

ART. XV.—*The building of the new Eden Bridge at Carlisle, 1801-1817.* By M. I. M. MACDONALD.

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THE historic crossings of the Eden at Stanwix, and their associated road-systems, are described by Mr Robert Hogg in CW2 lii. The remarks that follow attempt to throw further light on the circumstances in which the modern bridge was built. They should be seen as complementary to the article by Mr J. Hughes on the building of the Courts, Carlisle, 1807-1822 (CW2 lxx). Bridge and Courts, contemporaries in time, sharing the same architects and clerk of works, the same building committee, the same praise and derision, were regarded as twin white elephants by many rate-payers in Cumberland.

Mr Hogg has described and illustrated the Eden and Priestbeck bridges which together linked the city of Carlisle with Stanwix Bank at the opening of the 19th century. These bridges appear constantly among the county bridges requiring repair throughout the 18th century, but not more so than any other. Demand for the replacement of the bridges was to arise not so much from their decaying state but, again as Mr Hogg points out, from traffic congestion which was particularly acute during the great fairs on the Sands. The narrow carriageways posed problems to the growing number of wheeled vehicles, while the steep incline leading down Stanwix Bank to the Priestbeck Bridge required care.

In July 1801 Thomas Telford was instructed by the Treasury to make a survey of communications in the Highlands, and shortly after he was also ordered to carry out a survey of communications with Ireland

by Port Patrick. In his survey, Telford was to be accompanied by Lieut.-General Alexander Dirom, the improving laird of Mount Annan. The country between Carlisle and Gretna, with the river crossing at Stanwix, came within the area of the survey.

In commissioning Telford's survey the Government's considerations were primarily military, and a speeding up of communications to Ireland was seen in terms of easing the movement of troops. Merchants, manufacturers, and traders in Carlisle, Dumfries, or Glasgow, viewed a road from Carlisle to Gretna in quite a different light. An indication of the importance of the route is given in the evidence of Kirkman Finlay, M.P. for the Glasgow burghs, which is reproduced in the Report from the Select Committee for the Carlisle and Glasgow Road, 1815.¹ Finlay stated that "the principal part of the manufactures of Carlisle are sold at Glasgow, and exported from thence", and that "great quantities of Glasgow goods that come to England for sale, particularly those of great value, pass by that road; and the manufacturers at Carlisle are supplied with a great part of their raw materials from the Glasgow market by that road".

This being so, one would expect that the demand for the replacement of the Eden bridges, and the construction of a direct Carlisle and Gretna road, to come loudly from the North. It was at the invitation of the Provost of Annan that Thomas Boyd, architect in Dumfries, viewed the Esk, and reported on 10 August 1801 "to the Committees for carrying into execution a new bridge proposed to be built over the River Esk on a new line of road by Gratney to Carlisle".² This document appears to indicate that local committees working for the building of a new road were active in 1801 before the parliamentary commission had begun its work. A year later, on 29 November 1802, financial support for the project was

the subject of a letter from William Hodgson, Clerk of the Peace for Cumberland, to William Thompson, Procurator Fiscal in Dumfries: "in the mean time if it is your power I will be obliged by informing me the probable amount of subscriptions on your side and whether you think Glasgow will contribute anything".³

The merchants and manufacturers of Carlisle could also hope to gain from a new bridge which would link the city with a road to Gretna, and with the important military road to Newcastle. Such hopes were in accord with the "improving" spirit of the age. New bridge, new Courts, new lighting, new paving, new streets and terraces, all were visible signs of improvement. These aspirations find their most fanciful expression in Robert Carlisle's dream of a garden-city Carlisle in 1808.⁴

The various strands in the story so far are brought together in a letter from William Hodgson to Gen. Dirom at Mount Annan, written soon after the letter quoted above:

I had the honour of your letter of 25 November (1802), and in answer thereto beg leave to say there does not appear any reasonable objection to taking down the Walls and disposing of the materials, etc., — but as it is in contemplation to rebuild the bridges across the Eden, I should conceive it more likely Government might be disposed more readily to give the materials towards those bridges than the others on account of convenience; should you and Mr Telford mention in your report the improvement to this city by removing the Walls, I think it would be an act for which the inhabitants of this city would be thankful.⁵

For the next two years the replacement of the bridges must have been a frequent subject for discussion by the magistrates of Cumberland. From the evidence of a letter in William Hodgson's letter book the matter was the occasion for an adjournment of the Sessions on 23 February 1805 when plans for a new bridge were to be examined. One must assume that at this meeting the magistrates made a provisional selection

of the plans of Thomas Boyd of Dumfries, the architect whom we have already encountered surveying the Esk in 1801. On 18 April 1805 Hodgson wrote a brief letter to Boyd asking him to attend the magistrates on the 25th of the month with the plan of the intended bridge. Boyd hastily added the finishing touches to his plans and hurried to Carlisle. The magistrates duly assembled and ordered "That a new Bridge be built over the River Eden between the North end of Rickergate and the foot of Stanwix Bank."⁶

Boyd's plan was a bold one.⁷ An elegant bridge of five arches was to be built upon dry ground on the Sands. A canal or channel would then be cut down the island, passing under the bridge. The river was to be diverted into the new channel, so that the old channels could be stopped up. The bridge could then be linked by an embankment to Stanwix Bank and Rickergate. All this, Boyd suggested hopefully, "may cost about £10,000".

The building of the bridge was advertised within days of the Order, and estimates were received from masons in Dumfries, Musselburgh, Preston, and Wolsingham.⁸ Preliminary work on the project began in October 1805. Thomas and George Rawling travelled from Newcastle to make trial borings for the foundations and were paid £29. 13s. for their work. Perhaps it was thirsty work, for it cost the county £2. 10s. "for liquor furnished to the borers making soundings for a foundation for Eden Bridge". At the same time 584 oak trees were being assembled at the site, on the orders of Boyd himself, in preparation for the construction work. And then, at this point, work ceased.

We must return now to February 1805, when the magistrates were considering plans for a new bridge. In addition to Boyd's proposals, the magistrates had before them plans submitted by Thomas Harrison of

Chester. The decision to set aside his plans in favour of those of Boyd may not have been a satisfactory one to several people. On 13 July 1805 the *Carlisle Journal* carried an advertisement inviting interested parties to a meeting "to take into their consideration the observations and opinions of Mr Thos. Harrison, Chester, architect, as to the direction of the proposed new bridge over the River Eden", and to lay such observations before the magistrates. The meeting is reported in *CJ* 20 July, John Losh in the chair.

Harrison's "Observations upon a Design for a Bridge over the River Eden at Carlisle"⁹ is dated at Chester, 7 July 1805. He describes the bridge as consisting of five equal elliptical arches, the piers being distinguished by niches in the manner favoured by Harrison. The river, he suggested "should in time be diverted from running towards the city" by being confined by embankments. With the assistance of a ground plan¹⁰ prepared by William Nixon, sen., of Chalk, one of the county bridge surveyors, he chose a site from twenty to thirty yards upstream of the Priestbeck Bridge, where the new roadway could curve to the right to join the Longtown road.

The magistrates, however, do not seem to have taken any action over Harrison's observations, and preparations went ahead to implement Boyd's original scheme. The situation becomes somewhat confused with the appearance upon the scene of Thomas Telford. In June 1805 both Telford and Gen. Dirom were in the city, examining the city walls and viewing the situation of the bridges with William Hodgson. On 26 October of the same year the *Carlisle Journal* reported: "On Thursday Mr Telford, engineer, inspected the borings and situation for our projected Bridge. He got all the plans and reports delivered to him and will send the magistrates his opinion as soon as he has time to spare from his multiplicity of undertakings."

By 7 June 1806 the same newspaper could declare "and the new bridge over Eden, of which Mr Telford, civil engineer, has prepared a superb plan, is in a train of forwardness". A few months later, on 20 September 1806, the paper carried an advertisement announcing that the magistrates intended to apply for an Act of Parliament to enable them to pull down the city walls, erect new court-houses, a new bridge over the Eden, and a new gaol. The Act, passed the following year, makes no mention of a bridge, and several more years were allowed to pass before the project began again.

What was happening? The most likely explanation is that the magistrates were in a state of indecision pending the report of Telford on his survey of communications with Ireland. In particular they must have entertained the hope that the importance of the Eden crossing would entitle the scheme to a large grant from government funds. Whatever the reason, work on Boyd's scheme came to a halt late in 1805, and the magistrates prepared to await new developments.

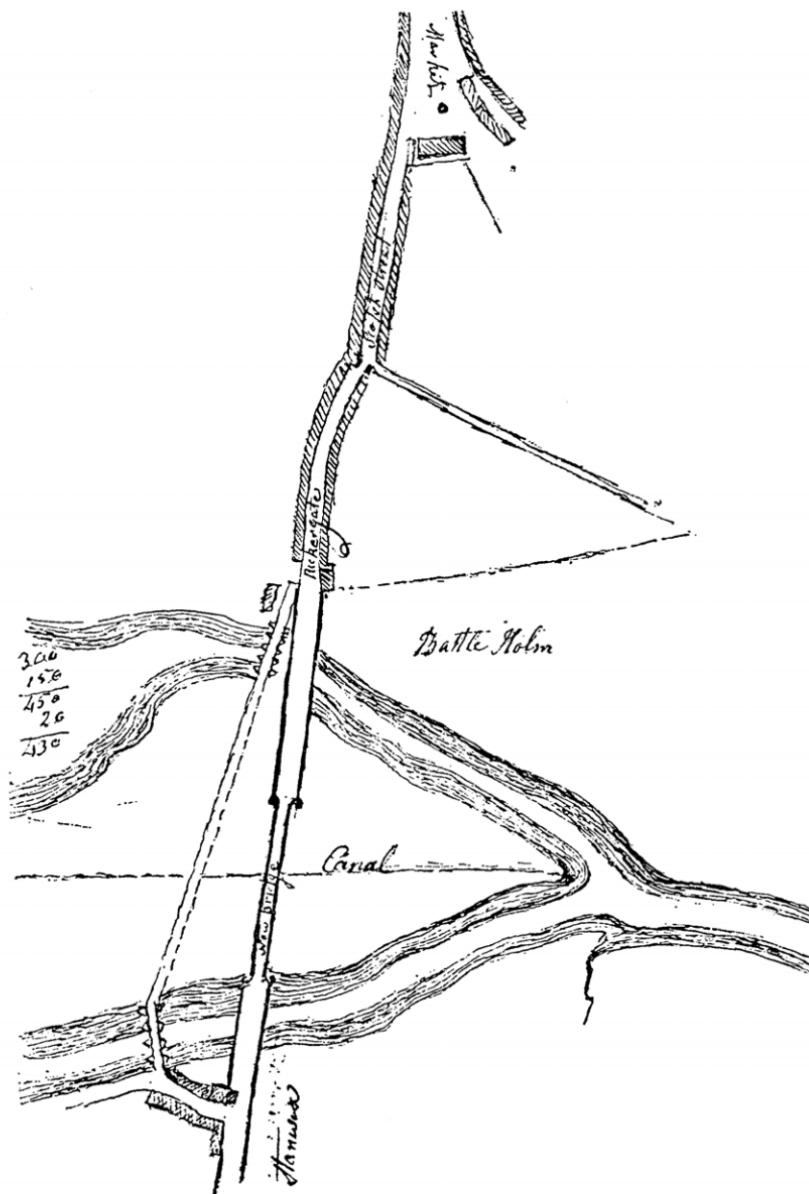
Telford made a detailed survey of the Eden at Stanwix Bank in March 1808, and his recommendations were published as an appendix to his report which made its appearance the following year. He rejected the scheme proposed by Boyd, and followed Harrison in recommending that the branch of the river adjoining the city should be blocked by an embankment. In May 1811 the Committee upon the Roads between Carlisle and Port Patrick produced its report.¹¹ The Committee was of the opinion "that the Bridges over the River Eden at Carlisle recommended by Mr Telford should be built; and that one moiety of the expense of building the same should be paid by the Public according to estimates already made by Mr Telford and Mr Rennie". The Committee further recom-

mended that the bridge over the Eden should be one of four which "should be first built, as the most urgent for the public service and advantage".

At Michaelmas in the same year the county magistrates, having received the committee's report, ordered that it should be implemented without delay. The Committee had recommended that Telford's plans should be executed, but without any apparent explanation the magistrates appointed Robert Smirke to carry out the project. Here is a very close parallel to the situation described by Mr Hughes with regard to the Courts in the previous year. In the case of the new bridge one has the impression that Smirke has been standing by in the wings, his plans all ready, awaiting his cue. One suspects that his selection was due to the all powerful Lowther family, for whom he had already worked at Lowther Castle. It could be argued, too, that there would be a degree of convenience in having the same architect at work on the two major building projects in the city.

Telford had estimated the cost of erecting a new bridge at £20,114. On the recommendation of the Carlisle and Port Patrick roads committee, one half, or £10,057, was to be provided out of government funds, while the remaining £10,057, and any additional expenses, were to be supplied by the county. It is important to notice that from the start Smirke was saddled with Telford's estimate. By August 1812, negotiations with the Treasury had been completed and a bond entered into, governing the payment of the grant from public money.

Smirke's plans followed those of Telford and Harrison in closing one branch of the river. He thought up something new for the design of the bridge (though Harrison had proposed a bridge of five equal elliptical arches). The raised causeway to the bridge did not follow a straight line as Telford, Harrison, and,



Sketch of the River Eden where the new Bridge is intended to be built,
by Thomas Boyd, architect in Dumfries, 23 April 1805.

indeed, Boyd, had proposed, but curved towards Rickergate. Was the young architect being strong-willed, determined to show his independence of thought?

Henry Luzmore, who was acting as Smirke's clerk of works at the building of the Courts, was appointed clerk of works for the new bridge. The building contract went to Paul Nixson, the architect, builder, and sculptor. Stone for the project was brought mainly from Cove Quarry, near Gretna, which the county leased for a period of five years. The stone was hauled across part of the Solway Marsh (to the great consternation of the inhabitants of Kirkandrews who suddenly found themselves liable to make and repair this section of the road) and then, apparently, across the Esk and down the Ford Road to Stanwix Bank. Limestone for mortar was shipped in bulk from the little seaport of Aberthaw in Glamorgan, and landed at Rockcliffe, Sandsfield, or Longburgh Nook, from whence it was carted to the building site and burnt down in a specially constructed kiln.

A steam engine, for pumping the caissons during construction work, was built by William Wood of Carlisle. It seems to have been regarded as a model of its kind, for the Trustees of Annan Bridge undertook to supply a similar engine during the repair of that bridge in 1814.¹²

The first arch of the new bridge was completed in June 1814, while the fifth arch was closed in December of that year. A temporary wooden bridge was then erected across the branch of the river near the city, to enable the old Eden Bridge to be dismantled and its material to be thrown into the new raised causeway. In February 1815 work began on the demolition of the Scotch Gate, which was also thrown into the the causeway.

So far work on the bridge had gone smoothly.

In the words of Francis Jollie, the editor of the *Carlisle Journal*, all was "beautiful", "elegant", and "magnificent". Then, from about mid-1815, there is a change of attitude. While there could be little cause for criticism in the bridge itself, Jollie and his sympathisers found much to criticize in the attendant engineering works, in particular the long raised causeway, and, later, the embankments along the river. First he questioned the long walls running along the causeway, which would hinder the free passage of cattle on to the Sands. Later he questioned the necessity of building what was virtually another five-arch bridge across the old bed of the Eden which was then to be cut off by embankments. The foundations of the causeway and the dry bridge were a cause of some delay and rebuilding. The curve of the raised causeway towards Rickergate, in particular, was a target for Jollie's wit. Was the architect trying to construct the letter W, in honour of Wellington and Waterloo? No, it was an L, as a "compliment to a certain nobleman"!

Jollie, of course, liked to take a line opposed to "the Establishment" which he saw embodied in the Lowther family. By ridiculing Smirke he could indirectly attack the incompetence of the faction whose protégé Smirke was. This was especially so in February and March 1816 when Carlisle was the scene of a lively parliamentary election which followed upon the death of Henry Fawcett. John Christian Curwen, the "Blue" candidate who could do no wrong in Jollie's eyes, opposed and defeated the "Yellow" candidate, Sir Philip Musgrave. In assessing the situation too, one has to remember that by running a vigorous and witty press campaign Jollie may have had an eye on increased sales. The *Carlisle Patriot* entered the debate for the opposing side, and both journals enthusiastically strove to score points over each other. The *Patriot* lacked the sharpness of Jollie's wit: in any case, as

one of the *Journal's* correspondents quoted witteringly, “*Patriotism* is the last refuge of a scoundrel”.

That the doubts about the handling of the bridge construction were entertained by a wide range of people is indicated by letters of William Hodgson, Clerk of the Peace, to Smirke in London, which seem to show a note of irritation over a lack of precision in Smirke’s specification and plans.¹³ At the Epiphany Sessions, 1815/16, three magistrates were added to the Court House Committee, so that the enlarged committee could direct and manage the building of the new bridge. John Christian Curwen raised the thorny issue at the Midsummer Sessions 1816, and on the proposal of Sir James Graham it was unanimously agreed that John Rennie should be invited to inspect Smirke’s work. Lord Lonsdale, for his part, professed that he was “happy” about such an inspection, being certain that Smirke’s plans were the best.

While Jollie was predicting that Rennie would never accept the invitation, William Hodgson wrote to the engineer asking him to come to Carlisle as soon as possible “in order that the ferment which has been raised in the public mind may be set at rest”. Rennie declined the invitation immediately, pleading business that would take him to Pembroke, Kent, and the South of France.

Jollie was jubilant. “As we last week hinted,” he proclaimed, “the task of criticizing Mr Smirke’s buildings is too invidious for Mr Rennie’s acceptance . . . and we shall be vastly surprised if any other person is sent for in Mr Rennie’s stead — By the bye, if anyone was to propose to send for Mr Smirke, we should think the proposal a good one: this gentleman seems to have taken his leave of us altogether . . .”

After the Rennie episode the heat went out of the controversy. Though the building scheme was largely completed by early 1817, payments for various items of expenditure were still being made in 1822, and

both Luzmore and Smirke were being harried by the magistrates over costs in 1818. Contemporaries were convinced that the cost of the scheme had been ruinous. The complete accounts of the new bridge do not survive for every year of construction, but in 1814 when the building operation was in full swing, the total expenditure was £19,860. 8s. 1d., only £200 short of Telford's estimate for the whole scheme.

Perhaps Smirke did deserve some of the criticism. There is something a little too breathless about his sudden appearance before the magistrates with a complete scheme for replacing the old bridges. His basic groundwork may not have been as thorough as it should have been. The curved raised causeway may have required more expense than was strictly necessary. One must repeat, however, that he was not responsible for the original estimate of £20,000, to which the public mind was pegged. The view that the project brought bridge building activity in the county to a halt may require some qualification. Bridge building was too essential to the life of the community to be discontinued, and an examination of the bridge orders suggests that bridge building was hardly checked. Even the charge that the expense of the Eden Bridge and the Court Houses delayed the urgent rebuilding of the Gaol may not be entirely fair; replacement of the old Gaol had been urgent, desperately so, long before Robert Smirke, jun., was born.

References.

- ¹ Copy in Ewart Library, Reference Section, Dumfries.
- ² Record Office, Carlisle (C.R.O.) DX/8/12.
- ³ C.R.O. D/Hodgson, letter book 1802-08.
- ⁴ C.R.O. D/Lons/L.
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- ⁸ C.R.O. QAB/8/1.
- ⁹ C.R.O. Ca/2/351.
- ¹⁰ C.R.O. Ca/Sands Case plans.
- ¹¹ Copy in Jackson Library, Tullie House.
- ¹² *Carlisle Journal*, 11 June 1814.
- ¹³ C.R.O. D/Hodgson, letter book 1816-19.
- ¹⁴ *Ibid.*