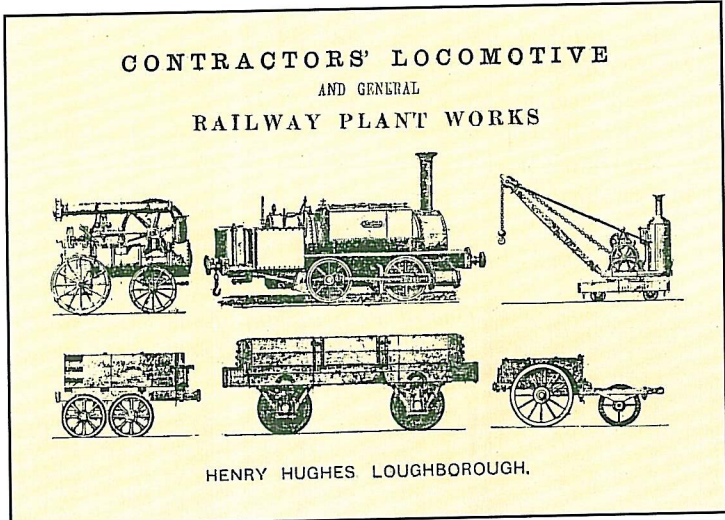


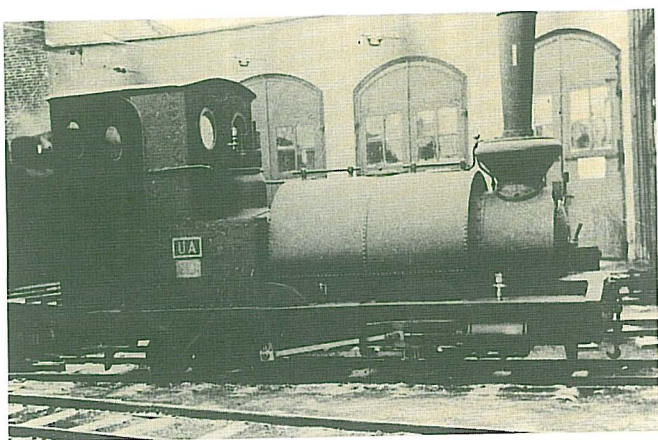
# Glimpses of the Past

by George Toms

## No. 18 Brush Steam Locomotives



Advertisement of 1862. Courtesy of Leicestershire County Record Office.



A delightful Hughes steam locomotive of 1871, now preserved in Sweden.



Another Hughes locomotive of the same period, also preserved in Sweden.

Brush inherited the building of steam locomotives from the Falcon Engine & Car Works Ltd in 1889 – a line of work dating back to the days of Hughes & March, on the Derby Road, certainly as early as 1861.

The Falcon Engine Works was producing pumping engines, stationary engines and engines for other specific duties, probably from 1853. Locomotive engines were a natural extension of these, some small and able to disengage the drive for stationary purposes. Most were small four wheelers, but one at least was somewhat larger – a 7ft. gauge saddle tank locomotive for the Government of the Cape of Good Hope. This was used on harbour works, but most were used by contractors building railways or for shunting in factories and collieries. A contractor's locomotive weighing 9 tons cost £500 in 1862.

They were simple and crude, but provided a regular business for Henry Hughes which expanded further following the transfer of manufacture to the present site.

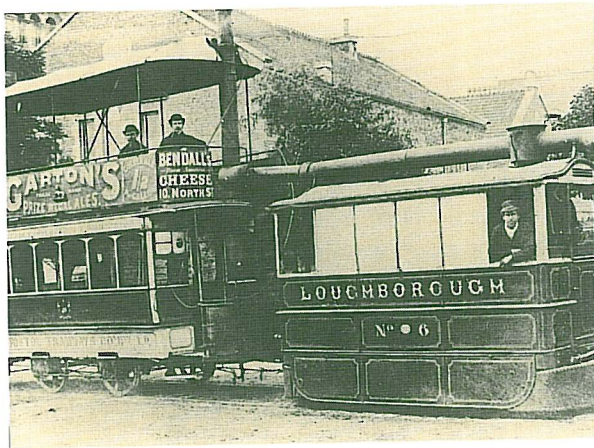
In 1867 one such locomotive was exhibited at the Paris Exhibition and there is little doubt that it further boosted demand. The basic design was enlarged about this time into an 0-6-0. By 1875 Henry Hughes 0-4-0 and 0-6-0 tank locomotives could be found at home and abroad, one as far away as New Zealand. Despite all this enterprise the locomotive business was quite small in comparison to that of other British manufacturers. The locomotive erecting shop had only two bays and even if other shops lent a hand, production was quite modest.

Henry Hughes saw an opportunity to adapt his locomotives for use on urban tramways and commenced the building of steam tramway engines in 1875/6, one to the design and order of John Downes and another to his own design. This development has been described in a previous "Glimpses".

The reformation of the company into Hughes' Locomotive & Tramway Engine Works Ltd in 1877 brought in new people, though not always introducing better ideas. The tramway side of the business expanded, but so did the accompanying liabilities. The size of the locomotive shop was doubled, though its enlargement enabled increased production rather than allowing the building of larger locomotives.

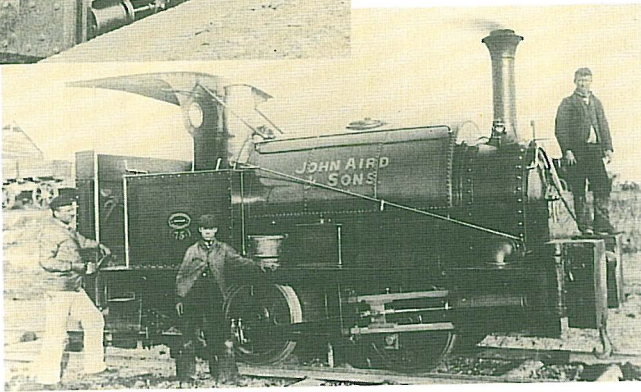
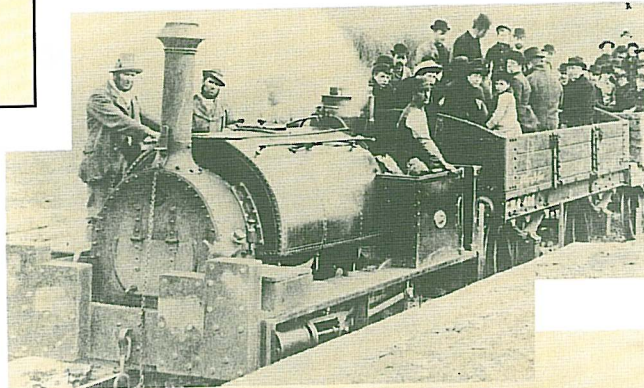
A sideline was the sale and hire of second hand locomotives, traded in for new ones. These were frequently advertised nationally. No doubt some of these were used for shunting in the works and demonstrated to prospective customers.

Financial difficulties saw the formation of the Falcon Engine & Car Works Ltd in 1882, end at last the production of larger locomotives and tramway engines. Tender locomotives started to appear, albeit a somewhat late introduction. New contacts and agencies brought in new orders, some for India and some for South America. One particularly large order was for steam tramway engines for Birmingham Central Tramways in the mid 1880s. Another good outlet for locomotives and tramway engines was Spain and the Spanish islands.



A Hughes steam tramway engine in service at Bristol in the early 1880s. It had previously seen service in Paris.

A typical contractor's locomotive, seen here hauling a navy train on the occasion of the opening of a new railway.



Loughborough craftsmen built this fine example of a contractor's locomotive.

Steam tramway engine and tramcar in service on Dunedin tramways, New Zealand circa 1880.

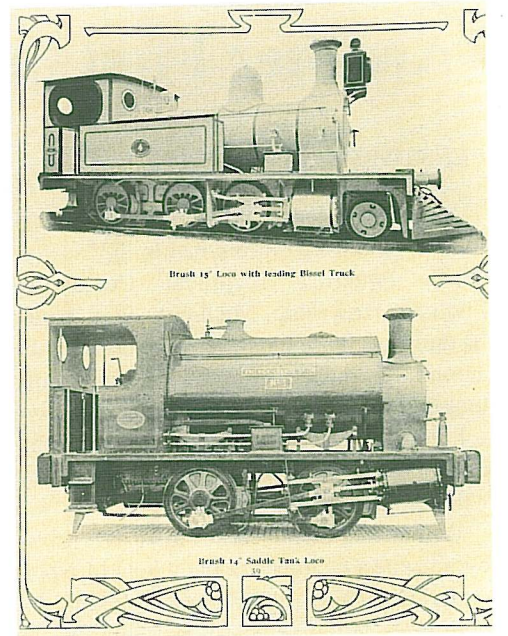


Some of the Brush locomotive customers listed in the 1905 catalogue date back to pre-Brush days, but were part of the advertising inheritance. The 4-6-0 above is photographed on the valve setting rig in the Falcon Works. The 4-4-0 below is one of the first supplied to the Beira Railway. Courtesy of Mr Len Staines.

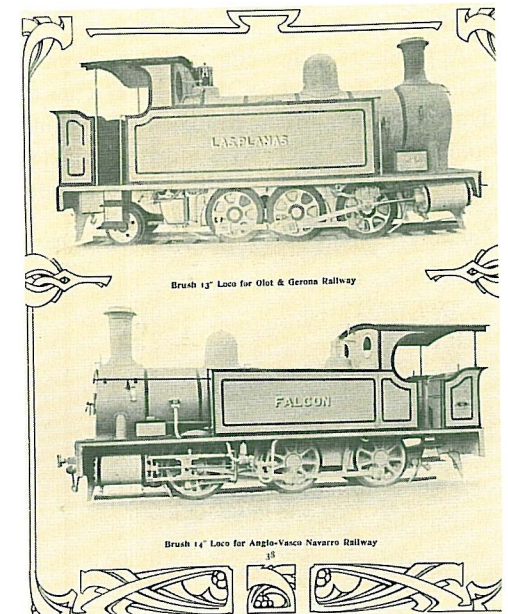
By the time Brush took over in 1889 business was reasonably brisk and locomotives were becoming larger, though not significantly so. The most common users of Brush locomotives were collieries, quarries, contractors, factories, colonial railways and tramways.

Perhaps the best-known locomotives of the 1890s were the 4-4-0 tender locomotives sent out to the 2ft. gauge Beira Railway being built in Mozambique. This was a very basic railway being hewn out of the bush, and a project riddled with danger and disease. Brush supplied about thirty such locomotives to the railway. These were supplemented by similar examples supplied by Glasgow Engineering Ltd in 1898, just at a time when the locomotive erecting shop at the Falcon Works was being replaced.

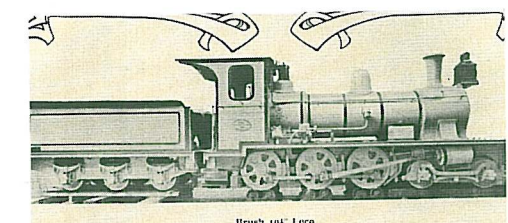
In some ways the Beira Railway contracts marked the high water mark in locomotive production for Brush, and although the new erecting shop (now 24 annexe) allowed for increased production and the building of larger locomotives, demand waned steadily over the next few years.



A 2-6-0 of 1890 destined for Uruguay, and the final development of the 0-4-0 saddle-tank, built for the Whitwick Granite Company in 1902. Courtesy of Mr Len Staines.

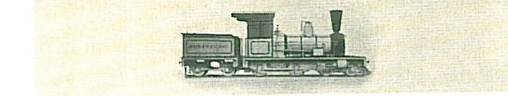


LAS PLANAS and FALCON, from a Brush catalogue of 1905. Courtesy of Mr Len Staines.



### Some Brush Locomotive Customers

Cork and Muskerry Railway.	West Bros.	Pauling & Co.
Grays Chalk Quarries.	Kerr, Stuart & Company.	Globe Brick Works.
Mantrips.	Ellis & Everard.	Peary, Catbill & Co.
North Borneo.	Birch & Son.	Verlin & Sons.
Morvi Railway (India).	Duncan & Abbott.	Northport Coal Co.
Masons.	Lucas & Auld.	Seaton Iron Co.
Borne Railway.	Walsall Corporation.	Baldklow, Vaughan & Co.
Dublin and Blessington Railway.	Cashill and Swansea Coal Co.	Bell Bros.
Indian Railways.	Parry & Co.	Shotton Bar Iron Co.
Olot and Gerona Railway.	Leid Helzer.	Gilbs & Co.
Sarria Railway.	I. C. Johnson & Co.	Stonemount Chalk Co.
Anglo-Vasco Railway.	Fletcher & Co.	Talbot & Co.
Penang Railway.	Liverpool Corporation.	Lewis & Co.
Admiralty.	Henry Lawat & Co.	Rose Innes & Co.
Chalkley Quarries.	Bagworth Colliery Co.	Hatcock Colliery.
Sulphur Gold Field Co.	Sponner & Co.	Glasgow Colliery.
Cornwall Railway.	Butters Bros.	Whitwick Granite Co.
	Stannary Hills Mines.	Etc., etc., etc.



A few 4-4-0 tender locomotives were sold to India and Borneo. Even 4-6-0 locomotives were also built, though only several in number. These and the now much larger 0-4-0 saddle tanks indicated the full development of the Brush steam locomotive design.

The last overseas order was for seven locomotives and came from the Royal Siam Railways. They were built in 1911 and the last order of all was for an 0-4-0 locomotive for the Whitwick Granite Company the following year.

Total production can only be estimated, perhaps between five and six hundred locomotives, over fifty years, but it employed many people not only of local origin, but others attracted from elsewhere.

Much more could be related on the story of the steam locomotives built at the Falcon Works, but alas, space does not permit it. From time to time specific locomotives will be singled out as subjects in future "Glimpses".