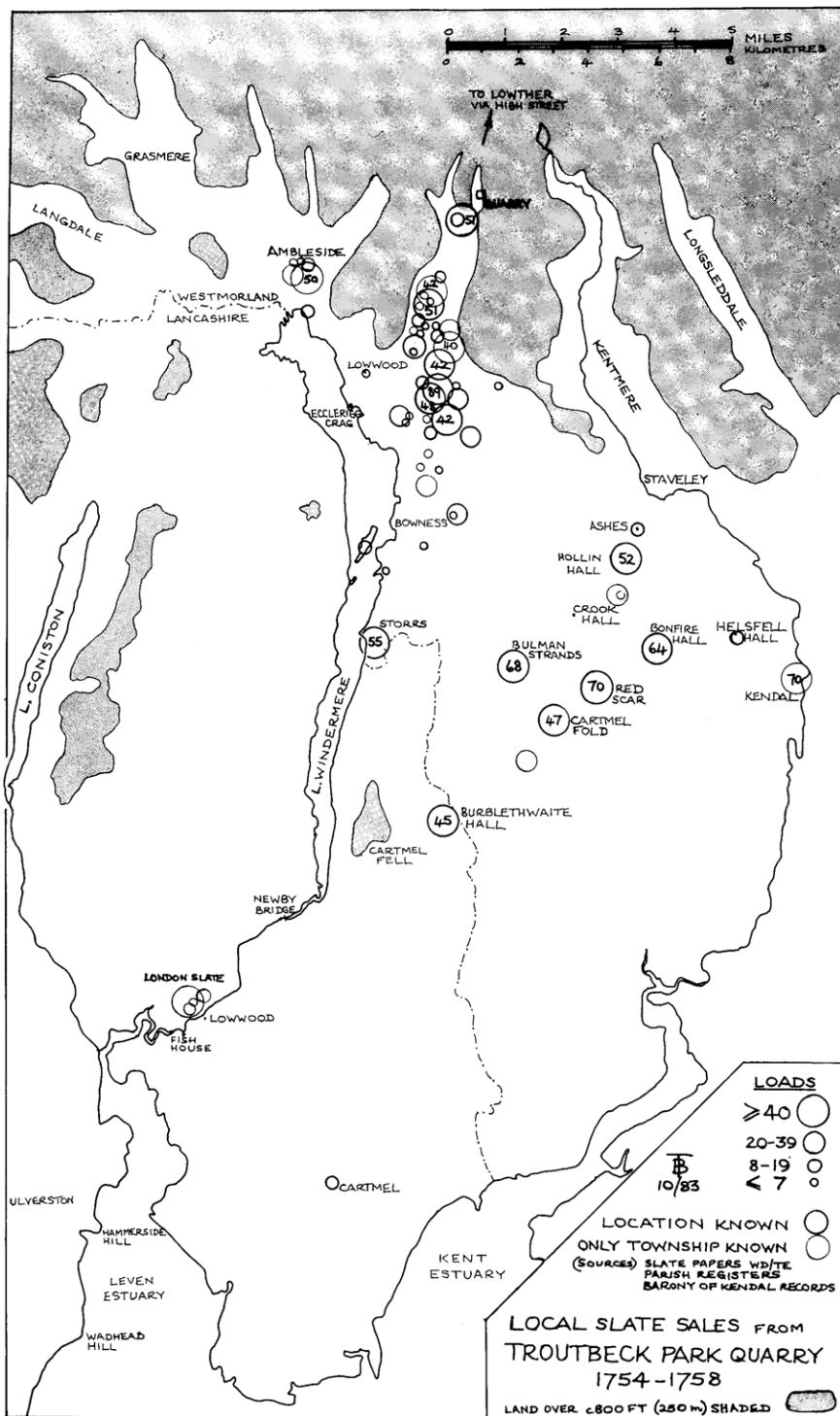


FIG. 3. - Local slate sales from Troutbeck Park Quarry, 1754-1758. This map locates three-quarters of all the local transactions recorded in the Troutbeck Park slate papers.

Low House, Troutbeck, where the lower two bays of the barn were burnt in October 1757. The rebuilding work there⁵¹ was supervised by William Birket whose building accounts also record the supply of "2 Tuns and one Load of Cuntry slate at 16s. 8d. p. Tun with Carriage, £1. 15s." and "3 Tuns of Tom slate at 10s. 10d. p. Tun with Carriage, £1. 12s. 6d." The quantities agree exactly and the charge correctly includes John Harrison's 4d. a load. This indicates the accuracy of Birket's accounts and his honesty and helps to indicate how many loads of slate might signify important building activity rather than mere roof repairs. The barn at Low House is 20 feet wide and the re-roofed section about 40 feet long if the part over the threshing floor is included. This would have needed about 4½ tons of Country slate, but the use of so much Tom slate increased this weight to about 5 tons⁵² or, as quoted, 51 loads. No slate was salvaged from the burnt section after the roof collapsed because it had been split by the intense heat.

Other local buildings illustrate how much variation occurred. When Benjamin Browne (1664-1748) of Townend, Troutbeck, built a new barn at Lane in 1731 he used 65 loads of Park slate (45 of which had been stored at his home) for a roof 42 feet long by 23 wide. However, in 1733, he bought only 24 loads from Troutbeck Park for a similar sized barn at Crostenriggs, which replaced an earlier hoghouse. Presumably, about 40 loads of slate were re-used from that earlier building. Therefore, consignments over about 24 loads could indicate the erection of a significant building, depending on how much slate was re-used. For example, when The Cragg in Troutbeck was extended almost 30 feet eastwards in 1779, 30 loads of slate were brought from Langdale. Also when William Birket built a new stable at Lowwood, Troutbeck in 1772, John Harrison carried the slate from Troutbeck Park for 17s. 6d. for perhaps 30 loads at 7d. each, enough to cover the 25 by 22 foot extension. Perhaps quantities of 10 to 20 loads represent major repairs or the construction of wash-houses, outshut extensions for pantries and staircases *etc.* For comparison, the new grotto at Rydal Hall, 12 feet square, required 12 loads of slate in 1669.⁵³

During William Birket's time at Troutbeck Park local sales of 1331 loads, including 215 of Tom, were recorded, an average of just over 16 loads per order, more than half of which (43) were for 6 or fewer loads, presumably for minor repairs, privies, porches *etc.* Over half of these small orders were for only two or three loads⁵⁴ and most were generated by the townships of Troutbeck and Applethwaite (Fig. 3). There were 15 orders for between 10 and 23 loads, over half rounded off to 15 or 20 loads and only 22 consignments were for over 27 loads, the largest being 89 loads for Roger Cookson at Hole Herd in August 1754. He had 48 more before 1758, but it is not certain whether these were for one large structure or perhaps two smaller buildings. If, in the four years covered by these accounts, an average of five or fewer significant building developments were supplied from Troutbeck Park each year, one must assume that Birket's comment about "the whole country being almost new built" refers to the effect of many slate quarries supplying the restricted area of his acquaintance during the two decades since he gained surveyor's skills in 1731.⁵⁵ Certainly, Lakeland's "Great Rebuilding" was later than in southern England but, until studies of other quarries and periods are made, conclusions about Troutbeck Park, the Cumbrian slate industry and its role in the rebuilding of farmsteads must be somewhat tentative.

The difficulty experienced in clearing accumulated stocks of slate during the 4½ years

after the quarry closed in December 1755 is surprising and, as that period can not be considered normal, one must question how typical was 1755, the only complete year's activity under Birket's management. In about 76 weeks Douthwaite produced 121 tons of London slate (about 83 tons a year) in addition to the short-lived output of 25 tons from the high quarry and Harrison carried 109 tons to Ecclelrigg in 13 months. The very similar patterns of Henry Williamson's carriage of slate down Windermere in 1754 and 1755 (Fig. 1) suggest that this level of production also applied to Mattinson's time. Even if output had reached Day's claim of 200 tons in better times, four voyages a year to London would have sufficed. Cargoes to other destinations add a broader interest to the study and have been described in some detail to show how Lakeland slate might have reached many other distant customers, and how it had to compete with Welsh⁵⁶ and continental slate as well as that of forceful local producers like William Rigg who used a similar route to the sea *via* Coniston Water and Penny Bridge. Details of the journeys from Troutbeck demonstrate the advantages of using water transport whenever possible (Fig. 2) and show how some ordinary Cumbrians earned part of their livelihood.

In view of the incessant problems exposed in the letters, Birket was probably relieved when the last London slate was cleared from Lowwood and he could concentrate on his farming. Day seemed concerned only for his own profit, for he admitted dissatisfaction at being offered 65s. a ton when slate could reach London for 53s. even in wartime. As winning the slate and taking it to the ships accounted for 15s. (23%) each, and cargo cost another 13s. (20%) in peacetime and 23s. (35%) in wartime, between 34% and 19% of the stated selling price was Day's gross profit and he considered the latter unacceptable. His labour relations reflected this attitude, but the quarrymen seemed unconcerned at finding alternative employment and only John Harrison complained of losing income. Perhaps Holm, Thwaites and the lightermen compensated by handling a greater production of naval stores in the war, but how soon was the quarry re-opened after the Treaty of Paris, who worked and managed it and was the trade similar to 1755? Certainly in the 1770s John Harrison and Henry Williamson were still doing the same job but William Birket was merely a customer when his former employer died in 1772. However poor were Day's management and salesmanship, his opinion that "we deservedly carry the Bell for the Best" was borne out by having eminent customers like George Dance, 'Capability' Brown and Henry Holland as well as by the use of Troutbeck slate for repairs to Westminster Hall.⁵⁷ Clearly, building records in London and elsewhere might cast more light on the Cumbrian slate industry just as those of Croome Court and St Mary's, Faversham have done.

Although lack of space precludes consideration of many finer points of detail, this article has clarified several aspects of the slate trade for a short period in one part of the Lake District. It raises many questions which will require more research in other archives if the industry is to be examined in the detail it deserves.

APPENDIX

The Ownership of Troutbeck Park 1650-1900.

Although the grant of Troutbeck Park by Charles I to Hudleston Philipson for services in the Civil War, and its confirmation to his son (Sir) Christopher Philipson by Charles II are already recorded,⁵⁸ the later history of the property requires examination. By his

own admission, Sir Christopher was "a loose man"⁵⁹ and by the 1690s had amassed debts so that he mortgaged his estates to Col. James Grahme of Levens Hall for £3,000. Troutbeck Park, worth £100 a year, was the most valuable estate and the others were Bumblethwaite Hall forge (£56), Crook Hall, lands and mill (£35), Crook rents (£2), Helsfell (£60), Windermere Island (£10) Lindeth (£16) and Langthwaite, Millom (£25). The last was sold to a Mr Senhouse for £550 by January 1695/6. For £1,000, Bumblethwaite was sold to a Mr Sandys who went to Newcastle with Philipson to settle the financial arrangements. Thus, on 1 August 1696, Timothy Banks,⁶⁰ the agent at Levens, reported "We hear that Sir Xpher is married there to a rich widdow", his first wife having died before 26 Jan. 1694/5. This match did not cure his problems for, in an account dated 9 January 1701/2, Banks charged £8. 4s. 10d. for "My Bill for Entries, Serving declaration in Ejectment . . . & takeing possession at Troutbeck, Lyndeth, Crook & Helsfell". However, on 26 August 1703, Philipson wrote to Grahme "I am Resolved to sell . . . my Estate save the Island & Lindeth wch are Tenant Right under the Queen Dowager . . . & that rather to you than any". In February 1704, Philipson was hoping a Mr Stanter would give him "£4,000 and take Helsfell & Troutbeck Parke for it wch is £200 pr. Annum". In April 1706 he was hoping a Mr Ward (one of Charles Pigeon's executors) would buy "Troutbeck Pk & Crook" for the same amount. By 17 July, Ward had purchased and Philipson wrote "I stay onely for the finishing . . ." (see note 59). He died in 1709, a broken man.

The way in which Troutbeck Park passed to Major Pigeon can be inferred from other documents at Levens.⁶¹ Charles Pigeon, son of Henry Pigeon of St. Edmundsbury, Suffolk, was admitted to Gray's Inn, London in 1656 and was one of the lawyers when Col. James Grahme "purchased all the Westmorland Estate of Mr Allan Bellingham for I drew the Conveyances & transacted all the affaire together with Mr Hilton" (Banks 4/1, 26 Oct. 1689).⁶² Events leading up to his death on 3 January 1700 are noted in Banks' letters to Grahme. He was buried at Boxted, 6 miles NNW of Sudbury (Suffolk) but left no family and bequeathed his estate to "David Reyner now at the School of Sedber in Yorkshire . . . [provided he] shall take the name of Pigeon". By a second codicil, he left £20 a year "to David Reyner for his maintenance until he comes into possession of the Estate" and "£50 for his present preferment in the World".

On 22 May 1697, Charles Pigeon had written to Banks "Here is a boy of very good parentage but small fortune, a little related to me, that has . . . a fancie to be in employment under me, but . . . has been abused of his money . . . by two . . . unworthy scholemasters He has too much growth for his learning but . . . capacitie enough to retrieve himself . . . I am advised . . . to putt him to the Schole att Sedbert, both for proficiencie & frugality as well as vertue & good discipline. The Coll adviseth . . . to send him downe to Levens on Friday next by [Anthony] Preston your neighbour [hood] Carrier . . . I desire of you to find out . . . where he may be conveniently tabled and Lodged" modestly. Three days later he wrote "With this comes David Reyner, who is recommended to Mr Wharton [headmaster 1674-1706] . . . by Mr Otway [and] . . . the Coll". Pigeon promised to reimburse any expenses. On 13 October he wrote to Grahme: "I thank you for your favour to my little friend att Sedbur. Mr Wharton . . . expresses great regard to him but he's soe much in arreare with Literature that . . . Mr Wharton . . . has not yet allowed him Liberty to waite on soe good a patron . . .". However, the

boy spent Christmas at Levens and continued “a pensioner to his generous friends”, benefitting “from the easier rate of Northern Education” and Pigeon’s charity.

After David Pigeon’s inheritance was invested by Mr Ward to buy Troutbeck Park, Crook Hall and Helsfell he wrote an intriguing letter to Col. Grahme from Kendal on 31 May 1708: “The Information wch you had of my breaking open of doores in Kirkland is Utterly falce . . . I was present for the zeal I [ha]ve to the cause but acted no farther than by the Constables directions and Assistance wch was proved before Doctor Archer and Capt Fleming⁶³ . . . It’s in your power to serve me or do me a diskindness in raiseing my recruits, so I desire you’l [ignore what] . . . may by my Enimies be represented”. Presumably he had been recruiting vigorously for the army. “Capt. Pigeon” was one of 55 names of gentry in “A List of founders of the Light Horse In 1715” and a later list of 1745 includes Mr Ralph Day as a Finder and Thomas Robinson as his Rider.⁶⁴ Pigeon’s brief military career can be outlined. On 1 April 1710, he was appointed Captain in Sir Charles Hobby’s Regiment of Foot for service against French settlements in Canada and Nova Scotia, where it served under General Nicholson at the siege and capture of Port Royal. David Pigeon commanded the party which was surprised by the French and Indians at “Bloody Creek” near Annapolis in June 1711 and was placed on half pay in 1713 until at least 1722.⁶⁵

The Mormon microfiche index for London records that David Pigeon married Mary Plawar of St. Paul’s, Covent Garden at St. James’, Duke’s Place on 9 June 1700. Two daughters named Hannah were baptized at St. Bride’s, Fleet Street in 1719 and 1723. Other children would have been baptized wherever his career dictated and Ralph Day’s bride on 21 August 1736 was Mary Pigeon of St Bride’s parish (see note 7). Thus, when David Pigeon of St. Bride’s made his will on 21 April 1733 (proved at P.C.C. 17 Jan. 1733/4) he bequeathed to his wife Mary “all my real estate . . . in Westmorland or elsewhere” and left his daughter Mary “£1,000 to be raised on Crook Hall, Troutbeck Park and Hells Fell Farme” for her education and upbringing as she was a minor, born about 1717. On 3 March 1740/1, her mother “late of Crook Hall”, willed the “profits from [her] estates to my dear daughter Mary Day, wife of Mr Ralph Day, for her life not subject to the debts, control or demand of her husband” and then to her daughter’s heirs. Administration was granted by P.C.C. on 3 April 1742 which led to a “Deed to lead Uses”, dated 9 July 1742,⁶⁶ to ensure that Ralph Day’s heirs would inherit if his wife died first without issue, which indeed happened.

Ralph Day’s letters to Troutbeck refer to his wife’s persistent ill-health (e.g. 26 April 1757). Her death is recorded with his on a monumental inscription at St. Michael’s church, Bray, Maidenhead: “Mary the wife of Ralph Day Gent. . . . died the 26 Feb. 1765 aged 48” and “Mr Ralph Day died Sepr 28, 1772 aged 65”.⁶⁷ His sisters Mrs Katharine Hilly (d. 29 May 1761 *ae* 50), Joan Day (d. 12 March 1794 *ae* 80), Elizabeth Day (d. 31 Dec. 1796 *ae* 81) and Amy Day (d. 1 April 1804 *ae* 82) are recorded as well as his father and mother, Thomas and Sarah (d. 1 July 1749 *ae* 81 and 21 Feb. 1759 *ae* 80 respectively). The parish registers confirm these details⁶⁸ and show that the family had lived at Ockwells Manor (Ockalls) since at least 1661.⁶⁹ They record the burial of Ralph’s daughter Mary on 22 September 1739, whilst the St. Andrew, Holborn registers show her baptism on 21 August 1739 as well as that of her brother Thomas on 10 June 1737. When Ralph Day made his will on 8 July 1765, following his wife’s death, he had no children but left £500 to his niece Sarah Heley and mentioned his copyhold estates

at Parke and Sandridge in Hertfordshire. After several bequests, he noted £1,000 due "on my marriage under Major Pigeon's bond payable with interest" and a £300 legacy "left [to] my late dear wife by the will of her late brother Charles Pigeon". Day left his property to his four sisters Joan, Elizabeth, Sarah and Amy provided Sarah did not marry "one Lane, a farmer in Oxfordshire". Sarah was baptized on 26 November 1719 and married John Lane of Ewelme on 9 August 1768 at Bray. Administration was granted to Joan Day by P.C.C. on 16 October 1772.⁷⁰

On 31 August 1797, Amy Day of Maidenhead, spinster, the surviving beneficiary and Sarah Lane of Ewelme, widow, entered a three part indenture to convey Troutbeck Park⁷¹ "for natural love and affection" to their great nephew Thomas Burningham of Maidenhead, youngest son of their late niece Sarah Burningham, the niece mentioned in Ralph Day's will. By a deed dated 7 October 1797, Troutbeck Park formed part of the settlement when Thomas Burningham married (on 14 Oct. at St. Martin's-in-the-Fields) Mary Wilson, eldest daughter of George Wilson, an apothecary of Bedford St., Covent Garden. She died in September 1828 at Froyle, Hants. and her husband on 22 July 1846. Thus his eldest son Henry inherited the property and shortly afterwards he paid his brothers George and Thomas £1,000 each to satisfy the conditions of the marriage settlement (Deed 2 Feb. 1874). Hence on 13 April 1874, Henry Burningham of Froyle conveyed Troutbeck Park (totalling 1,871 acres) to John Macmillan Dunlop of Windermere for £15,890, subject to William Hartley's 14 year lease, dated 16 March 1863. On 23 January 1883 the property was conveyed for £13,670. 5s. from the Trustees of J. M. Dunlop, late of Holehird, to the Troutbeck Park (Westmorland) Green Slate Co. Ltd. who, on 27 February 1883 mortgaged 1,852 acres to James Barrett for £9,000. In July 1887 the property was valued by Crayston Webster at £11,840 and the mortgage was transferred to Archibald Hamilton on 29 October 1887. On 21 February 1905 it was again transferred to Dougall, Mason and others.⁷² Troutbeck Park is now owned by the National Trust.

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Notes and References

¹ B. Tyson, CW2, lxxviii, 105-20; lxxix, 85-97; lxxx, 113-29; lxxxi, 93-112; lxxxii, 151-76; lxxxiii, 107-24. Also Ancient Monuments Society, *Transactions*, vol. 26, 68-93; vol. 27, 61-76 for Ewanrigg Hall and Rose Castle.

² Except in districts like the Solway Plain. See R. W. Brunskill, 'The Clay Houses of Cumberland', Ancient Monuments Society, *Transactions*, 10 (1962), 57-80.

- ³ More specialized stone for flags, quoins, lintels, window and door dressings were more expensive and so could bear the higher costs of transport from more specific locations elsewhere.
- ⁴ For example, in 1781 slate and laths for Kirkland Hall, east of Penrith, were sent 30 miles from Rydal over Kirkstone pass and along Ullswater.
- ⁵ C.R.O., Kendal, WD/TE, Box 'Slate Papers'.
- ⁶ For family details see CW2, lxxxii, 163-70.
- ⁷ Joseph Foster, *Marriages in Gray's Inn Chapel 1695-1754* (1889), 33.
- ⁸ His will, dated 21 April 1733, was proved in the P.C.C. 17 Jan. 1733/4. P.R.O., Prob. 11/663, f. 125.
- ⁹ Poor Rate books for St. Andrew, Holborn (2nd Division), Guildhall Library, 9975. The books for 1759-62 are missing and Day is not included in the 1763 returns.
- ¹⁰ There is a draft agreement dated 1725 for Thomas Lancaster and Thomas & Robert Lickbarrow to get slate at Ash Busk in Troutbeck Park until May day 1729. They were to be paid 9d. a load by William Thompson of Troutbeck Park who seems to have been Major Pigeon's manager there. It is not signed.
- ¹¹ Letters 7 June and 5 July 1755 etc. There are no actual records of Mattinson's period.
- ¹² This was also known as the "Low quarry in the Gill" and the synonymity is proved in Birket's letter of 23 March 1760.
- ¹³ C.R.O., Kendal, WD/TE, Bound MSS, II, 289. His will (IV, 71) has been lost.
- ¹⁴ B. Tyson, 'Quarry-floor Inscriptions at Ecclerigg Crag, Windermere', *Ancient Monuments Society, Transactions*, 25 (1981), 87-103.
- ¹⁵ Small notebook included in these slate papers, but otherwise irrelevant.
- ¹⁶ His father was Edward Turner, who wrote to Birket from Grange on 1 June 1755 that he had received from his son at Chepstow a draught on Birket for £13. 10s. for freight of slate and wanted this paid to John Barber, carrier, at Hawkshead. However, on 20 June, a Thomas Turner (for Edward) signed for Wm Rey of Cartmel to be paid. Another letter from Grange, in different handwriting, torn and dated 20 April 1755, was probably from John Turner saying that the slate had been loaded two weeks earlier, "very little Brocken in Coming down", but that "wind and wether would not permit" sailing. He had been "with William Rigg of the Coniston quarries who Loaded slate aboard of Capt James Penny".
- ¹⁷ An endorsement on Backhouse's letter of 12 April mentions "Wm Thwait's of Griffin" and also "Richd Backhouse, St. George and Dragon, Ulverstone".
- ¹⁸ In April 1757, Birket referred to Mr Postlethwaite being the agent there. Perhaps the *Clifford* had anchored off Bardsey, for Backhouse wrote to Birket on 4 July: "I will write to Mr Sunderland at Lowwood to secure all the Botes he can for [lighterage. They] . . . must come down [to] Wadward Hill [Wadhead Hill], the place where you was on Board the Vessell the last trip . . . Simon Woodburn is loading slate for London and I want to be there before him . . . [so] I send a special messenger to you". The Sunderlands probably owned shares in the *Clifford* (see n. 31).
- ¹⁹ John Sunderland of Allhallows Lane died in 1782 and was a partner, from 1749, of the Lowwood Company, formed about 1747. His brother Thomas, of Ulverston, was the chief partner and married the widow of George Bigland of Bigland Hall after the latter died in 1751. Alfred Fell, *Early Iron Industry of Furness* (1908), 37, 220, 266, etc. Thomas Sunderland reckoned transport to Chepstow at 10s. a ton. John seems to have acted as the Company's London agent.
- ²⁰ Birket's arithmetic seems to be faulty here, for $30 \times 128 \times 20 = 76,800$ lbs. compared to 75,792 lbs. neat weight, an understatement of exactly 9 cwt. neat weight.
- ²¹ The Seven Years War, 1756-63. There are several references to the war during 1755, for the real beginning of hostilities followed the annihilation of Braddock's force on the Monongahela (near Pittsburg) by the French in July. V. H. H. Green, *The Hanoverians 1714-1815* (1960), 198. Thereafter, shipping in the English Channel seems to have been under threat, raising transport costs.
- ²² An 18th century advertisement for second quality Coniston slate, sold by William Rigg, states that a ton would cover 23 square yards (or 207 sq. ft. at 10.82 lbs. per sq. ft.). As modern best Westmorland slate weighs about 9 lbs. per sq. ft., a ton of London slate should have left a good surplus on two squares of slating. C.R.O. (Kendal), WD/Ry, box 22.
- ²³ Edward Hyams, *Capability Brown and Humphrey Repton* (1971), 28. Brown had moved to Hammersmith, in 1751 aged 33, where he was much influenced by Henry Holland whose son Henry married Brown's eldest daughter Bridget. These documents cast interesting light on relationships between the two men.
- ²⁴ 13,300 Welsh slates left over were charged at 33s. per thousand.
- ²⁵ Birket had found out that "Backhouse *pays* Rigg lighterage for the slate put on Board wch is 1s. p. Tun . . .

- [and advised that] As ours is a long way up the river we pay 2s. p. Tun [lighterage] so you must reserve half wch will amount [to] £3 for 60 ton to be equal with Rigg, and Backhouse has agreed to it". The outcome of this change has not been found, but there is a hint that Rigg had 30 tons of slate on board the *Clifford* in addition to Day's.
- ²⁶ As the other two letters from Backhouse are in a different hand, they were no doubt written for him and were far less vernacular, as was the letter apparently from John Turner (see n. 16).
- ²⁷ Kent R.O., P146/7/6 for contract; 7/7/1 vestry committee and structural report; 7/7/2 and 3 Dance correspondence; 7/7/4 and 5 accounts and vouchers. Also Dorothy Stroud, *George Dance, Architect, 1741-1825* (1971), 50-1 and Plates 10 and 11; Edward Hasted, *History of Kent* (1782), ii, 720; Kent C.C. and Faversham Borough Council, *Faversham Conserved* (1969), 66.
- ²⁸ He was Clerk of the Works to the City of London from 1735, designed the Mansion House (1739-42), several London churches, the Corn Market in Mark Lane (1747-50) and had just rebuilt the gable of the SE transept at Canterbury Cathedral in 1751. H. M. Colvin, *Biographical Dictionary of British Architects 1600-1840* (1978), 248.
- ²⁹ i.e. "pulling down the tower & defective pier in Faversham Church . . . taking away the four piers under the tower and all the piers and arches in the nave . . . and rebuilding piers and arches and continuing the roof over the same". Kent R.O., P146/7/7/1.
- ³⁰ Presumably one of Day's "Chaps" or customers, who remains unidentified. There is no other information on these earlier voyages by Backhouse and Pennington.
- ³¹ He wrote also: "I have paid Mr Sunderland £30 on account of last Freight . . . shall write to him this post . . .". This suggests that the Lowwood Company, through the Sunderland brothers, held the major share in the *Clifford* so that Backhouse probably relied more on the furnace than on the quarry for his cargoes.
- ³² He has not been identified but, on 7 June 1755, Day hoped he might pay 3s. a load at the weigh post; clearly an extortionate price. Day also claimed wrongly that "country slate in Mr Pigeon's time by Thompson and Castlehow sold for 2s. p. Load & is now better so sho'd . . . fetch that now . . . or is not worth getting". In 1731-3 Benjamin Browne paid Pigeon only 1s. 4d. a load delivered to his barns at Lane and Crostenriggs in Troutbeck.
- ³³ He added "I hear Rigg of Coniston will not send any more slate. One Mr Strickland in London for Jackson Ford & [him] self Beats down the price"
- ³⁴ On 15 Nov. 1757 Day noted that Philipson had reported "a little house fallen in [at Troutbeck Park] and wants me to rebuild it" and sought Birket's advice. On 12 May 1758, George Browne (1688-1767 and Birket's uncle) wrote from Townend that "Mr Philipson . . . [wants] you to get two hundred of Best Hart Laths up to Troutbeck Park the beginning of the next week. The slaters will come the next week". He said Philipson had gout badly. WD/TE, Box "Wm Birket senr & junr".
- ³⁵ Day added that when he sold the previous 40 tons it weighed "only 33 Tons 700½ Exclusive of . . . about 3 Tons . . . to be redressed . . . for which they bid a Guinea only . . . I shall lose the £230 by Laroch . . .", presumably one of his slate customers.
- ³⁶ Apparently in Emlington's handwriting. The Warren was the part of Woolwich Arsenal where artillery was cast and proved. B. Pitts Capper, *Topographical Dictionary* (1808).
- ³⁷ Holms said ships carried by hundredweights of 120 lbs., but Sunderland and the captain said 112 lbs. only.
- ³⁸ 18½ tons longweight exceeds 21 tons shortweight by 320 lbs.
- ³⁹ Both names are equally clear in differing versions of the accounts.
- ⁴⁰ On 23 Feb. 1759 Day said Harrison "wants to work the Quarries at half profit with me. That won't do I think . . ." and had already brushed aside complaints that because of closure "the want of Carriage is a great loss to him [Harrison]" (15 Nov. 1757).
- ⁴¹ He appears to have taken over control from Philipson and was Mayor of Kendal in 1741 and 1755. (C. Nicholson, *Annals of Kendal*, 1861).
- ⁴² The second load to Chepstow met a similar problem in 1757 when a captain withdrew from his contract on getting a full loading of pig iron.
- ⁴³ $28 \times 128 \times 20 = 32 \times 112 \times 20$ exactly.
- ⁴⁴ These could indicate cash sales or defective booking; the latter seem more likely.
- ⁴⁵ Apparently of Bulman Strands and Cartmel Fold respectively. C.R.O. (Carlisle), D/Lons/L, Barony of Kendal Manor Court Books, vol. vi, 334.
- ⁴⁶ Wm. Robinson lived at Staveley and owned Burblethwaite Hall from 1711 to 1758. CW2, lxii, 173.
- ⁴⁷ Rigg also supplied 30 loads of third quality slate for repairs to Coniston mill in 1764 at 11d. a load and

- carriage cost $3\frac{1}{2}$ d. per load extra. Petty vouchers and accounts in C.R.O. (Kendal), WD/Ry, Boxes 6, 107 and 114.
- ⁴⁸ Farm names obtained from Barony of Kendal Manor Court Books (see note 45).
- ⁴⁹ The account states only 6d. each; apparently a clerical error.
- ⁵⁰ As both bought their slate for only 1s. a load from Goat Crag on 15 and 27 June 1756, they may have been clearing sub-standard Country slate at a preferential rate.
- ⁵¹ Described (like some buildings in the next paragraph) by B. Tyson, "Some Traditional Buildings in the Troutbeck Valley . . .", CW2, lxxxii, 165-8. (See also note 1).
- ⁵² $2 \cdot 1 \times 23 \times 9 \div 1 \cdot 15 = 378$ sq. ft. and $3 \times 18 \cdot 4 \times 9 \div 1 \cdot 15 = 432$ sq. ft., in all 810 sq. ft. or $20 \times 40 \cdot 5$ plan area. Note that modern third-quality slate weighs 25% more than second-quality for a given area so, if Country slate covered 23 sq. yds. per ton (see n. 22), Tom would cover $23 \times 100 \div 125 = 18 \cdot 4$ sq. yds. Also, as roof-pitch was usually 30° , Superficial area \div Plan area = secant $30^\circ = 1 \cdot 15$.
- ⁵³ B. Tyson, 'The Rydal Grotto, 1668-9', Ancient Monuments Society, *Transactions*, 24 (1980), 49-56: probably the oldest surviving outdoor grotto in Britain, and recently renovated by the Diocese of Carlisle.
- ⁵⁴ Mean 16-64, Median 6, Mode 2 (14 orders); 10 orders for 3 loads. Total sample 80 orders.
- ⁵⁵ His surveying and maths book survives. C.R.O. (Kendal), WD/TE, 'Birket/Browne a/c books'.
- ⁵⁶ At Whitehaven in 1676, Loweswater slate was experiencing competition from Welsh slate imported *via* Dublin. B. Tyson, 'The Work of William Thackeray and James Swingler at Flatt Hall . . .', *Anc. Mon. Soc., Transactions*, 28 (1984), 69.
- ⁵⁷ *Gentleman's Magazine*, 1805, 919.
- ⁵⁸ N.B., i, 181; J. M. Ewbank, *Antiquary on Horseback*, (1963), CW Extra Series, xix, 126.
- ⁵⁹ Levens Hall MSS, box D/P2, Letter 22 Sept. 1699, Sir Christopher Philipson to Col. James Grahme, one of 23 such letters 1697-1706.
- ⁶⁰ L.H. MSS, Banks 1 (box E), Banks 2 (box D), a series of over 300 letters 1690-1724; especially Banks to Grahme 17 Mar. 1693/4, 11 Jan. and 29 Jan. 1695/6, 1 Aug. 1696, 9 Jan. 1701/2.
- ⁶¹ L.H. MSS, Charles Pigeon to Timothy Banks 1689-1695 (box E, Banks 4/1-10) and 43 letters Pigeon to Grahme 1697-9 (box D/P2).
- ⁶² *Gray's Inn Admission Registers*, 1889. Pigeon had lent Bellingham £516 and then £200 more to buy out a Mr Nunn's interest in the estate. These formed part of the purchase price of £24,400 to be paid by Grahme. L.H. MSS., Account, box E, ms 2.
- ⁶³ Dr John Archer of Oxenholme, Mayor of Kendal 1706-7 and probably James Fleming, Sir Daniel's 9th son, born 1672 and a captain in the Militia (N.B., i, 172).
- ⁶⁴ C.R.O. (Kendal), WD/TE, bound MSS, i, 9-11; Rupert Jarvis, *The Jacobite Risings . . .*, Cumberland C.C., Record Series, Vol. 1 (1954), 259.
- ⁶⁵ *English Army Lists . . . 1707-1714*, vi, 283-4 and 287. From London in 1725-6, he was mediating a dispute between George Sewart and J. Braithwaite of Troutbeck, threatening to send the former "to sea in a man-of-war" if he did not settle the debt. C.R.O. (Kendal), WD/TE, bound MSS, v, 110-19.
- ⁶⁶ C.R.O. (Kendal), WD/NT, bundle 30. We are told that Helsfell Hall, Crook Demesne and Crook Hall were all formerly tenanted by Thomas Morland but now by James Singleton, Edward Hodgson and Thomas Robinson (Day's Militia rider) respectively. Troutbeck Park was tenanted in turn by William Thompson and William Castlehow.
- ⁶⁷ Charles Kerry, *The History & Antiquities of the Hundred of Bray* (1861), 55 and 115. Errors of family detail occur on p. 115.
- ⁶⁸ Berkshire R.O., *Registers of St. Michael, Bray*, transcribed and indexed by Mrs J. Jones. Three other sisters are mentioned; Sarah (1705-?), Mary (1715-1737) and Sarah (1719-?). Their grandfather was Ralph Day "of Ockalls", whose other children were Mary (1661-2) and Samuel (1665-70). Ralph seems to have been buried on 29 December 1701, eight months after his wife Joan.
- ⁶⁹ The house was built by Sir John Norreys between 1446 and 1466. *V.C.H., Berks*, iii, 73.
- ⁷⁰ The Prerogative Court of Canterbury wills referred to above are in P.R.O., Prob 11/-: Charles Pigeon -459, ff. 320-4; David Pigeon -663, ff. 125-6; Mary Pigeon -717, f. 275; Ralph Day -981 ff. 249-50.
- ⁷¹ Subject to Thomas Dawson's tenancy worth £225 per year.
- ⁷² This paragraph is derived from C.R.O. (Kendal), WD/NT bundle 30.