

## WILLIAM EASSIE - A NOTABLE VICTORIAN CONTRACTOR

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William Eassie built up a remarkable business in Gloucester, initially as a railway contractor and later pioneering the mass production of wooden buildings in kit form, many of which were shipped to distant countries. He was born at Lochee to the west of Dundee in 1805, and in the 1840s he was involved in the construction of the East Lancashire Railway (1).

### Railways

William Eassie moved to Gloucester in 1849 to work on the Gloucester & Dean Forest Railway which linked Gloucester to the South Wales Railway at Grange Court (to the north of Westbury-on-Severn). He was awarded the contract for supplying and installing the timber sleepers and for laying the iron rails. The line was seven miles long, double-track, broad gauge, with rails laid on longitudinal sleepers, 7ft 3in between centres, having cross members every 11ft (2). He later laid the permanent way for the Docks Branch of this railway which had its terminus at Llanthony on the west side of the Gloucester & Sharpness Canal (3). While engaged on this line near Gloucester, Eassie also obtained contracts for the permanent way of the Vale of Neath Railway in South Wales (4).

In carrying out these railway contracts, William Eassie became closely associated with the timber importers Price & Co of Gloucester, and in 1851 he set up a steam-powered saw mill on land at Mad Leaze beside the Gloucester & Sharpness Canal that Price & Co leased from Gloucester Corporation (5). (Fig.1. This site, grid reference SO 825177, to the south of Bakers Quay is now occupied by the Peel Centre.) Prior to the construction of this mill, most of the wood had been cut up by hand-sawyers. As well as his own contracts, Eassie became responsible for converting and pickling timber imported by Price & Co for the contractors Peto & Betts, and for a considerable period he was sending out about 1000 tons a week on the Midland Railway. Some pieces, destined for viaducts designed by Isambard Kingdom Brunel, were so long that they required three railway trucks to take the length. This arrangement was not really satisfactory, and Eassie therefore patented an adjustable draw bar for use instead of the central truck and an improved bolster with friction rollers on the trucks (6).

In 1853, William Eassie employed about 200 men at Gloucester. His works included 36 circular saws, two planing machines, two moulding machines, one tenoning machine and one mortising machine, all driven by a 100 horse-power steam engine. A segmental balk frame for sawing large pieces of timber was under construction. Eassie also had four Burnettising cylinders for impregnating the timber with zinc chloride, and the adjoining Timber Preserving Company had four creosoting cylinders (7).

### Diversification

As the boom in railway work eased, William Eassie looked for other uses for his machinery, and in 1853 he began to advertise for joiners work in the construction of houses, shops, cottages and green-houses. In particular, he built four green-houses for the Royal Agricultural Society's Show in Gloucester in July 1853 (8). He also used his machinery to make a large number of doors, windows and complete buildings for export to Australia for the prospectors seeking gold there. Some of these goods were sent direct from Gloucester on Humphrey Brown's schooner *Caroline Brown* which sailed in August 1853 (9). One special order from a merchant gentleman in Melbourne was for a large bungalow 75ft by 47ft, the separate parts

being numbered to facilitate its erection. The bungalow had a sitting room, kitchen, hall and three bedrooms, and the order included carpets, curtains, wall-papers and venetian blinds. Other goods sent to Australia included 2000 wheel-barrows for the prospectors (10).

At the end of 1853, William Eassie entertained 400 men and their wives at a Christmas tea party in one of the sheds of the works that was decorated specially for the occasion. He had established a Mutual Benefit Club among the workers, and the following year he gave them a half-day holiday on Saturdays (11). As well as making buildings, in 1854 Eassie started making railway wagons. This required enlarging the works to accommodate thirteen forges, turning lathes and an oven for heating large quantities of iron for making axles (12). In the same year, he was elected on to Gloucester Corporation as a Liberal (13).

### **Huts for the Crimea**

The outbreak of the Crimean War in 1854 adversely affected the timber trade generally, but it led to a remarkable opportunity for William Eassie, who was now assisted by his 20-year-old son William jnr. As winter approached, there was a desperate need to provide shelter for the troops in the Crimea, and Richard Potter of Price & Co. suggested sending out prefabricated wooden huts of the type Eassie had made for Australia. In November, Potter obtained an order from the British government for 500 huts, and teams of men were employed working day and night to get them finished within three months. Each hut was 28ft long by 16ft wide with a single door and window at one end and two sliding windows at the other end. (Fig.2) They were designed to accommodate 20 to 30 men lying feet to feet with a 4ft passage down the centre. The components of each hut were grouped into packages, bound together with iron hoops, and each part was labelled so that the hut could be assembled in the Crimea according to written instructions supplied. At the same time, similar huts were supplied by a contractor in Portsmouth (14).

While this first batch of huts was being made, Richard Potter travelled to Paris to meet the French Emperor who ordered a further 1,850 huts to a slightly modified design. The sides were lowered to give solidity against the storms of the Crimea, a door was provided at each end and the beds were raised higher above the ground. A party of French soldiers visited Gloucester in December 1854 to observe the manufacture of the huts and to learn how they should be erected and taken down quickly. The packages were loaded into trucks at the Llanthony yard of the Great Western Railway to be sent to Southampton, but there was a delay on the way as they had to be transferred from broad to standard gauge trucks at Basingstoke. The last huts were dispatched at the end of January, and Eassie provided a dinner for 60 to 70 of his key employees at the Swan & Falcon in Longsmith Street (15).

### **Renkioi Hospital**

Only a few days after finishing this mammoth project, William Eassie became involved in another major job for the Government. Following pressure from Florence Nightingale, Isambard Kingdom Brunel was asked to design a hospital that could be manufactured quickly in England and shipped out to the war zone. Evidently knowing of Eassie's facilities for producing buildings in kit form, Brunel wrote to him in February 1855 asking for his help in designing suitable buildings (16). Three weeks later, the first unit was under construction at Gloucester. It was about 90ft long by 40ft wide, divided into two wards and with rooms for water closets and for stores (17).

Brunel designed the hospital with 60 of these ward buildings, each intended for 50 patients. As well as those made at Gloucester, some were made by Walker's of London. The site

chosen for the hospital was at Renkioi, south-east of the Dardenelles, and William Eassie jnr was sent there to help supervise the construction work which began in May 1855. Initially he was in charge of about a dozen Gloucester carpenters, but following a message from Brunel in August, he became second engineer of the whole project and was given a captain's commission. In November, on a visit to the front at Balaklava, he saw some of the barrack huts that had been sent from Gloucester in the previous year. He was disappointed that these had been badly erected, but he noted that those made in Portsmouth were even worse. Back at Renkioi, the hospital was accommodating nearly 1000 patients at a time, although the final stages of construction were still continuing when hostilities ended in April 1856 (18).

Meanwhile, in August 1855, Eassie snr had received a further order from the Government for an improved design of barrack hut. These had windows along the sides, a higher roof with openings for ventilation and roof framing strong enough to allow a hammock to be slung from it. This design also allowed the option of linking huts together in a straight line for use as a field hospital for emergency treatment prior to sending casualties to Renkioi. During September and October, over 6,800 tons of these huts were sent on seventeen ships direct from Gloucester to Balaklava to avoid the delay in rail travel to Southampton (19).

### ***Great Eastern Launchways***

The end of hostilities in 1856 allowed William Eassie to return to more domestic matters, and he sought to develop the engineering capability of his works. He set up two steam hammers for forging scrap iron into ship knees, anchors and other heavy work, and he prepared a machine for driving the piles required in the launch-ways of Brunel's monster steam-ship, the Great Eastern, being built at Millwall (20).

### **Financial Difficulties and Reconstruction**

Unfortunately, however, the business ran into financial difficulties, and in September 1857, all work stopped and William Eassie was forced to pass over his affairs to trustees (21). One much later report claimed that Eassie had suffered a major loss on a Government contract for the construction of the Curragh Camp in Ireland. William jnr did visit Ireland at the time the camp was being planned and he did marry a young lady from Kildare, but War Office records show that Eassie's tender was not accepted (22). Another even later report said that Eassie had lost money on supplying timber for the Oxford Worcester & Wolverhampton Railway (23). Whatever the reason was for the failure, Eassie was fortunate to receive considerable support from his friends in Gloucester, and some of the saw mills were back in work again within eight months (24).

The new business was run in the name of William Eassie & Sons, with sons William and Peter Boyd Eassie taking a formal role in the management. They continued making wooden buildings for the domestic and export markets. One innovation was a new style of timber hut intended to shelter rifle shooters on a range. The roof and sides were covered with wave-joint boarding, developed by the firm to be water-tight without felt (25). In 1859, they made buildings and underground trunking for the Red Sea Telegraph Co. which was establishing a line along the shore of the Red Sea from Aden to Bombay. The Eassies also sent station buildings to Spain and to a railway from the Danube to Kustenju on the Black Sea (26).

### **More Prefabricated Buildings**

A description of the Eassies' yard in 1860 mentions three main sheds. In the first, 40,000 tons of timber were cut up in a year, entering as log and coming out as planks. In the second, timber entered square and came out with many moulded sides, and in the third, straight

lengths were converted into doors, windows, staircases, wardrobes or almost anything that could be made of wood. Sawdust was collected in the basement and taken away to be burned in the boilers that powered the steam engine. However, part of the outside yard was useless because it was covered four or five feet deep with sawdust made ten years earlier by 30 or 40 hand-sawyers, and on its weathered surface grew only a strange kind of scarlet mushroom (27).

The Eassies were not fully using the land that they leased from the Corporation, and in 1860 a new lease was agreed for about half the original area near to the canal, covering where most of their buildings stood. This allowed the newly formed Gloucester Wagon Company to set up works on the other half adjoining the Bristol road (28).

At the time of the census in 1861, William Eassie snr was living at High Orchard House immediately to the north of his works, but not for much longer. He died in May that year and was buried in the new cemetery which, as a councillor, he had played a part in establishing. The business was then continued by his two sons William jnr and Peter Boyd under the name W. Eassie & Co., employing 110 to 150 men (29).

Over the next few years, Eassie & Co. continued to make all kinds of wooden buildings and to provide joinery work for other buildings. (Fig.3) Notable contracts included the supply of stations for the Severn Valley Railway and for the Bilbao line in Spain. A large wooden mansion for the Governor of Lavanda in South Africa was impregnated with mercuric chloride in a tank built for the purpose to protect from the white ant. Timber hospital buildings, dormitories and workmen's sheds were made for the Pacific Steam Navigation Co. A large greenhouse was sent to Italy, and all the carpenter's and joiner's work was provided for a large crystal palace being built at Opporto. The firm also took on more general building projects, including the construction of Foster Brothers oil and cake mill adjoining their works (30).

### **Limited Company**

To help finance this kind of work and the new machinery needed to carry it out efficiently, the business was converted to a limited company in September 1866. As well as the main saw mill in Mad Leaze, the company also occupied part of Tredwell's Yard further down the Bristol Rd and they had a London office at No 18 Great George St, Westminster. The new financial arrangement established close links with the neighbouring Gloucester Wagon Co. as four of the initial directors were also directors of the Wagon Co. and the fifth was it's manager Isaac Slater (31). This association may well have been facilitated by Peter Boyd Eassie having married Slater's daughter (32). It may also have been influenced by William Eassie jnr moving to London to pursue a career in civil engineering, later specialising in sanitary and cremation matters. This left his brother as sole manager of the business, residing in High Orchard House (33).

Over the next few years, the firm developed a close relationship with the Wagon Co., carrying out much sawing and planing work for them, and following the premature death of Peter Eassie in June 1875, Eassie & Co. were taken over by their expanding neighbour (34). The Wagon Co. initially continued with Eassie's high quality joinery work for buildings, for example supplying houses for the Governor of the Gold Coast and his secretary in 1876, but in 1900 the Gloucester Joinery Co. Ltd. was established to take over this work. They carried on making shop fronts, shop fittings, staircases, greenhouses and church and school furniture until the mid 1940s (35).

## References

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- 2 Public Record Office (PRO) PRO RAIL 217/13.
- 3 GJ 1 Oct 1853 page 3 column 2.
- 4 PRO RAIL 704/76 2 Apr 1851, 704/4 20 Jun 1854.
- 5 Gloucestershire Record Office (GRO) GBR B4/1/7 18 Mar 1851; PRO RAIL 829/10 4 Jun 1851.
- 6 GJ 29 May 1852 p3c4.
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- 8 GJ 16 Jul 1853 p1c3
- 9 Illustrated London News (Ill Lon News) 6 Jan 1855 p14; GJ 20 Aug 1853 p3c2.
- 10 GJ 28 Jan 1854 p3c3; Gloucester Mercury 3 Mar 1860 p4c4; GJ 21 Apr 1860 p2c6.
- 11 GJ 31 Dec 1853 p3c5; GJ 28 Oct 1854 p3c4.
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- 13 GJ 1 Jun 1861 p3c3.
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- 31 PRO BT 31/1290/3255.
- 32 GRO Index Gloucester 6a p396.
- 33 GJ 25 Aug 1888 p5c3; Directory 1867.
- 34 Gloucester Cemetery grave No 4071; Glos RO D4791/6/5.
- 35 GC 24 Jun 1876 p4c4; Glos Coll JV 13.1; *Port of Gloucester* 1922; Directories.

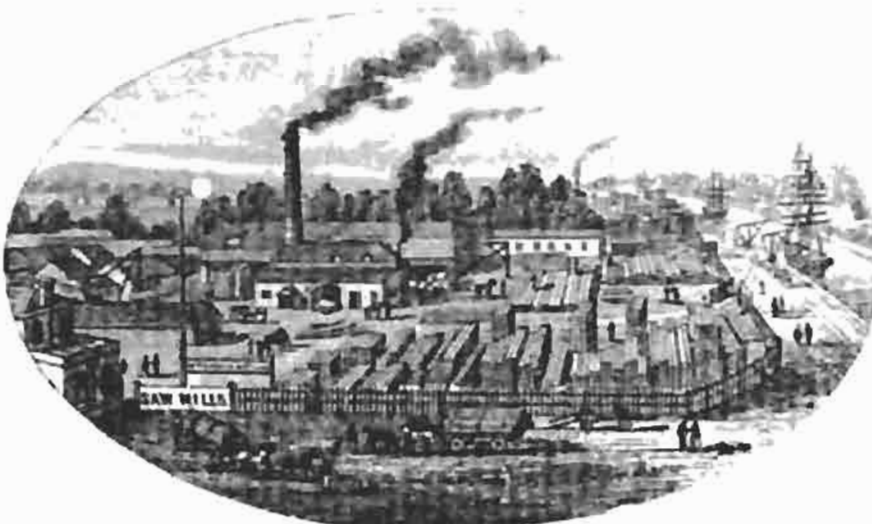


Fig 1. Eassie & Co's saw mill and timber yard looking south with the Gloucester & Sharpness Canal on the right. (From the company's 1873 bill-head Glos RO CBR B2/5/3/19/1).

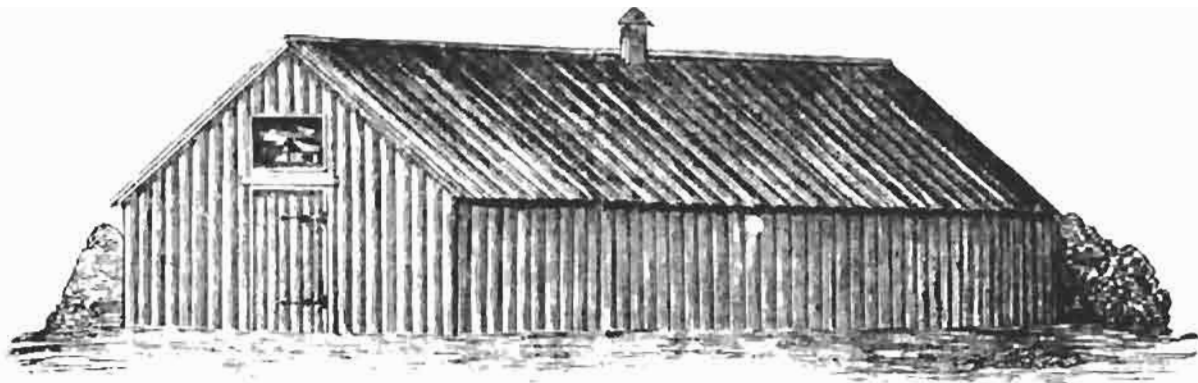


Fig 2. William Eassie's first hut for accommodating soldiers in the Crimea. (From the *Illustrated London News* 9 Dec 1854)

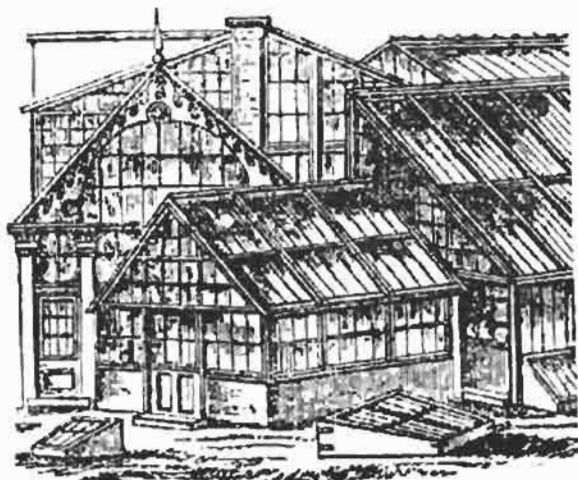


Fig 3. Three illustrations of the types of buildings and components produced by Eassie & Co. (From advertisements in the *Gloucester Journal* in the 1860s).

