

ART. XIII – *The building of the Cumberland and Westmorland Joint Lunatic Asylum  
(Garlands Hospital)*

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ON 8 August 1845 an Act of Parliament<sup>1</sup> was passed requiring all counties to provide a lunatic asylum for the pauper insane. It enabled County magistrates to set up a committee to provide an asylum and gave a Committee of Visitors power to procure plans, estimates and contracts for the purchase of land and the erecting of buildings. Any building work could be funded by a mortgage on the rates. All proposals had to be submitted to the Commissioners in Lunacy and all contracts and estimates had to be approved by the Secretary of State. A joint committee was formed to look after the lunatics of the counties of Cumberland and Westmorland.

The Act came about as a result of a survey of facilities for caring for pauper lunatics in England and Wales,<sup>2</sup> which showed that there were 15 county asylums caring for 4,200 lunatics and 139 private licenced houses caring for 2,900. However there were over 9,000 lunatics who were either receiving outdoor relief or were housed in unsuitable workhouses. Eleven English counties had no asylum or licenced house and in all but two others the accommodation was less than what was required. The Commissioners felt that it was best for lunacy to be treated early in a well-constructed public asylum, and so the Act of 1845 was created.

Prior to the Act the counties of Cumberland and Westmorland had used Dunston Lodge on the outskirts of Gateshead (Fig. 1).<sup>3</sup> This was a private asylum licenced by the Commissioners in Lunacy. The magistrates had a contract with the owner of the house for the care and maintenance of pauper lunatics. However this contract did not now exempt the counties from their obligation under the Act of providing a lunatic asylum.

The progress of building the Cumberland and Westmorland asylum can be followed in the reports of the Quarter Sessions published in the *Carlisle Journal*. In January 1851 it was reported that the Commissioners in Lunacy were pushing the committee to build an asylum for the county of Cumberland for a proposed cost of £25,000 to £30,000. At the April Sessions it was noted that the contract with Dunston Lodge made under the terms of the Act expired the following June, but the committee had applied to the Secretary of State for renewal, believing that it had given general satisfaction and it afforded every advantage which a county asylum could have done without throwing on the ratepayers the enormous expense of building and maintaining their own.

The Commissioners in Lunacy initially objected to this proposal but after a deputation to the Secretary of State, an extension of two years was granted. At the July 1851 Quarter Sessions the government Commissioners in Lunacy had expressed their satisfaction with the state of the house at Dunston Lodge.

At the January 1852 Quarter Sessions the County Lunacy Committee recommended that the court should take into consideration the necessity of making provision to purchase land for a future asylum. Mr Browne, chairman of the

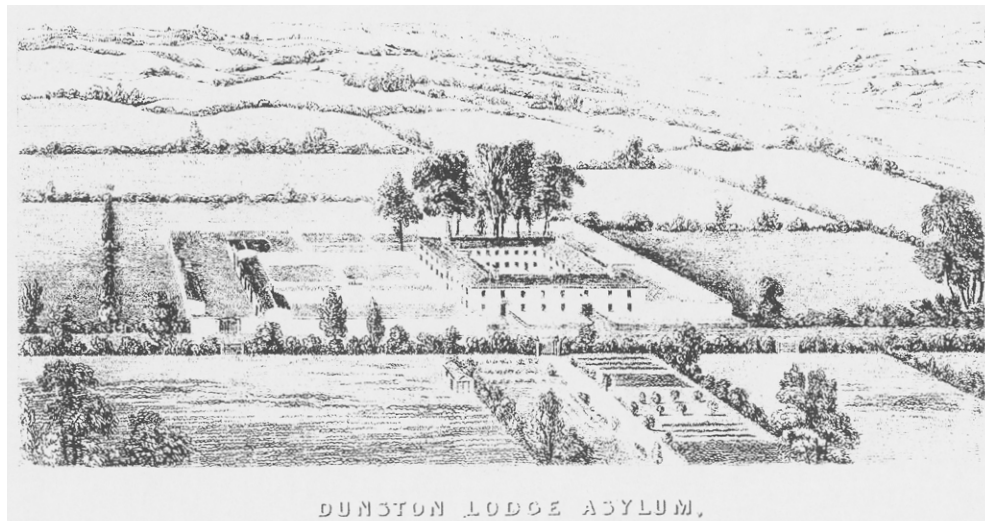


FIG. 1. Early illustration of Dunston Lodge asylum.

committee, concurred with those who thought that the longer the building of a county asylum could be delayed the better, but there was an “unfortunate Act of Parliament”, which compelled them to build one. The five years they were given to build one under the Act had already elapsed and the time had been extended by two years. The extension expired in June 1853 and had been granted on the understanding that an asylum would be provided. If the committee were to look for a site they would be acting on their instructions from the Commissioners in Lunacy and it would be a very good answer to the Secretary of State – “For all they knew it was a very difficult thing to find”. The asylum population had increased greatly over the previous year and the visiting commissioners had commented that they had more inmates at Dunston Lodge than the licence permitted. The committee thought that they should advertise but before advertising they would have to consult with Westmorland so that a suitable site could be found for both counties. The proposed site would be expected to hold 150 inmates and extend to 20 to 40 acres of land.<sup>4</sup>

The *Carlisle Journal* on 27 February 1852 carried an advertisement for the “County Lunatic Asylum”. A freehold estate was wanted for purchase containing between 25 and 40 acres. The conditions were that it must as near as possible to a railway station. The situation must be healthy and dry but not exposed; there should be a well with water both hard and soft<sup>5</sup> and preferably be within a short distance of good building materials. The land had to be in one plot. Details of any suitable land were to be sent to Mr Hodgson, clerk to the Visitors in Lunacy, at The Courts, Carlisle before 25 March.

The April Quarter Sessions heard that Mr Wilkinson, owner of the Dunston asylum, did not want to renew his contract with the two counties, so that the need to build a county asylum was greater. There then followed a debate on the style of building; the main consensus was that there was to be as little decoration as possible to keep the cost down.<sup>6</sup> By the July Quarter Sessions, the committee had considered

the advantages and disadvantages of the sites that had been offered and these had been visited by a sub-committee. They recommended to the court a site at Lowry Hill, two miles north of Carlisle,<sup>7</sup> and urged the purchase of 25 to 35 acres of land there and to procure plans for a building to accommodate a number not exceeding 200 rather than 150.

The report states that 18 or 19 sites had been offered, varying in price from £20 to £200 per acre. All sites above £100 per acre had been struck off the list. Eight or nine of the most likely sites had then been visited and most of them had then been discounted because of the lack of a suitable water supply. This left three sites which the committee thought suitable, one at Cardew, one at Southwaite, and the site recommended at Lowry Hill. However, both the Cardew site and the Southwaite site also had no water supply. It was also thought that the cost of building at Southwaite would be expensive. Lowry Hill had the advantage of easy access and was situated on clayey subsoil. This would allow bricks to be made on the site, estimated to save £1,500. The price of the land was £75 per acre and as it was close to Carlisle it could also be visited easily and gas could be obtained for lighting.

Mr James of Barrockside, a member of County Lunacy Committee, then suggested that they had failed to view a site to the south of Carlisle at Garlands near Carleton. This had been dismissed because the lowest price the owner would accept was 100 guineas per acre. Mr James went on to state that he had visited the site at Lowry Hill (also referred to as Goslin Bridge<sup>8</sup>) and that he was not happy with it. The site was swampy ground and there were nearby brickfields. He then went on to list the advantages of the Garlands site – being close to Newbiggin quarry, close to the railway station at Brisco, close to Carlisle, and with a good water supply. This provoked a debate between the members even down to the correct name for the site of either Goslin Syke or Lowry Hill. The meeting closed requiring the committee to fix on the site at Lowry Hill or elsewhere near Carlisle.<sup>9</sup>

At the October Sessions the committee reported that they had visited the site at Garlands but were still convinced that the Lowry Hill site was the best. They had begun boring for water and were hopeful of finding a good supply. The meeting then debated if it was worth trying to appeal to the new Secretary of State to avoid having to build an asylum. The general consensus was that there was little chance of a reprieve, because most counties had already built their asylums.<sup>10</sup>

The Quarter Sessions in January 1853 showed little change. Members were still arguing over trying to delay the building as it was an unnecessary expense on the ratepayers. The committee was still pushing for the Lowry Hill site and Mr James still preferred the Garlands site.<sup>11</sup>

The April Sessions heard of problems with the Lowry Hill site. The water supply had still not been proved, but the committee felt that a suitable supply would be available from the Carlisle Water Company. The meeting decided to submit the site to the Commissioners in Lunacy for approval.<sup>12</sup>

The July Sessions saw progress being made. The Commissioners in Lunacy had approved the Lowry Hill site and had suggested that a minimum of 50 acres should be purchased with the ability to buy more if required. The owner was stated to be Mr Ferguson and the price per acre was £78. Water had now been found on the site at a depth of 230 feet and this was yielding 15,000 gallons per day. It was being raised naturally to pumping distance and then to the surface by a hand pump. It was

thought that a steam pump could be installed if required. Sadly, this water supply dried up shortly afterwards.

The Session decided that a public competition should be held for the asylum plans. They would then pay for the best after the Committee and the Commissioners had approved it. The *Carlisle Journal* on 29 July 1853 carried an advertisement to architects and builders to submit plans for a lunatic asylum to be built within two miles of Carlisle. It had to be suitable to accommodate 200 patients and be capable of enlargement at a future date if necessary. All plans had to be submitted by 1 October 1853 and the successful competitor would receive 300 guineas when the final plans were adopted. There was also a debate on a proposal to build a joint asylum with both Durham<sup>13</sup> and Westmorland. It had been announced that the Durham Magistrates would not be renewing the Dunston Lodge licence to Mr Wilkinson, but would be issuing it to another person. Building a larger asylum would require the purchase of more land.<sup>14</sup>

There is no report for the October Session but by January 1854 it was reported that plans from 26 architects had been received, with building costs varying in amount up to £80,000. They had chosen one from Mr Thomas Worthington of Manchester at a cost of £17,555, which was to be submitted to the Commissioners for approval. There had been eight plans with building costs of under £21,000 and two other sets were kept in case the commissioners did not approve those of Mr Worthington.<sup>15</sup>

These original plans no longer exist but copies were published in *The Builder* in May 1858 (Figs 2 and 3).<sup>16</sup> They met the requirements set out by the Commissioners in Lunacy for building a lunatic asylum.<sup>17</sup> These requirements indicated that a large proportion of the orderly, chronic and convalescing patients did not require the expensive accommodation usually found in county asylums. They suggested that day rooms and associated dormitories should be constructed near the wash-houses on the women's side and near the workshops on the men's side. The plans produced by Mr Worthington allowed for this, with sixteen bed spaces for women and men, each associated with the wash-house and workshop blocks respectively. The plans were also praised for their use of open fires throughout the building as a means of heating, rather than expensive piped heating systems.

The beginning of 1854 saw the Lunacy Committee start to keep their own minute books of the meetings, together with associated letters and documents. These are deposited in the Cumbria Record Office, Carlisle.<sup>18</sup>

The April Sessions was informed that a petition against the Lowry Hill site had been sent to the Secretary of State after the purchase of the land had been sanctioned on 18 October 1853. It was signed by the medical practitioners of Carlisle, and the Guardians of the Carlisle, Longtown, Penrith, and Wigton Unions. Minutes of the committee meeting for February 1854 show that the objections to the Lowry Hill site arose from the bleak aspect and cold barren character of the soil. The absence of water would mean purchasing a supply from the water company at Carlisle on an annual basis. They also complained of the proximity of a dirty and noisome village (Kingstown), the existence of brick kilns to the south and east of the site, also the possible building of new ones to the west and north immediately adjacent to the site.

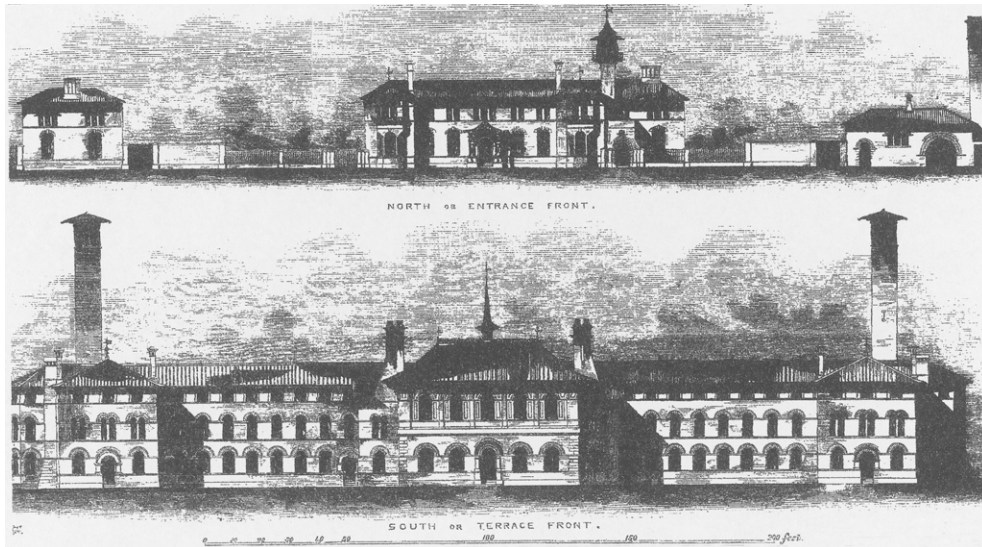
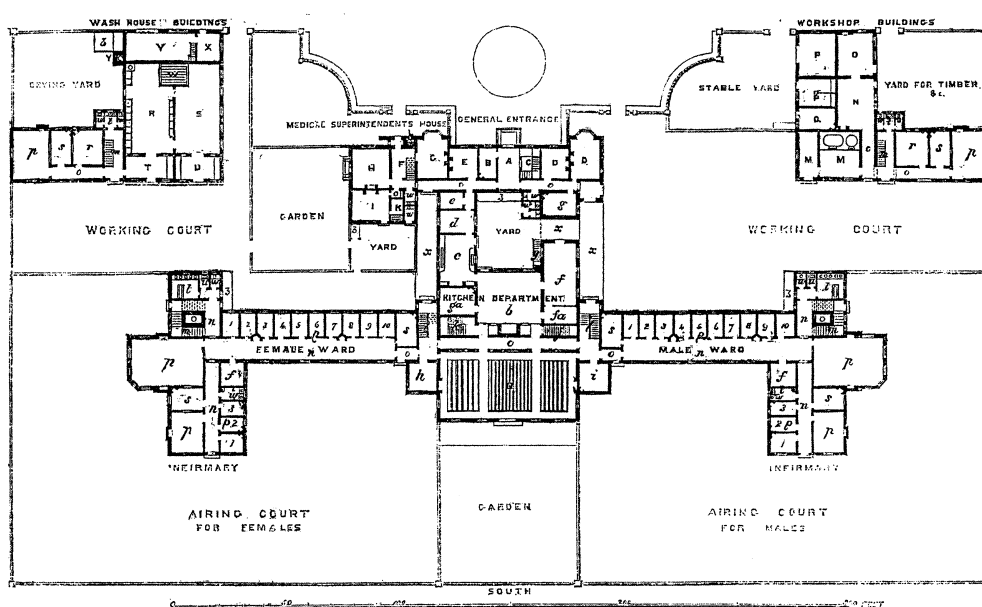


FIG. 2. Proposed elevations of Cumberland and Westmorland Lunatic Asylum as designed by Mr Thomas Worthington.



CUMBERLAND AND WESTMORELAND LUNATIC ASYLUM.

FIG. 3. Proposed plan of Cumberland and Westmorland Lunatic Asylum as designed by Mr Thomas Worthington.

The committee suggested that the brick kilns in the neighbourhood were neither so near nor of such an extent as to affect the inmates. The committee therefore suspended all proceedings on building the asylum until the Secretary of State made a decision. Again after a long debate the Session agreed that the Lowry Hill site was the best.

The Lowry Hill and Gosling Syke area of Carlisle has seen brick making activities since at least the mid eighteenth century. A plan of Mr Thomas Pattinson's estate at Kingmoor dated December 1787 shows a brick kiln in one of the fields.<sup>19</sup> The first edition Ordnance Survey, 1:10,560 map 1865 shows one brickfield in the Lowry Hill area of Carlisle. By the second edition in 1901 there were seven brick fields marked and two of the largest brick works in Carlisle had opened in the area, the Kingmoor Brick Works and the Kingstown Brick Works.<sup>20</sup>

The June Sessions was informed that the Commissioners had appointed Mr Grainger, a Medical Examiner for the Board of Health, to inspect the Lowry Hill site and any other suitable sites.<sup>21</sup> The October Sessions was told that a Mr Rawlinson<sup>22</sup> had submitted a report on the various sites. He had visited 16 sites and was adverse to the Lowry Hill site but recommended the Garlands site as the most suitable. However, the committee still wanted Lowry Hill and a report in the minute book for October 1854 notes that the sub-soil on the site was stiff gravelly clay locally known as "hard till" and that bricks could be made from it.

The Quarter Sessions on 9 January 1855 considered the correspondence received from Lord Palmerston, Secretary of State for the Home Department, stating that the Lowry Hill site should be sold and the Garlands site purchased. After a heated debate the magistrates still considered the Garlands site to be too expensive and they felt that they should try to find another suitable site and keep the Lowry Hill site until they did so.<sup>23</sup>

The magistrates were informed at the October Sessions that the Lunacy Committee had looked at three new sites in the Penrith area but that none of them was suitable. The Garlands site was still available at either £80 per acre if the whole estate was purchased or £100 per acre if only 50 acres were purchased. They had made an offer of £7,500 for the whole estate but this had been refused. The committee were now resigned to the fact that no other suitable estate was available and had entered into negotiation with the vendor to buy 50 acres and also terms for making bricks and water supply. These terms were not satisfactory and so the committee advised the magistrates to purchase the whole estate. This would allow bricks to be made as and when required, it would give them sole control over the water supply to the site and also the access road to the asylum would not be a common road. They also advised that the excess land purchased should be able to be let for a good rent because of the demand for vegetables etc. at the asylum.<sup>24</sup>

In October 1855 the committee resolved to ascertain the quality and quantity of brick clay to be got on the Garlands estate and had negotiated the rate for the production of bricks as 1s. 6d. per 1,000 for best bricks and 1s. per 1,000 for other quality. However this facility was not used when the decision to purchase the whole estate was made.

The Quarter Sessions on 10 January 1856 heard that a formal agreement between both parties had been signed for the purchase of the whole Garlands estate at a cost of £8,684 10s. which was to be split between the two counties, with Cumberland

paying £6,513 7s. 6d. and Westmorland the remainder. The present tenancy was due to expire at Candlemas.<sup>25</sup> However, the following Quarter Session on 9 April 1856 heard that the purchase of the Garlands had been deferred for twelve months. No reason for this deferral is given in either the report of the Quarter Sessions or the committee's minute book. The committee had sold the Lowry Hill estate by public auction for £2,010.

The actual date on which the county took possession of the estate is not noted, but the January 1857 Quarter Sessions was told that as the season was now so far advanced for carting clay for bricks it would be most advantageous to the counties that the building should be left for another year. A right was reserved with the tenant to dig and cart clay, and burn bricks, at any time after 1 October following. The reason for the delay was to allow the clay to weather prior to brick making. The normal procedure was for clay to be dug in the autumn and left in piles to allow rain and frost to break down the clay particles to make it easier to work.

The committee noted that clay of the best quality was available on the site. A letter states that a field (numbered 1) contained about one acre of the very best clay at a depth of 2 ft. 6 inches to 3 ft. and which would produce 1,250,000 bricks. This was the field with the supply of water in it. Field number 2 had about 1½ acres of clay of good quality from which about 1,750,000 bricks could be made. Field number 6 had about three acres of inferior clay scarcely suitable for brick making.<sup>26</sup> Clay was already being used to the south of Carlisle for brick and tile making, with works at Cumwhinton and Wragmire Moss.<sup>27</sup> The quarries of Newbiggin and Cumwhinton were both about two miles away and could supply stone at the following rates: ashlar 6½d per cubic foot and walling stone 2s. 6d. per ton.<sup>28</sup>

A letter<sup>29</sup> dated 3 April 1857 from Mr Cory, the county surveyor, lists the projected cost of building the asylum in various materials as:

|                                  |         |
|----------------------------------|---------|
| Brick                            | £22,767 |
| Brick and stone dressings        | £23,781 |
| Rubble stone and stone dressings | £24,386 |
| Rubble stone lined with brick    | £24,587 |

He also stated that he had examined the bricks used to build farm buildings on the site and found them to be of a suitable quality.<sup>30</sup> The committee decided that it would be most economical to construct the asylum strictly of bricks except for the quoins and dressings which should be of free stone and noted that the plans had been prepared with a view to a building of this character.

In September 1857 it was resolved unanimously that brick-making should not be included in the general contract. As will be seen later this was possibly a wrong decision. A Mr Lough<sup>31</sup> had been employed by that time and it was resolved to ask him to undertake to make the three million bricks required for the building equal to the samples (made from clay from the site) supplied to him, and to state the price per 1,000 for each of the two qualities. A meeting on the 13 October 1857 resolved, however, that the brick making should be put to tender before accepting Mr Lough's offer. An advertisement was therefore placed in *The Builder* and the usual county papers of Cumberland and Westmorland for persons willing to contract to make the quantity of bricks required for the asylum and that work was to commence as soon as satisfactory tenders were received.

The following advertisement appeared in the *Carlisle Journal* on 15 October 1857

### To Brick Makers

Required for building the Cumberland and Westmorland Lunatic Asylum within 3 miles of Carlisle about 2,500,000 bricks. Of which 1,700,000 are to be of the best quality and 800,000 in lesser. Samples of both kinds may be seen at the office of the County Surveyor in the Courts Carlisle. Clay, sand and water are on the premises but all other requisites must be found by the contractor. Persons willing to compete for the manufacture of the said [bricks] are required to send their tenders on or before the 10th of November next addressed to "The County Surveyor, Carlisle" from whom any further particulars may be obtained. Security for the due performance of the contract will be required and no pledge is given to accept the lowest tender

The particulars for brick making are shown in Fig. 4. The normal colour of bricks burnt from clay depends on the specific chemical composition: in the Carlisle area they are normally red. Different colours can be obtained by adding varying amounts of other chemicals to the clay before firing. The particulars also ask for the number of bricks that could be produced on a daily basis and states in the conditions that the brick quality must pass inspection by the architect or clerk of works.

The records<sup>32</sup> suggest that five tenders were received, the details of which are shown in Table 1.

TABLE 1.

Note the cost of 95,000 moulded red bricks on the original document is incorrectly calculated as £166 5s. The correct figure is £171, which would give a total for the contract of £3,019 15s.

| Type of Brick     | Lough      | Gregory        | Poor      | Tucker     | Gething |
|-------------------|------------|----------------|-----------|------------|---------|
| Best Red          |            |                |           |            |         |
| Cost per 1,000    | 19s.       | 25s.           | 22s. 6d   | 29s.       | 40s.    |
| Cost of 1,570,000 | £1491 10s. | £1962 10s.     | £1766 5s. | £2276 10s. | £3140   |
| Best Glazed Black |            |                |           |            |         |
| Cost per 1,000    | 28s.       | 37s. 6d        | 32s.      | 35s.       | 40s.    |
| Cost of 25,000    | £35        | £46 17s. 6d.   | £40       | £43 15s.   | £50     |
| Moulded Red       |            |                |           |            |         |
| Cost per 1,000    | 30s.       | 55s.           | 36s.      | 30s.       | 60s.    |
| Cost of 95,000    | £142 10s.  | £261 5s.       | £171      | £142 10s.  | £285    |
| Moulded Black     |            |                |           |            |         |
| Cost per 1,000    | 30s.       | 45s.           | 35s.      | 30s.       | 60s.    |
| Cost of 10,000    | £15        | £22 10s.       | £17 10s.  | £15        | £30     |
| Common Bricks     |            |                |           |            |         |
| Cost per 1,000    | 17s.       | 14s.           | 21s. 6d.  | 14s. 6d.   | 25s     |
| Cost of 800,000   | £680       | £560           | £860      | £580       | £1000   |
| Flue pipes        |            |                |           |            |         |
| Cost per 100 ft   | 100s.      | 85s.           | 110s.     | 125s.      | 150s.   |
| Cost of 3000 ft   | £150       | £127 10s.      | £165      | £187 10s.  | £225    |
| TOTAL COST        | £2514      | £2980 12s. 6d. | £3015     | £3245 5s.  | £4700   |



## CUMBERLAND AND WESTMORLAND LUNATIC ASYLUM.

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PARTICULARS FOR BRICK-MAKERS.

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The Tender for each description of Bricks is to be given at a price per thousand.

For Flue Pipes at a price per hundred feet lineal.

The quantities stated below are not to be taken as the exact numbers, but as an approximation, and the Contractor is to furnish as many as may be required, whether more or less, at the price stated in his Tender.

The Contractor is to furnish about 1,570,000 Bricks, equal in quality to the best sample, as, however, many Bricks made in the best manner and of good quality will probably not be equal to the best sample, such Bricks may be reckoned amongst those of the inferior kind if approved by the Architect.

Also about 25,000 Glazed Bricks, equal in quality to the best sample, but burnt black with manganese and litharge, or blackened by any other process the maker may think proper to employ, provided they are to the satisfaction of the Architect.

Also about 95,000 Moulded Bricks of the best quality, for flat and circular arches, and for other parts.

Also about 10,000 Black Glazed Arch Bricks of the best quality.

Also about 800,000 inferior Bricks equal to the sample.

Also about 3000 feet of Flue Pipe, one foot inside diameter.

All the Bricks and Pipes must be sound and well burnt, and approved by the Architect or Clerk of the Works, and the Contractor shall remove from the premises any rejected Bricks if the Architect shall require him to do so.

The Contractor is to state how many he can deliver daily from the First of May next, and a Fine will be imposed should any loss of time arise from his not furnishing the stipulated number, which Fine shall be sufficient to cover any damages claimed by the Builder for delay.

The Bricks are to be sorted and stacked in a convenient part of the field at the Contractor's expense.

JOHN A. CORY, County Surveyor.

*Courts, Carlisle, 15th Oct., 1857.*

FIG. 4. Copy of the particulars for brick makers tendering for the contract for the Cumberland and Westmorland Lunatic Asylum.

The addresses of the tenderers are as follows

Mr Gregory, Church Lane Brickyard, Wolverhampton.

Mr J. M. Gething, Brierley Hill Staffordshire.

Mr Hugh Tucker, Toppin Castle, Hayton, Carlisle.

Mr W. Poor, North Hale, Farnham, Surrey.

Unfortunately Mr Lough's tender has not survived so that his address is not available. From the addresses it can be seen that only one local person tendered for the contract. *The Post Office Directory for Cumberland and Westmorland* for 1858 contains details of 27 brick makers, most of whom appear to be itinerant, moving around the area making bricks and tiles as required on the site. The distances that had to be travelled by the other applicants suggest that brick makers were willing to travel considerable distances to acquire a suitably large contract.

A letter dated 11 October 1857 and signed "RP" suggests that the committee made enquiries in the area as to the cost of bricks on the open market. It states that Messrs Nelson<sup>33</sup> sold their patent machine-made bricks (with eight perforations) for cash at £1 per 1,000 at the works. It then goes on to state that good clamp bricks could not be bought at Carlisle for less than £1 per thousand and best pressed bricks cost £1 10s. 0d. per thousand. The letter gives a break down of the costs of producing both clamp bricks and pressed bricks as follows:

|                                            |          |
|--------------------------------------------|----------|
| Clamp bricks (per thousand)                |          |
| Casting clay, moulding, burning etc        | 7s. 9d.  |
| Coal, peat, turf and cartage of sand etc.  | 3s. 0d.  |
| Covers, barrows, planks etc. wear and tear | 10d.     |
| Total                                      | 11s. 7d. |
| Pressed brick                              |          |
| Casting clay, moulding, pressing, burning  | 12s. 6d. |
| Coal and peat cartage etc.                 | 3s. 9d.  |
| Kiln wear and tear, implements etc.        | 2s. 3d.  |
| Total                                      | 18s. 6d. |

These figures would give a profit per thousand to the brick maker of 8s. 5d. for clamp bricks and 11s. 6d. for pressed bricks.<sup>34</sup>

The individual tender letters also give an indication of the rate at which bricks would be made. Mr Poor makes the claim "If weather permits in May I may deliver into the carts 70-80,000 per week. But in June and afterwards I may be able to deliver from 90-100,000. If I can have sufficient drying ground for my bricks and if no stoppages [occur] after commencement of making". Mr Tucker gave production figures from the middle of May of 50,000 common bricks per week and best bricks 80,000 per week. Other types supplied as required. Mr Gregory gave a daily production of 12,000 best and 4,000 commons.

From these figures it possible to obtain some idea of the number of people who would be involved in making the bricks. Dobson in his *Rudimentary Treatise on the Manufacture of Bricks and Tiles*<sup>35</sup> states that "a good moulder if solely occupied in moulding, will turnout 2,000 bricks a day, between 6 am and 6 pm". On these figures, to get about 90,000 bricks per week on a six day working week, seven or eight moulders would be required. Each moulder would need a person to supply him with clay and a second person to take finished bricks to the drying area and to

stack them for drying. Therefore making green unburnt bricks would require about 20-24 people.

The minutes of the committee meeting on the 21 November 1857 record that Mr Lough's tender for making the bricks should be accepted with a security of £2,000. A report to the Quarter Sessions in October 1858 stated that his tender had been the cheapest and he would supply 12,000 bricks per day from the 1 May 1858. The contract was confirmed at the next committee meeting on the 28 December 1857 and it was also resolved that an advertisement for contractors to build the asylum should be placed with a start date of February.

The Easter 1858 meeting of the committee recorded that three contracts had been accepted for the construction of the asylum. Messrs Charles and John Armstrong<sup>36</sup> of Carlisle had received the contract for the building. George Black<sup>37</sup> of Carlisle gained the contract for the joinery work and David Thompson<sup>38</sup> of Carlisle the contract for plumbing and glazing. The total cost of all three contracts was £18,755.

Building work started on the new asylum, but problems soon arose. The committee heard on the 24 June 1858 that Messrs Armstrong had written a letter complaining that the rate of brick production was slower than had been promised and it was holding up the building process. The committee decided that Mr Lough should immediately purchase and deliver at his own expense 100,000 bricks which Messrs Armstrong agreed to accept as the supply required by them for the next fortnight (up to 8 July 1858). Also Mr Lough should deliver 100,000 per week till the deficiency from the 14 May was made up and should make up the remainder of the deficiencies during the brick-making season.

Accounts<sup>39</sup> were kept of the bricks delivered from the brickfield and kilns to the building sites. These show that the first kiln of bricks in the week 13-20 May produced 19,950 second quality bricks. The second burn delivered between 31 May and 3 June produced 42,400 bricks (Mr Lough counted 42,600). The third kiln fired produced the first of the best quality bricks, 6,500 and 15,000 second quality bricks. On 15 June bricks from the fourth burn were delivered. There were 3,200 first quality bricks and 48,000 second quality bricks. But 1,520 of these were returned as being too soft. The fifth burn delivered between 21 and 24 June supplied 32,800 second quality bricks and 4,600 first quality bricks.

Therefore in the first month of production Mr Lough delivered 156,630 second quality and 14,300 first quality bricks, 170,930 in total. The brick production promised by the other tenderers ranged from 96,000 per week by Mr Gregory to 130,000 per week by Mr Tucker. Mr Lough's production falls far short of these figures, so it is little wonder that the contractors were complaining.

Between 25 June and 8 July 100,000 bricks were delivered to the Asylum from Mr Metcalfe of Carlisle.<sup>40</sup>

Despite these problems the committee reported to the Midsummer Quarter Sessions in 1858 that the building work was progressing well. The majority of the foundations and parts of the cellarage were finished. They hoped all building work would be completed by summer 1860 and fitting out would be achieved by Michaelmas 1860.<sup>41</sup> However, brick production did not improve. Between 25 June and 8 July bricks from firings no.6 and 7 were delivered to the site. These comprised 55,600 second quality bricks and 11,800 first quality bricks, but Messrs Armstrong returned 1,500 second quality bricks as being too soft. This led to a note in the

minutes of the committee meeting on 14 July 1858 that after examining the bricks which had been furnished by Mr Lough the committee were of the opinion that they were not of sufficiently good quality for the outside work of the Asylum. They therefore thought that the whole of the building should be encased with stone. It was resolved to call a special meeting of the building committee on 17 July 1858.

This meeting came to the same conclusions as the earlier meeting, that the whole of the building should be faced with red sandstone instead of red brick. The stone facing would be let at 4s. 6d. per superficial yard extra and that Messrs Armstrong's tender dated 16 July 1858 should be accepted. From this rapid decision it could be assumed that the Armstrongs had discussed the problem with Mr Cory, the County Surveyor, and possibly put forward the idea of the outer skin of the asylum being constructed in stone. There is no mention of the site from which the red sandstone was obtained, but Newbiggin quarry would be the closest source.

The committee also resolved that the clerk should write to Mr Lough and give him notice that the contract entered into by him had not been fulfilled, either as to the quantity or quality of bricks supplied, and consequently he made himself liable to the penalties included in the contract. He was to be informed also that the outside was now to be in red stone, so red bricks would no longer be required, but all bricks still needed for the work must be furnished by him, strictly in accordance with the terms of his contract.

Between 23 July and 13 August 1858 Mr Lough provided 99,950 bricks. It would appear that there was possibly a partial failure of one kiln firing. Kiln 8 only produced second quality bricks. It was also during this period that the first special bricks were produced with reference being made to bull nosed and black coated bricks.

This rate of production was still not enough. At the committee meeting of 20 August 1858 it was decided that, as Mr Lough had failed to supply the quantity of bricks stipulated in the contract, the committee would purchase bricks elsewhere to allow the contractors to carry on with their work. Mr Lough would be informed that the committee would hold him liable for the extra cost incurred by them. They then asked Mr Cory to obtain 600,000 bricks either from Mr Nelson or any other contractor, to be delivered to the Garlands. This must have been put in hand immediately, because the first batch of 600 bricks was delivered that day from Mr Nelson.

Mr Lough attended a meeting with two members of the committee on the 17 September 1858 when he was asked what he intended to do to carry out the agreement he had made.<sup>42</sup> By the 26 September he had sent a letter to the committee offering to take £600 and give up the contract for making the bricks. The committee rejected this offer and said he was to be called upon to fulfil his contract and in the mean time bricks were to be purchased to supply the builder if Mr Lough was unable.

However by 30 October 1858 things cannot have improved because the committee was then suggesting that they settle with Mr Lough as per the terms of his letter dated 23 September 1858. The Christmas Quarter Sessions of 1858 heard from the committee that they had agreed with Mr Lough to take the whole of the bricks, burnt and unburnt, together with the whole of the plant upon the ground and release him from his contract, paying him £600 in full of all his claims and demands. They felt that in view of the long and expensive litigation with which they

had been threatened they had acted in the most advantageous way for the two counties. It was also reported that other persons had been engaged to prepare the clay for bricks to be used next season, although no names were given.

Actual building work on the asylum must have ceased during the winter months because a note in the minute books for the 21 March 1859 indicates that building work on the asylum had restarted that day. It goes on to state that a large quantity of clay had been dug during the winter and 90,000 bricks had already been made which the County Surveyor had found to be sound and good. There were also no problems keeping the builder supplied with as many as he required.

An account submitted by Messrs Armstrong over this period was for the construction of new brick kilns. This involved 46 days of bricklaying and 122 days of labour required to mark out, excavate the site, and help the bricklayers. To build the kilns 23 loads of lime were required. The total cost of kiln construction came to £67 15s. 3½d. However again this was being optimistic. Damage and trespass was occurring on the brickfields and a meeting on the 18 April heard that the Chief Constable was to send one of his men to the Garlands for the purpose of protecting the works and especially the brick fields from trespass and damage. By the middle of June the supply of bricks had again fallen behind the contractors' requirements. And in July the county surveyor was directed to inspect the quality of bricks being used and to remove any soft burnt bricks from the building.

Very little is then heard about the technicalities of the building process of the main buildings but by 4 January 1860 the female side of the asylum was ready to be slated over and the rest of the building, except for the central portion, would be in a few days more. The roof of the central portion was constructed but had not yet been placed on the walls.<sup>43</sup>

During this period a steam engine had been purchased from Mr Blaylock, and Messrs Armstrong had the contract to build the engine house for £69. Also negotiations had taken place with the Carlisle Gas Company to provide gas to the premises but this appears to have been too expensive and the committee decided to produce gas on site. Messrs Armstrong again received the contract for the construction work.

The Garlands hospital eventually opened on 2 January 1862 with the majority of patients being transferred from Dunston Lodge. A report dated the 30 June 1862 gives the following costs for building Garlands.

|                                              | £      | s  | d  |
|----------------------------------------------|--------|----|----|
| Building                                     | 24,925 | 5  | 6½ |
| Clerk of works                               | 455    | 2  | 0  |
| Water works                                  | 1,125  | 15 | 0  |
| Gas works                                    | 1,184  | 18 | 6½ |
| Draining and fencing of land                 | 445    | 15 | 0  |
| Levelling the road boundary fence and bridge | 2,733  | 8  | 7  |
| Lodge                                        | 308    | 14 | 8  |
| Loss on bricks supplied to contractors       | 864    | 8  | 0  |
| Total                                        | 32,043 | 7  | 4  |

The original estimates for building the asylum ranged from £22,767 for a fully brick built building to £24,587 for a stone building lined with bricks. Although the

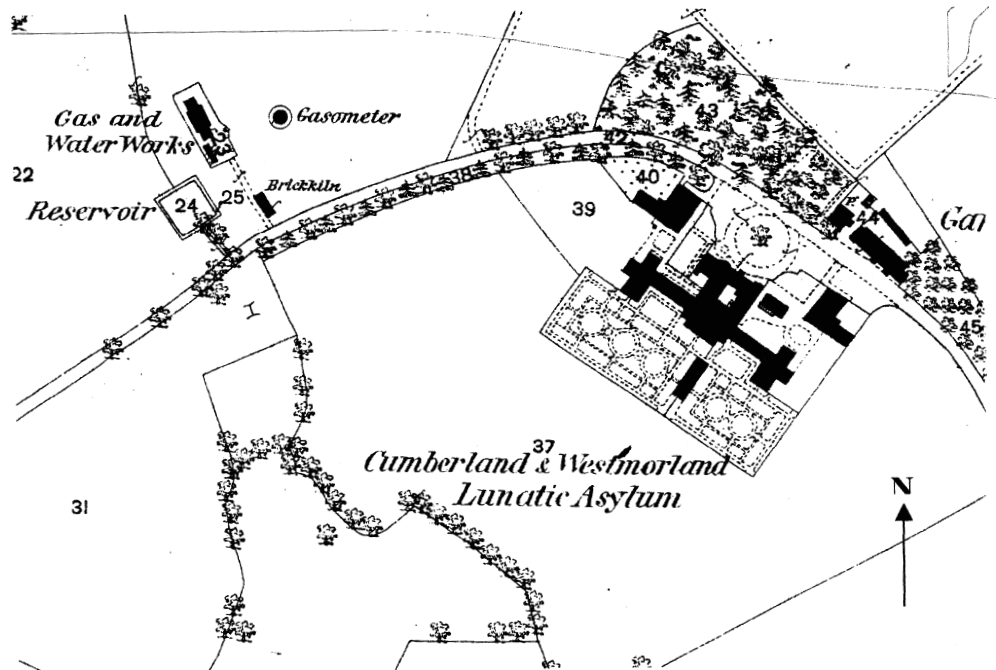


FIG. 5. Extract from 1st edition Ordnance Survey Map 1865 1:2500 showing plan of the Cumberland and Westmorland Lunatic Asylum and site of brick kiln etc. (Map Ref. NY 433 539).

initial plan was for a brick building with stone quoins, the problems related above gave rise to a stone building with brick lining and interior walls. The final price for the building of £24,925 is approximately £400 more than the original estimate. However, when all the extra work is added, the project came in nearly £8,000 over budget.

The initial estimate for the number of bricks required to build the Garlands was 3,000,000 when it was to be a brick building with stone quoins. From the records of bricks delivered to the site it would appear that over 8,000,000 bricks were made and used. This would include the use of bricks in the engine house, gas works and lodge, which were not accounted for in the original estimate.<sup>44</sup>

Did the delay in building an asylum, brought about by the magistrates, benefit the rate-payers of the counties? It would appear from articles in *The Builder*<sup>45</sup> that counties that built asylums immediately after the Act was passed were having difficulty with their buildings and alterations were being carried out. The main problem appeared to have been a lack of room to house the increasing number of inmates. The plans drawn up by Mr Worthington did meet the Commissioners in Lunacy guidelines subsequently published in 1856 and so the joint counties obtained an asylum, which met the latest standards.

In September 1858 a list was published in *The Builder* showing the costs per patient-place for some asylums under construction at that time, including the Cumberland and Westmorland. This gave a building cost of £20,000<sup>46</sup> for the Cumberland asylum or £100 per patient place. This compares with £98 1s. 6<sup>1</sup>/<sub>2</sub>d.

per patient for Durham's asylum for 312 patients, which was the lowest cost. The 200 place asylum built for Northumberland cost £212 2s 8<sup>3</sup>/<sub>4</sub>d. per place and the average over all the asylums quoted was £142 19s. 1<sup>1</sup>/<sub>4</sub>d. On these figures it would appear that the counties got a good deal. If the final figure for the construction of just the building is used a cost of £124 12s. 5d. is achieved, or if the total cost of £32,043 7s. 4d. is used a figure per place of £160 4s. 5d. results. Both of these costs compare favourably with some of those quoted. The magistrates appear to have gained for the ratepayers of Cumberland and Westmorland an asylum of the latest design at an acceptable cost compared to similar establishments elsewhere. Perhaps partly because they were one of the last counties to comply with the 1845 Act.

The layout of the original buildings of the Cumberland and Westmorland Lunatic Asylum are clearly shown on the 1st edition Ordnance Survey 1:2500 map (1868) (Fig. 5). From this it can be seen that the design followed that in the plans provided by Mr Worthington (Fig. 3).

All the original Garlands hospital buildings have now been demolished and the site developed for housing (1999-2003).

## Notes and References

- <sup>1</sup> *An Act to Amend the Laws for the Provision and Regulation of Lunatic Asylums for Counties and Boroughs and for the Maintenance and Care of Pauper Lunatics in England* 80 & 90 Victoria.
- <sup>2</sup> *Report of the Metropolitan Commissioners in Lunacy to the Lord Chancellor* 1844.
- <sup>3</sup> Dunston Lodge was a privately owned lunatic asylum owned by Mr John Etridge Wilkinson and in the 1844 survey it was listed as one of the best conducted private houses in the country. In 1851 a male inmate bit Mr Wilkinson on the arm. The pauper was put in a straight jacket, flogged and secluded: the medical attendant removed his two upper incisors. The magistrates of Cumberland held an inquiry and reported the facts to the Commissioners in Lunacy who found Mr Wilkinson guilty of the most flagrant cruelty and his licence was removed. The licence was transferred to Cornelius Garbutt, the father-in-law of Mr Wilkinson's son.
- <sup>4</sup> *Carlisle Journal*, 9 January 1852.
- <sup>5</sup> It is not understood how a supply of both hard and soft water could be obtained on a single site.
- <sup>6</sup> *Carlisle Journal*, 9 April 1852.
- <sup>7</sup> The first edition Ordnance Survey map 1868 shows Lowry Hill to be a farm house situated to the west of the main road north from Carlisle.
- <sup>8</sup> Goslin Syke is a small stream flowing in a south westerly direction crossing under the main road at Goslin Bridge. The precise site on which the asylum was to be built is not known but a description in the "Report on the proposed sites for the lunatic asylum for the counties of Cumberland and Westmorland" states the site to be two miles north of Carlisle and 400 yards west of the Longtown road. This would give a position approximately half way between Lowry Hill Farm and Goslin Bridge.
- <sup>9</sup> *Carlisle Journal*, 2 July 1852.
- <sup>10</sup> *Carlisle Journal*, 22 October 1852.
- <sup>11</sup> *Carlisle Journal*, 7 January 1853.
- <sup>12</sup> *Carlisle Journal*, 8 April 1853.
- <sup>13</sup> Durham built its own asylum for 312 inmates at Sedgfield and it opened on 13 April 1858 at a total cost of £31,480 (£4,000 for the land and £27,480 for the building and fittings) *The Builder* 17 (1859), 722.
- <sup>14</sup> *Carlisle Journal*, 1 July 1853.
- <sup>15</sup> *Carlisle Journal*, 6 January 1854.
- <sup>16</sup> *The Builder* 16 (1858), 294-295.
- <sup>17</sup> *Ibid.*, 293.
- <sup>18</sup> The minute books are CRO(C) /CC1/29/1 and the letters are CRO(C)/Qal/Asylum
- <sup>19</sup> CRO(C) D/Lons/L/Plans/Kingmoor.
- <sup>20</sup> For further details on brick works in the Carlisle area see Graham Brooks, "Cumbrian brick and tile

works: North Cumbria”, *The Cumbrian Industrialist* (2000) iii, 49-59.

<sup>21</sup> *Carlisle Journal*, 30 June 1854.

<sup>22</sup> Mr Robert Rawlinson was a civil engineer, who actually carried out the site visits and produced the report on the suitability of the sixteen sites originally offered.

<sup>23</sup> *Carlisle Journal*, 12 January 1855.

<sup>24</sup> *Carlisle Journal*, 19 October 1855.

<sup>25</sup> *Carlisle Journal*, 11 January 1856.

<sup>26</sup> CRO(C)/Qal/Asylum tenders etc. undated and unsigned letter. The field number must refer to either a sale plan or an earlier estate plan. The first edition Ordnance Survey 1865 1:2500 shows the brick kiln in a field to the west of the main building on the side of the approach road from Carlisle. The field also contains a reservoir. The site has now been built over.

<sup>27</sup> G. Brooks, *op. cit.*

<sup>28</sup> Newbiggin quarry (NY 437 513). *Kelly's Directory of Cumberland and Westmorland* 1858, shows Charles Armstrong as the quarry master at Newbiggin. Cumwhinton quarry is at NY457526.

<sup>29</sup> CRO(C)/ Qal/Asylum.

<sup>30</sup> The making of bricks on site was common in the Carlisle area before the opening of large commercial brick works. The jobs were usually let in the autumn so that dug clay could be left over the winter and the brickmaking started in the spring. For example, see the advertisement in the *Carlisle Journal*, 14 December 1860 “To be let by proposal the making and burning of two hundred thousand bricks on Brampton Townfoot Farm and Middle Farm. Proposals to John Warwick Naworth Castle”. Most of the brick makers listed in the trade directories were itinerant and did not have their own brickfields.

<sup>31</sup> The spelling of this name changes during the period of construction from Lough to Luff. It has not been possible to trace any other reference to this person. On the 28 December 1857 the minute book states he was from Ipswich.

<sup>32</sup> CRO(C)/Qal/Asylum.

<sup>33</sup> Messrs Nelson had a steam powered brick works at Murril Hill Carlisle. See G. Brooks, *op. cit.*, 49.

<sup>34</sup> These figures give high profits for brick making in the 19th century, the only cost missing from these figures is the cost of actually digging the clay and any royalties incurred. Taken with the values quoted in Table 1 the brick makers on site would still be going to make a considerable profit from production of the bricks. However the cost of buying clamp bricks in Carlisle £1 per thousand was similar to the cost of making them on site.

<sup>35</sup> *A Rudimentary treatise on the Manufacture of brick and Tiles* (1805) containing “An outline of the Principles of Brickmaking” by E. Dobson (reprinted *Journal of Ceramic History* 5(1) (1971), 84.

<sup>36</sup> *The Post Office Directory* for 1858 lists Charles and John Armstrong as builders from Albert Street, Carlisle. They were one of the major builders in the Carlisle area and built the Cumberland Infirmary, Clydesdale Bank in Bank Street, St Mary’s, St Paul’s, St John’s and the Charlotte Street Congregational Church, along with many of the railway sheds in the Carlisle area. The brothers had taken over from their father in January 1858. They later went on to own brickworks at Kingstown.

<sup>37</sup> *The Post Office Directory* for 1858 lists George Black as a joiner of Lowther Street, Carlisle.

<sup>38</sup> *The Post Office Directory* for 1858 lists David Thompson as plumber and glazier of Barwise Court, English Street, Carlisle.

<sup>39</sup> CRO(C)/Qal/Asylum.

<sup>40</sup> The 1851 Census lists Robert Metcalfe as a builder living in Princess Street, Carlisle.

<sup>41</sup> The committee appears to have given the magistrates an over optimistic view on the progress of the building of the Garlands.

<sup>42</sup> CRO(C)/CC1/29/1.

<sup>43</sup> The minutes state that the female side of the asylum had been slated over and the remainder of the building except the central portion would be completed in days. The roof of the central portion had been constructed but not yet placed upon the walls, which were ready to receive it. This suggests that the woodwork for the roof was constructed on the ground and then lifted into place before slating.

<sup>44</sup> Considering that most of the outside of the building was eventually constructed from stone it suggests that the original estimate of 3 million bricks was an underestimate.

<sup>45</sup> *The Builder* 16 (1858), 721-723; *The Builder* 17 (1859), 597-599.

<sup>46</sup> This must have been an unreliable figure in view of the final costs. Did the Cumberland and Westmorland committee provide a low figure? Were the figures quoted for the other asylums accurate? The final build figure for the Garlands was £32,043 7s. 4d. but this does not include the purchase price of the land and legal expenses etc. These figures do not appear within any of the records.