



THE NARROW GAUGE



THE NARROW GAUGE RAILWAY SOCIETY

No. 49 • NOVEMBER 1968

THE NARROW GAUGE RAILWAY SOCIETY

Hon. Secretary

Mike Swift,
47 Birchington Avenue,
Birchcliffe, Huddersfield

Hon. Editor

Henry Holdsworth,
76 Tower Lane,
Leeds 12

Hon. Membership Secretary

Jack Buckler,
123 Howdenclough Road,
Bruncliffe, Nr. Leeds

(For renewals, & membership enquiries)

SUBSCRIPTION £1.10 JUNIORS 10/- (under 18)

Editorial

This is issue forty nine and our half century will be reached with the February issue which I should like to make something special, perhaps a bumper issue. Will you help by letting me have an article and photos on your particular interest in the hobby??

A very happy day was spent at Clapham Transport Museum on 20/10/68, a small party from Leeds area travelled behind 'Flying Scotsman' to join many thousands thronging the hall on the special Sunday opening. It seems tragic that such a wonderful collection is to be broken up after a comparatively short stay in South London, we can only hope that not too many small exhibits find their way into private collections to be hidden away from the rest of us. I dare say your Editor could just find room for "Wren" in a corner of the lounge perhaps if BR get pushed.

Finally don't forget your entry for the photographic competition to be judged in December, two prizes of a years subscription will be given. (See April NG 1968).

Best wishes.

Henry Holdsworth.

Cover Photo

By Ivo Peters.

Back to the Schull & Skibbereen Light Railway.

- No. 4 Nasmyth Wilson built in 1888.
- No. 3 'Kent' a Peckett built in 1914.
- No. 6 Thomas Green 1893.

(This also corrects the name 'Kenny' given wrongly in our last issue for No. 3).

Contents

	<u>Magazine No. 49</u>	<u>November 1968</u>
2	A. HIRST & SON LTD.	Chris Down.
3	CYPRUS RAILWAYS.	I. K. Hutchinson.
6	MIDGET MALLETS.	Sydney Moir.
12	KATIE FAIRBOURNE.	Editor.
14	"LITTLE EGRET" Hunslet 175 of 1877.	Barrie McFarlane.
18	BRITISH N.G. INTERNAL COMBUSTION Wickham & Harland Wolff.	Brian Webb.
21	FERNILEE RESERVOIR (Pt 2).	Alistair Parsons.
25	NEW JERSEY MUSEUM.	Donald G. Rodi.
28	BAGULEY-DREWRY LTD. New loco for New Zealand.	Rodney Weaver.
30	LETTERS TO THE EDITOR.	

FOLD OUT SUPPLEMENT

Douglas Clayton's drawings of
SOUTHWOLD RAILWAY.



A. HIRST & SON LTD.

CRESCENT WORKS · DEWSBURY

By Chris Down

I have now established that the loco at Lower Halstow was built by A. Hirst and Son Ltd., Crescent Works, Dewsbury, Yorkshire, which firm is still in existence, making fork lift trucks under the trade mark 'Forager'.

The firm have given me all the information they can, which is not a lot as the early records were destroyed. It seems that the firm was begun in 1889, producing bi-polar electric motors and generators. They have photos of a loco under construction, in a works that the firm occupied only between 1898 and 1907, so that locos would only have been built in this period. Coincident with the 1907 move, the firm began to manufacture coal cutters, and ordinary motors ceased to be manufactured.

It is not known how many locos were built, but it was at least two. As Peter Excell says, the tube loco did not have the end sheets that were on the Halstow one, and from the firm's photos, it appears that the Halstow loco was built new with these sheets, and that it was new to Halstow.

This then is the 'story so far'. There seems no reason to suppose that these were the only two locos built by the firm; possibly others were used on the tube contract? Any further suggestions on this subject will be very welcome.

Editors Note:- See previous article page 11, NG No. 45, September 1967.

CYPRUS RAILWAYS

By I. K. Hutchinson

In the Summer of 1959 I paid a visit to the island of Cyprus. When I arrived at Nicosia Airport I was under the impression that there were no railways still in operation. This impression was, however, soon dispelled, as about two hours later to my amazement I saw the rear end of a small grey diesel loco disappearing under a bridge on the Nicosia - Limassol road, some 14 miles from Limassol.

On enquiry I discovered that this line was owned by the Hellenic Mining Company and runs from the pyrites mines at Kalavastos to Vasilikos some eight miles away on the south coast. The line abounds in sharp curves and very steep gradients. This 2'6" gauge line was apparently opened just before the second world war. I have unfortunately been unable to ascertain the exact date. Some seven or eight locomotives are employed, built by Oprensstein and Koppel and an American firm, possibly the American Locomotive Co.

On the north west coast at Xeros there was another short 2'6" gauge line, running from a pier near Xeros to mines at Skouriotissa owned by the American controlled Cyprus Mining Corporation. Although I was unable to visit the line, I believe that it is operated by American diesel locos. The line was opened about 1921, and a branch opened to Mavrovouni in 1929.

Of the 2'6" gauge Government Railway there was still a little left to see. Across the Mesaoria Plain there is a line of trees which indicates part of the route. Near the boundary fence of an army camp in Famagusta an old van body was seen and several coach bodies can be found in use as sheds in Nicosia backyards. Also the Hunslet loco No. 1 is preserved outside the old station in Famagusta.

On my return to England, I set myself the task of finding out more about the Cyprus Government Railways. The following is the result.

The first section from Famagusta to Nicosia (36 miles) was opened in October 1905, the extension west to Morphu two years later in December 1907. The final extension was opened in June 1915 bringing the total mileage to 76.

In 1932 all services west of Nicosia were replaced by road transport. Some two years later however a very limited freight service was reintroduced on this section. In April 1951 the Government announced that they intended to close the whole line. In November the track was removed between Nicosia and Kalakhoria and the last public train ran on 31st December, 1951.

Please see map on rear cover.

The locomotive stock was as follows:

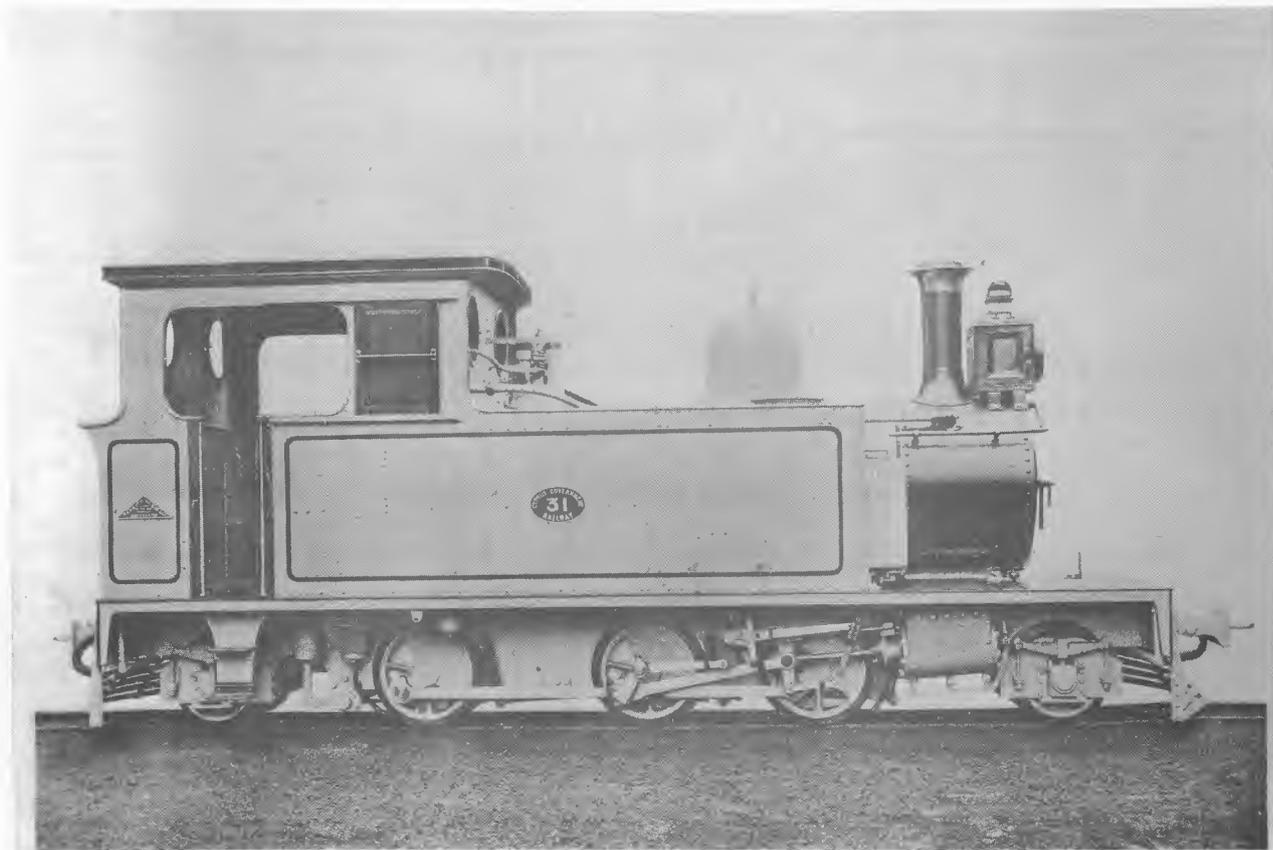
No. 1	0-6-0T (OC)	Hunslet.	Preserved at Famagusta.
No. 11	4-4-0	Nansmyth Wilson.	
No. 12	4-4-0	" "	
No. 21	2-6-0	" "	709/04.
No. 22	2-6-0	" "	710/04.
No. 23	2-6-0	" "	948/C12.
No. 31	2-6-2T	" "	
No. 32	2-6-2T	" "	
No. 41	4-8-4T	Kitson.	
No. 42	4-8-4T	"	
No. 43	4-8-4T	"	5297/20.
No. 44	4-8-4T	"	

and six 4 wheeled railcars.

Several of the locomotives are believed to have gone to Italy for scrap.



Photo opposite from R.N. Redmans collection. Further information would be welcome - Editor.



CYPRUS GOVERNMENT RAILWAYS.

Gauge, 2' 6". Working Pressure, 175 lb. Cylinders: Diameter, 10". Stroke, 15". Wheels Diameter: Bogie, 1' 10½"; Driving, 2' 3½". Heating Surface: Firebox, 47 sq. ft.; Tubes, 321 sq. ft.; Total: 368 sq. ft. Grate Area, 6.06 sq. ft. Fuel Capacity, 36 cub. ft. Water Capacity, 450 galls. Wheel Base Engine: Total: 17' 7", Rigid, 8' 2". Length of Engine and Tender over Buffers, 24' 2½". Extreme Height, 9' 8". Extreme Width, 7' 0". Weight (in Working Order)—Total: 20 tons 2½ cwt. Adhesive Weight in working order, 12 tons 16 cwt.

MIDGET MALLETTS

Details Sydney Moir

All photos from
H. T. Crittenden collection.

Say "Articulated" to a group of narrow-gaugers, and what comes to mind? The Englishman thinks of a Fairlie on the Festiniog: the American visualises a Shay: to the Continental it means a Mallett: in South Africa the word means "Garratt". But it came near being the synonym for Mallett in the two-footers in South Africa too, for the S.A.R. had Baldwin submit plans for Malletts in both tank and tender types before the first World War.

This drawing shows what the South African two-foot Mallett would have been like. Though Malletts worked on the 3'6" gauge lines, they never came to the narrow-gauge: possibly the amount of work involved in widening cuttings on the Avontuur put paid to the idea .. the boiler of a Mallett can swing out of all proportion when rounding a five chain curve.

Photo No. 1 (see next page)

Koppel's idea of a Mallett tank was nowhere as grandiose as that of Baldwin .. since it was a 'standard type' with them, it is possible that more miniature Malletts carried ARTHUR KOPPEL on their plates than could be found with the Baldwin disc on their smokebox fronts.

Photo No. 2

This little Mexican bears a remarkable resemblance to the Koppel idea of a baby Mallett .. it is within the bounds of possibility that she is a tender version of the German job. If so, then she has 7" x 7" high pressure cylinders: we know her wheels are 24" in diameter.

Photo No. 3

Any resemblance between the foregoing tender engine and this one is purely that of name. The French Ministry of War ordered it - and others like it - for use on the 60 cm. military railways of World War I.

Photo No. 4

The French also had a Tank version of the Mallett - but this is where we came in, with a Tank Mallett!

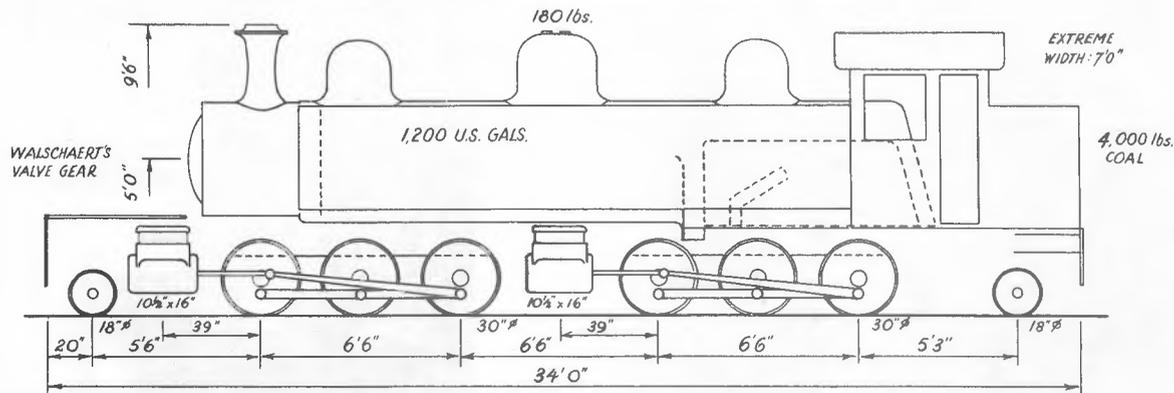
PROPOSED LOCOMOTIVE

South African Railways

AVONTUUR BRANCH

SIMPLE ARTICULATED

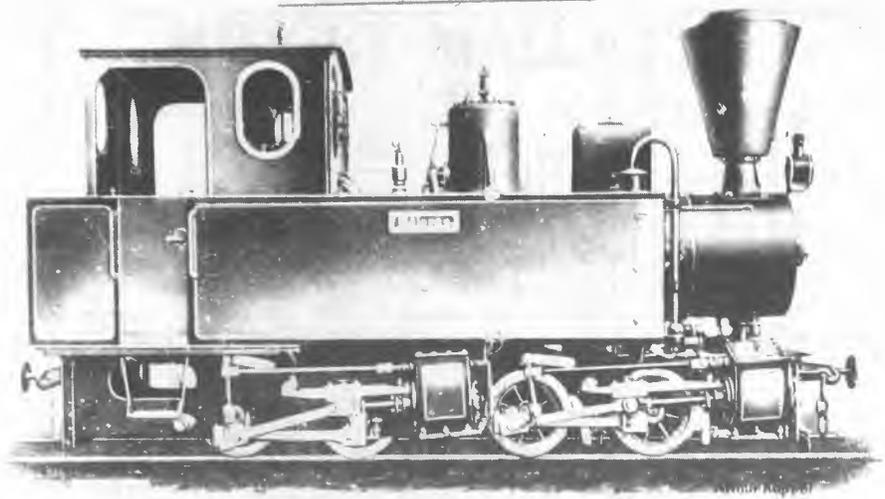
BALDWIN CLASS 16 $\frac{15}{15} \frac{1}{4}$ DD : B.L.W. TRACING 46590/N 4/7/22

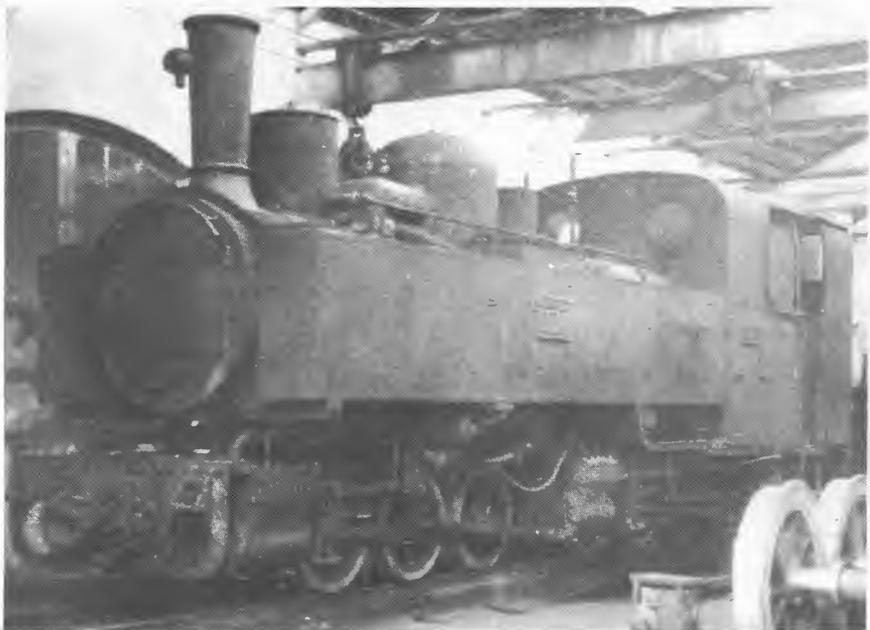
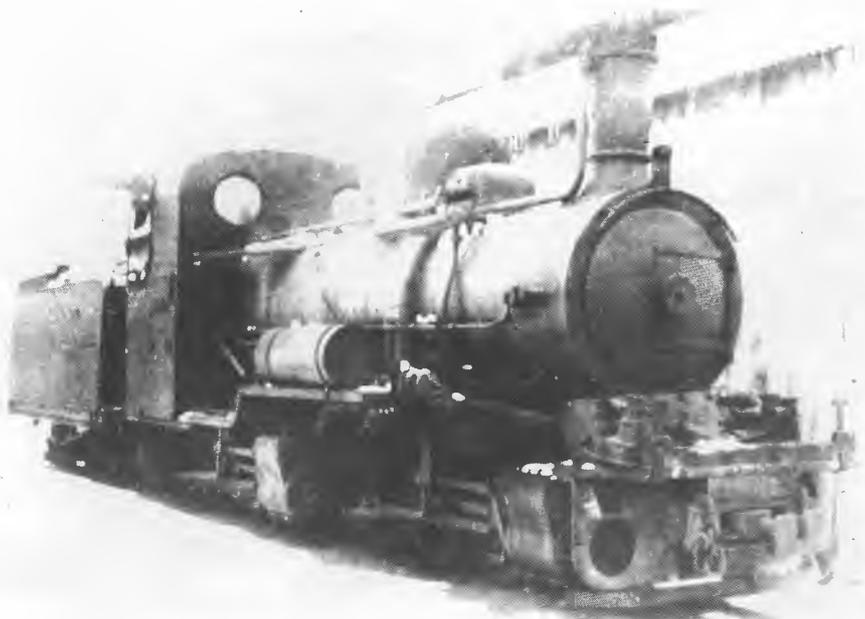


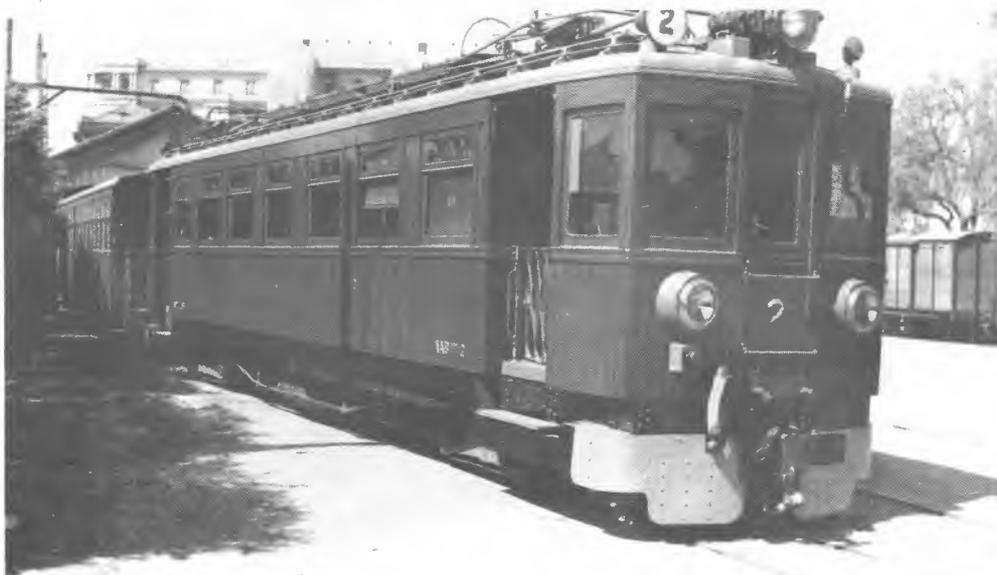
TRACTIVE FORCE 18,000 lbs.
TOTAL WEIGHT 97,000 "
WT. ON DRIVERS 80,000 "
ADHESION RATIO 4.44

RADIAL STAY FIREBOX,
SIZE 86" x 40"
GRATE AREA 20 sq. ft.
FIREBRICK ARCH & WALL

HEATING SURFACE: TOTAL - 982 sq. ft.
FIREBOX - 67 sq. ft.
TUBES - 915 sq. ft.
161 TUBES, 12'6" LONG x 1 3/4" DIAM.







TWO PHOTOGRAPHS BY MR. D. W. WINKWORTH - BROMLEY

The one opposite shows the only Giesl Ejector fitted engine on the Portuguese Narrow Gauge C.P. E209 2-4-6-OT on the Sabor Line with a cement container train.

The other shows an F.C. de Soller (Majorca) electric train at Palma terminus 1958 (see John Townsend's article in NG No. 48).



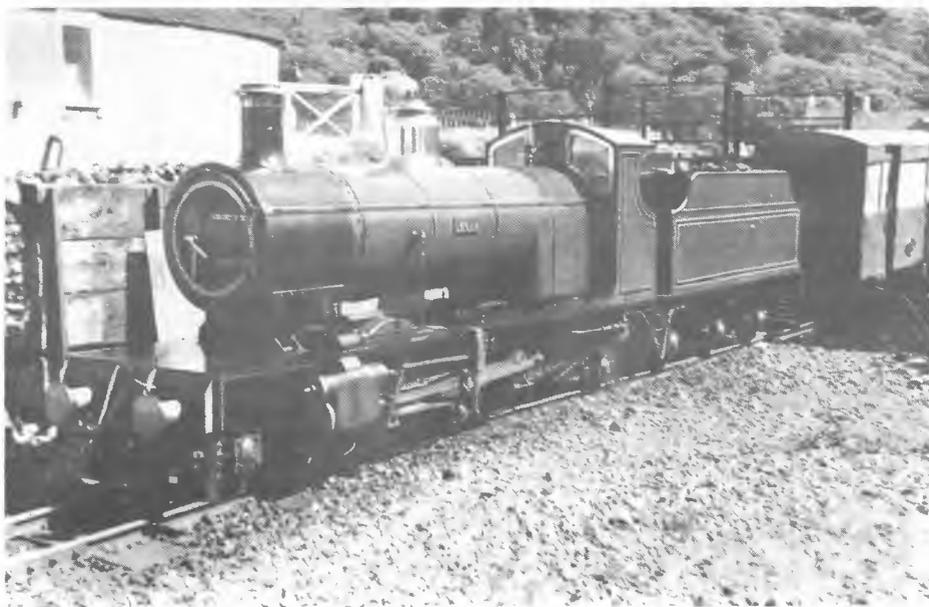
KATIE FAIRBOURNE

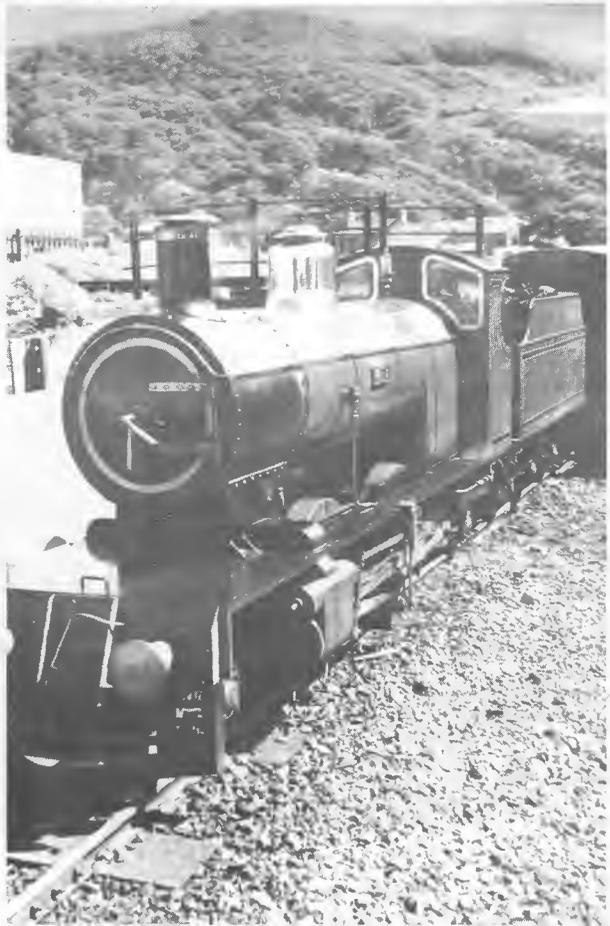
By Peter Halton and Henry Holdsworth.

On a recent visit to the FAIRBOURNE railway we had the pleasure of meeting for the first time "KATIE". A magnificent freelance 2-4-2 narrow gauge loco for their 15" gauge track, resplendent in a dark G.W.R. green with polished dome and chimney, Katie was built in 1956 for Dudley Zoo, after running only a short while there she was purchased and stored on Anglesey, before coming to Fairbourne in the early 60s.

Her sister (or brother?) engine "SIAN" was built for the Fairbourne in 1963 by Guest Engineering Stourbridge to a design by E.W. Twining. 20" driving wheels are powered by 5 $\frac{1}{16}$ " x 8" Piston Valve cylinders.

The Railway is well worth a visit when in the Barmouth area, a frequent service connects with a ferry across the estuary.





"LITTLE EGRET"

HUNSLET ENGINE Co. 175 of 1877

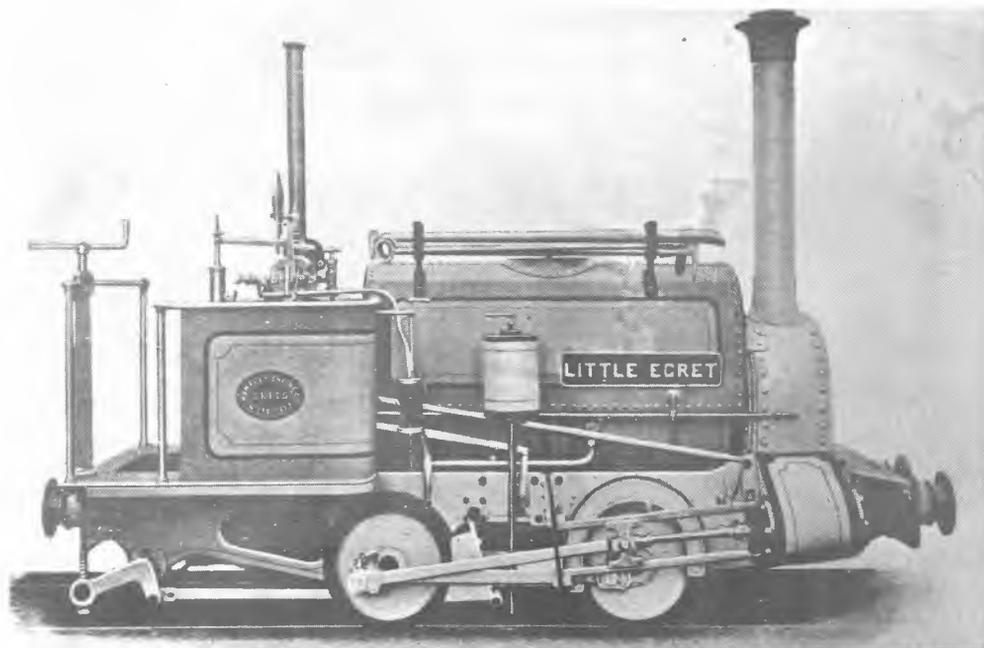
Barrie McFarlane

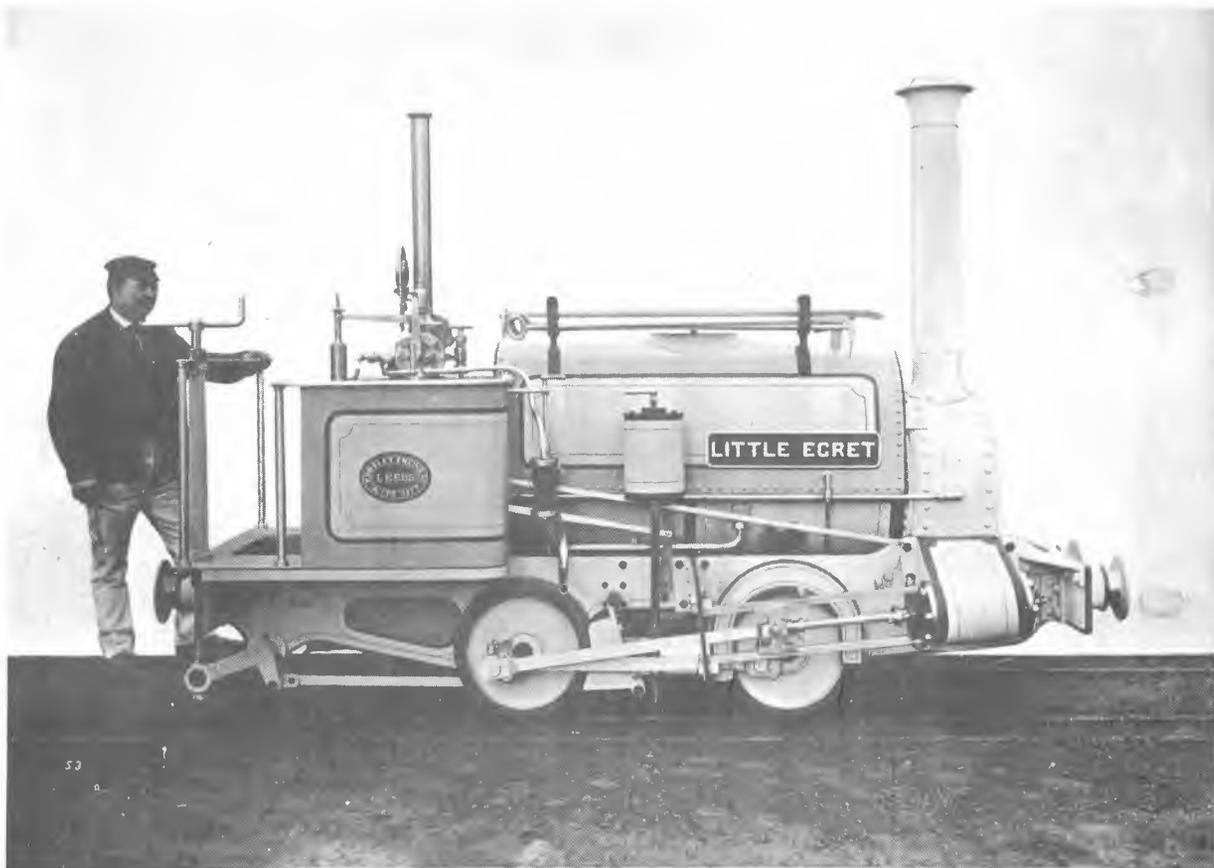
The loco was delivered new to Cransley Iron Co. in 1877. During 1896 it was overhauled by the builders and found to have been regauged to 3 ft. from the original 2'6".

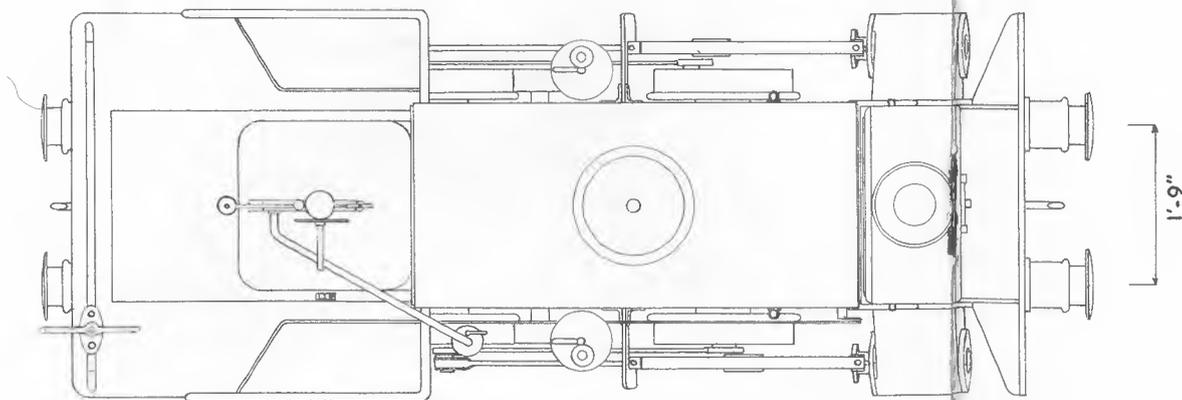
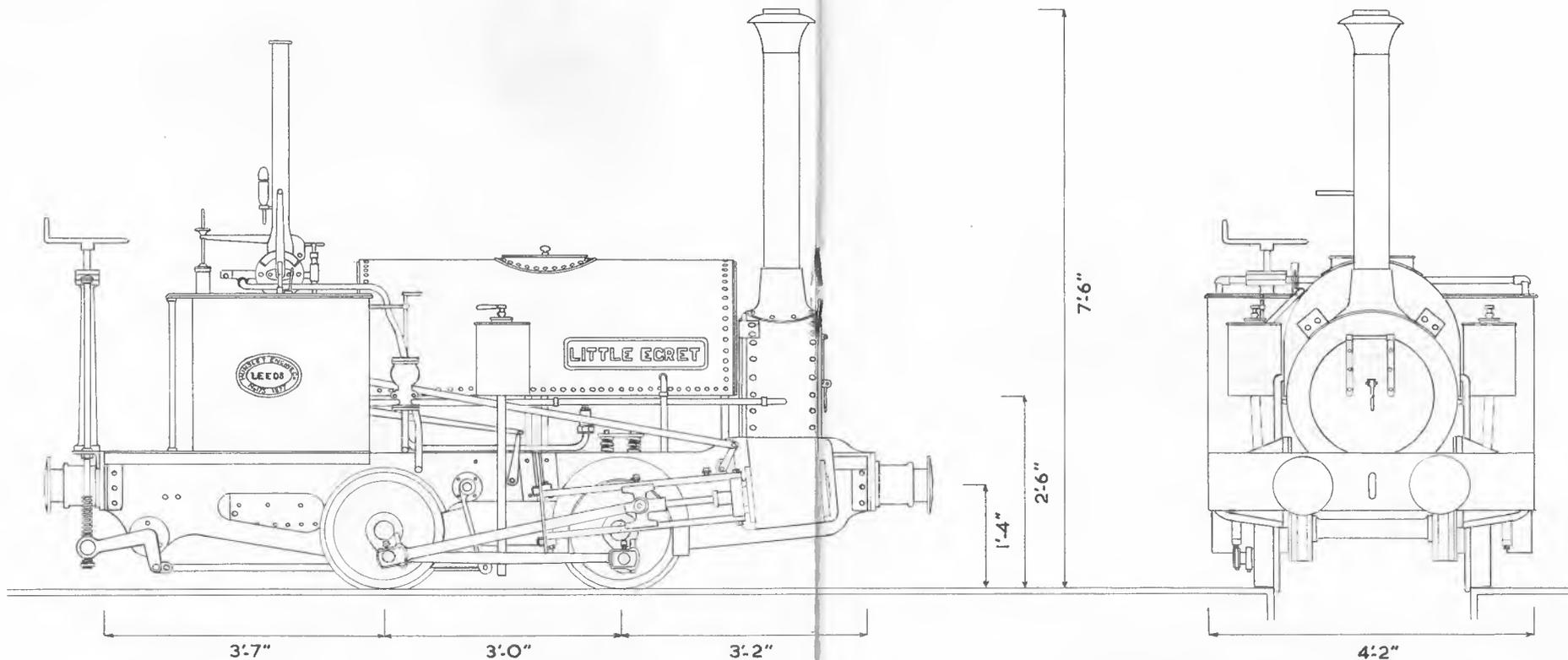
It was then owned by Simon Johnson, in 1900 by J. J. Lee, who sold it to Enoch Tempest in 1904 for use on the Blakedean Reservoir job for Halifax Corporation.

A full description of the works is given in The Railway Magazine for January 1967.

The drawing overleaf is by Barrie McFarlane and the photograph was loaned to us by Hunslet Engine Co. by courtesy of Geoffrey Horsman.







SCALE

HUNSLET ENGINE Co, O-4-O ST, "LITTLE EGRET"

Works No 175. Built 1877.

Gauge 2'-6". Wheels 1'-6" diameter.

Cylinders 5" bore X 8" stroke

Capacity of tank : 60 gallons.

Capacity of coalboxes : 2 3/4 cubic feet.

Heating surface : 16 tubes 1 7/8" outside dia. 41 1/2 sq. ft.

Firebox	9 1/2 sq. ft.
---------	---------------

Total	51 sq. ft.
-------	------------

Grate area 1 1/2 sq. ft.

B. McFarlane. August 1968.



THE BRITISH INTERNAL COMBUSTION LOCOMOTIVE

Part 7

Brian Webb

WICKHAM CONTRACTORS LOCOMOTIVES.

During the ten or so years from 1928 the firm of D. Wickham & Co. Ltd., of Ware, Hertfordshire, who were and still are designers and builders of a very comprehensive range of railway maintenance and inspection vehicles and trolleys, and railcars, introduced and built a small number of petrol and diesel engined locomotives with mechanical transmissions.

Perhaps the best known design was the pair of 90 h.p. branchline locomotives carried on fourwheels powered by diesel engines supplied in 1930 to the Central Argentine Railway. These were of 5'6" gauge and have no place in this publication.

It is the small range of contractors locomotives, offered in at least five different designs which are the subject here.

Little is known of these designs and even the firm themselves can offer very little due to their record of them being very sparse apart from the drawings and a few brochures. No record seems to exist as to how many were built or to whom they were sold. Suffice here to say that prototypes were built, tested and sold and perhaps this short note on them may jog someones memory and throw some light on their fate.

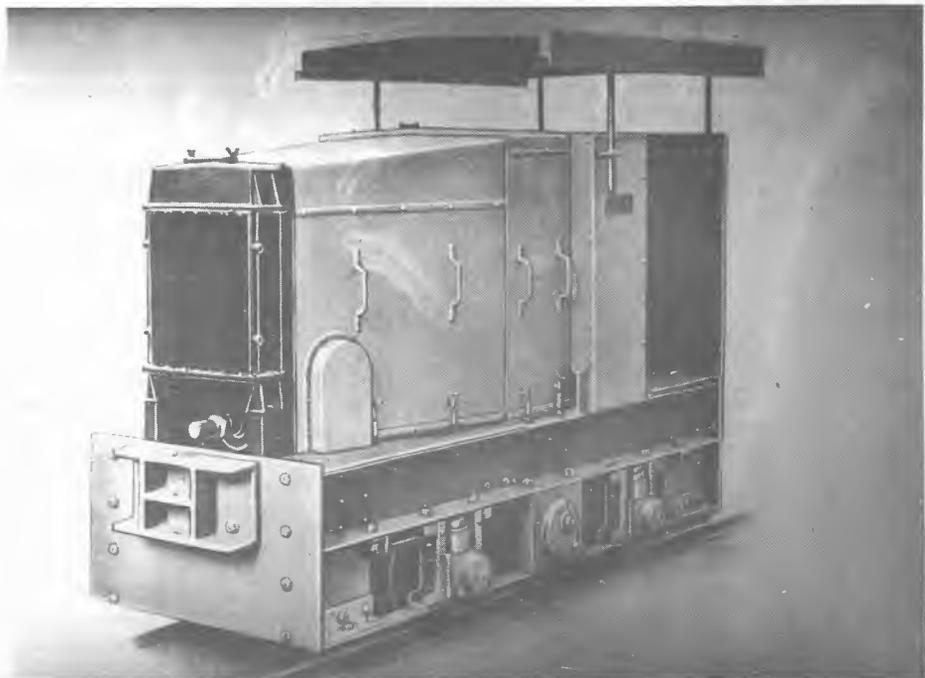
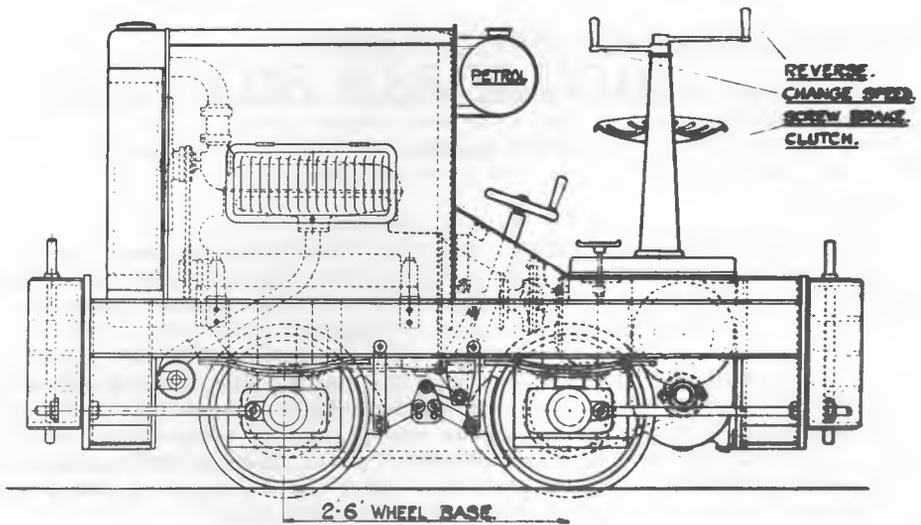
The locos were all of the two axle type, strongly yet simply constructed with various types of chain drive. Some had the well known Wickham gearbox and the majority of the designs were available with either petrol or diesel engines.

Illustrated here are two designs, both very different in appearance.

Type R701. Date 1928/9. Gauge 2'0".
Engine Morris 20 h.p. 4 cylinder petrol set to give either 12 or 18 h.p.
Drive via a flexible universal joint to a constant mesh two speed gearbox.
Speed change by sliding dog clutches. Chain drive through reduction gears to both axles. Weight 2 tons. Length over buffers 7'3". Wheel diameter 1'4". Wheelbase 2'6". Speeds 3 & 6 m.p.h.

Type R597. Date 1933/4. Gauge 2'0" - 5'6".
Engine either 20/24 h.p. diesel or 26/50 h.p. petrol.
Drive via dry multi-plate clutch with diesel engine, or inverted cone clutch with petrol engine.
Two speed gearbox and Wickham standard bevel drive transmission enclosed in an oil bath with roller bearings. Roller chains to intermediate shaft with final drive by chains to both axles.
Wheel diameter 1'4". Speeds 3 & 6 m.p.h.

Continued on next page.



THE SOLITARY HARLAND & WOLFF NARROW GAUGE SHUNTER.

Harland and Wolff Ltd. of Belfast well known for shipbuilding and heavy engineering products have only built eight diesel locomotives. These locomotives were of seven different designs and comprised one 3'6", one 4'8½" and the others 5'3" and 5'6" gauge designs.

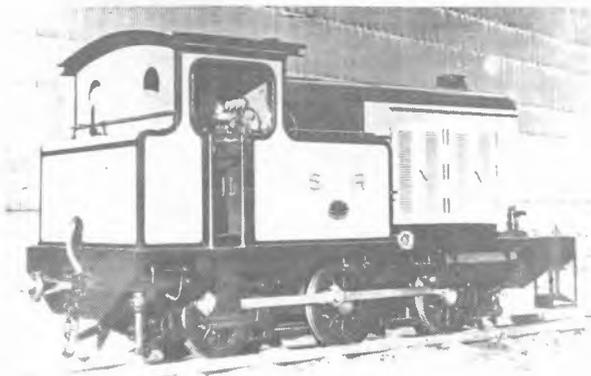
The only one we can cover in this publication is thus the 3'6" machine. In the period 1933-1936, the Sudan Government Railways placed in service a number of British built diesel locomotives. These were three Hawthorn Leslie 2'0" gauge units numbered 55-57, two English Electric-Hawthorn Leslie 3'6" gauge locos numbered 401/2.

Number 400 is the loco covered here and built under Harland and Wolff order number 9348 in 1935. It was a conventional 0-6-0 powered by a H & W built Burmeister & Wain TR 4 two stroke engine with 4 cyls. rated at 190 h.p. at 1200 r.p.m. Transmission comprised a Vulcan-Sinclair coupling and a Bostock & Bramley four speed gearbox. Drive was through a cardan shaft to a Bostock & Bramley worm gearbox on the leading axle.

The loco was re-engined in 1938 with a TR 6 six cyl. 225 h.p. engine and a new set of transmission to suit the higher powered engine.

As was usual the loco had fittings reminiscent of steam practice, namely a bunker, side tanks and chimney, which of course housed fuel tanks, equipment and the engine exhaust system.

The locomotive is understood to have not been too successful, and is no longer at work.



FERNILEE RESERVOIR

Part 2

Alistair Parsons

The two Manning Wardle 0-4-OST's used at Fernilee were named "Baslow" and "Derby" respectively. Both were built in the same year, 1904, and carried the makers numbers 1622 and 1630 respectively. No. 1622 sold new to Thomas Taylor, Waterfoot, Lancashire, who named it "Maden" used it on the construction of Cowpe reservoir, for Bacup Corporation. Lehane, McKenzie & Shand later used the loco now named "Baslow" on Holmbridge reservoir and their Gorple job (1928-34). For two years the loco worked at Fernilee. On the 30th January it was observed in the contractors yard at Darley Dale. From 1938-43 it is presumed Baslow worked on a job in South Wales, as it was observed in the contractors yard of Pauling & Co. Ltd. in June 1948. The loco was scrapped after 1950.

The other loco 1630 was sold new to Elliott's Metal Co., Burry Port where it was named "Anita". It was then sold in 1911 to William Underwood & Brothers, Abergavenny. Thereafter it was used by Abertillery District Water Board from 1919 to 1923. About 1925 Shands acquired it and used it on their Holmbridge reservoir job for Batley Corporation. The loco

by now named "Derby" was used on the Gorple reservoir job before working at Fernilee for a couple of years from 1934-36. On the 30th January, 1938 it was seen in the contractors yard at Darley Dale. It is presumed that "Derby" worked on a job in South Wales as it was next seen in June 1948 in the yard of Paling & Co., Danygraig, Swansea. "Derby" was scrapped after 1950.

Four Hudswell Clarke locomotives, all 0-4-OST were used on the Fernilee job. These were named "Heswall", "Gorple", "Cray" and "Wessenden". The loco "Heswall" had a very chequered career. This loco was built in 1898, makers number 504. It was acquired new by the Newcastle and Gateshead Water Company for use on construction of Catcleugh reservoirs and water-works in the years 1898 - 1905. Whilst on this job it was named "Brig". Where it was used from 1905 - 12 is not known for certain. "Brig" found its way to Arnold's the contractors in 1908. It arrived at Leighton for the reservoir job on 1st February, 1912. Subsequently it found its way to Underwood Brothers, contractors to the Abertillery District Water Board, on a reservoir construction job near Gwynne Fawr, Black Mountains. Underwood's began this job in 1912 and the Abertillery District Water Board finished the job in the years 1920 - 26. "Brig" went on from Abertillery to Shands in 1926 who named it "Heswall" and used it on various jobs. From about 1926 - 36 it worked at Fernilee. It was still on site there on January 2nd, 1938. It was last seen in April 1948 in W. Twigg's yard at Matlock.

The loco "Gorple" too had an interesting career. It was new to Arnold's the contractors for Leighton reservoir on the 26th January, 1914. On this job the loco was named "Healey". The loco (HC 1038/14) went on from there to Ripon to another of Arnold's contracts, this time the construction of filter beds in connection with a wartime camp. In 1919 "Healey" was employed by Arnolds for about 9 months on the construction of the Stainsby-High Dyke Branch for the G.N.R. in connection with the opening up of new ironstone fields by the Frodingham Iron and Steel Company. After this contract was completed "Healey" was returned to Arnolds plant depot at Doncaster, where it was used as a stationary pump boiler until sold (about June 1927) to Shands. They used this loco, by now named "Gorple" on their Gorple reservoir job (in the years 1928 - 34 at least). Afterwards it was used at Fernilee for a couple of years. In 1936 "Gorple" was sold to Richard Baillie, contractor to the Derwent Valley Water Board for construction of the Ladybower reservoir, although work on the reservoir was suspended for the duration of the war 1939 - 45. "Gorple" was last seen on site at Ladybower in April 1948, being scrapped on site, by Marple and Gillott of Sheffield not long afterwards.

The loco "Cray" (HC 1086/14) was similarly a widely travelled loco. It was sold new to Burnley Corporation for use on construction of Hurstwood No. 1 reservoir. It worked on the Hurstwood reservoir job until 1925 when it was sold to Shands in 1927, who used it on construction of Holmbridge reservoir. "Cray" was later used by them on the Fernilee job. In 1936 it was sold to Richard Baillie for use on his Ladybower reservoir job. "Cray" was last seen there on site in April 1948, and was scrapped on site during 1949 by Marple Gillott Ltd. of Sheffield.

The loco "Wessenden" (HC 1096/14) is thought to have worked in the Wessenden Valley, Lancashire, on the construction of reservoirs. However, it is pretty certain that this loco was delivered new to Grinkle Park Mining Company near Staithes, Yorkshire. It remained there until sold to George Cohen & Co., Stanningley, Leeds about 1934. It was seen in Shand's yard at Darley Dale in 1937 and 1938. Little else is known of its career. Perhaps the information will come to light.

The three Bagnall O-4-OST's used at Fernilee were built in 1923 (makers numbers 2218 and 2219) and 1924 (makers number 2233) respectively, and were acquired from the Taff Fechan Water Board in 1926.

WB 2218/23 named "Rhondda" when new from works was later renamed "Taff Fawr" and used at Fernilee 1934 to 36. It remained on site until 1938 at least, during the War it served on Burray in the Orkneys, passing into Balfour Beattys hands at Inverkeithing, Fife by 1945. From there to Connell of Coatbridge in May 1950. scrapped 1951.

WB 2219/23 "Rhydney" had a similar history, in 1928 it was acquired by Shands and renamed "Halifax", later story as 2218.

WB 2233/24 "Merthyr" was sold by Taff Fechan Water Board to Shands in 1928. They used it at Holmbridge and Gorple before bringing it to Fernilee. By then it was named "Batley". It remained on site until 1939 when it was hired by McAlpines. During the rest of the War its history is lost in War Office records. In 1945 the loco was at Inverkeithing, and came to Twiggs, Matlock later in the year. From 1946 "Batley" was used at the British Railways sleeper depot at Beeston, Nottingham, being withdrawn in October 1955 and scrapped early 1956.

Another interesting loco used at Fernilee was named "Darley Dale". It was built in 1925 by Ducroo & Brauns makers number 1242. It was an O-4-OT and was acquired new by Shands for their Fernilee job. It had the same later history as "Kinder" (OK 10903/25). Both locos passed in to the hands of W. Twigg, dealer, Matlock in 1945, who resold them to B.A. Collieries Ltd., Cinderhill Colliery, Bulwell, near Nottingham. They passed into N.C.B. stock on the 1st January, 1947 at Babbington Colliery, Cinderhill, N.C.B. Area No. 6, Eastern Division and both were scrapped in October 1947.

The loco "Vyrnwy" was built by Orentein & Koppel in 1930, makers number 12242. It came new to the Fernilee job and worked there until 1936. "Vyrnwy" was identical to "Kinder" and both were O-4-OWT's. It was still on site at Fernilee on the 2nd January, 1938. During World War II "Vyrnwy" was probably used in the Orkneys, and was later seen in Shand's yard on the 7th December, 1946, before passing to J. C. Stratton and Co. Ltd., at Tutbury, Staffordshire. "Vyrnwy" was later used by Piel and Walney Gravel Co. Ltd., Lancs. and was scrapped in March 1963.

Also on the Fernilee job were two Haig Class Kerr Stuart O-6-OT's. Both were built in 1918 makers numbers 3084 and 3089 named "Cardiff" and "Prenton" respectively. The design of these locos was almost identical to a design of Decauville loco used by the French Military authorities in World War I, it is said that the plans for these locos were loaned to Kerr Stuart's by Decauville.

"Cardiff" (K53084/18) was delivered new to the Home Grown Timber Committee and sent to the Canadian Forestry Corps at Ampthill, Bedfordshire in 1918. It was used by Harrogate Corporation Waterworks, Masham, Yorkshire, (i.e. the Leighton reservoir job) then sold to Shands in 1923, and used on the Gorple job from June 1927 to 1934, at least. Evidently "Cardiff" worked at Fernilee in the years 1923-27 and 1934-6. It was used in the Orkneys during World War II - spares were sent to Scapa in May and October 1943. After the war "Cardiff" was seen on the 1st June, 1947 in the yard of W. Twigg, Matlock. It was there for a while, being last seen in May 1951. "Cardiff" was scrapped in 1952-3.

"Prenton" (KS 3089/18) had quite a long career. It was delivered new to Gillow Brown, Grantown on Spey. How long it was there is not known for certain. In 1931 it was sold by P. D. Hayes and Son, Heaton Norris to Shands for use on the Fernilee job. "Prenton" was used at Fernilee from 1931-36. It was still on site there on 2nd January, 1938, and the following year was sold to Thos. W. Ward, Sheffield. Ward's resold "Prenton" to the United Steel Company, Ore Mining Branch, Cottesmore Mines, Rutlandshire, where it was renumbered "340" (but not renamed) and worked there above ground on the overland line. The loco was scrapped in 1957 when the narrow gauge railway at the mines was dismantled.

The author wishes to acknowledge the help of R. Roberts, Barnoldswick, W. K. Williams of the B.L.C., C. G. Down, K. E. Hartley, M. Billington and R. P. Morris of the N.G.R.S.

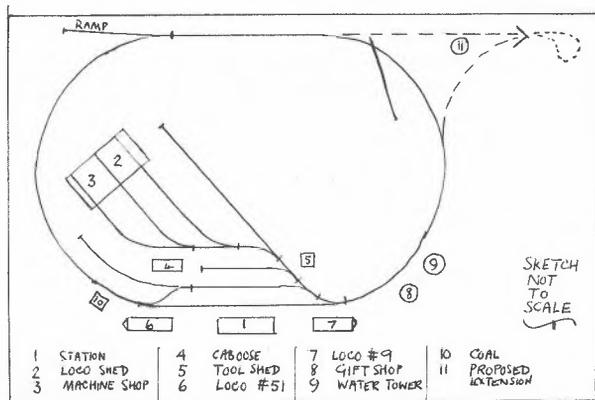
Extra Notes.

Fernilee Reservoir was built for Stockport Corporation Water Works and is of course in Derbyshire.

"Tenacity" (WB 1669-02) very probably had 9" x 12" cylinders and was a few inches longer than the standard Bagnall.

It is suggested two Ducroo & Brauns locos were used at Fernilee and were later rebuilt with Traction Engine boilers (complete with cylinders!!)

"Shands" in this article is abbreviation for Lehane, McKenzie and Shand Ltd.



NEW JERSEY TRANSPORTATION MUSEUM

Donald G. Rodi

The deserted village of Allaire, New Jersey is coming back to life. It has been turned into a state park and, since 1963, has had a 3 foot gauge steam railroad, even if it is just a $\frac{3}{4}$ mile oval.

The pride of the PINE CREEK RAILROAD is its 36 ton, 2 truck Shay, an ex-Ely-Thomas Lumber number 6 built in 1927 by Lima. It pulls a train consisting of 2 open excursion cars and a small 4-wheeled caboose.

The next loco that will probably be ready to operate is number 19, "Wanamie", an O-4-OT from the Pennsylvania coal country, built by Vulcan in 1948 or '49. She may not look like much, but I understand that only a few broken stay-bolts have to be replaced to put her under steam. The museum wants to remove the tank and add a tender for appearances sake.

Currently undergoing an overhaul is "Lady Edith", a 4-4-OT built in 1887 by Stephenson and came here from the CAVAN & LEITRIM RAILWAY, Ireland. To back her up are number 202C, a goods van from the WEST CLAIR RAILROAD of Ireland and numbers 31L, a coach, and 51C, a brake van, both from the TRALEE & DINGLE RAILROAD in Ireland.

On display are number 9, an O-4-OT, 30 inch gauge, 14 ton, built by Porter in 1924 and comes from the ANACONDA COPPER CO. of New Jersey. The other is number 51, a 19 ton O-4-OT, 42 inch gauge, built by Vulcan in 1923. She belonged to the LEHIGH NAVIGATION COAL SALES CO. in Pennsylvania.

The little railroad is pretty self-sufficient, as can be seen on the map. There are numerous displays and a very well stocked souvenir stand, which is more like a book shop. The railroad operates weekends spring, summer, and fall. The twenty-five cent fare is a worthwhile investment.





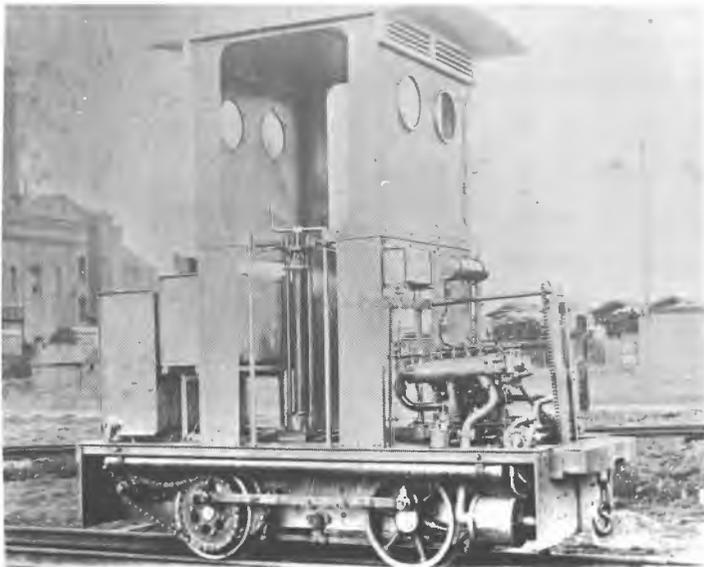
BAGULEY—DREWRY DIESELS For NEW ZEALAND

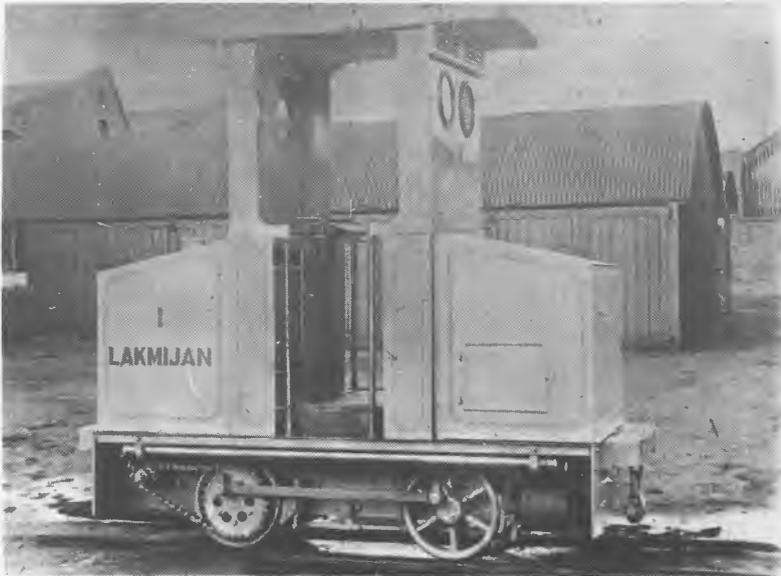
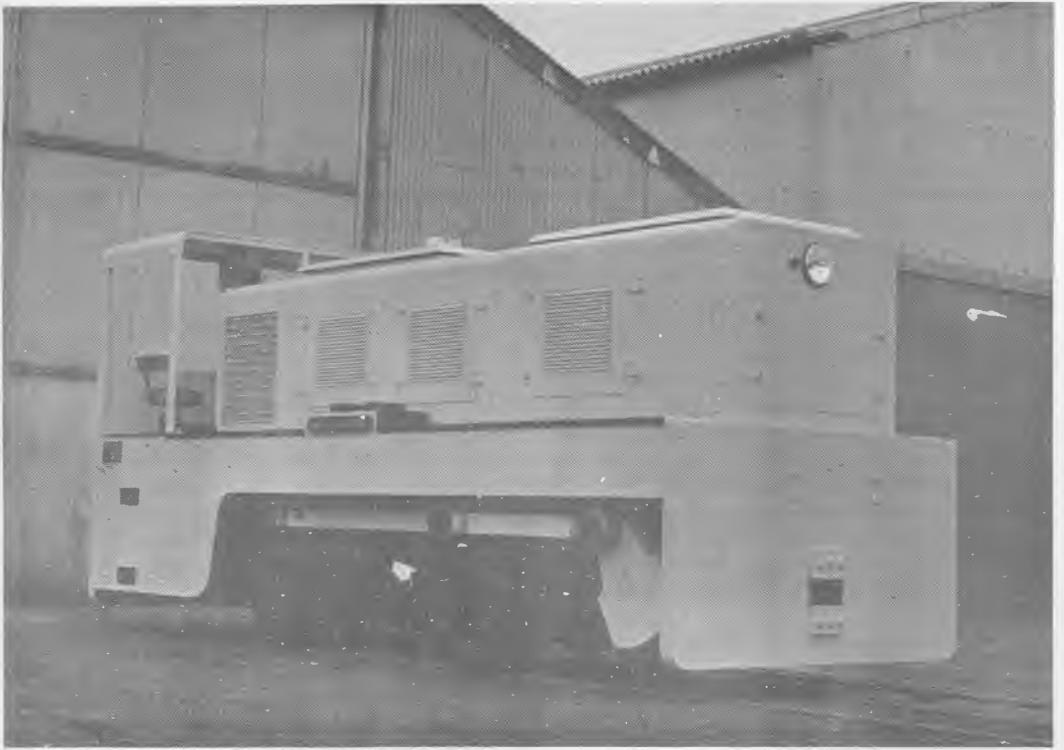
By Rodney Weaver

Five 212 h.p. 0-4-0 diesel locomotives have just been constructed for the Tongariro Power Development Scheme by Baguley-Drewry Ltd., Burton on Trent. The locomotives, built to the order of Downer and Associates, are for use during the construction of a four-mile tunnel to bring water from Lake Rotoaria to the power station on Lake Taupo. This scheme is located in the centre of the North Island.

The locomotives are built to the N.Z. standard gauge of 3'6", but are much restricted in height and width by the confines of the tunnel; the limits are 6'6" and 6'0" respectively. The frames are constructed of heavy plate in order to provide as much adhesive weight as possible spread along the length of the locomotive, this being a preferred alternative to hanging ballast weights on the ends of the chassis. The driver sits sideways under a canopy at the rear of the locomotive. The engine is a Cummins NH 200 diesel, rated at 212 b.h.p. under site conditions; this is coupled to a three-stage Twin-Disc torque converter and a Wiseman final drive unit. The latter is mounted on the jackshaft and driven by a cardan shaft from the torque converter. Spiral Tube radiators are fitted on each side of the locomotive and there is an exhaust gas conditioner. Westinghouse straight air brakes are fitted. The locomotive weighs 18 tons in working order and has a maximum speed of 21 m.p.h. Train loads in the tunnel will be 150-200 tons.

Continued on next page.





The locomotives are finished in yellow and carry works Nos. 3650 - 4; the new "Baguley - Drewry" nameplate will be noted. These locomotives were ordered at the beginning of January 1968 - the order being obtained against American and Japanese competition - and the first one was completed by the middle of May.

I would like to thank Mr. W. R. Souster, Managing Director of Baguley-Drewry Ltd., for supplying the specification and photograph.

By way of contrast with the latest Baguley-Drewry locomotive, we are illustrating the first locomotive built by Baguley Cars Ltd. at their original works in Shobnall Road, Burton on Trent. This is Works No. 534 of 1914, one of three 10 h.p. 0-4-OPMs built for the 2' gauge plantation lines of the Assam Corporation. This little machine bears a superficial resemblance to earlier locomotives supplied by the defunct concern of McEwan Pratt & Co. and was probably similar mechanically. The engine, however, was of Baguley design and manufacture. Baguley railcars of 1921 are still in service in the Far East - indeed spares are still supplied at regular intervals - so perhaps one of these machines still serves on some isolated plantation. Anyone going East for a holiday?

Letters to the Editor

From: BARRIE McFARLANE, Brighton.

I was very pleased to see Douglas Clayton's Southwold Drawings in NG 48, I enclose a sketch of the MOY wagon to supplement the earlier drawing, the photo can be reproduced by courtesy of The Museum of British Transport.

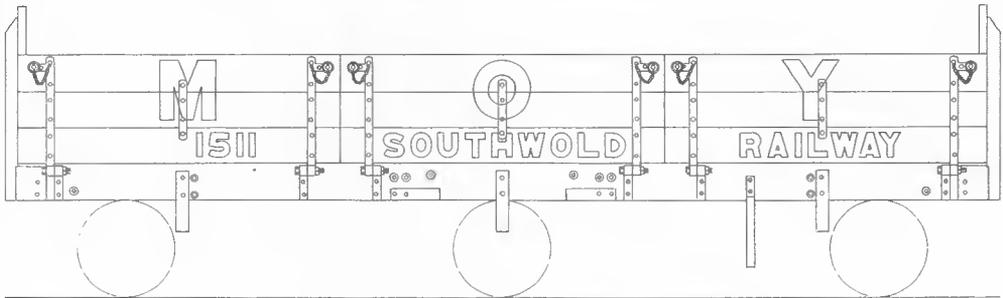
I will say before closing that the present magazine is superb, the method printing appears to have had the effect of increasing both the quality and quantity of material submitted and the Editor must view each issue with much satisfaction.

Editors Note

Thank YOU Barrie! It is a pleasure to put together a magazine and I wish to continue the job, but pressure of work may throw out of gear the proposed timetable now and again, this issue should have been out in October - however we plan something good for No. 50. See Editorial.

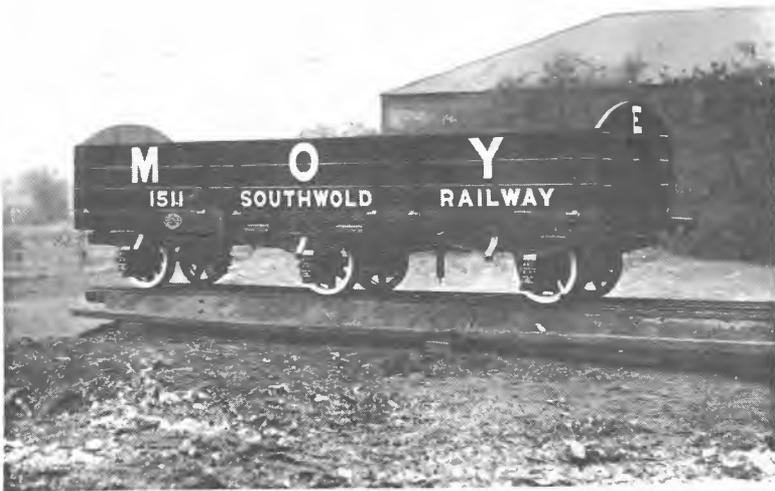
Continued on inside of back cover.

A NARROW GAUGE PRIVATE OWNERS WAGON

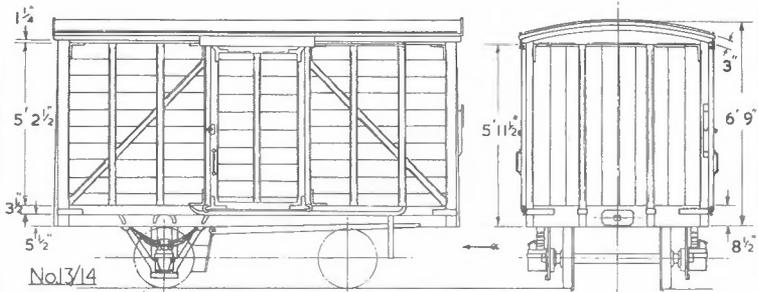


This drawing is based upon Douglas Clayton's drawing of the 6 wheel Cleminson system wagon in "Narrow Gauge" No 48. The Moy owned wagons were red oxide with white lettering. Photograph: Museum of British Transport, Clapham.

B,McFarlane. 8/1968.

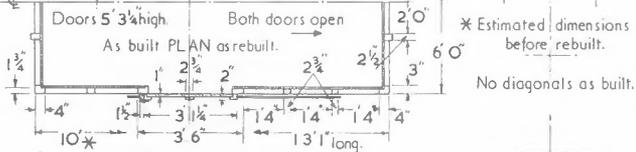


Southwold Railway

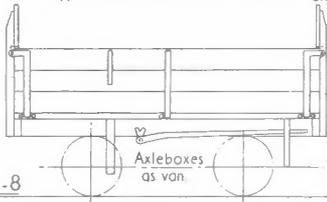


No 13/14

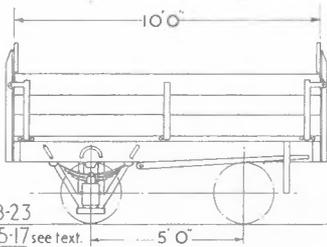
Wheelbase * 5' 0" 6' 0"



Feet: 10
5
0
15

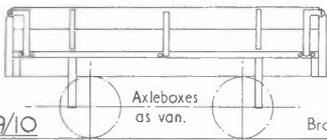
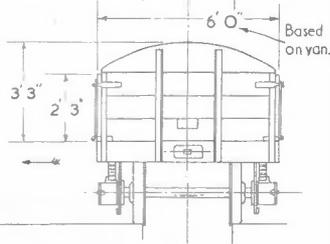


No 1-8



No 8-23

No 15-17 see text.



No 9/10

Brake as No 1-8

On wagons No. 1-10 and 15-23 door stops may vary in number and position and not always fitted either to one or both sides of a wagon.



No 11/12

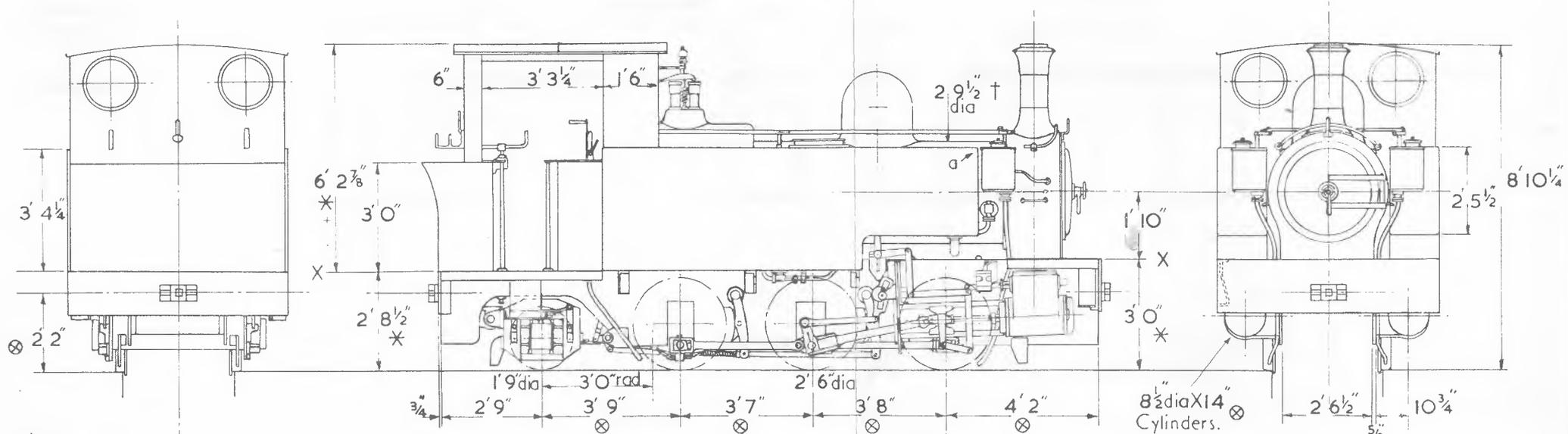
Brake as No 1-8

No 5

See also text notes.

© D. Clayton. 5/1963.

Southwold Railway



† Scaled.

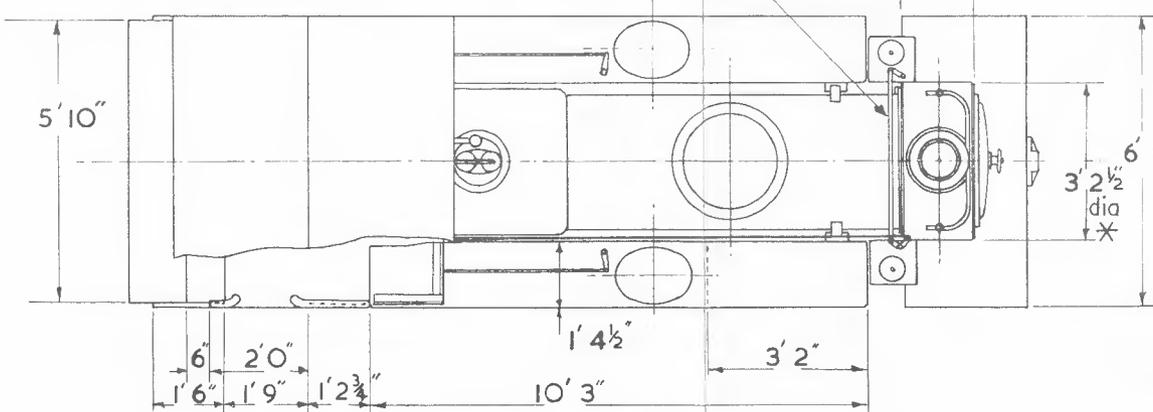
* By summation.

X At these points all dimensions are to underside of footplate, ie. top of frame.

⊗ See text note.

This connection at least removed

1' 8" 1' 6" Smokebox outside length.



Detail of tank corner at "a" others similar.

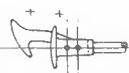
Side view.

Not to scale.

Plan view.

6' 0" All footplates and tanks.

3' 2 1/2" dia *

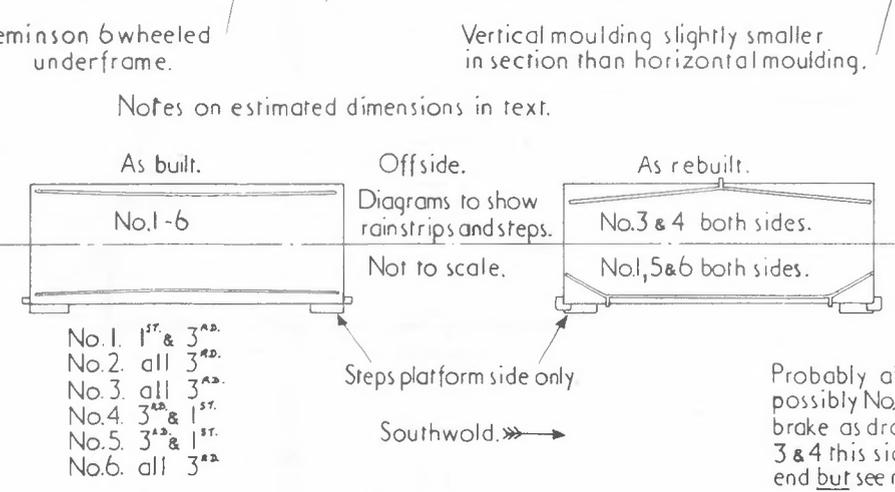
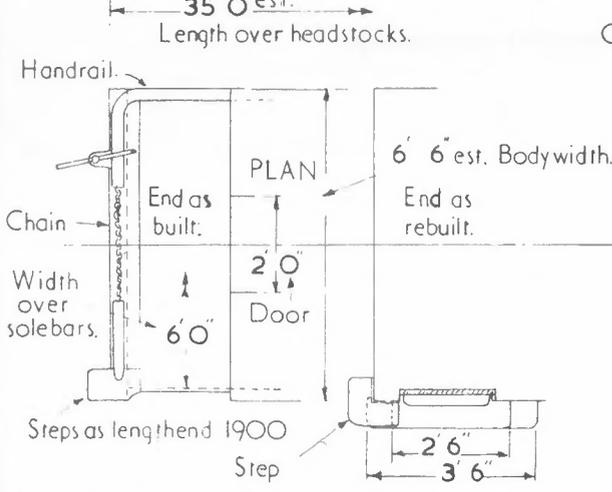
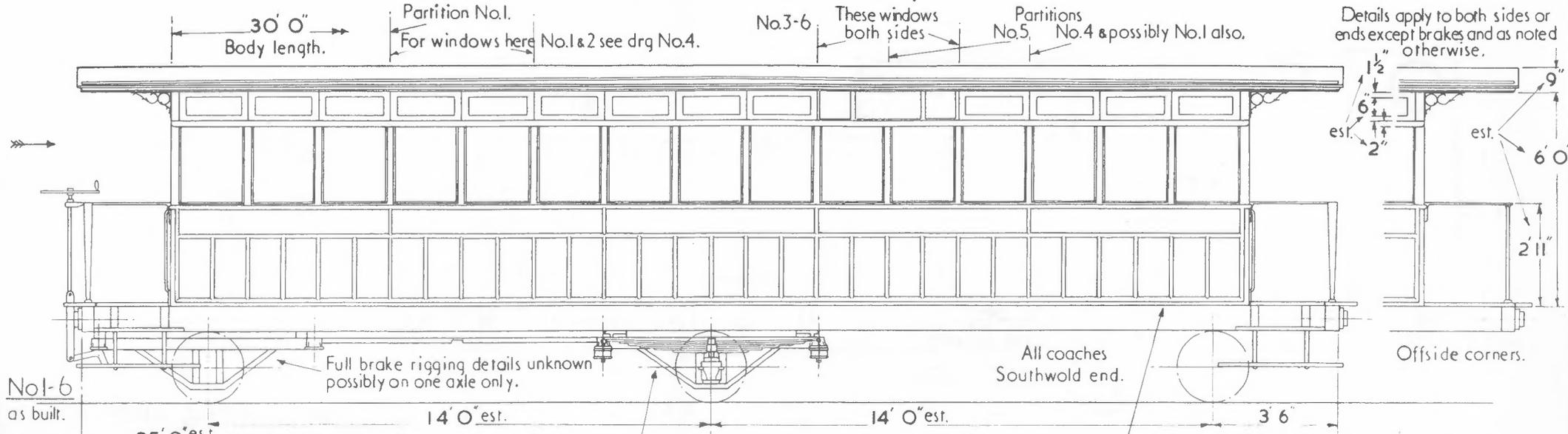


Detail of couplings.

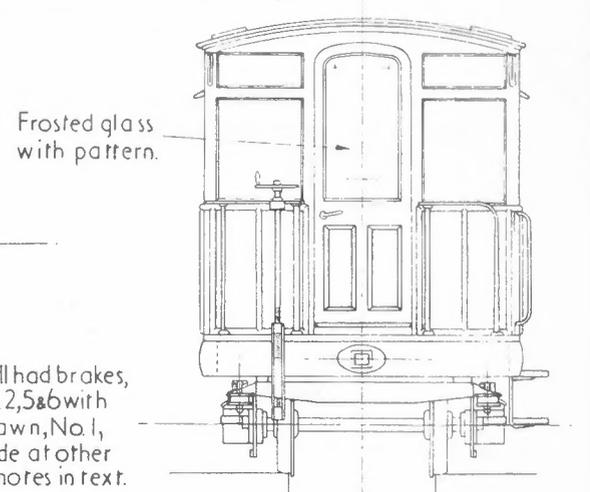
O-6-2T No.4.



Southwold Railway



- No.1. 1^{st.} & 3^{rd.}
- No.2. all 3^{rd.}
- No.3. all 3^{rd.}
- No.4. 3^{rd.} & 1^{st.}
- No.5. 3^{rd.} & 1^{st.}
- No.6. all 3^{rd.}



Probably all had brakes, possibly No.2, 5 & 6 with brake as drawn, No.1, 3 & 4 this side at other end but see notes in text.

All rolling stock wheels assumed to be 2' dia.



No.3 See also text notes.

LETTERS TO THE EDITOR

From: P. J. DEVLIN, Leeds 6.

Whilst reading Sydney Moir's article in the July 68 edition of "The Narrow Gauge" about Shay locomotives in general and the Gilpin Railroad in particular, I noticed an error in one of the author's statements. He writes on page 26: "As far as is known, no examples of either the three-truck or four-truck Shays ever worked on the narrow gauge, being entirely confined to the 4'8 $\frac{1}{2}$ " lines." However, the 3' gauge West Side Lumber Co. in California ran seven three-truck Shays on its tracks, numbered 7, 8, 9, 10, 12, 14 and 15, No. 10 being the heaviest narrow-gauge Shay ever built, scaling 163,200 lbs.

Although, this is only a small error in an otherwise excellent article, I feel it is worthwhile putting the record straight.

From: ALISTAIR PARSONS, Grantham.

From various sources he mentions a number of N.G. Shays which survive - (see page 26, July 68 N.G.)
3' Ex Sumpter Valley now on Black Hills Central Railroad.
3' Three truck Lima 1916 ex West Side Lumber Co. now on the Camino Cable & Northern.
3' Lima 1912 now on Roaring Camp & Big Trees Railroad.
And the Jersey Museum loco mentioned in this issue.

From: Sqd. Ldr. J. I. BROUGH, Edinburgh, Australia.

I refer to the query in Mr. Baker's letter appearing in the April 68 issue of our magazine.

The Colonial Sugar Refining Co. Ltd. is an Australian company with large sugar interests in various Australian states as well as in Fiji. The Hudswell Clarke locomotive shown on page 11 is probably one of a batch of three delivered to CSR (Fiji) in 1912 (Works numbers 972, 973 and 974). These became Lautoka (Mill) Nos. 11, 10 and 12, respectively. The H.C. 4-4-0, "Sydney", delivered in 1915 became Lautoka No. 18; Mr. Boreham's model (September 67) shows her in later guise with new chimney, sandboxes (between the frames), and new (electric) headlamp.

As everywhere, the steam loco is giving way to the IC loco, and Fiji is no exception. In late 1967, I noted few steam engines, even the famous "Free Train" was hauled by one of the ubiquitous Clyde (Clyde Engineering Co. Pty. Ltd. of Australia) 0-6-0 diesels.

The book by Messrs. Peter Dyer and Peter Hodge, "Balloon Stacks and Sugar Cane", is an invaluable work on the sugar cane railways of Fiji.

I hope the foregoing is of interest.

Editors Note

Another letter from Ron Allison now back in New Zealand covered the points above, but also includes a batch of 1913 locos numbers 1013, 1014, 1015 and 1016, also 1050 and 51 of 1914.

A drawing of 972 appears in the book mentioned.

