

THE SUPPLY OF TIMBER DURING THE FIRST WORLD WAR

Few in the Government and Military establishment realized the strategic importance of timber at the outbreak of hostilities in 1914. At that time, 90% of the country's needs, some eleven and a half million tons, was imported. It wasn't until a shortage led to delays in building training camps for the army that any real attempt was made to secure adequate supplies from within these isles to cope with the huge increase in demand caused by the war.

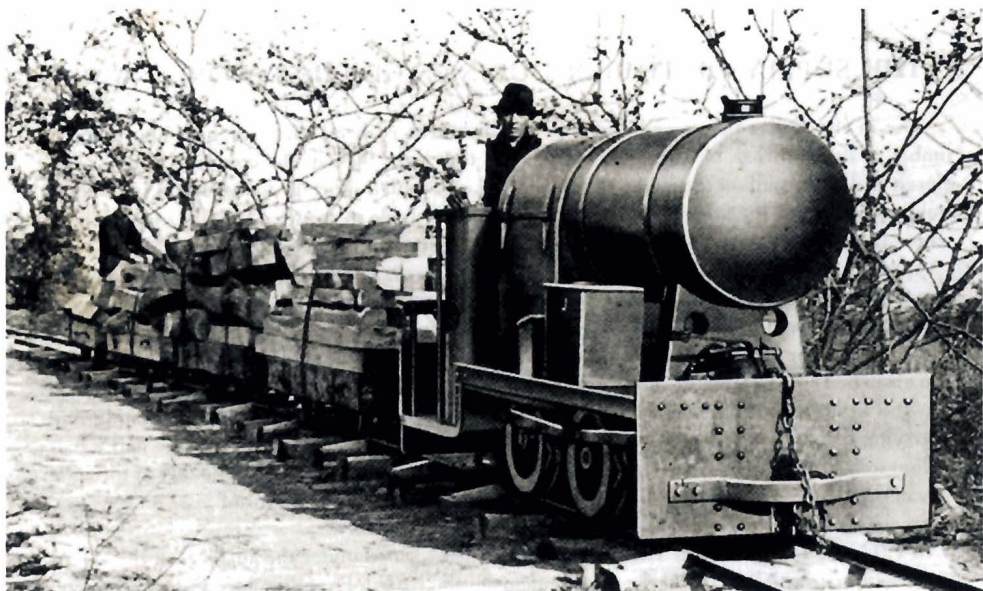
Apart from huts for military camps, the armed forces used vast quantities of wood for dugouts, tunnelling, duck boards, temporary (or "corduroy") roads, road and rail vehicles, packing cases, ammunition boxes, telegraph poles, barbed wire stakes, ship repairs, aircraft and hangars for them, railway sleepers and so on. Industry vital for the production of war material also absorbed a huge amount. The primary source of energy at this period was coal, which was also the basic raw material for the production of gas and electricity. In total, mining and quarrying of coal and other minerals, particularly iron ore, consumed some three and a half million tons annually. In Cleveland alone, it was estimated that 3 million cubic feet of pitwood was needed to produce 500,000 tons of iron ore each year. Coal required less: on average, between 60 and 80 tons could be extracted per ton of pitwood.

In 1915, the Home Grown Timber Committee was formed under the auspices of the Board of Agriculture, initially to fulfil the requirements of the British Expeditionary Force in France, although this soon broadened to include most strategic needs. The Committee's task was formidable. They were starting from scratch, with little expertise, equipment or skilled labour and were heavily dependent on the timber trade, which itself was not very well organized



A commercial postcard of a typical short handworked temporary timber railway of 3ft gauge, somewhere in the Scottish Highlands.

(Andrew Neale collection)



*A publicity photograph of one of the five '74' class 20 h.p. Baguley 0-4-0PM locos (Bg 774-779) supplied in 1919 for forestry work. Note the home made rolling stock and sleepers and extremely light rail, possibly 9lb/yd, the lightest on which the locos could theoretically run. The location is unknown.
(Industrial Railway Society, Brian Webb Collection)*

particularly in England. Although it was known that about 4% of the United Kingdom was afforested, no one had any idea how much of the timber was any use. Administratively, the Committee was taken over by the War Office's Directorate of Timber Supply in March 1917, but within two months, was transferred to the Board of Trade as the Timber Supply Department with its own Controller.

Equipment, some of it designed by the Department's own staff, was purchased in vast quantities, despite having to compete with the military and other government ministries. One particular difficulty was in obtaining light rails for tramways. Experiments were even carried out with caterpillar tractors, but with what success is not known. Labour, too, posed problems, many men having to be recruited from abroad, including approximately 800 Finnish seamen, most of whom ended up in the UK after having been torpedoed; almost 1500 Portuguese and some 350 Americans formed into the New England Sawmill Unit. By far the biggest overseas contingents however, were the lumbermen of the Canadian Forestry Corps which, together with the much smaller Newfoundland Forestry Corps, almost equalled the number of British civilians employed by the Department in 1918. The Department's achievements were considerable for, by 1917, more than half the country's timber and pitwood requirements were being met. Some 182 sawmills were in operation, with a further 40 run by the Canadian and Newfoundland Forestry Corps and the New England Sawmill Unit. By the end of the year some 2,231,957 tons had been procured at a cost of £3,321,490.

Haulage in and from the woods was mostly by horses, tractors, traction engines, steam and petrol lorries. Railways were however, also used. In the Spring of 1918, the Timber Supply Department had about 22 miles of light 14lb rail and nearly 50 miles of 20lb rail. The former of course, could only be used for man or horse powered lines.

Examples of these were included in sawmilling plant sold by the TSD at the end of the War. One was on the Tregoyd Estate in Breconshire, which sawed timber cut in Werniago Wood. This had a mere 75 yards of 2 foot gauge track laid with 14lb rail and wooden sleepers. Its entire rolling stock consisted of two timber bogies. Another slightly longer system was leased by the Earl of Mansfield to the Home Grown Timber Committee in 1916 and was situated in New Scone Wood in Perthshire. This consisted of 300 yards of track (gauge unspecified) on which 4 timber bogies ran.

Of most interest to railway enthusiasts are those which employed locomotives. Few details of these survive and those that do are scanty and tantalisingly brief. Even the locations of many are not precisely known. It should also be appreciated that, by their very nature, timber railways were temporary, their exact routes never being fixed for very long. Once part of a plantation had been felled, the track was lifted and relaid in another area. Much, but by no means all of the information which follows has been culled from the surviving documents relating to the purchase and sale of timber and plant during and after the war. These are often particularly frustrating for the researcher for a number of reasons. Contracts often only include information about a railway when special provisions were made, such as when its route cut off grazing land from a water supply. Some, such as that at Kerry, state that the route of the railway has been marked in red ink on an accompanying map. On many occasions, on turning to the map in question, the authors have found no such red ink route and in at least one instance, the map is missing altogether.

Thus, the following chapters do not claim to be a comprehensive survey of all timber light railways. The authors are all too well aware how sparse is the information on many lines and also, that there are a number of omissions. The activities of the CFC are well represented although, as their lumbermen were experienced at large scale operations where the use of railways made economic sense, this is not so surprising. It should not be forgotten though, that there were many other railways run by British workers and German PoWs under military control.

Standard gauge lines were relatively few and some details are appended. On the narrow gauge the principal gauges were two and three feet with at least three lines employing the 60cm gauge and these used 10 h.p. petrol Baguley petrol tractors originally ordered by the French *Ministere de la Guerre* in November 1916, but subsequently cancelled. They were eventually sold to the Timber Supply Department in 1918, so it is likely that the ready availability of these machines dictated the gauge of the railways they ran on. The French ordered five machines which the TSD purchased along with two others of the same gauge between April and November 1918.

Most lines of whatever gauge were simple and small in scale, with only one or two locomotives, a mile or two of track and usually ten to a dozen "bogies". The 3ft gauge railways tended to be steam powered, whilst the narrower gauges were, on the whole, the preserve of internal combustion engines.

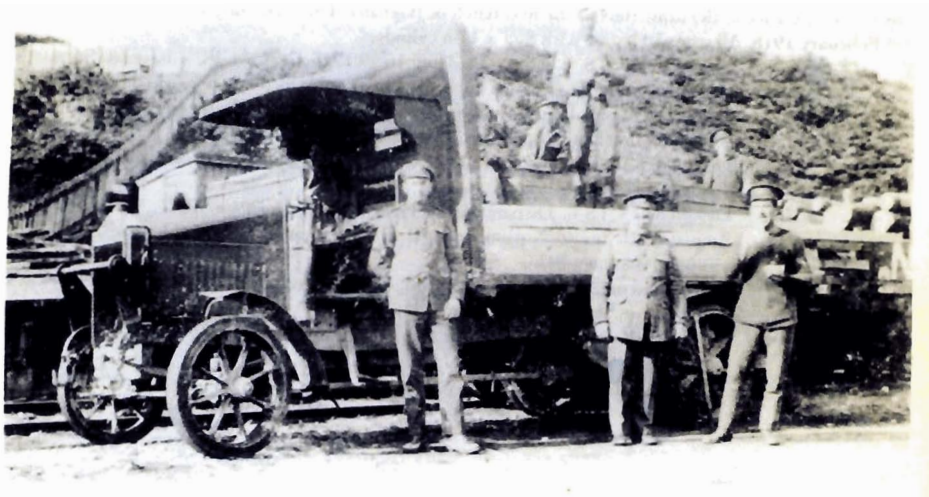
As a footnote, the Timber Supply Department was replaced by the Timber Disposal Board at the end of the War and wound up in 1922. To avoid confusion in the following chapters, it is referred to as the Timber Supply Department throughout whether it was under the control of the Board of Agriculture, the War Office or the Board of Trade.

DORNOCH, ROSS-SHIRE

A 3ft gauge Kerr Stuart "Haig" (works no. 3085) painted with the legend CTS 6 was dispatched on 19th November 1917 to the Officer Commanding the 129th Company of the CFC at Dornoch station on the Highland Railway. The line (or lines) on which it worked was one of the most extensive and interesting of the timber light railways, but frustratingly, the authors have been able to discover only a very few details concerning the operation.

In September 1917, the Duke and Earl of Sutherland sold the rights to a vast quantity of timber on his estate, the value of it amounting to £109,000. This was spread over several sizeable woodlands, all bar one of which lay to the north and west of Dornoch station. These were Lochs, Poles, Harriet and Duchess-Countess Plantations and Duke's Wood. Gunn Plantation near Lairg was also included. Most, if not all of the timber was shipped out from Dornoch by sea using the Duke's Skelbo Pier at Little Ferry, which the TSD leased and extended for the purpose.

The CFC (of which the 117th Company was also at work in Dornoch) would have left in 1919, but without felling all the timber on these plantations. In the issue of the "Timber Trades Journal" for 15th May 1920, the TSD invited offers for what remained. This was described as "Timber In Light Railway in Woods And At Little Ferry 33,311 sleepers". Unfortunately, the exact location was not given, the advertisement merely stating that they were on the Sutherland Estate. Included in the sale however, was 410 tons of track, including points, at 24lb to the yard. This is over 10 linear miles of track so it is likely that the railway was used to transport the timber from a number of plantations to the pier. If all this track was in fact utilised and with the quantity of wood that had to be transported, more motive power than the Haig would have been required. If any additional locos were used at Dornoch, they would almost certainly have been second hand. It would appear that the Haig



Military personnel pose with a Hallford lorry at Dornoch station yard. The driver, Mr Edward Bick of Cheltenham, had been seconded here specifically for this job as at this time there was a distinct shortage of competent commercial vehicle drivers. (Collection David E. Bick)

was not included in the sale as in August 1921 it was noted loaded on a wagon in Dornoch goods yard awaiting despatch to the Wishaw yard of dealers T. W. Ward Ltd. In November 1922 it was resold via another dealer, Alexander Hammond of Slough, to Cottesmore ironstone pits in Rutland where it put in many years of useful work, finally being cut up in January 1957.

The purchaser was William Black & Son of Brechin, one of the larger Scottish timber merchants. Indeed, Black himself had served on the Advisory Committee to the TSD. His firm however, failed to complete the work by the end of September 1922, the deadline allowed for in the original contract between the Duke of Sutherland and the TSD. After this date, any remaining timber reverted to the Estate. In the meantime, the Duke had sold some of the land, including the Harriet Plantation to a Major Rutherford and a Frederick Wignall, who, in May 1923, claimed the timber which William Black & Son had not cleared under the terms of the original contract.

Kerr Stuart 0-6-0T

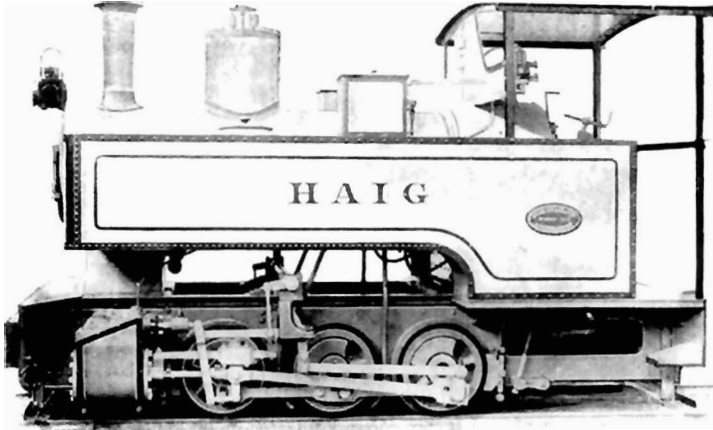
A standard product of the manufacturers, the Haig class was derived from, but not identical to, the Joffres which were constructed to a Decauville design for the French military. The first three Haigs had been built for stock and had to be modified to suit the FSD's specifications before they could be delivered. They were ordered by the War Office at the same time as the first batch of Bagnalls. The final Haig was ordered at the beginning of February 1918. All were 3ft gauge with 8 1/2 x 11in cylinders.

- 3083 Designated CTS 4. Dispatched on 16.10.1917 to the CFC's base at Stewart's Lane, Battersea on the SECR. It is not known where this locomotive worked initially, but in 1922 it was purchased along with 3084 by Leeds Corporation for use on their Leighton reservoir construction job at Masham.
- 3084 Designated CTS 5. Dispatched on 28.11.1917 to Ampthill; resold for use at Masham (see 3083 above).
- 3085 Designated CTS 6. Dispatched on 19.11.1917 to Dornoch. To T. W. Ward, Wishaw in August 1921, resold November 1922 to Cottesmore Ironstone Quarries, Rutland, where scrapped January 1957.
- 3089 Dispatched on 29.4.1918 to Carr Bridge. Resold for reservoir construction work at Elslack near Skipton, then Fernilee, Derbyshire and finally to Cottesmore Ironstone Quarries (see 3085 above).

"HAIG"

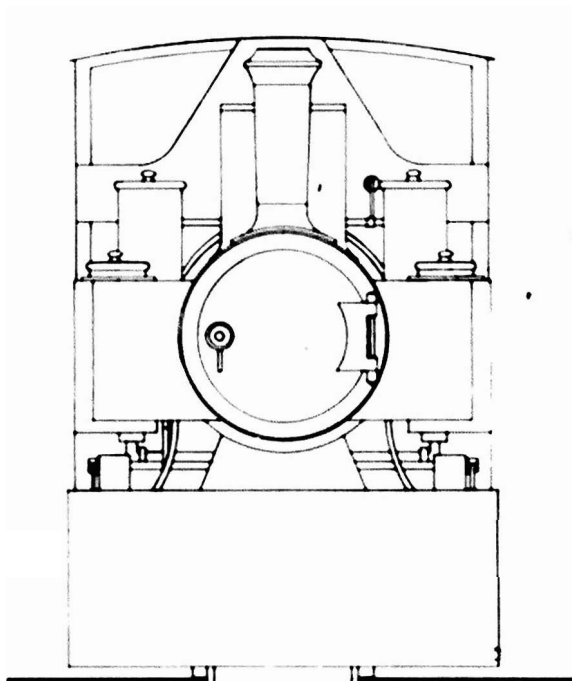
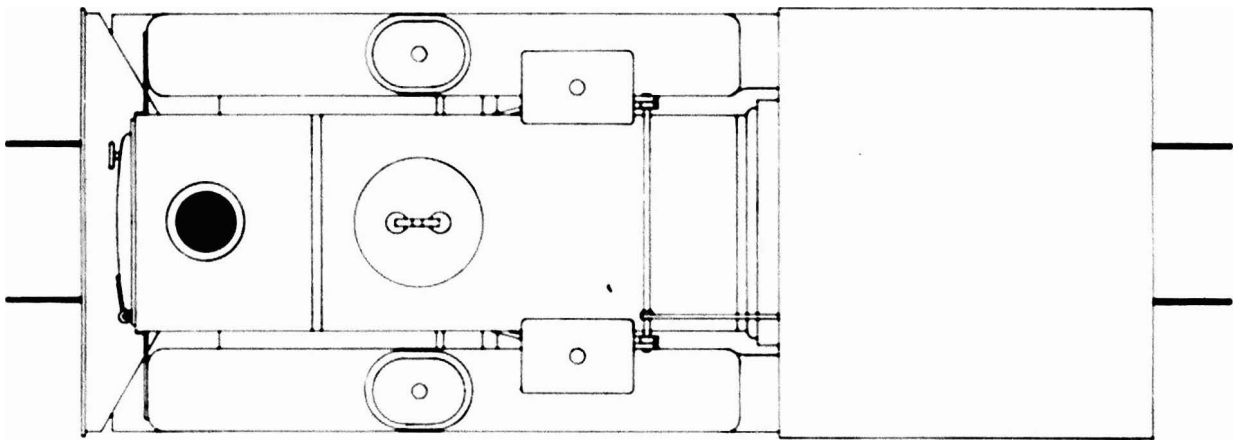
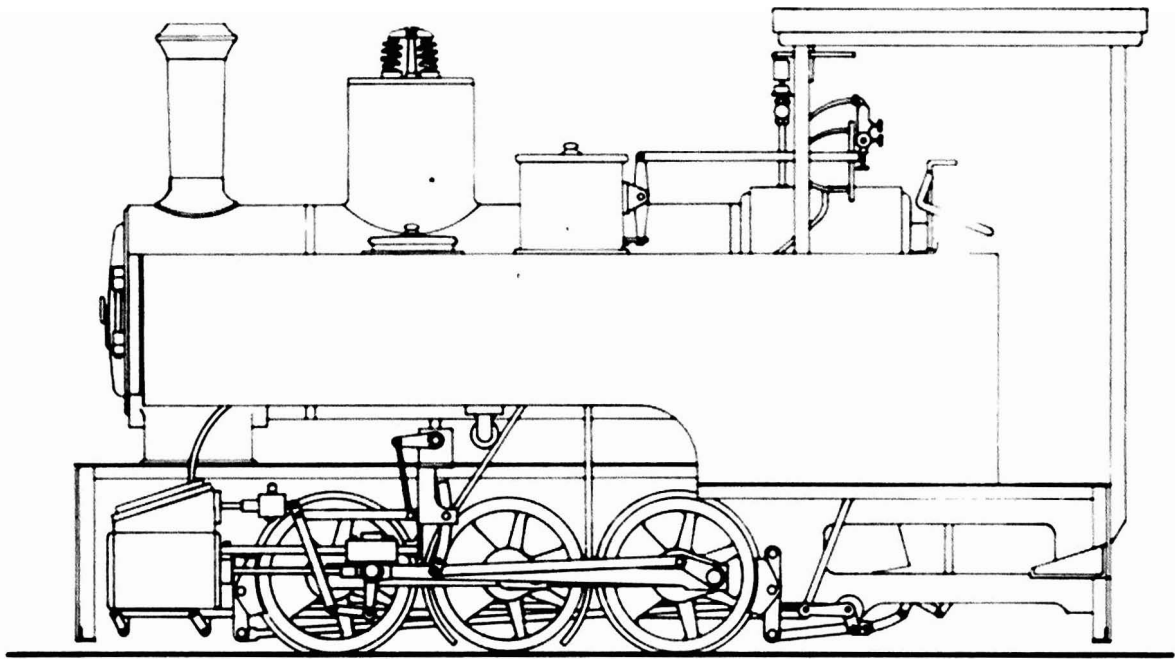
(63 H.P.)

For 2 ft. 0 in. to 3 ft. 6 in. Gauge & for Rails 18 to 25 lbs. per yd.



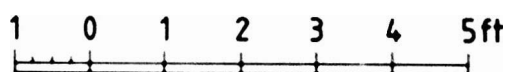
Cylinders	8½ in. diam. & 11-in. stroke	215 mm. x 280 mm.
Diameter of Wheels over Tyres	1 ft. 11½ in.	600 mm.
Wheel Base	4 ft. 7½ in.	1,400 mm.
Tubes (Steel)	62 (1½ in. diam.)	62 (44 mm. diam.)
Working Pressure	160 lbs. per sq. in.	11.24 kgs. per sq. cm.
Boiler Feed	Two Injectors	--
Firebox	Steel	--
Water Tanks (Side)	196 gallons	900 litres
Fuel Space	20 cu. ft.	0.57 cu. m.
Heating Surface - Tubes	163.5 sq. ft.	15.65 sq. m.
.. .. Firebox	23.25 sq. ft.	2.16 sq. m.
.. Total	191.75 sq. ft.	17.81 sq. m.
Grate Area	4 sq. ft.	0.371 sq. m.
Approximate Weight, empty	8 tons 10 cwt.	8,636 kgs.
.. .. in working order	10 tons 10 cwt.	10,668 kgs.
Tractive Power	4,790 lbs.	2,173 kgs.

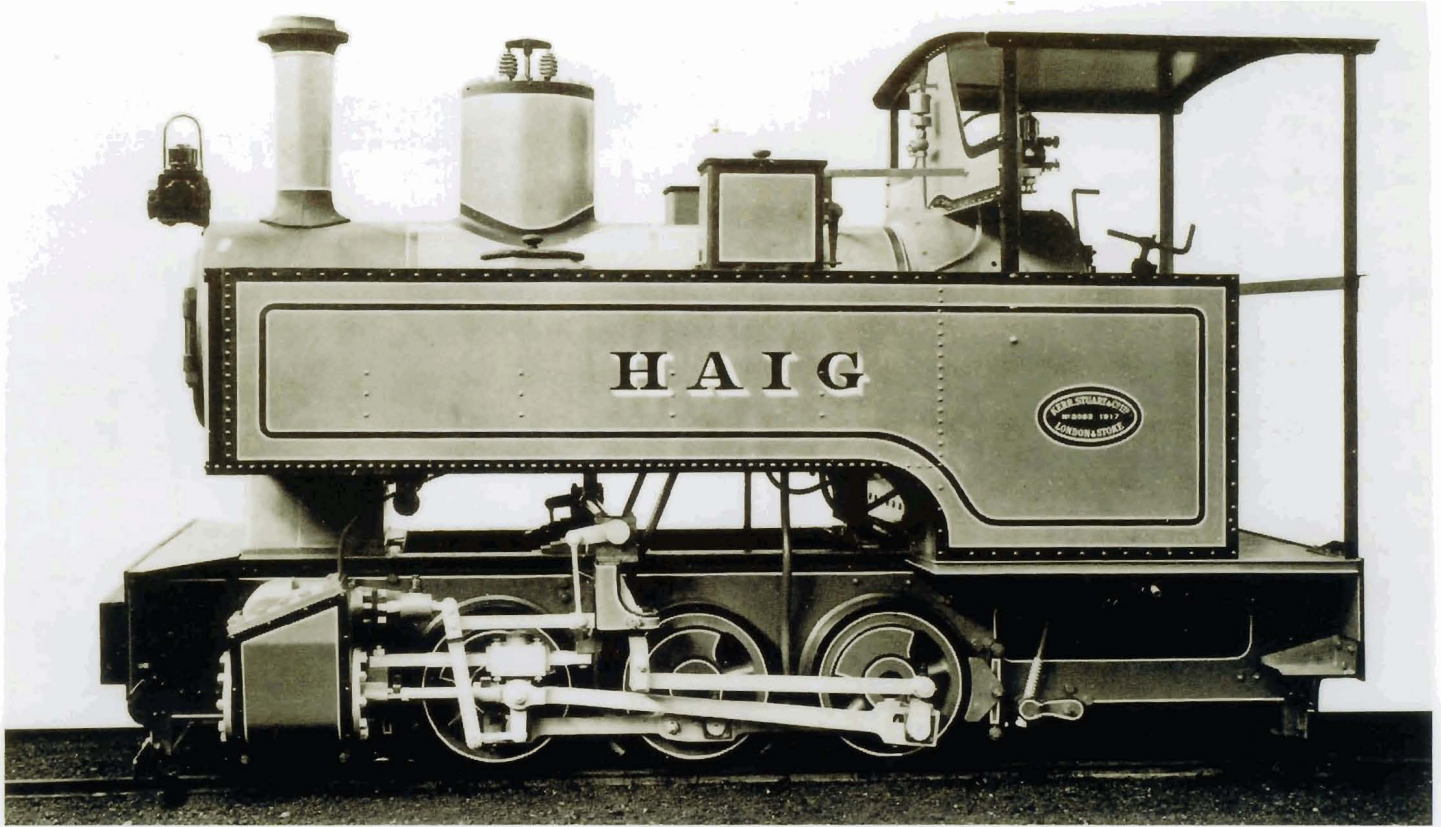
FOR COAL OR WOOD FUEL.



KERR STUART & Co. Ltd.
"HAIG" CLASS
2ft GAUGE

Rivets, Buffers and Couplers not shown





Kerr Stuart photographed the prototype Haig 0-6-0T (KS 3083/17) specially painted and lettered with the class name before delivery. Although none were built for UK customers after the 1914/18 War, it proved a popular loco overseas, primarily for sugar cane tramways, and indeed four more were built by Bagnall after Kerr Stuart's demise in 1930. (Hunslet Engine Co./Armley Museum, Leeds)

After leaving Dornoch, Kerr Stuart 3085 spent the remainder of her life on the 3ft gauge Cottesmore ironstone tramway in Rutland where she was later joined by KS3089, another ex-forestry Haig. Seen here about 1952, 3085 was cut up in January 1957, shortly before the railway itself closed. (F. Jones)

