

No. 6

Henry's Tramway Engines

During the late 1870s there was much activity at the Falcon Works connected with steam tramways. In fact Henry Hughes, the driving force at the works, even served on a House of Commons Select Committee investigating the use of steam traction on street tramways. The activity was not without competition, other firms were trying to produce tramway engines and rolling stock.

The normal motive power was that of the horse and there were powerful forces determined to keep their interests profitable in matters of stabling, fodder and supplying horses. The Board of Trade defended the legislation then in force and it was empowered to authorise limited use of mechanical traction on tramways. Six months was an average period, and if a steam tramway engine did run, the rules restricted it to do so without noise, emit no smoke or steam and to run at less than ten miles an hour. The impossibility of these rules taxed engineers to the limit.

In 1875 Henry Hughes built a steam tramway engine to the design and order of John Downes of Birmingham, and within months produced his own design which went on trial on Leicester Tramways early in the following year. It was a four-wheeled locomotive based on an established design adapted for tramway use by being enclosed in the manner of a small tramcar and fitted with condensing gear to consume its own steam. It resembled a mobile hen house. Later, it saw service in Glasgow and at least one other engine, named PIONEER, went around the country on demonstration. More engines were built, but hardly any were actually sold because of the restrictions of time sanctioned by the Board of Trade. Contracts were let for owners to run the engines in place of horses, but the profitability of such ventures was questionable. The engines were often too heavy for the track.

They worked reasonably well, but suf-

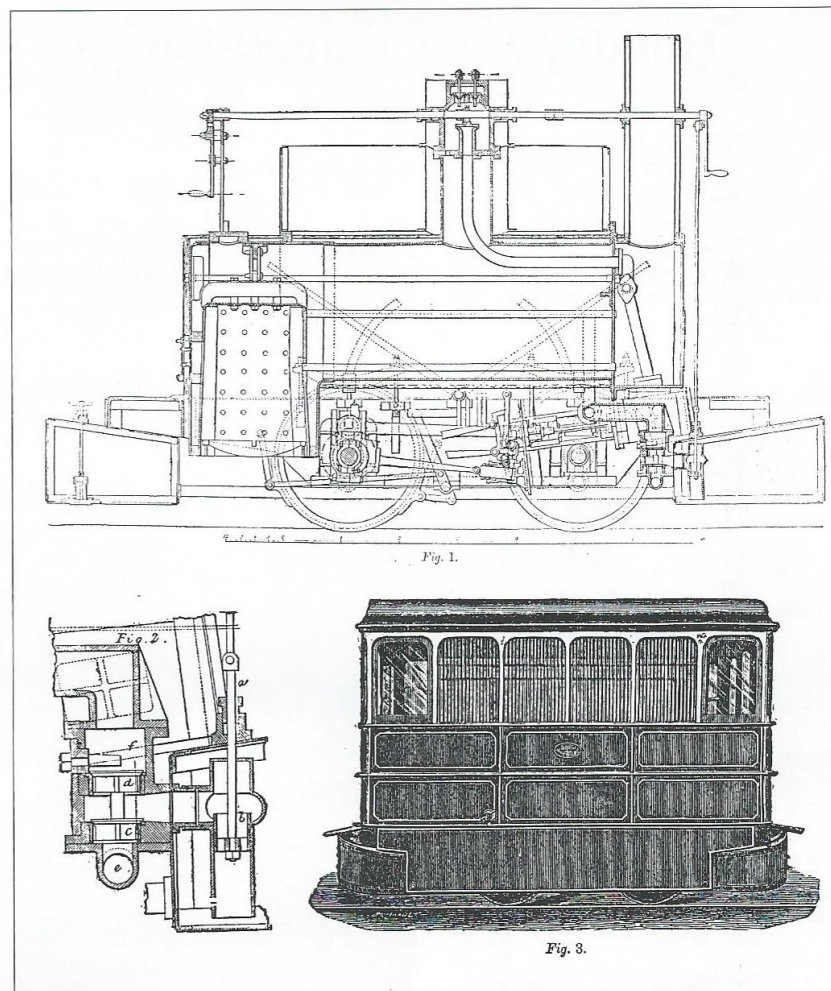
fered problems with the condensing gear and were victims of prejudice against them. A common problem was the 'planted' traveller who would flag them down on an incline while they were struggling up and board the trailer car. The engine and car were obliged to stop of course, but restarting was another matter!

When Henry's partner decided to withdraw his share of the business recourse was made to sell the whole business to a consortium of tramway speculators. Thus the Hughes' Locomotive & Tramway Engine Works Ltd. was born in 1877, with Henry Hughes employed as manager. New workshops were erected (11 Shop) to build tramcars and a sample American tramcar was purchased from North Metropolitan Tramways (of London), examined thoroughly and later sold back to them!

More Hughes Patent tramway engines were built and at least four were sold to Dunedin Tramways of New Zealand. Another was built in 1877/8 specially for exhibition at the 1878 Paris Exposition. It was the pride and joy of the Falcon Works and went on trial in the streets of Paris after the Exposition. It won a medal which was proudly displayed in Baldwin's the jewellers in Loughborough Market Place.

A subsidiary company was formed to run steam tramways and to provide engines and cars, with the Falcon Works building them. In the meantime, progress was being made with the House of Commons Select Committee which reported for mechanical power and advocated relaxation of the regulations. The future looked promising.

One contract emerged for Paris and about a dozen engines were built and despatched. The problems encountered were considerable. Untreated water from the River Seine fouled the boilers, the track was too light and there were accusa-



tions of sabotage by competitors or the horse faction. Most of the engines returned home in a poor state, some went to Lille, the scene of another operating contract that used a larger and new Hughes design of engine, introduced in 1880. After refurbishing, survivors went to Bristol Tramways where further problems plagued them. The new design operating at Lille also met with problems. The most serious was the completely unsuitable track which, being designed for light horse-drawn tramcars, formed a 'wave' ahead of the engines and eventually broke up.

The commitment to keep these engines in revenue-earning service placed an intolerable strain on company finances and this situation was set against a back-

ground of national depression also. The company went into liquidation in 1880/1, being offered for sale by auction in 1881. There were no takers. Recourse was made for a new company to be formed. This happened in 1882, and the Falcon Engine & Car Works Ltd. was formed and with a new design of tramway engine reaped the benefits of relaxed tramway legislation and sold many tramway engines thereafter.

The old Hughes tramway engines faded away, some being laid aside at the Falcon Works. By 1899 there were still sufficient parts to contribute to the first works shunting locomotive SPRITE. It lasted well into the 1930s, but that is another story.