

BUDE CANAL & HARBOUR SOCIETY

Bude Harbour and Canal – Interesting People

JAMES GREEN'S REPORT TO SUBSCRIBERS

5th April 1818

James Green presented his report on the survey of proposed lines for a Canal from Bude into the interior of the Counties of Cornwall and Devon to the subscribers at a General Meeting held at Launceston. The report of 10 pages covers all the aspects of constructing a canal from Bude to Holsworthy and on towards Okehampton, and to Tamerton Bridge. It also includes his report on extending the canal from Tamerton Bridge to Launceston but favours stopping at Rushgrove Mill, which is below Launceston.

He provided a range of costings based on how much of the proposed lines were completed. If all the proposed lines were constructed, including the Harbour at Bude, the cost was estimated at £128,341 and he estimated that the trade would generate 10% per annum on that expenditure.

There are separate estimates as to the total costs for various points along the proposed lines to allow the subscribers to judge for themselves the best investment in such a canal.

The smallest and cheapest option was to not cross the Tamar and including the Harbour expense totalled £43,195. As it happened the subscribers eventually chose to extend the canal onto Holsworthy to a terminus at Blagdon Moor and an extension from Tamerton Bridge to Druxton rather than Rushgrove Mill, Launceston. This then totalled £91,617 including the larger canal between Bude and Helebridge, the sea lock for larger vessels and the Breakwater.

James Green also did calculations on the probable tonnage and receipts. The amount of sand taken per annum, prior to the canal being constructed, is calculated from reliable information from several parishes, as 224,000 seams. A seam is equivalent to 2½ hundred-weights, equalling 280lbs or 1/8th of a ton. The current cost per seam was an average of 14d or 10s 8d per ton carriage. He further calculated that by using the canal to transport the sand, that a man, boy and horse with four boats making a trip from Bude to an average point, would take 2 days. This will cost 6s per day, thus 20 tons or 160 seams would be carried for 12 shillings, which is just under 1d per seam. It was then rounded up to 1d plus ½d, to 1½d per seam, as the present trade could bear this because of the advantage of the sand being delivered. The saving is 12½d per seam on the present cost of 14d per seam. This would allow the cost of sand per seam to be 6d per seam, a saving of 8d per seam for the customer. So, 224,000 seams of sand, at 6d per seam, would net £5,600 0s 0d.

Mr Green estimated that the volume of sand would easily be doubled per annum adding another £5,600 to the annual income. This is based on the fact that farmers would increase the use of sand to manure their land due to the reasonable price and ease of obtaining it. This could easily make the total income per annum £11,200 0s 0d. Further calculations on income earned carrying imports and exports on the canal showed 1,625 tons and 400 tons respectively, both at 3s 9d making an extra £379 13s 9d bringing the total to £11,579 13s 9d.

The report also has calculations on trade based on the extended canal system to Okehampton for the carriage of culm, increasing the total to £15,083 3s 9d, but, as we know the subscribers decided on reduced scale for the canal and the income, as suggested by Mr Green, would be £11,879 13s 9d, however, these estimates, as we now know, did not materialise.

JAMES GREEN 1781-1849

Born in Birmingham, the son of an engineer, he worked with his father until 1801. He then worked with John Rennie on various engineering projects throughout the country. In 1808 he was appointed Bridge Surveyor for the County of Devon and in 1818 was made Surveyor of Bridges & Buildings for the County, a post he held until 1841.

Green settled in Exeter, an energetic man of far-seeing mind, usually self-confident and at times opiated. The post he held allowed him to undertake private works and he duly advertised his services.

He produced a plan in 1810 for a canal from Bideford to Torrington for Lord Rolle. He later built such a canal between 1824-25 which had tub boats, a powered incline and a tidal lock at Annery. This lock is a miniature version of the Sea Lock at Bude and gave access to the River Torridge.

As well as the Bude Canal, his first important assignment was a part-time engagement; between 1820-27 he was engaged on enlarging the Exeter Canal. He also produced reports for a proposed Liskeard & Looe Canal and one for the Chard Canal.

He is probably best known for the tub boat canal section of The Grand Western Canal which had 7 vertical boat lifts and an inclined plane. This was commenced in 1832 to link Rennie's early broad canal with Taunton – although constructed was not entirely successful.

So, with his work in Devon, living in Exeter and the eminent people he knew, it is not surprising that he was chosen to report on constructing a Canal at Bude into the hinterland and eventually to construct the same. This massive enterprise for the remote area of Cornwall and West Devon at this time of the early 1800s was an expression of Green's determination to overcome the difficult terrain of the inland areas. The use of inclined planes was the answer to the areas undulating topography.

However, after construction, his use of the 'bucket in a well' system for Hobbacott Down Incline became the weak link in the concept. The length of plane, 935 feet and change in canal levels of 225 feet was too much for the materials involved. There are numerous reports in the Canal Company records about the mechanical failure and in 1835 James Green was contracted to repair and improve the machinery at Hobbacott Down at a cost of £300 and to work and keep the same in repair for one year for a further sum of £260, paid in monthly instalments. This gave Green sole control of the premises and works at Hobbacott Down.

There is no mention of Green working on Hobbacott Down Incline after 1837 but the problems continued right up to the demise of the Company. In 1893 the then engineer, Mr Sullivan, was instructed by the Management Committee to cap the wells at Hobbacott Down with concrete.

Despite this, the coming of the Canal and development of a safe haven at Bude during the 1820s, changed the purpose of Bude and was the catalyst for greater development in the years to come.

JOHN PANCHEN

Master in the Royal Navy, Bude Harbour Master and Inspector for the Bude Harbour & Canal Company.

The earliest confirmed record of John Panchen so far discovered is of him in 1803 as an Able Seaman in HMS Thunderer, a 74-gun Ship of the Line that took part in the Battle of Trafalgar. The ship's Muster Books and Pay Books show that he had allotted some of his pay to his mother, to be paid in Bridport, and that his place of birth was in Dorset. Those records also indicate that in March 1803 his age was 25. There is support for the recorded age being fairly accurate, because there is a record of a John Panchen being baptised on December 13th 1778 in Bridport, and no other children of the same name were baptised within two years of that date. The Panchen family had been in Bridport at least since the early 1600s and were probably of French Huguenot origin.

John was transferred to HMS Hibernia, another Ship of the Line, about 6 months before the battle of Trafalgar took place, and he remained in Hibernia until 18th July 1806 when he was again transferred, this time to HMS Contest, a Gun-Brig operating in The English Channel and along the French and

Spanish coasts. From then on his career and personal life can be followed with a high degree of certainty.

On 7th September 1807, having passed examination for the rank of Master, he joined HMS Thais as Acting Master on 8th of October 1807. HMS Thais was built as a fire ship in 1806, but was converted to a sloop in 1808. In the two years John Panchen was with Thais he travelled widely to the West Indies, Brazil, and the Cape of Good Hope, as well as in the North Sea.

His promotion to Master was confirmed on 23rd May 1809, by which time he was with HMS Narcissus, a 32-gun frigate commanded by Captain Aylmer. In the course of the next two and a half years his sea-going experience widened with travel to Labrador, Newfoundland and the Canary Islands.

A further year (1812-13) was spent as Master of the frigate HMS Phoebe under Captain Hillyer. Had he stayed with her longer he would have taken part in a maritime epic of the so-called 1812 war with America in which, after escorting a convoy to Rio de Janeiro (March-April 1813) Hillyer was ordered to sail round Cape Horn to hunt down and capture the American frigate Essex that was attacking and capturing British shipping in the Pacific Ocean west of South America. Essex was finally caught at Valaraiso Chile, overcome after a fierce engagement, and captured.

As it was, John stayed behind in Plymouth when Phoebe sailed for Brazil in March 1813. He was posted to a newly launched frigate HMS Creole. There were two main aspects to the duties of a Master RN. They were navigation and maintenance and repair of the ship's navigation and sailing equipment. As he was with Creole in Plymouth for only three months while she was being fitted out, it seems likely that his role on Creole was one of supervising the rigging-out of the ship.

His next ship, the frigate HMS Pactolus, was also a newly built ship that was being fitted out when John Panchen was appointed Master in September 1813, his commanding officer once again being Captain Aylmer. In June 1814 the 1812 war with America was still in progress and Pactolus embarked troops and set sail for America. Once there Pactolus joined a squadron commanded by Captain Hardy (of Trafalgar fame) and they proceeded to the town of Stonington, Connecticut which was alleged to be engaged in the manufacture of "torpedoes" (called "mines" nowadays) being used against British ships.

On arrival off Stonington on 9th August 1814 Hardy made a request that the town be evacuated. The request was refused and there followed three days of bombardment of the town by Hardy's squadron, with counter fire from the local militia. There were conflicting reports from the two sides as to how successful the British operation had been.

Pactolus remained in North American waters for some time after the Stonington affair, only returning to Portsmouth in April 1815, a couple of months before Napoleon's final defeat at Waterloo. Pactolus was subsequently deployed in the River Gironde giving support to a French Royalist movement and, incidentally, assisting in a blockade of the French coast aimed at preventing Napoleon's apparently planned escape to America hidden in a barrel aboard a merchant ship.



HMS Pactolus