The first railway locomotive in the West of England

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The history of the Somerset Coal Canal has been well documented by Clew[1] and others, and is probably well enough known in outline to most readers of *BIAS Journal*. It will be sufficient for the purposes of this paper to state, by way of introduction, that the Somersetshire Coal Canal Company was incorporated in 1794 and was empowered to build a canal from Limpley Stoke to Paulton, with a branch canal from Midford to Radstock, and also to construct tramroads from collieries to the canal side. Lack of money, and probably also shortage of water, led to the Radstock branch (which had, in any case, never been fully completed) being closed at some date between 1812 and 1815. A tramroad was laid along the towing path from Midford to connect with lines already built from collieries at Old Welton and Clandown to the terminal basin at Radstock.

It has long been known, or at least suspected, that the tramroad from Clandown to Midford was the scene of an early experiment in steam traction. Dendy Marshall[2], in his standard work on early steam locomotives, quotes from two sources and gives a piece of local tradition. One of the sources is a pamphlet of 1864[3] and the other is a newspaper article of 1925.[4] Neither is, therefore, contemporary with the events they describe.

A search through local newspapers, undertaken for the purpose of extracting references to the history of the coal industry in Somerset, provided, for the first time, a contemporary reference to this early locomotive, and has given a few valuable details concerning its size and performance. The *Bath Journal*, in its issue dated 14 August 1826, carried the following item of news:

> Mr Ashman, engineer to the coal-works at Clandown, in this neighbourhood, has lately constructed a loco-motive steam carriage, for the conveyance of coal from the above collieries to Midford Wharf, which appears to be the lightest, and on the most improved principles, of any hitherto invented. Its weight with the cistern full of water, in the back part, is 2 tons 3 cwt; and its velocity, with nine loaded waggons, 27 cwt each, on the level plane, 3¾ miles an hour.

The locomotive evidently underwent prolonged trials before being put into service, for it was not until over a year later that the same newspaper, in its issue dated 27 August 1827, informed its readers that:

> A vehicle, impelled by steam, has been put into operation the last week at Clandown, to convey coals to Midford, and succeeds very well.

Two further particulars may be added to the above. First, the local tradition mentioned by Dendy Marshall to the effect that the machine was a 'single-arm engine', which must surely mean a single-cylinder engine, and brings to mind Trevithick's Penydarren locomotive of more than twenty years before. Secondly, the locomotive, to reach Midford, must have passed through a tunnel at Wellow; this tunnel survives apparently unaltered and the height from the crown of the vault to the floor (in which the impressions left by the stone sleepers could still distinctly be seen some twelve years ago) is 7 feet 7 ins. Allowing for the height of the sleepers and rails it would seem that Ashman's locomotive could hardly have been higher than 6 feet 6 ins at most, and was therefore one of the smallest and lightest of early locomotives. The trainload which it is described as drawing was the same as that hauled by a three-horse team, as is shown by the following quotation from a contemporary source:[5]

> On the Radstock railroad, where six miles are level, and two incline to the canal . . . three horses bring down eight, and sometimes nine waggons, containing twenty-seven hundred weight each, or thereabout; costs two-pence per ton per mile.

It is probable that the turnouts on the line, and the sidings and layout at the wharf, were all designed to accommodate 8-or 9-waggon trains, so that it would have been pointless to have built a larger and more powerful machine unless the whole line were to be reconstructed. A further reason may have been a desire to avoid damage to the track; a tramplate from one of the Coal Canal tramroads, now in the Bristol City Museum, is of cast iron and weighs only 30 lb/yard.

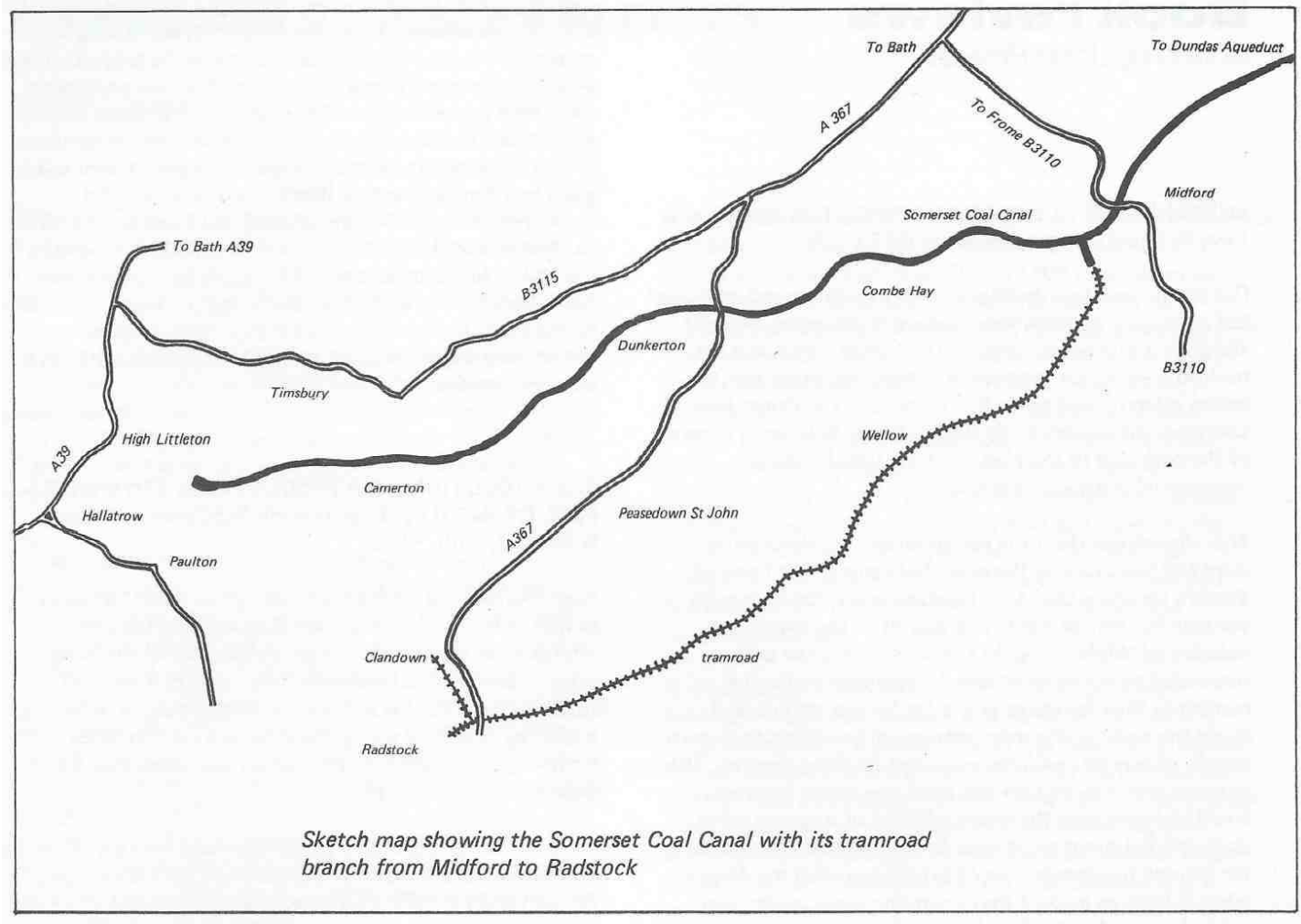
The locomotive was apparently not a success, for there are no further references to it in any surviving sources. It may indeed have been a total failure, despite the optimistic tone of the newspaper reports. The pamphlet of 1864 quoted by Dendy Marshall states that 'it failed, or broke down in making its first trip', and the 'Early recollections of Moses Horler', (b.1818) lend confirmation to this. Horler wrote:

> One of my earliest recollections is the running of a locomotive engine, made by the late Mr William Ashman (of Clandown) in the year 1825 [sic]. It was designed to take the coal from Clandown to Midford – but the engine would not run properly owing to the metals not being strong enough.[6]

Horler's explanation seems a likely one. It is also possible that the light trains gave the locomotive little advantage over horse haulage in terms of operating costs.

There can, however, be no doubt that to William Ashman of Clandown belongs the credit of designing and constructing the first railway locomotive in the West of England. Its comparative failure need not necessarily have been due to any inherent defect in design; many early locomotives were too heavy for the primitive permanent way of horse tram-roads and although Ashman was evidently an early adherent to the engineering maxim 'simplify and add lightness' he too seems to have been frustrated by the shortcomings of the only piece of railway at his disposal.

(This paper was originally written some twelve years ago and was put aside in the hope that more information on Ashman as a locomotive engineer might come to light. This



Sketch map showing the Somerset Coal Canal with its tramroad branch from Midford to Radstock

has not happened, but I have recently been encouraged by Dr Hugh Torrens to submit my original draft, in a slightly amended form, for publication, as it appears to contain all that we are ever likely to know about this pioneer locomotive. Dr Torrens, who is working on a history of Stothert & Pitt Ltd, has suggested that they may have had a hand in the building of the locomotive, and as one of the leading firms of engineers in the district this certainly seems not unlikely. Dr Torrens has drawn my attention to the interesting fact that George Stothert junior (1786-1858) visited Penydarren in 1804 and must have seen Trevithick's locomotive).

References

1 Clew, K R *The Somerset Coal Canal and railways*. (1970)

2 Marshall, C F D *A history of railway locomotives down to the end of the year 1831*. (1953)

3 Greenwell, G C and McMurtrie, J *On the Radstock portion of the Somersetshire coalfield*. (1864).

4 *Somerset County Herald*, 28 August 1925

5 *Observations on the general comparative merits of inland communication by navigations or rail roads. . . in a letter to Charles Dundas Esq MP* (1825)

6 Horler, M 'The early recollections of Moses Horler' (ca. 1900) (Horler's autobiography has not, so far as I am aware, been published. A typescript copy of the original MS was formerly in the possession of Mr G A V Foster of Radstock, and it is from this that the quotation is taken).